









Hose, Fittings and Equipment

Catalog 4400 March 2023





ENGINEERING YOUR SUCCESS.

Parker Hannifin - the global leader and your partner



With annual sales exceeding \$13 billion, Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems, providing precision-engineered solutions for a wide variety of mobile, industrial and aerospace markets. Our products are vital to virtually everything that moves or requires control, including the manufacture and processing of raw materials, durable goods, infrastructure development and all forms of transport.

Within Parker's seven operating groups, the company's engineering expertise spans the core motion technologies – electromechanical, hydraulic and pneumatic – with a full complement of fluid handling, filtration, sealing and shielding, climate control, process control and aerospace technologies.

The leader in "dry technology" for the fluid power industry, Parker's Fluid Connectors Group is your single source for high-quality tube fittings, hose and hose fittings, thermoplastic tubing, brass fittings and valves, quick-disconnect couplings and assembly tools. The Fluid Connectors Group serves customers in a broad range of markets, including Aerial Lift, Agriculture, Bulk Chemical Handling, Construction Machinery,

Food & Beverage, Fuel & Gas Delivery, Industrial Machinery, Medical, Mining, Mobile, Oil & Gas and Transportation. Products are available for shipment 24 hours a day, supported by 49 manufacturing facilities throughout the world, a global distribution network and 25 company-owned stocking service centers. Our commitment to you is impeccable customer service. To meet your specific requirements, we offer a broad range of programs designed to reduce your overall operating costs, streamline manufacturing, improve productivity, manage inventory, enhance delivery and address safety and environmental issues. For value-added services that generate value-added solutions, team up with Parker!



Hose Products Division















With a long history of providing premier customer service, Hose Products Division is the leading manufacturer of hose, fittings and crimping technology for industrial and hydraulic markets. Continually expanding our products to better serve the market, we offer world-class service technologies including the Parker Tracking System, Onsite containers and rapid prototyping. Our division headquarters in Wickliffe, Ohio, is our precision-engineered-solution center for products, materials and processes, and is equipped with state-of-the-art development, testing and performance technology. Hose Products Division has several manufacturing locations within the United States dedicated to delivering a quality product on time. Knowing that uptime and productivity are major drivers in your business success, we proudly present our catalog outlining Parker's best-in-class hose products and services.

Best regards,

Ty Doyle

General Manager

PARKER SAFETY GUIDE FOR SELECTING AND USING HOSE, TUBING, FITTINGS AND RELATED ACCESSORIES



FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF HOSE, TUBING, FITTINGS, ASSEMBLIES OR RELATED ACCESSORIES ("PRODUCTS") CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE. POSSIBLE CONSEQUENCES OF FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THESE PRODUCTS INCLUDE BUT ARE NOT LIMITED TO:

- Fittings thrown off at high speed.
- High velocity fluid discharge.
- Explosion or burning of the conveyed fluid.
- Electrocution from high voltage electric powerlines.
- Contact with suddenly moving or falling objects that are controlled by the conveyed fluid.
- Injections by high-pressure fluid discharge.
- Dangerously whipping hose.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- Sparking or explosion caused by static electricity buildup or other sources of electricity.
- Sparking or explosion while spraying paint or flammable liquids.

Before selecting or using any of these products, it is important that you read and follow the instructions below. Only hose from Parker's Stratoflex Products Division is approved for in flight aerospace applications, and no other hose can be used for such in flight applications.

Parker Publication No. 4400-B1 Revised 2007

DO NOT MIX & MATCH

DO NOT MIX & MATCH -

Components from different manufacturers should not be combined to create hose assemblies (apart from rare instances when both manufacturers have approved the exception). To mix and match components is to increase the risk of hose failure – a dangerous situation regardless of setting or application. Possible consequences of hose failure resulting from the use of incompatible components include:

- Fittings thrown off at high speed
- High velocity fluid discharge
- Fluid injection injuryViolently "whipping" hose
- Sparking or explosion from sprayed flammable fluids
- Suddenly moving / falling objects otherwise held static by fluid pressure

The individual is solely responsible for the hose assemblies he or she fabricates. Fluid power professionals should abide by three basic tenets when fabricating hose assemblies:

- Only assemble hoses and fittings of the same make
- Always use a crimper approved by the manufacturer of the hose and fittings
- Crimp only to the manufacturer's specification

Parker's recommendations are consistent with SAE standard J1273: Industry Consensus on Best Practices for Using Hydraulic Hose. The complete technical paper, which includes SAE-recommended practices for hose assembly fabrication, can be purchased from www.SAE.org.

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Hose Products Division – the market leader and your supplier of choice



Put a bite on the braid.

Parker's world-recognized tiger mascot has represented the Parkrimp No-Skive hose assembly program since its introduction in 1980. In a contest originally held by our marketing department, the tiger was the winning suggestion over three others: a turtle (deemed "too slow"), an alligator ("not very good looking") and a shark ("too intimidating" particularly at the time of the release of the movie Jaws).

More than three decades later, the tiger graphic still supports the Parkrimp message everywhere, clearly symbolizing our unique, patented Parkrimp fittings with tapered steel teeth and our Parkrimp crimping machines. Their ability to eliminate hose cover skiving and achieve the metal-to-metal grip of factory assemblies revolutionized the process for markets worldwide. And today, it's the industry standard.

Pride in our products: At Parker, we believe the best fluid connector products for your operation are the ones that get the job done right. We offer the most comprehensive line of hoses, fittings, equipment and accessories you'll need. And if there's something you need that's not a standard product, we're able to design and manufacture it for you with ease.

You'll also benefit from our ultimate competitive advantage – our network of distribution outlets that can provide our products nearly anytime and anywhere. We strive to provide customers with local engineering, local products and local service.

MSHA IC-40/26

Parker 422/42

Parker offers the largest selection of hoses plus more fitting sizes than any other manufacturer. You'll find a wide variety of hoses including braided, spiral and multi-purpose, and more than 4,500 Parkrimp fittings. Parker products have been designed, tested and approved to meet and exceed global standards.



The right product is available for your application, including hose that features a variety of abrasion-resistant cover choices, flexibility, a wide range of media compatibility and more – characteristics that make Parker the hose supplier of choice for customers that demand the most from their equipment.

Made in the U.S.A. - serving the world

In an ever changing global business environment, all applications are not created equal. We can help you specify solutions in order to make informed purchasing decisions around technology, applications and relevant specification requirements. When you buy from Parker, you are getting a Parker designed hose made worldwide within our own

factories, assembled by Parker employees. Therefore, Parker can promise premier customer service, high quality manufacturing standards, on-time delivery and a culture of continuous improvement so you remain competitive in the marketplace and achieve growth objectives.



Global Availability

Parker hoses are manufactured in the major regions of

the world – North America, Europe and Asia – supporting the equipment and customers we serve. Our worldwide reach makes it easier to specify and source through our unrivaled industrial distribution network of 13,000 locations worldwide. We strive to provide customers with local engineering, quality products and premier services on a global level.

Standard cover, while our SuperTough cover is 450 times more abrasion resistant offering unparalleled protection from abrasive environments.

are easier to handle, requiring fewer man-hours for installation and repair.



A smaller bend radius lets designers place key components – such as pumps and valves – closer together, so systems can be more compact. This gives engineers more freedom in configuring equipment with less hose. As a result of our designs, the force to flex or the force re-

quired to put the hose in its minimum radius is the lowest in the industry. The force to flex directly affects employee fatigue, risk of injury and ease of installation.

Extended Hose Life

Consistency in product performance starts with consistent materials. Parker's materials development laboratory uses the latest technology to evaluate products under various conditions. Hose construction style as well as cover type has a direct impact on hose life and safety. For instance, our spiral hose has two times the impulse life, which reduces material and labor costs.



Parker hoses come in a variety of cover options so you can match the right cover to your application. Our ToughCover is 80 times more abrasion resistant than our

Innovative Design

Today there is a tremendous

amount of pressure to adjust

with the continuously evolving application requirements in terms of available space, performance, and production efficiency. Parker responded with the development of higher temperature resistant hoses, increased pressure ranges, longer impulse life and improved abrasion resistance to meet these increas-

Our hose has a smaller outside diameter, weighs less, and is more flexible, which simplifies installation. This can lead to smaller and lighter cable tracks

ing requirements.

Specifications

All of our hoses meet or

exceed various industry specifications including SAE, EN, DIN, or ISO. Many of our new hoses are designed to meet the ISO 18752 specification, which enables customers to choose a hose by pressure range, not construction. Hoses in this product family simplify the specification process as well as reduce compliance complexity on a global platform.

Services – easy to do business with



PARKER TRACKING SYSTEM (PTS)

Parker Tracking System (PTS) is an innovative component-tagging and asset management solution. In addition to labeling components, users can document, replace, track, inspect, plan and analyze key equipment data with PTS.

www.parker.com/pts



PARKERSTORE

ParkerStores are a global network of independently-owned industrial retail operations with more than 3,500 service points around the world. Whether it's through a brick-and-mortar location or from one of our mobile Hose Doctor operators, Parker is your best bet for on-the-job help.

www.parkerstore.com



HOSE CLEANING SERVICES

Parker offers hose cleaning services in order to protect the life of hose assemblies from dirt and debris, which can cause unwanted hose failures. A pellet flushing system is used after hoses are cut and crimped to remove debris from inside the assembly. To ensure cleanliness, we recommend utilizing Parker Clean Seal Caps. Both the pellets and the caps are an easy and quick way to ensure you have a contamination-free hose assembly.

www.parkerhose.com



CUSTOM MANUFACTURING OPERATION & RAPID SERVICE UNIT

When the situation calls for a custom product or special single piece, the experts at Parker's Hose Products Division can create a solution specific to your needs.

Parker's Custom Manufacturing Operation and Rapid Service Unit can produce a single, critical piece or several in as little as 24 hours.

www.parker.com/rsu



TUBE ASSEMBLIES & HOSE TUBE COMBINATIONS

Parker's tube assemblies or hose and tube combinations provide an alternative to rubber hose. Tube assemblies are a viable alternative in some applications where the port to port mounting is consistent and where the vibration and movement is limited. All assemblies are custom made to your specifications. Parker is ideally suited to supply high volume assemblies for equipment manufacturers but can also supply for quantities as small as five. For more information, please call: **440-943-5700.**

Continuously developing ways to serve our customers

CRIMPSOURCE

To help you with your equipment, Parker provides an exclusive online software application: CrimpSource. CrimpSource supplies you with the necessary crimp specifications in order to adhere to our strict safety standards. It is the industry's most complete resource for crimper technical information. It provides easy access to all the specifications necessary to correctly fabricate a factory-quality hose assembly. With a series of dropdown menus, users are able to choose a crimper, the type of hose, and compatible fittings. Once the crimper is selected, the user is provided with crimp specs, crimper die recommendations, technical manuals, and crimper decals available for immediate printing.



www.parker.com/crimpsource.

KITTING

Want to speed up assembly on the factory floor? Parker custom kits might be just what you're looking for. From fittings and adapters to pre-made assemblies, custom kits can hold a wide range of materials, in the exact order and quantities you need. What's the advantage? Streamlined procedures. Quicker assembly. Lower costs. And a single part number for easier processing.



VENDOR MANAGED INVENTORY

Enjoy a customized program where Parker personnel can manage your inventory in person or remotely. Reduce overall inventory, increase your inventory turns and increase your efficiency.



BREADMAN

Lean logistics and delivery of Parker products and kits directly to the customer's assembly line, work station or warehouse.

- 100% parts availability minimizes downtime, increases production and reduces costs
- Elimination of stock checking reduces manpower and maintains production levels
- Daily delivery reduces inventory and overheads
- Electronic order processing eliminates paperwork and reduces administration costs



CAD

By making thousands of CAD files available, Parker provides its customers with the resources to do more.

www.parker.com/HPD_CAD



Parker Tracking System

Increasing the speed, timing, and accuracy of your next replacement

Parker Tracking System (PTS) is an innovative component-tagging and asset management solution offered by Parker and our business partners in over 62 countries worldwide. Today's equipment and machines are more connected than ever before and harnessing this complex data is key to maximizing up-time. By focusing on critical-wear components, Parker drives new levels of productivity, efficiency, and reliability.

Uptime is everything

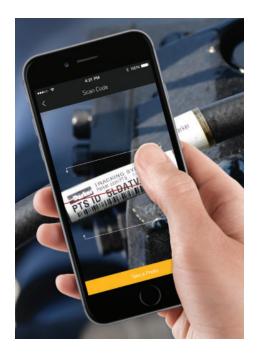
Record, manage and retrieve critical asset information with PTS. This innovative system provides fast and accurate product information, speeding replacement regardless of where or when the original component was created. Because tagged products can be replaced sight unseen, PTS eliminates the need to wait for removal before new parts can be acquired. Reducing transaction time, means users can realize significant gains in productivity and equipment uptime.

Business system integration

Maintenance, Repair and Operations (MRO) can be greatly enhanced by customizing PTS and integrating it into existing systems. With seamless data integration, Parker enables bi-directional transfer of critical data to maximize asset visibility and performance. For details on supported platforms and protocols, contact a member of our team.

Global power, local reach

PTS works seamlessly around the world. Whether you sell, service or operate products and equipment in one city, one state or worldwide, PTS can be tailored to your needs. Equipment built in one country that is sold and serviced in another can use PTS to deliver accurate product details wherever and whenever they are needed. To support our global footprint, PTS offers translation in multiple languages.



Maintenance and inspection

Industry and governmental regulations are driving businesses to be more aware of their own record keeping. The PTS Pro Service Plan enables users to establish inspection and/or replacement dates to drive proactive maintenance planning.

With PTS Pro, users can realize greater equipment utilization and ensure compliance with a variety of safety and maintenance programs.

Parker offers tagging media that has been tested and engineered to excel in rugged applications, including extreme temperatures, UV, salt spray, xenon arcing, and submersion in many fluids such as fuel, Skydrol[®], and salt water. A product specialist can help select a tagging solution that is perfect for you.

Simple. Durable. Powerful.

Tagging solutions for every application

PTS makes producing clear and dynamic product identification tags a breeze. PTS marking provides a critical link to the digital record where product-specific data is stored. Along with durable labels, RFID and other tagging media are available.

Reporting

Robust reporting tools can provide data for engineering, quality, and sales to analyze for a better understanding of component part performance. Customized reports can be exported for further analysis.

Operational efficiency

OEMs can use custom data fields to produce labels with assembly instructions to help ensure correct components get delivered to the appropriate manufacturing cell or machine. This custom label data can also be used to direct customers on spare part replacement when required.

Within an OEM operation, barcodes representing PTS IDs and customer part numbers speed data entry. Date marking on each label verifies the manufacture date by providing key information for warranty, inspection or maintenance planning purposes.

Compliance

PTS can help deliver compliance with a number of industry accreditations such as ISO 9001 and ISO 17165-1. We also support requirements from The Energy Institute, DNV, and other regulatory bodies.

How PTS works:

- PTS labels are customized with specific assembly information and attached to the hose when the assembly is made.
- When the assembly requires replacement, simply call your local distributor with your PTS number, or call 1-800-C-Parker to find an authorized distributor near you.

 The distributor can create an exact replacement of your hose assembly and either ship it to you or have it ready to pick up once you arrive. Distributors can also scan your hose label in-store.

 Data is collected about your failure which may help us in recommending different components or accessories designed to get the most from your machine or equipment.

PTS labels are specifically engineered to withstand harsh chemicals, temperatures, UV exposure and other challenging conditions.

Visit **www.parker.com/pts** for more information.



The Parker Fluid Connectors Group

Take advantage of our connections

Need help with the big picture? Turn to Parker. As part of the Fluid Connectors Group, we have everything to keep the ideas flowing.

Innovative products

We manufacture highly engineered components and systems that facilitate motion and the controlled flow of liquids and gasses for a wide variety of global markets to increase our customers' productivity and profitability. From

developing more efficient energy, advancing medical science and engineered materials, providing clean food and water, and supporting military efforts; Parker's brings it all together, partnering with our customers to help solve some of the world's greatest engineering challenges.



Global reach

Parker's global footprint is supported by an unrivalled industrial distribution network extending to approximately 13,000 locations around the world. Through this extensive network of local, independent businesses, Parker brings its products and services to customers in 104 countries.

Mobile services

Parker is your best bet for on-the-job help. Our mobile services operate 24 hours a day, 7 days a week, to arrive at your plant or job site fast. Complete with factory-trained professionals to troubleshoot your problem. Our mobile vans carry a full complement of hose, all major fitting configurations, and a complete set of metrics —

everything that's needed to create a replacement. It's like having your Parker distributor come to you! Find out more at parker.com/distributors.

ParkerStore Onsite mobile work containers

To provide expert service even in the most remote job site locations, the ParkerStore Onsite Program delivers a fully customized mobile workspace directly to your job site. These highly efficient and mobile container-based work sites provide all the technology, equipment and inventory needed for remote fabrication of hose and tube assemblies, and much more.

The ParkerStore Onsite container solution will significantly reduce the time it takes to obtain critical spares or fabricate replacement hose assemblies. Equipment and labor downtime are greatly reduced, keeping your operations up and running longer. Find out more at www.parker.com/onsite.

ParkerStores

ParkerStores provide walk-in customers with the ability to personally select the parts they need







Cargo Doors

Storage Racks and Cabinets

Full Electrical Service







Security Doors

Heating/Cooling

Rugged Lighting Service

in a retail environment. Customers can see, touch, and feel the parts they're considering, and talk directly to staff when advice is needed. With more than 2,200 locations in more than 90 countries, ParkerStores are yet another way customers can get in, get out, and get going. Find out more at **www.parkerstore.com.**



Before you spec it, STAMP it





Size

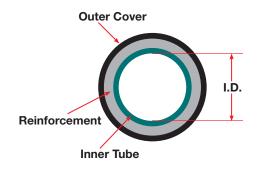
When you order hose and fittings from Parker, remember the word "STAMP." That way you won't forget important information! Parker uses a system of measurement called Dash Numbers to indicate hose and fitting size. The dash number, or dash size, is the measure of a hose's Inner Diameter (I.D.) in sixteenths of an inch. (The exception to this is SAE 100R5 hose. See the chart below for complete details.)

This measuring system of the inside diameter of the hose is universally used by the fluid power industry today. Don't know the hose size? Check the layline. If the original printing has worn off, the original hose must be cut and the inside

diameter measured. Be sure to measure the overall assembly length and fitting orientation before cutting the hose.

The hose I.D. must be sized accurately to obtain the proper flow velocity. A flow that's too slow results in sluggish system performance, while a flow that's too high causes excessive pressure drops, system damage, and leaks.

Use the Flow Capacity Nomogram in Section E to determine the proper hose I.D. for an application's flow rate requirements.



The hose size is determined by the inside diameter which can be measured or found on the layline.

		Hose I.D. (In	nches)				
		Transportation perant Hoses	Transportation and Refrigerant Hoses				
Dash No.	Inches	Millimeters	Inches	Millimeters			
-3	3/16	5	-	-			
-4	1/4	6,3	3/16	5			
-5	5/16	8	1/4	6,3			
-6	3/8	10	5/16	8			
-8	1/2	12,5	13/32	10			
-10	5/8	16	1/2	12,5			
-12	3/4	19	5/8	16			
-16	1	25	7/8	22			
-20	1-1/4	31,5	1-1/8	29			
-24	1-1/2	38	1-3/8	35			
-32	2	51	1-13/16	46			
-40	2-1/2	63	2-3/8	60			
-48	3	76	3	76			



Temperature

When specifying hose, there are two temperatures you need to identify. One is the ambient temperature, which is the temperature that exists outside the hose where it is being used; the other is the media temperature, which is the temperature of the media conveyed through the hose.

Very high or low ambient temperatures can have adverse affects on the hose cover and reinforcement materials, resulting in reduced service life.

Media temperatures can have a much greater impact on hose life. For example, rubber loses flexibility if operated at high temperatures for extended periods. Parker hoses carry different temperature ratings for different fluids. For example, 811HT hose has a temperature range of -40°F to + 257°F (-40°C to +125°C) for petroleum-based hydraulic fluids. However for water, water/glycol, and water/oil emulsion hydraulic fluids, the range drops to a rating of up to +185°F (+ 85°C). Air is rated even lower at up to 158°F (+ 70°C).

Some media can increase or decrease the effects of temperature on the hose. The maximum rated temperature of a hose is specific to the media. See the Minimum/ Maximum Temperature Chart in Section E for a full listing of all temperature ratings.



Application

Before selecting a hose, it is important to consider how the hose assembly will be used. Answering the following questions may help:

- What type of equipment is involved?
- What are the environmental factors?
- Are mechanical loads applied to the assembly?
- Will the routing be confined?
- What about hose fittings permanent or field attachable?
- Will the assembly be subjected to abrasion?

Sometimes specific applications require specific hoses. For example, applications where hoses will encounter rubbing or abrasive surfaces, would be best

handled by our family of abrasionresistant hose with both Tough and Super Tough covers.

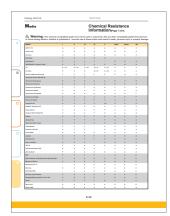
When application space is tight, bend radius is another important consideration. Parker offers a full line of hoses designed for one-half SAE bend radius at full SAE-rated pressures. We offer hoses with increased flexibility and smaller outer diameters enabling faster, easier routing in small spaces, reducing both hose length and inventory requirements.

Industry standards set specific requirements concerning construction type, size, tolerances, burst pressure, and impulse cycles of hoses. Parker hydraulic hoses meet or exceed standards such as:

- SAE (Society of Automotive Engineers)
- EN (European Norm)
- DIN (Deutsches Institut für Normung)
- ISO (International Organization for Standardization)



Governmental agencies control additional standards for particular industries such as U.S.C.G. and ABS. You must select a hose that meets the legal requirements as well as the functional requirements of the application.



Chemical Resistance information on page E-38.

Media

What will the hose convey? Some applications require the use of specialized oils or chemicals. The hose you order must be compatible with the medium being conveyed. Compatibility must cover the inner tube, the cover, hose fittings, and o-rings as well. Use the

Chemical Resistance Chart found in Section E to select the correct components of the hose assembly that will be compatible with your system's media. The chart contains the chemical resistance rating of a variety of fluids.







Pressure

When considering hose pressure, it's important to know both the system working pressure and any surge pressures and spikes.

Hose selection must be made so that the published maximum working pressure of the hose is equal to or greater than the maximum system pressure.

Surge pressures or peak transient pressures in the system must be below the published maximum working pressure for the hose.

Each Parker hose has a pressure rating which can be found on the Hose Overview Chart on page A-6, to A-7 and in Section E.

All Parker hydraulic hoses have passed the industry rated specifications for burst pressure and carry a 4:1 design factor unless otherwise noted. Burst pressure ratings for hose are for manufacturing test purposes only. They are not an indication that the product can be used above the published maximum working pressure. It is for this reason that the burst pressure ratings have been removed from the hose charts within the catalog.

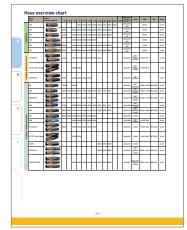
Care must also be taken when looking at the "weakest link" of the hose assembly. A hose assembly is rated at the maximum working pressure of the hose and the fitting component. Therefore the maximum working pressure of the hose assembly is the lesser of the rated



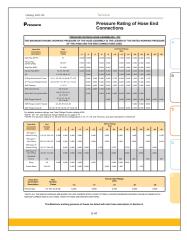
To mix and match components is to increase the risk of hose failure – a dangerous situation regardless of setting or application.

working pressure of the hose and the end connections used.

Here is an example: An F471TC0101040404-60" hose assembly (which consists of 471TC-4 hose and two 10143-4-4 fittings) would have a maximum working pressure of the lesser of the three components. In this case the fittings have a 12,000 psi rating. The hose has a 5,800 psi rating. Therefore the maximum pressure rating of the hose assembly would be 5,800 psi. Pressure ratings for each Parker end connection can be found on the Pressure Rating of Hose End Connections -PSI Chart in Section E.



Hose Overview page A-6 to A-7.



Pressure Rating of Hose End Connections page E-47.

Pressure spikes can occur during machine operation in an instant. They can occur so quickly in fact, that standard glycerin filled gages will never detect them. Using a pressure diagnostic system like Parker's SensoControl can help detect how often and how drastic these pressure spikes



are. Contact your Parker representative today.

Hose basics

Everything you need to know

Hose Hint

Use the layline of the hose as a visual index when routing and tightening the assembly to ensure the hose is not twisted or kinked.



It's all in the family

At Parker, we believe the best hose for your operation is the one that gets the job done right — no more, no less. That's why we offer you a comprehensive line of hoses, as well as all the options that go with it. Worried about price?

We've got rubber hoses that are an exceptional value. Need hose that can take the heat? We've designed hoses for that. Looking for hose to handle the most demanding conditions? No problem. We have hoses made specifically for high temperatures, tight bending, abrasive environments, and more.

Not sure what hose you need? Talk to our experts. They're trained to know, and they're happy to help.

Abrasion? We've got you covered

Got abraision? We've got you covered. Our expanded line of abraision resistant hose offers you a world of protection, not to mention a choice of covers: Tough Cover (TC) for tough environments; SuperTough (ST) for the really tough stuff; and our new Critical Protection (CP) offering a combination of abraision and impact resistance. Depending on your application, our TC, ST, and CP hose covers can simplify your assemblies by eliminating the need for any additional protective sleeving.

М	etal-to-Hose Abrasion Resistar	nce Comp	arison
of Abrasion Resistance	Results from the ISO 6945 metal-to-hose abrasion test show that ToughCover, SuperTough, and Critical Protection cover hoses offer significantly greater abrasion resistance than standard rubber cover hose.	450 X Critical Protection (CP) Cover	450 X Super Tough (ST) Cover
Levels	Standard Rubber Cover Crc Cover (TC)		

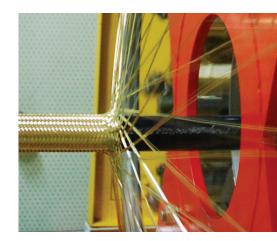
OPTIONAL COVERS								
Туре	Features							
ToughCover (TC)	Very good abrasion resistance. Good resistance to ozone and cold flexibility.							
SuperToughCover (ST)	Excellent abrasion resistance. Very good resistance to ozone and cold flexibility.							
Critical Protection (CP)	Excellent abrasion & damage resistance. Very good resistance to ozone and cold flexibility.							

From the superior flexibility and tighter bend radius of our wire-braided hoses...to the wide fluid compatibility and high pressure performance of our No-Skive spiral hoses...our expanded family of abraision resistant hoses get the job done, giving you the results you need in the construction, forestry, mining, injection molding, refuse and recycling, and energy industries.









Braided vs. spiral hose

Hydraulic hose can be referred to by construction style, of which there are two main types: braided and spiral. The majority of "low-pressure hoses" have a textile braided construction. They're commonly used to transmit petroleum-based fluids, diesel fuel, hot lubricating oil, air, ethylene glycol anti-freeze, and water.

"Medium-pressure hoses" typically feature one- and two-wire braided construction. These hoses are frequently found on construction equipment, heavy-duty trucks, and fleet vehicle applications. In general, braided hose is selected for its flexibility.

At one time in the industry, two-wire braided hose was most commonly used in many applications. But the advent of larger, off-road specialty equipment drove the creation of spiral hose, which is very well suited for applications where extremely high impulse pressure is encountered.

Today, hydrostatic drives using four and six-wire spiral hoses can be found on everything from lawn tractors to earth movers. Because today's world demands faster, more powerful equipment requiring increased working pressures, Parker is responding with an expansive offering of spiral products.



Inner beauty

The inner tube of a hose is offered in several different rubber compounds. Each rubber compound can react differently to the media being conveyed. The inner tube must also resist effects of high or low temperatures and environmental elements. The table on the right highlights popular rubber compounds used for hose inner tubes:

Inner Tube Compounds									
Туре	Features								
PKR® Rubber	Excellent resistance to ozone and weathering; good heat resistance. Good resistance to petroleum-based fluids.								
Synthetic Rubber	Excellent resistance to petroleum-based fluids and environmentally friendly fluids.								
Butyl Rubber	Very good weathering resistance. Good physical properties. Poor resistance to petroleum-based fluids.								
EPDM Rubber	Excellent resistance to phosphate ester fluids and dry air. Poor resistance to petroleum-based fluids.								

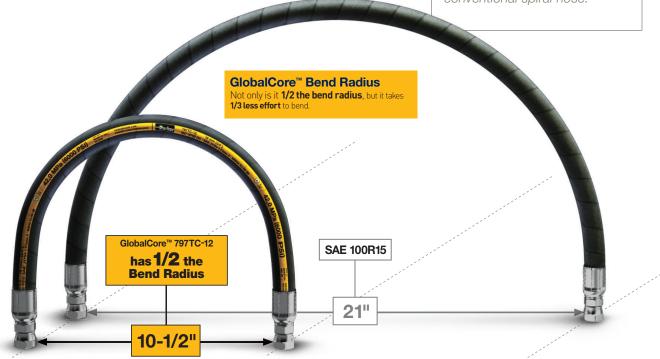
Strong like spiral bends like braided

Looking for flexible hose that can be routed in tight spaces?

Parker has a full line of hoses designed for one-half SAE bend radius at full SAE pressure. These hoses plumb and bend tighter than other SAE 100R1, 100R2,

100R4, 100R12 and 100R13 type hoses, reducing hose length requirements by up to 47%. The tighter bend radius means fewer bent tube fittings, and longer life in applications where machinery movement causes hoses to bend sharply. It also means reduced inventory requirements for you.

GlobalCore Hose has half the bend radius of its SAE counterpart and a significantly smaller bend radius than corresponding-size Parker conventional spiral hose.





Parker fittings

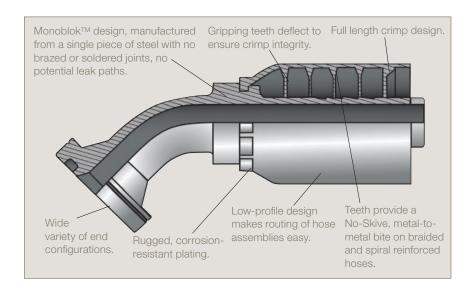
The products of choice for custom and standard applications



Crimpable fittings

Parker Parkrimp assemblies consist of No-Skive hose and fittings, permanently joined by any one of our Parkrimp crimpers. The teeth in Parker's crimped fittings bite down to the hose wire for a metal-to-metal grip with maximum integrity. Our one-piece fittings can be combined with many No-Skive hose types to cover low-, medium- and high-pressure applications, as well as special application categories that can also be used with permanent crimped fittings.

We offer steel, brass, and stainless steel fittings from 3/16" to 3", with our steel fittings featuring a corrosion-resistant plating that exceeds SAE standards. Styles include o-ring face seal, flare, male pipe, metric designs and many more. All are compatible with the easy-to-use Parkrimp system of crimping machines.



When combined with our No-Skive hose, Parker Parkrimp fittings provide factory-quality hose assemblies quickly and cost effectively.

Monoblok™ fittings

Monoblok™ fittings are manufactured from a single piece of steel. First introduced in ultra-high-pressure hydraulic applications, their lack of brazed or

soldered joints provides the utmost in leak protection, eliminating any potential leak paths. Parker Monoblok fittings are available in a wide variety of end configurations and fitting series. These fittings also feature: No-Skive, bite-the-wire, full-length crimp, corrosion-resistant plating, weather seal, and a low-profile design.



Metric fittings

Parker's metric fittings are available in a full range of DIN, BSP, BSPP, French GAZ, and JIS configurations to meet worldwide applications. Parker's metric fittings are available in a wide range of sizes to meet your requirements.

Field attachable fittings

Parker field attachable fittings enable you to make hose assemblies right at the job site without special tools or machines.

Our wide range of No-Skive hose – hose that does not require the removal of the outer cover or inner tube prior to assembly – combines with a variety of field attachable steel, stainless steel, and brass fittings quickly and easily.

Parker field attachable fittings include the popular Push-Lok® style, as well as two- and three-piece series fittings that use an interchangeable nipple with one- and two-wire braided hose.

Custom fittings for short-run or special applications

Custom tube and hose fittings are available from Parker.
Configurations include NPTF,
JIC, SAE, GAZ, ISO, DIN, JIS,

and BSP in a wide range of sizes. Material options include steel, stainless steel and brass. All of our products are manufactured to world-class standards.

Hose Hint

How tight is tight enough? Differences in platings and other variables can affect the amount of torque required to ensure a proper connection. Always refer to this catalog or go to www.parkerhose.com for proper assembly procedures.

Hose End Type	Pressure	Seal Reliability	Vibration Resistance	Ease of Installation	Reusability	Temperature
Seal-Lok – 0-Ring Face Seal	Excellent	Excellent	Very Good	Excellent	Excellent	Limited by Seal
37° Flare	Very Good	Good	Good	Good	Good	Excellent
Tapered – (NPT, NPTF, BSPT and Metric Taper)	TF, BSPT and Good* Poor		Poor	Good	Poor	Excellent
Four-Bolt Flange	Excellent	Good	Excellent	Very Good	Excellent	Limited by Seal

*Rated 'Poor' for dynamic pressure systems.

Hose Hint

Never mix and match one manufacturer's fittings with hose from another manufacturer. Parker hose, fittings, and crimpers are designed to work together as a system. This ensures optimum product performance, reliability, and safety.



Fittings with XTR coating for extreme resistance to corrosion

Parker XTR coating provides more than seven times SAE standard protection. An outstanding advantage for equipment in highly caustic applications and environments, Parker's proprietary formulation has been tested to resist corroding for more than 720 hours. Parker products with XTR coating assure all the leak-free performance and installation advantages that our customers expect. Even the assembly torque remains the same. For unmatched quality, service and support, now with extreme corrosion resistance, specify Parker hose and tube fitting products with XTR coating. For additional information, refer to Bulletin 4480-B158.



GlobalCore Hydraulic Industry Standard Suction & Return Line Push-Lok Multipurpose Phosphate Ester Low Temperature Transportation Alternative/Marine Refrigerant

Hose visual index

В

C

D



Hose visual index

722LT	A-41	792LT	A-41	Transportatio Hose	n	293	A-42 PARKER 299/AR BRANE II
ISO 3862-1	TYPE R12	SAE J517	100R15	Tiose		SAE J1	402 AI
213	A-43	266	A-44	201	A-45	206	A-46
	ARKER STRATOFILEX 200 AM &		ARKER 266 AIR BRAKE		Parker 201 AIR BRAKE		<u> </u>
SAE J1	402 AI	SAE J1	402 AII	SAE J51	7 100R5	SAE J51	7 100R5
611HT	A-47	271	A-48			SS23CG	A-49
	Parker 611HT HI-TEMP		arker 271 AIR BRAKE	Alternative/ Marine Hose		PA	PIKER SS23CG
SAE J517	7 100R6	SAE J1	402 A			UL	21
SS25UL	A-50	SS25UL-AGA	A-50	221FR	A-51		
	SSZSUL TY LE GAS PA		SS2501 W Is als by	P	ARKER 221FR	Refrigerant Hose	
UL 21 / N	NFPA 58	AS / NZS 1869-	2012 CLASS D	ISO	7840		
285	A-52	244	A-53				
	PARKER 285		PARKER 244				
SAE J2	2064-C	SAE J2064-	B CLASS 1				

В

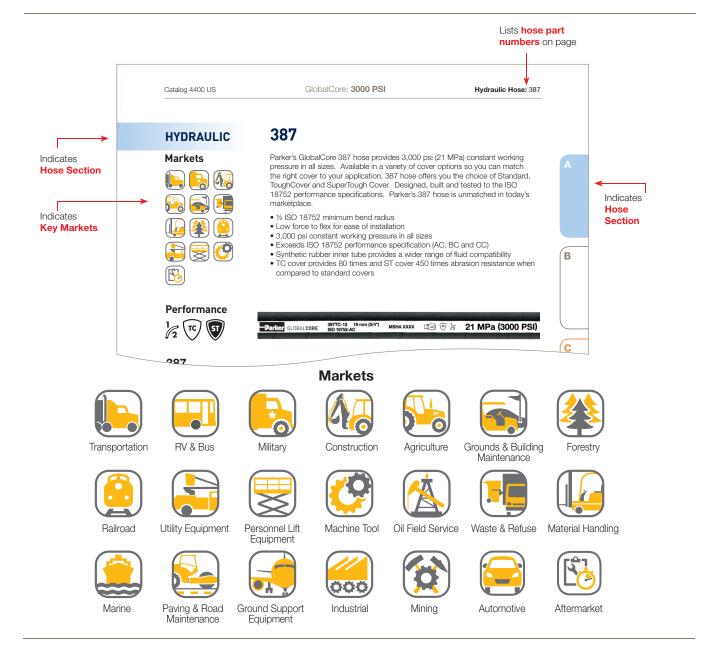
How to read the hose section

Parker offers a wide variety of hoses including braided, spiral, multi-purpose, transportation, refrigerant, LP gas and more. Parker's product line has been tested and approved to meet

B

and exceed global standards. Our hoses range in size from 3/16" to 3" I.D. and are compatible with crimp and field-attachable style fittings. Specific hose information is displayed throughout the catalog and

is defined by the information shown below. Please take a moment and review.



Performance Legend



Half SAE Bend



ToughCover



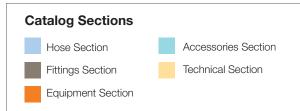
SuperTough Cover

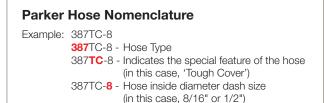


High Temperature

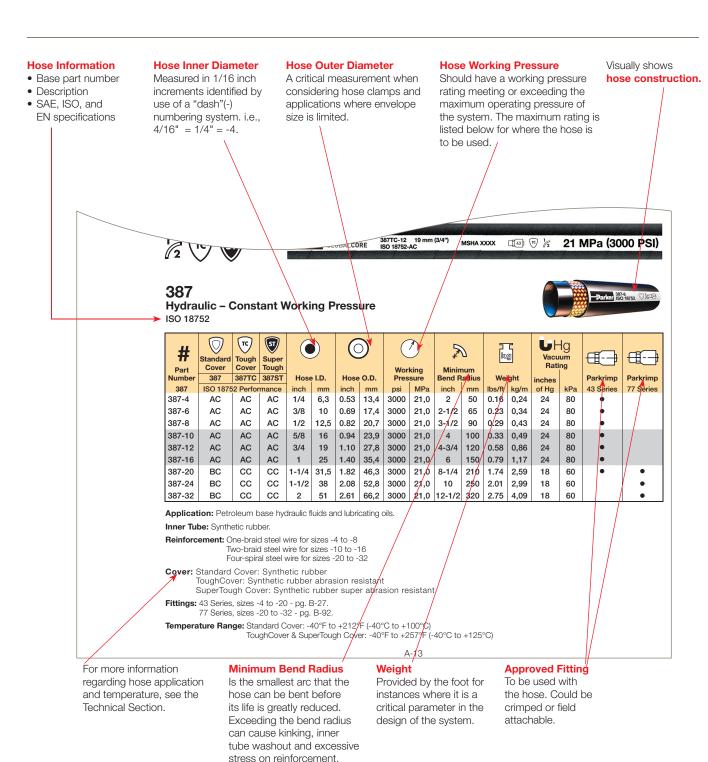


Low Temperature





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Hose overview chart

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	Hose Size	Hose Reinforcement	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32	-40	-48	Standard Temp. Range °F	SAE	ISO	EN	Page
	187	-9ater 10 12				1000	1000	1000	1000	1000	1000	1000	1000		-40/+212/ +257		18752		A-13
	387	Parket 80 term (7858)	3000		3000	3000	3000	3000	3000	3000	3000	3000			-40/+212/ +257		18752		A-14
Core	487	- 7 6 6 m m 2	4000		4000	4000	4000	4000	4000	4000	4000	4000			-40/+212/ +257		18752		A-15
GlobalCore	722	-244 Hills 103			4000	4000	4000	4000	4000						-40/+212/ +257		18752		A-16
	787	-Pulse NIG . s	5000		5000	5000	5000	5000	5000	5000	5000	5000			-40/+212/ +257		18752		A-17
	797	-Darker Michigan	6000		6000	6000	6000	6000	6000	6000	6000	6000			-40/+212/ +257		18752		A-18
	JK	THE POLICE AND AN	10500		10000										-40/+120	J517 100R2AT	1436-1-2SN	853-2SN	A-19
	422	200 W 00000	3250	3125	2600	2325	1875	1525	1275	900	725	575			-40/+212	J517 100R1AT/ J1942	1436-1-1SN	853-1SN	A-20
	482TC/ST	Sam Sec Mill ac	3250	3250	3000	2500	2000	1750	1275						-40/+212	J517 100R1AT/ J1942	1436-1-1SN	853-1SN	A-21
70	426	NO ROS CO	2750		2250	2000	1500	1250	1000	625	500	375			-50/+302	J517 100R1AT/ J1942			A-22
tandar	302	- NEXT NEXT NOTICE	5800	5000	4750	4000	3600	3100	2400	1800	1300	1150			-40/+212	J517 100R2AT/ J1942	1436-1-2SN	853-2SN	A-23
istry Si	436	Parker NO-SOVE ON			4000	3500	2750	2250	2000						-55/+302	J517 100R16	11237-R16		A-24
Hydraulic – Industry Standard	471TC/ST	See Front HVF OR	5800		5000	4250	3625	3125	2500						-40/+212	J1942	11237-2SC	857-2SC	A-25
Hydr	471TC Twin Tough	A FERNICA OF			5000	4250									-40/+212	J1942	11237-2SC	857-2SC	A-26
	472TC	Parint 10/14/1009 CTT								2250	1800	1300			-40/+212	J1942			A-27
	722TC/ST									3000	2500	2500			-40/+257	J517 100R12/ J1942	3862-1-R12	856-R12	A-28
	777							4000	4000						-40/+212/ +257		18752		A-29
Line	811/811HT with HC	PARKER HIS ECCO-ME						100	70	50	50	50	62		-40/+212 /+257	J517 100R4/ J1942*			A-30
Return	811/811HT with 81	PARKER INTERIOR AND						300	250	200	150	100	62		-40/+212 /+257	J517 100R4/ J1942*			A-31
Suction and	881 with HC	PARKER SI SUTION SIS						100	70	50	50	50	62		-40/+257	J517 100R4/ J1942			A-31
	881 with 43/81/DB	PROPERTY SET SUCTOR SEE						300	250	200	150	100	62		-40/+257	J517 100R4/ J1942			A-31

Updated 12/2020

Hose overview chart

В

																JSE UV	CIVIC	** **	
	Hose Size	Hose Reinforcement	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32	-40	-48	Standard Temp. Range °F	SAE	ISO	EN	Page
	801	Powies year Ltd First Co.	350		350	300	300	300	200						-40/+257				A-32
×	836	Parley VIII LLEPIS ON	400		400	400	350	300							-55/+302				A-34
Push-Lok	804	Pizzlar PUSHICA SA	150		150	150	150	150							-40/+176				A-34
_	821	PARKER PUSHLOX III	350		300	300	250	250							-40/+212				A-35
	821FR	PARKER PUSHLOX INVA	350		300	300		250							-40/+212				A-35
	627	-Parker SERIES 657													-40/ +212				A-36
ter	304	The MO State IN	5000		4000	3500	2750	2250	2000	1625	1250	1125			-40/+176				A-38
ate Ester	774	Carlo Holosoft						4000	4000	3000	2500	2500			-40/+176				A-38
Phosphate	424	CENTER HOSONE ON							1000	625	500	375			-40/+176				A-37
ā	F42	(2)				6000		6000	6000	6000					-40/+176				A-39
du	472LT	Parks 100 SUE (ZU)	5800		5000	4250	3625	3125	2500						-70/+212			857-2SC	A-40
Low-Temp	722LT				4000	4000	4000	4000	4000	3000	2500				-70/+212	J517 100R12	3862-1-R12	856-R12	A-41
	792LT	7-4m							6000	6000	6000				-70/+212	J517 100R15	3862-1R15	856-R15	A-41
	293	PARKER 29860 WAS II	500		500	500	450	450	450						-58/+302	J1402 AI			A-42
	213	PARKER (TRANSPLES COME	2000	1500	1500	1250	1000	750	400	300	300	200	175		-50/+302	J1402 AI			A-43
ation	266	PARKER 206 AR BAAS	2000	1500	1500	1250	1250	750	400	300	250				-55/+302	J1402 AII			A-44
Transportation	201	DETAIL 201 AR BEASE	3000	3000	2250	2000	1750	1500	800	625	500	350	350	200	-40/+302	J517 100R5/ J1402 All			A-45
Tra	206		3000	3000	2250	2000	1750	1500	800	625	500	350	350		-55/+302	J517 100R5/ J1402 All			A-46
	611HT	- Service - EANAL KYLONA	400		400	400	350	300							-55/+302	J517 100R6		854-R6	A-47
	271	Parker Th M. P.M.			225	225									-50/+212	J1402 A			A-48
rine	SS23CG	PARKER SOMES			425	425	425	425							-40/+250				A-49
ive/Ma	SS25UL		350	350	350	350	350	350							-40/+250				A-50
Alternative/Marine	SS25UL-AGA	No Service of the ser	350	350	350	350	350	350							-40/+250	J1527 A			A-50
	221FR	PANKER ZORI		500	500	500	500	500	500						-4/+212	Class I/ J1942	7840		A-51
Refrigerant	285	PAPIXER 265	500		500	500	500	500							-22/+257	J2064-C			A-52
Refr	244	PARKER 244							500	500	350				-22/+257	J2064-B Class 1			A-53

*811 Hose is not compliant with SAE J1942

How to order crimped hose assemblies

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9	Box 10	Box 11
F	387	06	39	08	08	08		-24		

Parker 387-8 10643-8-8 13943-8-8 OAL

В

Box 1:	Prefix
Symbol	Description
F = P = Y = K =	Parkrimp Crimp Fittings (43, 77 Series, etc.) Parkrimp Crimp Fittings (26 Series only) Permanent Crimp Fittings (HY Series only) Permanent Crimp Fittings (81 Series only)

Box 2:	Hose Type					
Symbol	Description					
387 =	ISO 18752 Hose					
Note: see page A-6 for complete list of Parker Hoses						

Box 3: 1st Fitting End Configuration

Syn	nbol	Description
06	=	Female JIC 37 Degree Swivel Straight
No	te: See	page E-32 for a complete list of fitting configurations

Box 4: Symbol	2nd Fitting End Configuration Description
39 =	Female JIC 37 Degree Swivel 90 Degree Elbow - Short Drop

Box 5:	1st Fitting End Connection Size
Symbol	Description
08 =	1/2" Female JIC (3/4x16 Thread)

Box 6:	2nd Fitting End Connection Size
Symbol	Description
08 =	1/2" Female JIC (3/4x16 Thread)

Box 7:	Hose Size
Symbol	Description
08 =	1/2 inch Hose Inner Diameter

00 -	1/2 Indititiose initial blantatal
Box 8:	Fitting Material
Symbol	Description
No Suffix B = C = BA = BS = ZJ =	Steel Brass 316 Stainless Steel Brass nipple with steel nut and socket Brass nipple with brass nut and steel socket XTR plating

	1 0
Box 9:	Over All Length (OAL)
Symbol	Description
24 =	Expressed in inches (610 mm)

OAL of a hose assembly is measured from the end of the straight fitting or centerline of the fitting seat. OAL of the Seal-Lok® hose assembly is measured to the sealing surface of the straight fittings or to the centerline of the elbow fittings

Box 10:	Displacement Angle
Symbol	Description
270	Specified only if two (2) elbow fittings are used. Starting with either end as the far end, measure angle clockwise to describe the displacement angle of the near end

Box 11:	Hose Assembly Guards
Symbol	Description
SG =	Spring Guard
HG =	Polyguard
PG =	ParKoil™
FS =	Fire Sleeve
AS =	Partek Sleeving
PS =	Partek Sleeving
	pelling out an assembly part number, list entire g part number

Updated 8/2021

How to order field attachable hose assemblies

Box 1 Bo	x 2 Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9	Box 10	Box 11
R 20	01 06	39	06	06	08		-24		



Box 1:	Prefix
Symbol	Description
R = M = B = C =	Field Attachable (all series except 22 & 23) Field Attachable (22 & 23 Series only) Clamp i.e., 88HC-H and 88DB on 88 Series Worm Gear Clamp i.e., 88H Series on 88 Series

	Hose Type
Symbol	Description
201=	SAE 100R5
Note: See	e page A-6 for complete list of Parker Hoses

Box 3:	1st Fitting End Configuration	
Symbol	Description	
06 =	Female JIC 37 Degree Swivel - Str.	
Note: See page E-32 for a complete list of fitting configurations		

Box 4: 2nd Fitting End Configuration						
Symbol	Description					
39 =	JIC 37 Degree Flare Elbow					
	0.0 0. 20g.00 . Idio 2.50					

Box 5:	1st Fitting End Connection Size					
Symbol	Description					
06=	3/8" JIC (9/16x18 Thread)					

Box 6: Symbol	2nd Fitting End Connection Size Description
06=	3/8" JIC (9/16x18 Thread)

Box 7:	Hose Size
Symbol	Description
08 =	13/32 inch Hose Inner Diameter

B

Box	c 8:	Fitting Material					
Syn	nbol	Description					
No	Suffix =	Steel					
В	=	Brass					
С	=	316 Stainless Steel					
BA	=	Brass nipple with steel nut and socket					
BS	=	Brass nipple with brass nut and steel socket					

Box 9:	Over All Length (OAL)					
Symbol	Description					
24 =	Expressed in inches (610 mm)					
OAL of a hose assembly is measured from the end of the straight fitting or centerline of the fitting seat. OAL of the Seal-Lok® hose assembly is measured to the sealing						

surface of the straight fittings or to the centerline of the

elbow fittings

Box 10:	Displacement Angle
Symbol	Description
270	Specified only if two (2) elbow fittings are used. Starting with either end as the far end, measure angle clockwise to describe the displacement angle of the near end

Box 11:	Hose Assembly Guards
Symbol	Description
SG =	Spring Guard
HG =	Polyguard
PG =	ParKoil™
FS =	Fire Sleeve
AS =	Partek Sleeving
PS =	Partek Sleeving
	nen spelling out an assembly part number, list tire sleeving part number

Updated 8/2021

[•] See page E-14 for Agency Approval For Building Hose Assemblies Key

GLOBALCORE

Providing a simple solution of robust hydraulic hoses designed to endure the tough conditions where work gets done, GlobalCore is the future that OEMs and end users around the world have been asking for.

You know Parker as the global leader in providing unprecedented performance and value for hydraulic systems with high-pressure applications. With our GlobalCore solution, you can significantly reduce your inventory and part number complexity by using GlobalCore's constant working pressure hoses and fittings.

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Designed to meet the most common working pressures in industry, GlobalCore stands above the competition and serves customers around the world with a simple family of constant working pressure hoses.

GlobalCore hoses are manufactured in the major regions of the world – North America, Europe and Asia – supporting the equipment they serve, regardless of where it was originally manufactured, or where it is today.

Designed, built and tested to the ISO 18752 specifications, GlobalCore reduces engineering and service complexity by providing the first comprehensive product family across the most commonly used constant working pressure classes.

Parker's worldwide reach makes GlobalCore easier to specify and source through our unrivaled industrial distribution network of 13,000 locations globally.

Hoses	-4	-6	-8	-10	-12	-16	-20	-24	-32	-40	-48
7 MPa / 1,000 psi			187	187	187	187	187	187	187	187	187
21 MPa / 3,000 psi	387	387	387	387	387	387	387	387	387		
28 MPa / 4,000 psi	487	487/722	487/722	487/722	487/722	487/722	487	487	487		
35 MPa / 5,000 psi	787	787	787	787	787	787	787	787	787		
42 MPa / 6,000 psi	797	797	797	797	797	797	797	797	797		
Fittings	-4	-6	-8	-10	-12	-16	-20	-24	-32	-40	-48
7 MPa / 1,000 psi			43	43	43	43	43	43	43	43	43
21 MPa / 3,000 psi	43	43	43	43	43	43	43,77	77	77		
28 MPa / 4,000 psi	43	43	43	43	43	43	77	77	77		
35 MPa / 5,000 psi	43	43									
42 MPa / 6,000 psi	43	43	77	77	77	77	77	77	77		

All hoses rated to ISO 18752 performance specifications Various cover options available, see hose charts for detail



High performance

Because challenges can emerge anytime and anywhere, your solution should endure the tough conditions of your work environment. The high performance standards designed, engineered and manufactured into GlobalCore provide the longest service life possible.

With GlobalCore hoses tested to twice their ISO 18752 standard, high performance in rugged environments and high impulse applications is ensured.

Long known as the premier manufacturer of hydraulic hoses, you can expect Parker's GlobalCore system will continue to meet our own rigorous standards of excellence.

Additional value is realized through:

- 212° / 257° F temperature ratings
- Standard, ToughCover and SuperTough Cover technologies for abrasion resistance
- ½ minimum bend radius
- Low force to flex for ease of installation
- Advanced inner tube chemistry

Cohesive

GlobalCore is a unified system that delivers hoses designed, built and tested to the ISO 18752 specification.

Released in 2006, and quickly adopted by customers worldwide, Parker is at the forefront of delivering this universal standard for hydraulic hoses.

The ISO 18752 specification was developed based on how hoses are specified and used by customers - by pressure range, and not by construction. It's a truer specification

150 18752 Performance Definitions (4.2 Grades and Types)									
		Resistance to Impulse							
Grade	Typea	Temperature °C	Impulse Pressure (% of MWPb)	Minimum Number of Cycles					
A	AS	100	133%	200,000					
	AC	100	13370	200,000					
В	BS	100	133%	500,000					
В	BC	100	13370						
С	CS	120	133% and 120%°	500,000					
	CC	120	13370 and 120%						
D	DC	120	133%	1 000 000					

^a Standard or compact, e.g. CS is grade C and standard type.

Standard types have larger outside diameters and larger bend radii and compactypes have smaller outside diameters and smaller bend radii.

^b Maximum working pressur

c 120% of the MWP shall be used for classes 350, 420 and 560 instead of 133%.

ISO 18752 classifies according to their resistance to impulse into four grades: A, B, C and D. Each grade is classified by outside diameter into standard types (AS, BS and CS) and compact types (AC, BC, CC and DC) as shown in this table.

based on today's needs. Although the specification covers hoses ranging from 500 psi through 8,000 psi and in sizes from -3 to -64, our focus is on the critical range where our customers operate.

GlobalCore expands our range of ISO 18752 hoses and provides options for the most critical sizes and pressure ranges.



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C

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Global

A single cohesive family of complimentary products so qualified has never before been offered globally.

With manufacturing locations in the major global regions, regardless of where your equipment was originally manufactured or is today, GlobalCore will support your hydraulic hose needs.

Simple

B

GlobalCore is a unified system that delivers hoses built on the ISO 18752 specifications, which was developed on how hoses are specified and used by customers – by pressure range and not by construction. Therefore, the selection process is simple. Select the GlobalCore hose based on maximum working pressure required for your application.

Selecting the fitting is even simpler. Choose the renowned 43 Series, with more than 2,500 configurations, or the 77 Series, designed specifically for higher pressure applications and available in more than 500 configurations.

Agency approvals

GlobalCore carries the most common international agency approvals as requested by our customers. ABS, DNV, Lloyd's, MSHA*, USCG are comprehensive approvals, while other certifications will be specific to designated hoses or sizes.











Visit parkerglobalcore.com for the latest list of hose and agency approvals.*

Visit www.parker.com/GlobalCore for more information.

*MSHA only approved for TC and ST cover options.



Catalog 4400 US GlobalCore: **1000 PSI Hydraulic Hose:** 187

HYDRAULIC

187

Markets











Parker's GlobalCore 187 Hose provides 1,000 psi (7 MPa) constant working pressure in sizes -8 through -48. Designed and engineered for reliable, lasting performance in high-pressure hydraulic applications, 187 Hose is unmatched in today's marketplace.

- ½ ISO 18752 minimum bend radius (up to -32)
- Low force to flex for ease of installation
- Exceeds ISO 18752 performance specification (AC and AS)
- Synthetic rubber inner tube provides a wider range of fluid compatibility
- TC cover provides 80 times and ST cover 450 times abrasion resistance when compared to standard covers

Performance





187 Hydraulic – Constant Working Pressure ISO 18752



view on web page

# Part	Standard Cover	Tough Cover	Super Tough			0		Work	(ing	Minim		S Ik	5	Vacu Rati	ıum	Crimp S	Solution Variable
Number	187	187TC	187ST	Hose	I.D.	Hose	O.D.	Press	-	Bend R		We	ight	inches		Parkrimp	Crimper
187	ISO 1875	52 Perfor	mance	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	43 Series	43 Series
187-8	AC	AC	AC	1/2	12,5	0.81	21	1000	7,0	2-1/2	65	0.29	0,43	24	80	•	
187-10	AC	AC	AC	5/8	16,0	0.93	24	1000	7,0	3	75	0.33	0,49	24	80	•	
187-12	AC	AC	AC	3/4	19,0	1.08	27	1000	7,0	3-1/2	90	0.42	0,63	24	80	•	
187-16	AC	AC	AC	1	25,0	1.41	36	1000	7,0	4-1/2	114	0.61	0,91	24	80	•	
187-20	AC	AC	AC	1-1/4	31,5	1.75	44	1000	7,0	5-1/2	140	1.24	1,85	18	60	•	
187-24	AC	AC	AC	1-1/2	38,0	2.04	52	1000	7,0	9-3/4	248	1.32	1,96	18	60	•	
187-32	AC	AC	AC	2	51,0	2.54	65	1000	7,0	12-1/2	318	1.75	2,60	18	60	•	
187-40	AS	AS	AS	2-1/2	63,5	2.97	75	1000	7,0	20	508	2.04	3,04	18	60		•
187-48	AS	AS	AS	3	76,0	3.54	91	1000	7,0	20	508	2.77	4,12	18	60		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: One- or two-braided steel wires. **Cover:** Standard Cover: Synthetic rubber.

ToughCover: Synthetic rubber abrasion resistant. SuperTough Cover: Synthetic rubber super abrasion

resistant.

Fittings: 43 Series - pg. B-27.

Temperature Range: Standard Cover: -40°F to +212°F (-40°C to +100°C).

ToughCover & SuperTough Cover: -40°F to +257°F (-40°C to +125°C).

For -40 & -48 sizes only -40°F to +212°F (-40°C to +100°C).









Catalog 4400 US **Hydraulic Hose: 387** GlobalCore: 3000 PSI

> • ½ ISO 18752 minimum bend radius • Low force to flex for ease of installation

compared to standard covers

HYDRAULIC

387

Markets

















B

















387TC-12 19 mm (3/4") ISO 18752-AC

MSHA XXXX

Parker's GlobalCore 387 Hose provides 3,000 psi (21 MPa) constant working pressure in sizes -4 through -32. With a lightweight, flexible design, 387 Hose improves routing capabilities and maximizes efficiency across sizes and markets.

• Exceeds ISO 18752 performance specification (AC, BC and CC) • Synthetic rubber inner tube provides a wider range of fluid compatibility • TC cover provides 80 times and ST cover 450 times abrasion resistance when



21 MPa (3000 PSI)

387 **Hydraulic - Constant Working Pressure** ISO 18752



view on web page

# Part	Standard Cover	Tough Cover	Super Tough			(Worl	king) Jum	k	C	Vacu Rati	um		
Number	387	387TC	387ST	Hose	I.D.	Hose	O.D.	Pres	sure	Bend R	adius	Wei	ght	inches		Parkrimp	Parkrimp
387	ISO 1875	2 Perfor	mance	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	43 Series	77 Series
387-4	AC	AC	AC	1/4	6,3	0.53	13,4	3000	21,0	2	50	0.16	0,24	24	80	•	
387-6	AC	AC	AC	3/8	10	0.69	17,4	3000	21,0	2-1/2	65	0.23	0,34	24	80	•	
387-8	AC	AC	AC	1/2	12,5	0.82	20,7	3000	21,0	3-1/2	90	0.29	0,43	24	80	•	
387-10	AC	AC	AC	5/8	16	0.94	23,9	3000	21,0	4	100	0.33	0,49	24	80	•	
387-12	AC	AC	AC	3/4	19	1.10	27,8	3000	21,0	4-3/4	120	0.58	0,86	24	80	•	
387-16	AC	AC	AC	1	25	1.40	35,4	3000	21,0	6	150	0.79	1,17	24	80	•	
387-20	BC	CC	CC	1-1/4	31,5	1.82	46,3	3000	21,0	8-1/4	210	1.74	2,59	18	60	•	•
387-24	вс	CC	CC	1-1/2	38	2.08	52,8	3000	21,0	10	250	2.01	2,99	18	60		•
387-32	BC	CC	CC	2	51	2.61	66,2	3000	21,0	12-1/2	320	2.75	4,09	18	60		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: One-braid steel wire for sizes -4 to -8. Two-braid steel wire for sizes -10 to -16.

Four-spiral steel wire for sizes -20 to -32.

Cover: Standard Cover: Synthetic rubber.

ToughCover: Synthetic rubber abrasion resistant. SuperTough Cover: Synthetic rubber super abrasion

resistant.

Fittings: 43 Series, sizes -4 to -20 - pg. B-27. 77 Series, sizes -20 to -32 - pg. B-90.

Temperature Range: Standard Cover: -40°F to +212°F (-40°C to +100°C).

ToughCover & SuperTough Cover: -40°F to +257°F (-40°C to +125°C).

Catalog 4400 US **Hydraulic Hose:** 487 GlobalCore: 4000 PSI

HYDRAULIC

487

Markets













Parker's GlobalCore 487 Hose provides 4,000 psi (28 MPa) constant working pressure in sizes -4 through -32. Constructed for high performance, 487 Hose is designed for easy installation and handling in even the toughest applications. Highly flexible across all sizes, 487 Hose excels in multiple applications around the world.

- ½ ISO 18752 minimum bend radius
- Low force to flex for ease of installation
- Exceeds ISO 18752 performance specification (AC, BC & CC)
- TC cover provides 80 times and ST cover 450 times abrasion resistance when compared to standard covers

Performance











487 **Hydraulic - Constant Working Pressure**

ISO 18752



view on web page

# Part	Standard Cover	Tough Cover		Critical Protection			()	Wor	king	Mini	mum	kg			—
Number	487	487TC	487ST	487CP	Hose	l.D.	Hose	O.D.	Pres	sure	Bend I	Radius	Wei	ght	Parkrimp	Parkrimp
487	ISO	18752 P	erforma	ınce	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	77 Series
487-4	AC	AC	AC		1/4	6,3	0.52	13,1	4000	28,0	2	50	0.20	0,30	•	
487-6	AC	AC	AC		3/8	10	0.68	17,2	4000	28,0	2-1/2	65	0.28	0,42	•	
487-8	AC	AC	AC	AC	1/2	12,5	0.81	20,4	4000	28,0	3-1/2	90	0.35	0,52	•	
487-10	AC	AC	AC		5/8	16	0.94	23,9	4000	28,0	4	100	0.44	0,66	•	
487-12	AC	AC	AC	AC	3/4	19	1.10	27,8	4000	28,0	4-3/4	120	0.58	0,86	•	
487-16	BC	CC	CC	CC	1	25	1.49	37,8	4000	28,0	6	150	1.34	1,99	•	
487-20	ВС	CC	CC		1-1/4	31,5	1.82	46,3	4000	28,0	8-1/4	210	1.74	2,59		•
487-24	ВС	CC	CC		1-1/2	38	2.03	52,8	4000	28,0	10	250	2.07	3,08		•
487-32	BC	CC	CC		2	51	2.65	67,3	4000	28,0	12-1/2	320	4.35	6,47		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Two-braid steel wire for sizes -4 to -12. Four-spiral steel wire for sizes -16 to -24.

Six-spiral steel wire for size -32.

Cover: Standard Cover: Synthetic rubber.

ToughCover: Synthetic rubber abrasion resistant. SuperTough Cover: Synthetic rubber super abrasion resistant. Critical Protection Cover: Synthetic rubber excellent

abrasion & damage resistance.

Fittings: 43 Series, sizes -4 to -16 - pg. B-27. 77 Series, sizes -20 to -32 - pg. B-90.

Temperature Range: Standard Cover: -40°F to +212°F (-40°C to +100°C).

> ToughCover & SuperTough Cover: -40°F to +257°F (-40°C to +125°C).

MARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

Updated 2/2023

B

Catalog 4400 US GlobalCore: **4000 PSI Hydraulic Hose:** 722

HYDRAULIC

722

Markets















B





Parker's GlobalCore 722 Hose provides 4,000 psi (28 MPa) constant working pressure in sizes -6 through -16. Designed for high-pressure, high-impulse applications, 722 Hose delivers maximum performance and efficiency. The 4-spiral construction of 722 Hose ensures ease of installation while reducing the amount of hose needed for your application.

- ½ ISO 18752 minimum bend radius
- Exceeds ISO 18752 performance specification (BC and CC)
- 4-spiral construction for longer life in high-impulse, heavy-duty cycle applications
- TC cover provides 80 times and ST cover 450 times abrasion resistance when compared to standard covers

Performance









722 Hydraulic – Constant Working PressureISO 18752



view on web page

	Standard	•	Super			(Worl	9		mum	[kg	_	=
Number	Cover	Cover	Tough	Hos	e I.D.	Hose	O.D.	Pres	sure	Bend I	Radius	Wei	ight	Parkrimp
	722	722TC	722ST											
	ISO 18	752 Perfor	mance	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
722-6	BC	CC	CC	3/8	10	0.78	19,9	4000	28,0	2-1/2	65	0.40	0,60	•
722-8	вс	CC	CC	1/2	12,5	0.89	22,7	4000	28,0	3-1/2	90	0.54	0,80	•
722-10	ВС	CC	CC	5/8	16	1.04	26,4	4000	28,0	4	100	0.74	1,10	•
722-12	ВС	CC	CC	3/4	19	1.21	30,7	4000	28,0	4-3/4	120	0.94	1,40	•
722-16	BC	CC	CC	1	25	1.50	37,8	4000	28,0	6	150	1.34	1,99	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Four-spiral steel wire.

Cover: Standard Cover: Synthetic rubber.

ToughCover: Synthetic rubber abrasion resistant. SuperTough Cover: Synthetic rubber super abrasion

resistant.

Fittings: 43 Series - pg. B-27.

Temperature Range: Standard Cover: -40°F to +212°F (-40°C to

+100°C) - BC.

ToughCover & SuperTough Cover: -40°F to

+257°F (-40°C to +125°C).

Catalog 4400 US **Hydraulic Hose:** 787 GlobalCore: 5000 PSI

HYDRAULIC

787

Markets















Parker's GlobalCore 787 hose provides 5,000 psi (35 MPa) constant working pressure in sizes -4 through -32. With a Compact Spiral design that offers greater advantages in routing and installation, 787 hose delivers superior performance in a lightweight, force-to-flex product.

- ½ ISO 18752 minimum bend radius
- Meets ISO 18752 performance specification
- Nearly 30% smaller O.D. by area than SAE spiral
- Twice the impulse/life tested up to 2,000,000 cycles
- Flex impulse tested providing a hose superior in both performance and service life
- Weighs less than SAE spiral hose
- TC cover provides 80 times and ST cover 450 times abrasion resistance when compared to standard covers

Performance











787 Hydraulic - Constant Working Pressure ISO 18752



view on web page

#		(A)	(57)	СР			((5	7	5 [k	9		
Part Number	Standard Cover	Tough Cover	Super Tough Cover	Critical Protection	Hos	e I.D.	Hose	O.D.	Wor Pres	_	Minin Bend F		Wei	ight	Parkrimp	Parkrimp
	787	787TC	787ST	787CP	inah		inah		:	MDa	inah		lla a /fi	lear/ma	40 Carias	77 Corios
787-4	AC	AC	Performan AC	ice	inch 1/4	mm	inch 0.51	mm	psi 5000	MPa	inch 2	mm 50	1bs/ft 0.21	kg/m 0.31	43 Series	77 Series
		_				6,3		13,0		35,0	_		_		•	
787-6	AC	AC	AC		3/8	10	0.68	17,2	5000	35,0	2-1/2	63	0.28	0,42	•	
787-8	BC	DC	DC	DC	1/2	12,5	0.83	21,1	5000	35,0	3-1/2	90	0.45	0,67		•
787-10	ВС	DC	DC		5/8	16	0.94	23,9	5000	35,0	4	100	0.54	0,80		•
787-12	ВС	DC	DC	DC	3/4	19	1.10	27,9	5000	35,0	4-3/4	120	0.78	1,16		•
787-16	ВС	DC	DC	DC	1	25	1.40	35,7	5000	35,0	6	150	1.17	1,74		•
787-20	ВС	DC	DC		1-1/4	31,5	1.77	44,9	5000	35,0	8-1/4	210	1.95	2,89		•
787-24	BC	DC	DC		1-1/2	38	2.08	52,8	5000	35,0	10	255	2.66	3,96		•
787-32	BC	DC	DC		2	51	2.66	67,6	5000	35,0	12-1/2	318	4.37	6,50		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Proprietary synthetic rubber.

Reinforcement: Two-braid steel wire for sizes -4 to -6, Four- or six-compact spiral steel wires for sizes

-8 to -32.

Cover: Standard Cover: Synthetic rubber.

ToughCover: Synthetic rubber abrasion resistant. SuperTough Cover: Synthetic rubber super abrasion resistant. Critical Protection Cover: Synthetic rubber excellent abrasion & damage resistance.

Fittings: 43 Series: sizes -4 to -6 - pg. B-27. 77 Series: sizes -8 to -32 - pg. B-90.

Temperature Range: Standard Cover:

-40°F to +212°F (-40°C to +100°C). ToughCover & SuperTough Cover: -40° F to $+257^{\circ}$ F (-40° C to $+125^{\circ}$ C). (-4 to -6 rated to +212°F).

MARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov. Updated 2/2023 B

Catalog 4400 US GlobalCore: **6000 PSI Hydraulic Hose: 797**

HYDRAULIC

797

Markets















B

Parker's GlobalCore 797 hose provides 6,000 psi (42 MPa) constant working pressure in sizes -4 through -32. Tested up to 2,000,000 cycles, 797 hose provides superior performance and service life with an easy-to-install compact spiral construction for high-pressure, high-impulse applications.

- Meets ISO 18752 performance specification
- Nearly 30% smaller O.D. by area than SAE spiral
- Twice the impulse/life tested up to 2,000,000 cycles
- Flex impulse tested providing a hose superior in both performance and service life
- Weighs less than SAE spiral hose
- TC cover provides 80 times and ST cover 450 times abrasion resistance when compared to standard covers

Performance











797 Hydraulic – Constant Working Pressure ISO 18752



view on web page

#		TC	Super	СР			0				5*	7	k	C		
Part Number	Standard Cover 797	Tough Cover 797TC	Tough	Critical Protection 787CP	Hose	e I.D.	Hose	O.D.	Worl Pres	•	Minin Bend R		Wei	ght	Parkrimp	Parkrimp
	IS	O 18752 F	Performar	nce	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	77 Series
797-4	AC	AC	AC		1/4	6,3	0.51	13,0	6000	42,0	2	50	0.21	0,31	•	
797-6	BC	CC	CC		3/8	10	0.66	17,0	6000	42,0	2-1/2	63	0.31	0,46	•	
797-8	вс	DC	DC	DC	1/2	12,5	0.83	21,1	6000	42,0	4	100	0.45	0,67		•
797-10	ВС	DC	DC		5/8	16	0.94	23,9	6000	42,0	4-1/2	115	0.54	0,80		•
797-12	ВС	DC	DC	DC	3/4	19	1.10	27,9	6000	42,0	5-1/4	135	0.78	1,16		•
797-16	ВС	DC	DC	DC	1	25	1.40	35,7	6000	42,0	6-1/2	165	1.17	1,74		•
797-20	BC	DC	DC		1-1/4	31,5	1.77	44,9	6000	42,0	8-3/4	225	1.95	2,89		•
797-24	вс	CC	CC		1-1/2	38	2.08	52,8	6000	42,0	12	305	2.66	3,96		•
797-32	BC	CC	CC		2	51	2.66	67,6	6000	42,0	15	380	4.37	6,50		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Proprietary synthetic rubber.

Reinforcement: Two-braid steel wire for size -4, Four- or six-compact spiral steel wires for sizes -6 to -32.

Cover: Standard Cover: Synthetic rubber.

ToughCover: Synthetic rubber abrasion resistant. SuperTough Cover: Synthetic rubber super abrasion resistant. Critical Protection Cover: Synthetic rubber excellent abrasion & damage resistance. **Fittings:** 43 Series: sizes -4 to -6 - pg. B-27. 77 Series: sizes -8 to -32 - pg. B-90.

Temperature Range: Standard Cover: -40°F to +212°F (-40°C to +100°C).

ToughCover & SuperTough Cover: -40°F to +257°F (-40°C to +125°C). (-4 rated to +212°F).

JK - Jack Hose

Markets







Parker Jack Hose should be your choice for use on hydraulically powered jacking equipment. From its engineered inner tube, and twin braids of high-tensile steel reinforcement, to its durable outer cover, our hydraulic Jack Hose has been designed for high performance, easily supporting the rigors of high tonnage hydraulic jack applications. Jack Hose comes with the added benefits of the world's largest distributor network and Parker's unequalled technical services.

- 10,500 max working pressure
- Engineered inner tube provides exceptional hydraulic fluid compatibility
- No-Skive design eliminates the need to remove hose cover before crimping

JK

Hydraulic - Jack Hose

Parker IJ100 HYDRAULIC JACK H

view on web page

ISO 1436-1 TYPE 2SN / SAE J517 100R2AT / EN 853 TYPE 2SN / NFPA 1936 / EES 116-4

# Part Number	Hose	e I.D.	Hose	O.D.		king sure	Mini	mum Radius	k Wei	□ ⑤	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
JK-4	1/4	6,3	0.59	15	10500	72,4	4	100	0.26	0,39	•
JK-6	3/8	10	0.75	19	10000	70	5	125	0.37	0,55	•

NOTE: THIS PRODUCT CAN ONLY BE ASSEMBLED BY CERTIFIED DISTRIBUTORS OR CUSTOMERS ACCORDING TO THE METHODS PRESCRIBED IN BULLETIN 4480-T18-US. JK HOSE HAS A 2:1 DESIGN FACTOR.

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Two braids steel wire. Cover: Synthetic rubber, MSHA accepted.

Temperature Range: -40°F to +120°F (-40°C to +49°C).

Fittings: 10143-4-4, 10143-4-6, 10143-6-4, 10143-6-6 pg. B-30.

- See Section C for Parkrimp
- Temperature Range of other media listed in Section E.

Assembly Instructions.

B

422

Markets









B







Parker's worldwide hose line is designed to accommodate global customer requirements. Manufactured to strict international specifications, 422 hose offers customers consistency of performance combined with improved availability anywhere in the world.

- One-wire braid hose design manufactured to international specifications (ISO 1436-1 Type 1SN)
- Increased working pressures for improved reliability and expanded applications versus standard SAE 100R1
- Synthetic rubber inner tube for greater fluid compatibility and bio-oil resistance

422/421-8 Worldwide WP 16,0 MPa (232) WP 16,0 MPa (232)

422

Hydraulic Worldwide

view on web page

Parker 422/421 Worldwid

ISO 1436-1 TYPE 1SN / SAE J517 100R1AT / SAE J1942 / EN 853 TYPE 1SN

# Part Number	Hose		Hose		Worl		Minii Bend I		_	s sight	Vacui Ratir	um	Parkrimp	Field Attachable
Itamber											inches	J	•	
	inch	mm	inch	mm	psi	мРа	inch	mm	lbs/ft	kg/m	of Hg	кРа	43 Series	42 Series
422-4	1/4	6,3	0.53	13	3250	22,5	4	100	0.16	0,24	24	81	•	•
422-5	5/16	6,3	0.59	15	3125	21,5	4-1/2	115	0.18	0,27	24	81	•	•
422-6	3/8	10	0.68	17	2600	18,0	5	130	0.23	0,34	24	81	•	•
422-8	1/2	12,5	0.81	21	2325	16,0	7	180	0.29	0,43	24	81	•	•
422-10	5/8	16	0.94	24	1875	13,0	8	200	0.33	0,49	24	81	•	•
422-12	3/4	19	1.09	28	1525	10,5	9-1/2	240	0.42	0,63	24	81	•	•
422-16	1	25	1.41	36	1275	8,8	12	300	0.63	0,94	24	81	•	•
422-20	1-1/4	31,5	1.79	45	900	6,3	16-1/2	420	0.8	1,19	18	61	•	
422-24	1-1/2	38	2	51	725	5,0	20	500	1	1,49	18	61	•	
422-32	2	51	2.54	64	575	4,0	25	630	1.5	2,24	18	61	•	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: One braid steel wire.

Cover: Synthetic rubber.

Temperature Range: -40°F to +212°F (-40°C to +100°C).

Fittings: 43 Series - pg. B-27. 42 Series - pg. B-173.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

B

HYDRAULIC

482TC/ST

Markets

















• 1/2 minimum bend radius for ease of routing



Performance





482TC

Hydraulic - ToughCover

ISO 1436-1 TYPE 1SN / SAE J517 100R1AT / SAE J1942 / EN 853 TYPE 1SN



view on web page

Hydraulic Hose: 482TC/ST

482ST

Hydraulic - SuperTough Cover

ISO 1436-1 TYPE 1SN / SAE J517 100R1AT / EN 853 TYPE 1SN



view on web page

# Part Number	Hose	e I.D.	Hose	O.D.		king	Minii Bend F		\text{\text{W}}	_	Parkrimp	Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	42 Series
482TC/ST-4	1/4	6,3	0.53	14	3250	22,7	2	50	0.16	0,24	•	•
482TC-5	5/16	8	0.59	15	3250	22,7	2-1/4	55	0.18	0,27	•	•
482TC/ST-6	3/8	10	0.69	17	3000	21,0	2-1/2	65	0.23	0,34	•	•
482TC/ST-8	1/2	12,5	0.82	21	2500	17,5	3-1/2	90	0.29	0,43	•	•
482TC/ST-10	5/8	16	0.94	24	2000	14,0	4	100	0.33	0,49	•	•
482TC/ST-12	3/4	19	1.09	28	1750	12,2	4-3/4	120	0.42	0,63	•	•
482TC/ST-16	1	25	1.41	36	1275	8,8	6	150	0.63	0,94	•	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: One braid steel wire.

Cover: Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -40° F to $+212^{\circ}$ F (-40° C to $+100^{\circ}$ C).

Fittings: 43 Series - pg. B-27. 42 Series - pg. B-173.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

426

specifications.

Markets













B

Engine compartment applications

- Meets SAE 100R1 specification
- Distinction to the second distinct of the least of the le
- Distinctive blue cover indicates high temperature rating
- Temperature up to 302° F

Performance



426

Hydraulic – High-Temperature SAE J517 100R1AT / SAE J1942



# Part Number		e I.D.	Hose	O.D.		king sure	Minii Bend F		k Wei	☐ ⑤	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
426-4	1/4	6,3	0.53	13	2750	19,2	4	100	0.16	0,24	•
426-6	3/8	10	0.68	17	2250	15,7	5	125	0.23	0,34	•
426-8	1/2	12,5	0.81	21	2000	14,0	7	180	0.29	0,43	•
426-10	5/8	16	0.94	24	1500	10,5	8	200	0.33	0,49	•
426-12	3/4	19	1.09	28	1250	8,7	9-1/2	240	0.44	0,65	•
426-16	1	25	1.40	36	1000	7,0	12	300	0.66	0,98	•
426-20	1-1/4	31,5	1.79	45	625	4,3	16-1/2	420	0.94	1,40	•
426-24	1-1/2	38	2.00	51	500	3,5	20	500	0.98	1,46	•
426-32	2	51	2.54	64	375	2,6	25	630	1.46	2,18	•

Parker's 426 hose is a hydraulic industry standard hose that has a pressure range of 375-2750 psi, which is designed for high-temperature applications up to 302°F. The 426 hose is designed, built, and tested to meet SAE J517 100R1AT and SAE J1942

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: PKR®.

Reinforcement: One braid steel wire. **Cover:** PKR®. rubber, blue, MSHA accepted.

Temperature Range: -50°F to +302°F (-46°C to +150°C).

Fittings: 43 Series - pg. B-27.

[•] See Section C for Parkrimp Assembly Instructions.

[•] Temperature Range of other media listed in Section E.

302

Markets





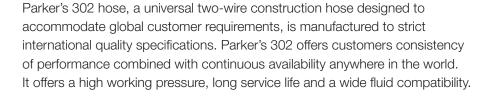












- Universal two-wire hose design manufactured to international specifications (ISO 1436-1 Type 2SN)
- Increased working pressures for improved reliability and expanded applications
- Synthetic rubber inner tube for greater fluid compatibility and bio-oil resistance

Parker 302/301-16 Worldwide WP 16,5 MPa (2400 PSI) ISO 1436-

302

Hydraulic Worldwide

view on web page

302/301 Worldwid

ISO 1436-1 TYPE 2SN / SAE J517 100R2AT / SAE J1942 / EN 853 TYPE 2SN

# Part	Hose	e ID	Hose	O.D.	Wor	king	Minin Bend R	num	کر الارو Wei	_	Vacuu Ratir inches	ım	Parkrimp	Field Attachable
Number	inch	mm	inch	mm	psi	Мра	inch	mm	lbs/ft	kg/m	of Hg	kPa	43 Series	30 Series
302-4	1/4	6,3	0.59	15,0	5800	40	4	100	0.26	0,39	28	95	•	•
302-5	5/16	8	0.65	16,6	5000	35	4-1/2	115	0.28	0,42	28	95	•	
302-6	3/8	10	0.75	19,0	4750	33	5	130	0.37	0,55	28	95	•	•
302-8	1/2	12,5	0.88	22,3	4000	28	7	180	0.45	0,67	28	95	•	•
302-10	5/8	16	1.00	25,5	3600	25	8	200	0.52	0,77	28	95	•	•
302-12	3/4	19	1.16	29,4	3100	21,5	9-1/2	240	0.67	1,00	24	80	•	•
302-16	1	25	1.50	38,1	2400	16,5	12	300	1.00	1,49	24	80	•	•
302-20	1-1/4	31,5	1.86	47,1	1800	12,5	16-1/2	420	1.16	1,73	24	80	•	•
302-24	1-1/2	38	2.14	54,5	1300	9	20	500	1.44	2,14	24	80	•	•
302-32	2	51	2.64	67,2	1150	8	25	630	1.99	2,96	24	80	•	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Two braids steel wire.

Cover: Synthetic rubber.

Temperature Range: -40°F to +212°F (-40°C to +100°C).

Fittings: 43 Series - pg. B-27. 30 Series - pg. B-167.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.



В

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436

Markets











B

Performance



With one-half the minimum SAE bend radius and a smaller hose O.D., 436 hose has the flexibility to work in almost any application - including tight spots. Engineered to withstand high pressure within a wide range of working temperatures, Parker's 436 hose is not only versatile, but dependable over a long hose life. For quality, service, and value, there's simply no match.

- Compact construction provides easier routing
- Temperatures up to 302° F
- Distinctive blue cover indicates high temperature capability
- Reduced bend radius and excellent flexibility
- 2-wire braided reinforcement with smaller construction
- Meets SAE 100R16 / ISO 11237 Type R16 specifications

436

Hydraulic - Compact High Temperature ISO 11237 TYPE R16 / SAE J517 100R16



BLU BLK

view on web page

# Part Number	Hose	e I.D.	Hose	O.D.	Worl Pres	-	Minir Be Rad	nd	_	g ight	Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	42 Series
436-6	3/8	10	0.68	17	4000	27,5	2-1/2	65	0.28	0,42	•	•
436-8	1/2	12,5	0.81	21	3500	24	3-1/2	90	0.34	0,51	•	•
436-10	5/8	16	0.94	24	2750	19	4	100	0.44	0,66	•	•
436-12	3/4	19	1.09	28	2250	15,5	4-3/4	120	0.54	0,80	•	•
436-16	1	25	1.41	36	2000	13,8	6	150	0.82	1,22	•	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: PKR®.

Reinforcement: Two braids steel wire. Cover: PKR® rubber, blue, MSHA accepted.

Temperature Range: -55°F to +302°F (-48°C to +150°C).

Fittings: 43 Series - pg. B-27. 42 Series - pg. B-173.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E

471TC/ST

Markets









Parker's 471TC/ST hose is a hydraulic industry standard hose that has a pressure range of 2500-5800 psi, with a synthetic rubber inner tube which provides wide fluid compatibility. The two-wire braided construction offers more flexibility than the standard spiral counterpart in order to fit your needs.

- Smaller O.D. for ease of installation
- Approved with 43 Series fittings
- Provides 1/2 minimum bend radius

Parker SUPER'I'() UGH 471ST-12 WP 21,5 MPa (3125

Performance



471TC

Hydraulic - ToughCover ISO 11237 TYPE 2SC / SAE J1942 / EN 857 TYPE 2SC

471ST

Hydraulic - SuperTough Cover ISO 11237 TYPE 2SC / SAE J1942 / EN 857 TYPE 2SC



Hydraulic Hose: 471TC/ST

view on web page



view on web page

# Part Number	Hose	e I.D.	Hose	O.D.		king sure	Minin Bend F		kç We	ight	Vacui Ratii	um	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	inches of Ha	kPa	43 Series
471TC/ST-4	1/4	6,3	0.51	13	5800	40,0	2	50	0.20	0,30	28	95	•
471TC/ST-6	3/8	10	0.68	17	5000	35,0	2-1/2	65	0.28	0,42	28	95	•
471TC/ST-8	1/2	12,5	0.80	20	4250	29,7	3-1/2	90	0.35	0,52	28	95	•
471TC/ST-10	5/8	16	0.94	24	3625	25,0	4	100	0.44	0,66	28	95	•
471TC/ST-12	3/4	19	1.09	28	3125	21,5	4-3/4	120	0.58	0,86	24	80	•
471TC/ST-16	1	25	1.40	35	2500	17,5	6	150	0.79	1,17	24	80	•

For larger sizes see 472TC.

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Two braids steel wire.

Cover: Synthetic rubber abrasion resistant, MSHA accepted. Temperature Range: -40°F to +212°F (-40°C to +100°C).

Fittings: 43 Series - pg. B-27.

- See Section C for Parkrimp
- Assembly Instructions. • Temperature Range of other media listed in Section E.

MARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

B

Hydraulic Hose: 471TC Twin Tough

HYDRAULIC

471TC Twin Tough

Markets











Twin Tough hoses eliminate the labor and material costs required to manually bundle two separate hoses using tie straps or plastic sleeves. Plus, Parker's Twin Tough saves valuable time in the field.

- 5000 psi constant working pressure in -6-6 and 4000 psi in -8-8
- Two-wire braided construction
- Abrasion-resistant TC cover

Performance



B



471TC

Hydraulic - Twin Tough Cover ISO 11237 TYPE 2SC / SAE J1942 / EN 857 TYPE 2SC



# Part Number	Hose	e I.D.	Hose	O.D.	Worl		Minir Bend F	num	_	(g) ight	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
471TC-6-6	3/8	10	0.68	17	5000	35,0	2-1/2	65	0.56	0,84	•
471TC-8-8	1/2	12,5	0.80	20	4250	29,7	3-1/2	90	0.70	1,04	•

For assembly instructions see page C-19.

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Two braids steel wire.

Cover: Synthetic rubber abrasion resistant, MSHA accepted. Temperature Range: -40°F to +212°F (-40°C to +100°C).

Fittings: 43 Series - pg. B-27.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

Markets



















Performance



472TC

Parker's 472TC hose is a hydraulic industry standard hose that has a pressure range of 1300-2250 psi, which allows for one to meet the specifications of any task at hand. The 472TC is designed, built, and tested to meet SAE J1942 specifications. The two-wire braided construction offers more flexibility than the standard spiral counterpart in order to fit your needs. The synthetic rubber inner tube provides a wide range of fluid compatibility.

- Synthetic rubber inner tube provides wide fluid compatibility
- Available in larger sizes: -20, -24, -32
- 2-wire braided construction

472TC

Hydraulic – ToughCover SAE J1942



Hydraulic Hose: 472TC

# Part Number	Hose	e I.D.	Hose	O.D.	_	king	Minin Bend I		k We	ight	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
472TC-20	1-1/4	31,5	1.79	45	2250	15,7	8-1/4	210	1.34	2,01	•
472TC-24	1-1/2	38	2.01	51	1800	12,5	10	250	1.44	2,16	•
472TC-32	2	51	2.54	65	1300	9,0	12-1/2	315	1.93	2,90	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Two braids steel wire.

Cover: Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -40°F to +212°F (-40°C to +100°C).

Fittings: 43 Series - pg. B-27.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

722TC / ST

Markets









B







722TC / ST hose was designed for high performance. Its resilient 4-wire spiral construction and Parker's leading ToughCover and SuperTough Covers provide unmatched abrasion resistance. It is also one-half the bend radius of SAE 100R12 hose, making it easy to install and reducing the amount of hose needed and its synthetic rubber inner tube provides a wider range of fluid compatibility.

- 1/2 the bend radius of SAE 100R12 hose, reducing the amount of hose needed to make your connection
- 4-spiral construction for longer lasting hose in high impulse, heavy duty cycle

• Synthetic rubber inner tube provides a wider range of fluid compatibility



Performance







722TC / ST

Hydraulic - ToughCover ISO 3862-1 TYPE R12 / SAE J517 100R12 / SAE J1942 / EN 856 TYPE R12



view on web page

Hydraulic Hose: 722TC/ST



view on web page

	# Part Number	Hose	e I.D.	Hose	O.D.		king	Minin Bend F	num	k wei	_	Parkrimp	Parkrimp
		inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	71 Series
	722TC/ST-20	1-1/4	31,4	1.84	46	3000	21,0	8-1/4	210	1.74	2,59	•	
	722TC/ST-24	1-1/2	38	2.07	53	2500	17,5	10	250	2.01	2,99		•
İ	722TC/ST-32	2	51	2.59	66	2500	17,5	12-1/2	320	2.75	4,09		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber. Reinforcement: Four spiral steel wire.

Cover: Synthetic rubber, MSHA accepted.

Temperature Range: -40°F to +257°F (-40°C to 125°C).

Fittings: 43 Series, sizes -6 to -20 - pg. B-27. 71 Series, size -24 to -32 - pg. B-75.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

777 Hose

Parker's **777 Hose** offers innovative and proprietary features, delivering 4,000 psi and greater advantages in routing and installation. Compared with conventional spiral hose, Parker's 777 hose is lighter in weight and has a smaller outside diameter than hoses on the market.

Performance









777 Hose

4,000 psi, Reduced O.D., Reduced Weight ISO 18752



view on web page

Hydraulic Hose: 777

#	(S)	TC	ST	СР			(0		7		\$	7	kg		
	Standard	Tough	Super	Critical			Ŭ								
Part Number		Cover Cover Cover Protection 777 777TC 777ST 777 CI ISO 18752 Performance				I.D.	Hose	0 D	Wor Pres	-	Minii Bend I		Wei	ight	Parkrimp
777					inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
777-6	ВС	CC	CC		3/8	10	0.66	17.0	4000	28.0	2.00	50	0.36	0.53	•
777-8	ВС	CC	CC	CC	1/2	12.5	0.81	20.6	4000	28.0	2.80	72	0.44	0.65	•
777-10	ВС	CC	CC		5/8	16	0.93	23.5	4000	28.0	3.15	80	0.56	0.83	•
777-12	ВС	CC	CC	CC	3/4	19	1.12	28.4	4000	28.0	3.80	96	0.76	1.31	•
777-16	BC	CC	CC	CC	1	25	1.38	35.0	4000	28.0	4.75	120	0.99	1.47	•

^{*} Standard cover hose is rated to 212° F, Tough Cover and Super Tough covers are rated to 257 ° F

Parker 777TC-16 25 mm (1") MSHA IC-40/41 (25) © 28 MPa (4000 PSI) -40° C TO +125° C -40° F TO +257° F MADE IN USA

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

 $\label{lem:reconstruction} \textbf{Reinforcement:} \ \ \text{Four-spiral steel wire}.$

Cover: Standard Cover: Synthetic rubber.

ToughCover: Synthetic rubber abrasion resistant. SuperTough Cover: Synthetic rubber super abrasion resistant. Critical Protection Cover: Synthetic rubber excellent abrasion & damage resistance.

Fittings: 43 Series - pg. B-27.

Temperature Range: Standard Cover: -40°F to +212°F (-40°C to

+100°C) - BC.

ToughCover & SuperTough Cover: -40°F to

+257°F (-40°C to +125°C).

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B

Catalog 4400 US Suction & Return Hose: 811 Suction and Return

SUCTION & RETURN

811, 811HT, 881 Suction Line

Markets





















B









Parker's 811 and 881 are suction and return line hoses that have a working pressure range of 62-300 psi as well as a vacuum rating range of 25 to 28 in/Hg. The 811HT is designed for high temperature applications.

- Up to one-half the SAE minimum bend radius for standard and high-temperature applications
- Meets or exceeds SAE 100R4 performance specifications
- Compatible with Parkrimp or field attachable fittings
- High-visibility layline
- Suitable for vacuum applications from 25 to 28 in/Hg
- Oil- and weather-resistant synthetic rubber cover
- High-temperature range for petroleum-based hydraulic fluids of -40° F to +257° F for 811HT

Performance



Suction and Return Line 1/2 SAE Minimum Bend Radius SAE J517 100R4



view on web page

# Part			(<u></u>	W					∯ imum Radius		kg	Vacu	um	Parlining	Field
Number	Hose	. ע.ו 	Hose	O.D.	81/8	rking 8DB		ure HC	benu	nauius	vvei	ight	Ratii inches	ng	Parkrimp	Attachable 88 Series
	inch	mm	inch	mm	psi	MPa	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	43/81 Series	w/HC or DB
811-12	3/4	19,0	1.18	30,0	300	2,1	100	0,7	2-1/2	64	0.42	0,63	25	84	•	•
811-16	1	25,4	1.50	38,0	250	1,7	70	0,5	3	76	0.65	0,96	25	84	•	•
811-20	1-1/4	31,8	1.77	45,0	200	1,4	50	0,3	4	102	0.82	1,22	25	84	•	•
811-24	1-1/2	38,1	2.05	52,0	150	1	50	0,3	5	127	1.04	1,55	25	84	•	•
811-32	2	50,8	2.50	63,6	100	0,7	50	0,3	6	152	1.26	1,87	25	84	•	•
811-40	2-1/2	63,5	3.00	76,2	62	0,4	62	0,4	7	178	1.64	2,45	25	84		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Multiple layers of fiber spiral and one helical wire.

Cover: Synthetic rubber.

Temperature Range: -40°F to +212°F (-40°C to +100°C).

Fittings: 81 Series - pg. B-193. 88 Series - pg. B-193.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

WARNING: This product can expose you to chemicals including DEHP, which is known to the State of California to cause cancer and birth defect or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Performance



811HT

Suction and Return Line - High-Temperature 1/2 SAE Minimum Bend Radius

SAE J517 100R4 / SAE J1942



view on web page

# Part	((9		(7)		Minir			kg	Vacu	um		Field
Number	Hose	e I.D.	Hose	O.D.	Wo	orking	Pressu	ıre	Bend F	Radius	Wei	ight	Ratii	ng	Parkrimp	Attachable
					81/8	8DB	88H	HC			lbs/ft kg/m		inches			88 Series
	inch	mm	inch	mm	psi	MPa	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	43/81 Series	w/HC or DB
811HT-12	3/4	19,0	1.18	30,0	300	2,1	100	0,7	2-1/2	64	0.42	0,63	28	95	•	•
811HT-16	1	25,4	1.50	38,0	250	1,7	70	0,5	3	76	0.65	0,96	28	95	•	•
811HT-20	1-1/4	31,8	1.77	45,0	200	1,4	50	0,3	4	102	0.82	1,22	28	95	•	•
811HT-24	1-1/2	38,1	2.05	52,0	150	1	50	0,3	5	127	1.04	1,55	28	95	•	•
811HT-32	2	50,8	2.50	63,6	100	0,7	50	0,3	6	152	1.26	1,87	28	95	•	•
811HT-40	2-1/2	63,5	3.00	76,2	62	0,4	62	0,4	7	178	1.82	2,71	28	95		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Reinforcement: Multiple layers of fiber spiral and one helical wire.

Inner Tube: Synthetic rubber.

Cover: Synthetic rubber, MSHA accepted.

Temperature Range: -50°F to +257°F (-46°C to +125°C).

Fittings: 81 Series - pg. B-193. 88 Series - pg. B-193.

MARNING: This product can expose you to chemicals including DEHP, which is known to the State of California to cause cancer and birth defect or other reproductive harm. For more information go to www.p65warnings.ca.gov.

881

Suction and Return Line

SAE J517 100R4 / SAE J1942



view on web page

# Part			0			(mum	k	9	Vacu	0		Field
Number	Hose	I.D.	Hose	O.D.	_	rking F /88DB	ressu 881	- 1	Bend	Radius	Wei	_	Ration inches		Parkrimp	Attachable 88 Series
	inch	mm	inch	mm	psi	MPa	psi	Мра	inch	mm	lbs/ft	kg/m	of Hg	kPa	43/81 Series	w/HC or DB
881-12	3/4	19,0	1.20	30,6	300	2,1	100	0,7	5	127	0.50	0,74	28	95	•	•
881-16	1	25,4	1.49	37,9	250	1,7	70	0,5	6	152	0.60	0,89	28	95	•	•
881-20	1-1/4	31,8	1.78	45,3	200	1,4	50	0,3	8	203	0.89	1,32	28	95	•	•
881-24	1-1/2	38,1	2.06	52,4	150	1	50	0,3	10	254	1.11	1,65	28	95	•	•
881-32	2	50,8	2.48	63,1	100	0,7	50	0,3	12	305	1.27	1,89	28	95	•	•
881-40	2-1/2	63,5	3.00	76,2	62	0,4	62	0,4	14	356	1.82	2,71	28	95		•

^{*}Only sizes -12 through -32 meet J1942/USCG H, HF.

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Multiple layers of fiber braid and one helical wire.

Cover: Synthetic rubber, MSHA accepted.

Temperature Range: -40°F to +257°F (-40°C to +125°C).

Fittings: 43 Series - pg. B-27. 81 Series - pg. B-193. 88 Series - pg. B-193.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

MARNING: This product can expose you to chemicals including DEHP, which is known to the State of California to cause cancer and birth defect or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Updated 9/2022

B

PUSH-LOK®

801 Multipurpose

Markets















B

Parker's Push-Lok Plus multipurpose hose line features the widest fluid compatibility, application range and size range in the industry. It also incorporates the highest working pressure in all sizes, making it the most versatile general-purpose hose available. The Push-Lok system is easy to use. No clamps or special tools are required during installation. And with Parker's exclusive color-code system, you can inventory, maintain and identify your hose needs easily and efficiently. The industry's most complete line of low-pressure 801, 804 hose and fittings, Push-Lok offers the range and versatility to meet all your instrumentation needs.

- · Easy assembly and organization with Parker's exclusive color-code system
- Push-Lok assemblies can be made in seconds, saving valuable time and cost
- The unique seal of Push-Lok ensures reliable, durable, leak-free service



801 - Push-Lok Plus®

Multipurpose

Available Cover Colors:













# Part			(Worl	king	Minir	num	S Ik	9	Vacu	0		Field
Number	Hose	I.D.	Hose	O.D.	Pres	sure	Bend F	Radius	Wei	_	Ratin		Parkrimp	Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft		inches of Hg		HY Series	82 Series
801-4	1/4	6,3	0.50	12,7	350	2,4	2-1/2	65	0.09	0,13	28	95	•	•
801-6	3/8	10	0.63	15,9	350	2,4	3	75	0.11	0,16	28	95	•	•
801-8	1/2	12,5	0.78	19,8	300	2,1	5	125	0.18	0,27	28	95	•	•
801-10	5/8	16	0.91	23,0	300	2,1	6	150	0.19	0,28	15	51	•	•
801-12	3/4	19	1.03	26,2	300	2,1	7	180	0.24	0,36	15	51	•	•
801-16	1	25	1.28	32,6	200	1,4	10	250	0.37	0,55	15	51	•	•

Application: Pneumatic, petroleum base hydraulic fluid, lubricating oils, and antifreeze solutions (not suitable for dry air applications).

Diesel fuel - approved only when coupled with HY Series fittings.

Inner Tube: Synthetic rubber. Reinforcement: One fiber braid.

Cover: Synthetic rubber, MSHA accepted.

Temperature Range: Air: +158°F (+70°C). Water: +185°F (+85°C)

Oil: -40°F to 257°F (-40°C to +125°C).

Fittings: 82 Series - pg. B-178. HY Series - pg. B-130.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- Push-Lok is not recommended for any refrigerant, or for use in air conditioners and heat pump applications.
- Push-Lok is not recommended for applications where extreme pulsation is encountered.
- Temperature Range of other media listed in Section E.
- 801 hose is not approved with any HY Series stainless steel fittings.











В

Push-Lok Plus 801 hose provides the quick and easy assembly/ disassembly advantage and the fullest range of color-coding to benefit your operations. It's now approved with both 82 Series push on and HY Series crimp fittings.

Push-Lok Plus 804 hose features quick and easy assembly and provides an EPDM inner-tube for hot water, dry air and phosphate ester fluids. Not to be used in applications with lubricated air or media that is oil based.

Push-Lok 821 is a higher-pressure multipurpose hose that is widely used for shop air systems and general industrial and maintenance

applications. Approved with 82 Series fittings, it's also available with a fire-resistant (FR) cover for use near welding operations.

Push-Lok Plus 836 delivers high-temperature up to 302° F, heat-resistant performance and higher working pressures than 821, along with the same HY and 82 Series fittings compatibility.

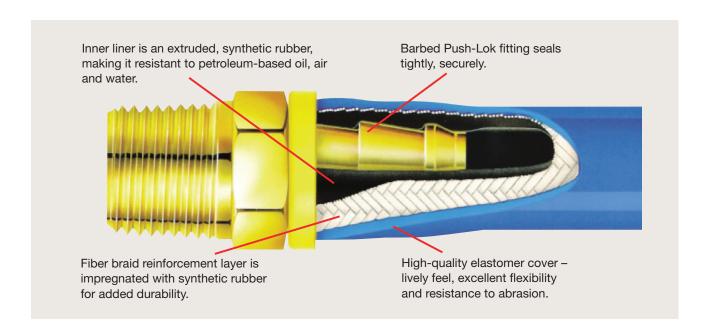
The color-coded advantages

In applications where a number of hose lines carry different media, Push-Lok colors reduce timely "tracing" of lines, preventing disconnection of the wrong line and unnecessary, costly downtime.

Using color-coded Push-Lok hose is an excellent way to:

- Enhance product appearance
- Improve inventory control
- Identify industrial drop lines





PUSH-LOK®

836, 804 Multipurpose

Performance



B

836 - Push-Lok Plus®

Multipurpose – High-Temperature Available Cover Colors: BLU BLK



view on web page

# Part Number	Hose		Hose			king	Min	imum Radius	k We	g iaht	Vacu Ratii	um	Parkrimp	Field Attachable
Italibei	11000		11000				Bena		•••		inches	_	- and mp	Attaonable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	HY Series	82 Series
836-4	1/4	6,3	0.50	12,7	400	2,8	2-1/2	65	0.09	0,13	28	95	•	•
836-6	3/8	10	0.63	15,9	400	2,8	3	75	0.11	0,16	28	95	•	•
836-8	1/2	12,5	0.78	19,8	400	2,8	4	100	0.18	0,27	28	95	•	•
836-10	5/8	16	0.91	23,0	350	2,4	5	125	0.19	0,28	18	61	•	•
836-12	3/4	19	1.03	26,2	300	2,1	6	150	0.24	0,36	18	61	•	•

Application: Pneumatic, petroleum base hydraulic fluid, lubricating oils, diesel fuels and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid. **Cover:** PKR, MSHA accepted.

Temperature Range:

Air: +212°F (+100°C). **Water:** +185°F (+85°C).

Oil: -55° F to $+302^{\circ}$ F (-48° C to $+150^{\circ}$ C).

Diesel fuels: -40°C to 150°C. (-40°F to 302°F) with HY crimps only.

Fittings: HY Series - pg. B-130. 82 Series - pg. B-178.

WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.



Dry Air/Hot Water

Available Cover Colors: BLK



view on web page

# Part Number	Hose	e I.D.	Hose	O.D.		king sure	Minir Bend F	num	k We	了 g ight	Vacu Rat	ıum	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	inches of Hg	kPa	82 Series
804-4	1/4	6,3	0.50	12,7	150	1,0	2-1/2	65	0.09	0,13	15	51	•
804-6	3/8	10	0.63	15,9	150	1,0	3	75	0.11	0,16	15	51	•
804-8	1/2	12,5	0.78	19,8	150	1,0	5	130	0.18	0,27	15	51	•
804-10	5/8	16	0.91	23,0	150	1,0	6	150	0.19	0,28	15	51	•

Application: Phosphate ester, dry air and water.

Inner Tube: EPDM rubber.
Reinforcement: One fiber braid.

Cover: EPDM rubber. Temperature Range: Air: +158°F (+70°C).

Phosphate ester: -40° to +176°F (-40° to +80°C).

Water: +200°F (+93°C). **Fittings:** 82 Series - pg. B-178.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- Push-Lok is not recommended for any refrigerant, or for use in air conditioners and heat pump applications.
- Push-Lok is not recommended for applications where extreme pulsation is encountered.
- Temperature Range of other media listed in Section E.
- 836 hose is not approved with any HY Series stainless steel fittings.

PUSH-LOK® 821, 821FR Multipurpose

821

Multipurpose

Available Cover Colors: BLK



page	web	on	view
page	web	on	view

# Part Number	Hose	I.D.	Hose	O.D.	Worl Pres		Min	imum Radius	_	g ght	Vacue Ratii inches	um ng	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	82 Series
821-4	1/4	6,3	0.50	12,7	350	2,4	2-1/2	64	0.06	0,09	28	95	•
821-6	3/8	10	0.63	15,9	300	2,1	3	76	0.09	0,13	28	95	•
821-8	1/2	12,5	0.78	19,8	300	2,1	5	127	0.12	0,18	28	95	•
821-10	5/8	16	0.91	23,0	250	1,7	6	152	0.19	0,28	28	95	•
821-12	3/4	19	1.03	26,2	250	1,7	7	178	0.21	0,31	28	95	•

Application: Pneumatic, petroleum base hydraulic fluid, lubricating oils and antifreeze solutions (not suitable for dry air applications).

Inner Tube: Synthetic rubber. Reinforcement: One fiber braid.

Cover: Fiber braid.

Temperature Range:

Air: +158°F (+70°C). Water: +185°F (+85°C). **Oil:** -40°F to +212°F. (-40°C to +100°C).

Fittings: 82 Series - pg. B-178.

WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer and DBP, which is known to the state of California to cause birth defect or other reproductive harm. For more information go to www.p65warnings.ca.gov.

821FR

Multipurpose – Fire-Resistant Cover

Available Cover Colors: WHT BRN BLU GRN BLK



view on web page

# Part Number	Hose	e I.D.	Hose	О.D.		king	Mini	imum Radius	\text{\text{W}}	_	Vacu Rati inches	ium ing	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	82 Series
821FR-4	1/4	6,3	0.50	12,7	350	2,4	2-1/2	64	0.08	0,12	28	95	•
821FR-6	3/8	10	0.63	15,9	300	2,1	3	76	0.11	0,16	28	95	•
821FR-8	1/2	12,5	0.78	19,8	300	2,1	5	127	0.12	0,18	28	95	•
821FR-12	3/4	19	1.03	26,2	250	1,7	7	178	0.22	0,33	28	95	•

Application: Pneumatic, petroleum base hydraulic fluid, lubricating oils and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid. Cover: Fire resistant fiber braid.

Hose cover colors include: White, Brown, Blue, Green, and Black.

Temperature Range: Air: +212°F (+100°C). Water: +185°F (+85°C).

Oil: -40° F to $+212^{\circ}$ F (-40° C to $+100^{\circ}$ C). Fittings: 82 Series - pg. B-178.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- · Push-Lok is not recommended for any fuel, refrigerant, or for use in air conditioners and heat pump applications.
- Push-Lok is not recommended for applications where extreme pulsation is encountered.
- Temperature Range of other media listed in







627 **THERMAL COOLING**

Performance



B

Parker's 627 Thermal Cooling Hose is designed to be utilized for the transfer of coolant in high performance computers and data farms. The tube is specially compounded peroxide cured EPDM, which is formulated to be compatible with industrial coolants.

627

Thermal Cooling Available Cover Colors: BLK



view on web page

## Part Number	Hose	I.D.	Reinf Layers	Hose	O.D. mm	Wei		Mini	mum Radius mm	Work Press psi		Perm Cplg Rec	Nom Std Pack Qty ft	Pkg Type
627-6-RL	3/8	9.5	2	0.7	16.7	0.13	0.19	1.3	33	150	10	•	700	Reel
627-8-RL	1/2	12.7	4	0.9	22.7	0.24	0.36	2.0	51	150	10	•	550	Reel
627-12-RL	3/4	19.1	4	1.2	29.4	0.34	0.51	3.0	76	150	10	•	400	Reel
627-16-RL	1	25.4	4	1.4	36.3	0.46	0.68	4.5	114	150	10	•	300	Reel
627-20-RL	1 1/4	31.8	4	1.8	45.7	0.67	1.01	6.5	165	150	10	•	250	Reel
627-24-RL	1 1/2	38.1	4	2	50	0.84	1.24	9	228	150	10	•	200	Reel

Application: Thermal Cooling Tube: Black EPDM, peroxide cured Reinforcement: Multiple textile plies Cover: Black EPDM; smooth finish

Temperature Range: -40°F to +212°F (-40°C to +100°C)

Brand Method: White ink

Brand Example: PARKER 627-16 EPDM-P WP 1MPa

(150 PSI) 25,4mm (1") 9U L94 HB

Flame Resistance MADE IN USA

Design Factor: 4:1

Industry Standards: UL94 Flame Resistance Rating HB

Vacuum: Not Recommended

Couplings: Designed to be used with hose barbs and

clamps

Parker 627-16 EPDM-P WP 1 MPa (150 PSI) 25,4 mm (1/2") CTU US UL94 HB FLA	ME RESISTANCE MADE IN USA
Manufacturer's Identification	Date Code

PHOSPHATE-ESTER 424, 304, 774, F42

Markets







Parker's phosphate-ester hoses enables you to address the needs of the next generation aviation ground support equipment and the trend towards higher pressures in other industries using phosphate-ester fluids. Our hose selection offers the industry's largest selection of low-, medium-, and high-pressure hoses specifically designed to resist aggressive airline hydraulic fluids. Parker's phosphate-ester hose line, together with the proper EPDM O-ring face seal and 37° Flare fittings and pipe adapters, means your leak-free assemblies will be the last thing you'll need to worry about.

424 hose

- Up to 1,000 psi
- Dimensionally conforms to SAE 100R1 Type AT specification
- Uses Parkrimp 43 Series fittings, providing the widest selection of end configurations available anywhere

304 hose

- Up to 5,000 psi
- Dimensionally conforms to SAE 100R2 Type AT specification
- Uses Parkrimp 43 Series fittings, providing the widest selection of end configurations available anywhere

774 hose

- Up to 4,000 psi
- Dimensionally conforms to SAE 100R12 and EN 856 Type R12 specifications

B

• Uses Parkrimp 71 Series fittings

F42 hose

- 6,000 psi maximum working pressure
- Compatible with phosphate ester based hydraulic fluids with a temperature range of -40°C to +80°C (-40°F to +176°F)
- Uses Parkrimp 70 / 79
 Series fittings





view on web page

# Part Number	Hose	e I.D.	Hose	O.D.	Working Pressure			mum Radius	_	g ight	Vacuum nt Rating		Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	inches of Hg	kPa	43 Series
424-16	1	25	1.40	36	1000	6,9	12	300	0.63	0,94	20	68	•
424-20	1-1/4	31,5	1.73	44	625	4,3	16-1/2	420	0.80	1,19	20	68	•
424-24	1-1/2	38	2.00	51	500	3,5	20	500	1.00	1,49	15	51	•
424-32	2	51	2.50	64	375	2,6	25	630	1.50	2,23	11	37	•

Application: Phosphate-ester base hydraulic fluids.

Inner Tube: EPDM rubber.

Reinforcement: One-braid steel wire.

Cover: EPDM rubber, green.

Temperature Range: -40° F to $+176^{\circ}$ F (-40° C to $+80^{\circ}$ C).

Fittings: 43 Series - pg. B-27.

See Section C for Parkrimp

Assembly Instructions.

Temperature Range of other media listed in Section E.

PHOSPHATE-ESTER

B

304Hydraulic – Phosphate-Ester Base Fluids



view on web page

# Part Number	Hose	e I.D.	Hose	O.D.	Wor Pres		Minir Bend F	num	k Wei	ट ड्रा ight	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
304-4	1/4	6,3	0.59	15	5000	34,5	4	100	0.26	0,39	•
304-6	3/8	10	0.75	19	4000	27,5	5	130	0.37	0,55	•
304-8	1/2	12,5	0.88	22	3500	24	7	180	0.45	0,67	•
304-10	5/8	16	1.00	25	2750	19	8	200	0.53	0,79	•
304-12	3/4	19	1.16	29	2250	15,5	9-1/2	240	0.67	1,00	•
304-16	1	25	1.50	38	2000	13,8	12	300	1.00	1,49	•
304-20	1-1/4	31,5	1.86	47	1625	11,2	16-1/2	420	1.16	1,73	•
304-24	1-1/2	38	2.14	54	1250	8,6	20	500	1.44	2,14	•
304-32	2	51	2.64	67	1125	7,8	25	630	1.99	2,96	•

Application: Phosphate-ester base hydraulic fluids.

Inner Tube: EPDM rubber.

Reinforcement: Two-braid steel wire.

Cover: EPDM rubber, green.

Temperature Range: -40°F to +176°F (-40°C to +80°C).

Fittings: 43 Series - pg. B-27.

WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

774
Hydraulic – Phosphate-Ester Base Fluids



view on web page

# Part Number	Hose	e I.D.	Hose	O.D.	Wor Pres	king sure	Minii Bend I		k We	了	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	71 Series
774-12	3/4	19	1.21	31	4000	28,0	9-1/2	240	0.94	1,40	•
774-16	1	25	1.50	38	4000	28,0	12	300	1.34	1,99	•
774-20	1-1/4	31,5	1.84	46	3000	21,0	16-1/2	420	1.74	2,59	•
774-24	1-1/2	38	2.07	53	2500	17,5	20	500	2.01	2,99	•
774-32	2	51	2.59	66	2500	17,5	25	630	2.75	4,09	•

Application: Phosphate-ester base hydraulic fluids.

Inner Tube: EPDM rubber.

Reinforcement: Four-spiral steel wire.

Cover: EPDM rubber, green.

Temperature Range: -40°F to +176°F (-40°C to +80°C).

Fittings: 71 Series - pg. B-75.

 See Section C for Parkrimp Assembly Instructions.

• Temperature Range of other media listed in Section E.

PHOSPHATE-ESTER

F42Hydraulic – Phosphate-Ester Base Fluids



view on web page

# Part Number	Hose	I.D.	Hose	O.D.		king	# Minir Bend F		k Wei	_	Parkrimp	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	70 Series	79 Series
F42-8	1/2	12,5	0.97	25,0	6000	42,0	8	200	0.56	0,83	•	
F42-12	3/4	19	1.26	31,9	6000	42,0	10-1/2	265	1.03	1,53		•
F42-16	1	25	1.52	38,5	6000	42,0	13	330	1.40	2,08		•
F42-20	1-1/4	31,5	1.97	50	6000	42,0	17-1/2	445	2.66	3,96		•

Application: Phosphate-ester base hydraulic fluids.

Inner Tube: EPDM rubber.

Reinforcement: Four- or six-spiral steel wire.

Cover: EPDM rubber, green.

Temperature Range: -40° F to $+176^{\circ}$ F (-40° C to $+80^{\circ}$ C).

Fittings: 70 Series - pg. B-65. 79 Series - pg. B-125.

- See Section C for Parkrimp Assembly Instructions.
- Assembly Instructions.

 Temperature Range of other media listed in Section E.

C

В

D

E

LOW TEMP

472LT, 722LT, 792LT

Markets









B





In extremely cold and usually remote areas, a hose burst or leak in a critical application can cause expensive downtime and possible environmental issues. Selecting the right hose for dependable, long-life performance in these applications is essential.

Parker's family of low-temperature hoses are designed specifically to excel in the brutal operating conditions of extreme cold!

- Delivers superior performance in extreme cold conditions
- Rated as low as -70°F (-57°C)
- The choice for heavy construction equipment, side booms, mining equipment, mobile equipment, arctic oil field, snow grooming equipment, snow making machinery and cold storage applications
- These No-Skive hoses use Parker's standard 43, 71, and 79 Series fittings and easy-to-use Parkrimp style crimping system

Performance



472LT

Low-Temperature Braided EN 857 TYPE 2SC



view on web page

# Part Number	Hose	I.D.	Hose	O.D.		king sure	Minin Bend R	num	k@ Wei	_	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
472LT-4	1/4	6,3	0.53	13,1	5800	40,0	2	50	0.20	0,30	•
472LT-6	3/8	10	0.67	17,2	5000	35,0	2-1/2	65	0.24	0,42	•
472LT-8	1/2	12,5	0.71	20,4	4250	29,7	3-1/2	90	0.35	0,52	•
472LT-10	5/8	16	0.94	23,9	3625	25,0	4	100	0.44	0,66	•
472LT-12	3/4	19	1.09	27,7	3125	21,5	4-3/4	120	0.58	0,86	•
472LT-16	1	25	1.39	35,4	2500	17,5	6	150	0.79	1,17	•

Application: Petroleum base hydraulic fluids and lubricating oils in low-temperature conditions.

Inner Tube: Proprietary synthetic rubber compound. **Reinforcement:** Two-braid high tensile steel wire. **Cover:** Proprietary synthetic rubber compound.

Temperature Range: $-70^{\circ}F$ to $+212^{\circ}F$ (-57°C to +100°C).

Fittings: 43 Series, sizes -4 to -16 - pg. B-27.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.







Performance

1/2 []-

722LT

Low-Temperature Spiral

ISO 3862-1 TYPE R12 / SAE J517 100R12 / EN 856 TYPE R12*



view on web page

# Part Number	Hose	I.D.	Hose	O.D.	Worl	_	Minin Bend R		Kg Wei	_	Parkrimp	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	71 Series
722LT-6	3/8	10	0.78	19,8	4000	28,0	2-1/2	65	0.40	0,60	•	
722LT-8	1/2	12,5	0.89	22,6	4000	28,0	3-1/2	90	0.54	0,80	•	
722LT-10	5/8	16	1.04	26,4	4000	28,0	4	100	0.74	1,10	•	
722LT-12	3/4	19	1.21	30,6	4000	28,0	4-3/4	120	0.94	1,40	•	
722LT-16	1	25	1.49	37,7	4000	28,0	6	150	1.34	1,99	•	
722LT-20	1-1/4	31,4	1.82	46,2	3000	21,0	8-1/4	210	1.74	2,59	•	
722LT-24	1-1/2	38	2.06	52,5	2500	17,5	10	250	2.01	2,99		•

Application: Snow grooming equipment, heavy construction equipment and sidebooms.

Inner Tube: Nitrile synthetic rubber.

Reinforcement: Four-spiral steel wire.

Cover: Synthetic rubber, MSHA accepted.

*Temperature Range: -70°F to +212°F (-57°C to +100°C).

(Outside industry specification)

Fittings: 43 Series, sizes -6 to -20 - pg. B-27. 71 Series, size -24 - pg. B-75.

MARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

Performance



792LT

Low-Temperature NO-SKIVE

ISO 3862-1 TYPE R15 / SAE J517 100R15 / EN 856 TYPE R15*



view on web page

# Part Number	Hose	I.D.	Hose	O.D.	Work		₩ Minii Bend I		k Wei	g g ight	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	79 Series
792LT-16	1	25	1.52	38,7	6000	42,0	13	330	1.48	2,20	•
792LT-20	1-1/4	31,5	1.97	50	6000	42,0	17-1/2	445	2.48	3,69	•
792LT-24	1-1/2	38	2.22	57	6000	42,0	20-3/4	530	3.22	4,79	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Four- or six-spiral wire, high tensile steel.

Cover: PKR Rubber.

* Temperature Range: -70°F to +212°F (-57°C to +100°C). (Outside industry specification).

Fittings: 79 Series - pg. B-125.

- See Section C for Parkrimp
- Assembly Instructions.
- Temperature Range of other media listed in Section E.

WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

B

Parker's transportation hose selection has all your vehicle and equipment

293, 213, 266 **TRANSPORTATION**

Markets



Performance



B

293

Transportation – Air Brake Hose SAE J1402 AI / DOT FMVSS 106 AIR BRAKE - AI



view on web page

# Part Number	Hose I.D.		Hose O.D.		Working Pressure		Minimum Bend Radius		kg Weight		Vacuum Rating		Parkrimp	Field Attachable
Italiiboi	11000		11000	O.D.	1100		Dena i		****	9	inches	-	r arkimip	Attaoriable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	26 Series	21/23 Series
293-4	3/16	5	0.49	12,5	500	3,5	1/2	15	0.10	0,15	28	95	•	•
293-6	5/16	8	0.62	15,7	500	3,5	1	25	0.15	0,22	28	95	•	•
293-8	13/32	10	0.74	18,7	500	3,5	1-1/2	40	0.18	0,27	28	95	•	•
293-10	1/2	12,5	0.83	21,1	450	3,1	2	50	0.20	0,30	28	95	•	•
293-12	5/8	16	0.96	24,3	450	3,1	2-1/2	65	0.22	0,33	28	95	•	•
293-16	7/8	22	1.21	30,6	450	3,1	3-1/4	80	0.25	0,37	20	68	•	•

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels, and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid.

Cover: Abrasion resistant nylon fiber braid.

Temperature Range: -58° F to $+302^{\circ}$ F (-50° C to $+150^{\circ}$ C). Rated to 302° F, 150° C in engine applications Rated to 212° F, 100° C in air brake applications

Fittings: 26 Series - pg. B-9.

21 Series - pg. B-155.

• Field Attachable Assembly Instructions are in Section B with each Fittings Series.

 See Section C for Parkrimp Assembly Instructions.

• Temperature Range of other media listed in Section F

• SAE spec certification for 293 hose is for -4 through -12 only.

MARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

Updated 9/2021

Markets





Performance





213

Transportation

SAE J1402 AI / DOT FMVSS 106 AIR BRAKE - AI



view on web page

# Part Number	Hose I.D.		Hose	Hose O.D.		Working Pressure		Minimum Bend Radius		kg Weight		dg um	Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	МРа	inch	mm	lbs/ft		inches of Hg		26 Series	21/23 Series
213-4	3/16	5	0.49	12,5	2000	14	3/4	20	0.12	0,18	28	95	•	•
213-5	1/4	6,3	0.55	14	1500	10,5	1	25	0.14	0,21	28	95	•	•
213-6	5/16	8	0.62	16	1500	10,5	1-1/4	30	0.17	0,25	28	95	•	•
213-8	13/32	10	0.74	19	1250	8,7	1-3/4	45	0.20	0,30	28	95	•	•
213-10	1/2	12,5	0.83	21	1000	7	2-1/4	55	0.22	0,33	28	95	•	•
213-12	5/8	16	0.96	24	750	5,2	2-3/4	70	0.24	0,36	28	95	•	•
213-16	7/8	22	1.21	31	400	2,8	3-1/2	90	0.30	0,45	20	68	•	•
213-20	1-1/8	29	1.49	38	300	2,1	4-1/2	115	0.44	0,65	20	68	•	•
213-24	1-3/8	35	1.73	44	300	2,1	7-1/2	190	0.52	0,77	15	51	•	•
213-32	1-13/16	46	2.14	54	200	1,4	14	355	0.67	1,00	11	37	•	•
213-40*	2-3/8	61	2.88	73	175	1,2	24	610	1.31	1,95	11	64	•	•

*NOTE: Due to fitting size, this is a factory crimp only.

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels, and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid and one steel braid.

Cover: Fiber braid.

Temperature Range: -50°F to +302°F (-45°C to +150°C). Rated to 302°F, 150°C in engine applications

Rated to 212°F, 100°C in air brake applications

Fittings: 26 Series - pg. B-9. 21 Series - pg. B-155.

- See page E-5 for charted effects temperature has on maximum working pressures of 201, 206, 213, and
- See Section B for Field Attachable Assembly Instructions.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.
- SAE spec certification for 213 hose is for -4 through -12 only.

266 hose.



B

Markets







Performance



B

266

Transportation

SAE J1402 AII / DOT FMVSS 106 AIR BRAKE - AII



view on web page

# Part Number	r Hose I.D.		e I.D. Hose		Working Pressure		Minimum Bend Radius		kg Weight				Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	ka/m	inches		26 Sprips	20/22 Series
266-4	3/16				2000		3/4	20		0,22	28	95	•	•
266-5	1/4	6,3	0.58	14,8	1500	10,5	1	25	0.16	0,24	28	95	•	•
266-6	5/16	8	0.68	17,2	1500	10,5	1-1/4	30	0.23	0,34	28	95	•	•
266-8	13/32	10	0.77	19,5	1250	8,7	1-3/4	45	0.26	0,39	28	95	•	•
266-10	1/2	12,5	0.92	23,4	1250	8,7	2-1/4	55	0.38	0,56	28	95	•	•
266-12	5/8	16	1.08	27,4	750	5,2	2-3/4	70	0.42	0,63	20	68	•	•
266-16	7/8	22	1.24	31,4	400	2,8	3-1/2	90	0.48	0,71	15	51	•	•
266-20	1-1/8	29	1.50	38,4	300	2,1	4-1/2	115	0.51	0,76	15	51	•	•
266-24	1-3/8	35	1.75	44,5	250	1,7	5-1/2	140	0.68	1,01	11	37	•	•

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels, and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid and one steel braid.

Cover: Fiber braid.

Temperature Range: -55°F to +302°F (-48°C to +150°C). Rated to 302°F, 150°C in engine applications

Rated to 212°F, 100°C in air brake applications

Fittings: 26 Series - pg. 9.

20 Series - pg. B-145. 22 Series - pg. B-163.

- See page E-5 for charted effects temperature has on maximum working pressures of 201, 206, 213, and
- See Section B for Field Attachable Assembly Instructions.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.
- SAE spec certification for 266 hose is for -4 through -12 only.

201, 206

Markets





Performance





Transportation



Parker 201 AIR BRAKE

B

SAE J517 100R5 / SAE J1402 All / DOT FMVSS 106 AIR BRAKE - All

#							₹		kg		U Hg			
Part Number	Hose I.D.		Hose O.D.		Working Pressure		Minimum Bend Radius		Weight		Vacuum Rating		Parkrimp	Field Attachable
											inches			
			inch			MPa			lbs/ft	-	-		26 Series	20/22 Series
201-4	3/16	5	0.52	13	3000	21	3	75	0.15	0,22	28	95	•	•
201-5	1/4	6,3	0.58	15	3000	21	3-3/8	85	0.18	0,27	28	95	•	•
201-6	5/16	8	0.68	17	2250	15,7	4	100	0.23	0,34	28	95	•	•
201-8	13/32	10	0.77	20	2000	14	4-1/2	115	0.27	0,40	28	95	•	•
201-10	1/2	12,5	0.92	23	1750	12,2	5-1/2	140	0.37	0,55	28	95	•	•
201-12	5/8	16	1.08	27	1500	10,5	6-1/2	165	0.40	0,60	28	95	•	•
201-16	7/8	22	1.23	31	800	5,6	7-3/8	185	0.46	0,68	20	68	•	•
201-20	1-1/8	29	1.50	38	625	4,3	9	230	0.51	0,76	20	68	•	•
201-24	1-3/8	35	1.75	44	500	3,5	10-1/2	265	0.68	1,01	15	51	•	•
201-32	1-13/16	46	2.22	56	350	2,4	13-1/4	335	0.89	1,32	11	37	•	•
201-40	2-3/8	60	2.88	73	350	2,4	24	610	1.31	1,95	11	37	•	•
201-48	3	76	3.56	90	200	1,4	33	840	2.09	3,11	11	37		•

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels, and antifreeze solutions.

Inner Tube: Synthetic rubber.

Reinforcement: One fiber braid and one steel braid.

Cover: Fiber braid.

Temperature Range: -40°F to +302°F (-40°C to +150°C). Rated to 302°F, 150°C in engine applications

Rated to 212°F, 100°C in air brake applications

Fittings: 26 Series - pg. B-9. 20 Series - pg. B-145. 22 Series - pg. B-163.

- See page E-5 for charted effects temperature has on maximum working pressures of 201, 206, 213, and
- See Section B for Field Attachable Assembly Instructions.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.
- SAE spec certification for 201 hose is for -4 through -12 only.

WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

Updated 9/2021

Markets









Performance



B

206

Transportation



view on web page

SAE J517 100R5 / SAE J1402 AII / DOT FMVSS 106 AIR BRAKE - AII

# Part Number	Hose I.D.		Hose O.D.		Working Pressure		Minimum Bend Radius		kg Weight		Vacuum Rating		Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	inches of Ha		26 Series	20/22 Series
206-4	3/16	5	0.52	13	3000		3	75		0,22	28	95	•	•
206-5	1/4	6,3	0.58	15	3000	21	3-3/8	85	0.18	0,27	28	95	•	•
206-6	5/16	8	0.68	17	2250	15,7	3-1/2	90	0.23	0,34	28	95	•	•
206-8	13/32	10	0.77	20	2000	14	3-1/2	90	0.27	0,40	28	95	•	•
206-10	1/2	12,5	0.92	23	1750	12,2	4	100	0.37	0,55	28	95	•	•
206-12	5/8	16	1.08	27	1500	10,5	4	100	0.40	0,60	28	95	•	•
206-16	7/8	22	1.23	31	800	5,6	4	100	0.46	0,68	20	68	•	•
206-20	1-1/8	29	1.50	38	625	4,3	5-1/2	140	0.51	0,76	20	68	•	•
206-24	1-3/8	35	1.75	44	500	3,5	7-1/2	190	0.68	1,01	15	51	•	•
206-32	1-13/16	46	2.22	56	350	2,4	13-1/4	335	0.89	1,32	11	37	•	•
206-40	2-3/8	60	2.88	73	350	2,4	24	610	1.31	1,95	11	37	•	•

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels, and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid and one steel braid.

Cover: Fiber braid, blue.

Temperature Range: -55°F to +302°F (-48°C to +150°C). Rated to 302°F, 150°C in engine applications

Rated to 212°F, 100°C in air brake applications

Fittings: 26 Series - pg. B-9. 20 Series - pg. B-145.

22 Series - pg. B-163.

- See page E-5 for charted effects temperature has on maximum working pressures of 201, 206, 213, and
- See Section B for Field Attachable Assembly Instructions.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.
- SAE spec certification for 206 hose is for -4 through -12 only.

611HT



Markets









Performance



611HT

Transportation

SAE J517 100R6 / EN 854 TYPE R6

Parker 611HT HI-TEMP	

view on web page

B

# Part Number	Hose I.D.		Hose O.D.		Working Pressure		Minimum Bend Radius		kg Weight		Vacuum Rating		Parkrimp
	inch	mm	inch	mm	psi	МРа	inch	mm	lbs/ft	kg/m	inches of Hg	1	HY Series
611HT-4	1/4	6,2	0.47	11,9	400	2,8	2 1/2	65	0.09	0,13	28	95	•
611HT-6	3/8	9,3	0.59	15,1	400	2,8	3	75	0.11	0,16	28	95	•
611HT-8	1/2	12,5	0.75	19,0	400	2,8	4	100	0.18	0,27	28	95	•
611HT-10	5/8	15,7	0.88	22,2	350	2,4	5	125	0.19	0,28	18	61	•
611HT-12	3/4	18,8	1.00	25,4	300	2,1	6	150	0.25	0,36	18	61	•

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels, and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid.

Cover: Synthetic rubber abrasion resistant, MSHA accepted.

Temperature Range: -55°F to +302°F (-48°C to +150°C).

Fittings: HY Series - pg. B-130.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.
- 611HT hose is not approved with any HY Series stainless steel fittings.

TRANSPORTATION 271 Air Brake

271-6 FIR BRAKE 3/8 SAE J1402 F DE

Markets



B

D





271

Transportation – Air Brake Hose SAE J1402 A / DOT FMVSS 106 AIR BRAKE - A



view on web page

# Part					Wor	king	Ş Minir		k	5	
Number	Hose I.D.		Hose O.D.		Pressure		Bend Radius		Weight		Parkrimp
	inch mm		inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	25 Series
271-6	3/8	10	0.75	19	225	1,6	1-3/4	45	0.20	0,30	•
271-8	1/2	12,5	0.88	22	225	1,6	2	50	0.26	0,39	•

Application: Air brake systems. **Inner Tube:** Synthetic rubber.

Reinforcement: One or more fiber braid.

Cover: Synthetic Rubber.

Temperature Range: -50°F to +212°F (-46°C to +100°C).

Fittings: 25 Series - pg. B-5.

- See page E-5 for charted effects temperature has on maximum working pressures of 201, 206, 213, and 266 hose.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

ALTERNATIVE / MARINE

SS23CG

Markets









If you make or maintain LPG / CNG powered equipment, SS23CG hose is your choice for gas permeation resistance and reliable performance. SS23CG meets the requirements of CSA 8.1-2015 Type III and meets permeation requirements of 1,6 g/m²-day. Hose assemblies should be installed in accordance with CSA B149.1.



SS23CG

Transportation - Compressed Natural Gas and Liquefied Petroleum Gas UL 21 / CSA 8.1 2015 TYPE III / NFPA 58



view on web page

B

# Part Number	Hose I.D.				Working Pressure		Minimum Bend Radius		kg Weight		Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	26 Series
SS23CG-6	5/16	8,0	0.68	17,2	350	2,4	4	100	0.16	0,24	•
SS23CG-8	13/32	10,0	0.77	19,5	350	2,4	4-1/2	115	0.17	0,25	•
SS23CG-10	1/2	12,5	0.92	23,4	350	2,4	5-1/2	140	0.28	0,42	•
SS23CG-12	5/8	15,9	1.05	26,8	350	2,4	6-1/2	165	0.30	0,45	•

FACTORY MADE HOSE ASSEMBLIES ONLY. Contact Hose Products Division for more information. For ECE R110 and ECE R67 approval, contact Hose Products Division.

Application: Liquefied petroleum gas (LPG), Compressed natural gas (CNG).

Inner Tube: Nylon.

Reinforcement: One stainless steel braid.

Cover: Synthetic rubber.

Temperature Range: -40°F to +250°F (-40°C to +121°C).

Fittings: 26 Series - pg. B-9.

- Embossed layline per industry standard
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

ALTERNATIVE / MARINE

Markets









B

SS25UL

- Low-pressure service with liquefied petroleum gas
- UL Standard 21 certification
- Oil and LPG resistant synthetic fiber cover
- Compatible with 26 Series Parkrimp style fittings

SS25UL

Transportation – Liquefied Petroleum Gas
UL 21 / NFPA 58



# Part Number	Hose I.D.		Hose I.D.		se I.D. Hose O.D.		Working Pressure		Minimum Bend Radius		kg Weight		Parkrimp	Field Attachable
rtainibo:	inch	mm	inch	mm		MPa		mm	lbs/ft	kg/m	26 Series	20/22 Series		
SS25UL-4	3/16	5	0.52	13,2	350		0.75	20	0.11	0,16	•	•		
SS25UL-5	1/4	6,3	0.58	14,8	350	2,4	1	25	0.13	0,19	•	•		
SS25UL-6	5/16	8	0.68	17,2	350		1-1/4	30	0.18	0,27	•	•		
SS25UL-8	13/32	10	0.77	19,5	350	2,4	1-3/4	45	0.21	0,31	•	•		
SS25UL-10		12.5	0.92	23,4	350	2.4	2-1/4	55	0.29	0,43	•	•		
SS25UL-12	-	16	1.08	27,4	350	2,4	2-3/4	70	0.23	0,55	•	•		

Application: Liquefied petroleum gas (LPG).

Inner Tube: Synthetic rubber.

Reinforcement: One fiber braid and one stainless

steel wire braid.

Cover: Fiber braid.

Temperature Range: -40°F to +250°F (-40°C to

+121°C).

Fittings: 26 Series - pg. B-9.

20 Series - pg. B-145. 22 Series - pg. B-163.

WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

SS25UL-AGA

Transportation – Liquefied Petroleum Gas AS / NZS 1869-2012 CLASS D



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#			(5	7	k	9		#
Part Number	Hose	I.D.	Hose O.D.		Working Pressure		Minimum Bend Radius				Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	26 Series	20/22 Series
SS25UL-4-AGA	3/16	5	0.52	13,2	375	2,6	0.75	20	0.11	0,16	•	•
SS25UL-6-AGA	5/16	8	0.68	17,2	375	2,6	1-1/4	30	0.18	0,27	•	•
SS25UL-8-AGA	13/32	10	0.77	19,5	375	2,6	1-3/4	45	0.21	0,31	•	•

FACTORY MADE HOSE ASSEMBLIES ONLY. Contact Hose Products Division for more information.

Application: Liquefied petroleum gas (LPG).

Inner Tube: Synthetic rubber.

Reinforcement: One fiber braid and one stainless steel wire braid.

Cover: Fiber braid.

Temperature Range: -40°F to +250°F (-40°C to +121°C).

Fittings: 26 Series - pg. B-9.

20 Series - pg. B-145. 22 Series - pg. B-163.

- See Section B for Field Attachable Assembly Instructions.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section F.

WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.



ALTERNATIVE / MARINE

221FR

Markets







Parker's 221FR hose is a transportation hose used for marine fuel and engines that provides fire resistance for gasoline and fuel systems. The 221FR hose is manufactured to meet many industry standards, such as ISO and SAE, for reliability.

• ISO 7840 and USCG approved



221FR

Transportation – Marine Fuel and Engine Hose ISO 7840 / SAE J1527 A CLASS I / SAE J1942



view on web page

# Part Number	Hose		0.	ose D.		sure		imum Radius	Wei	ight	Vacuu Ratir inches	um ng	·	Field Attachable 20/22 Series
221FR-5	1/4		0.58		500		1	25		0,28	24	81	20 Series	20/22 Series
221FR-6	5/16	'	0.68		500	- , -	1-1/4	30		0.34	24	81	•	•
	13/32				500	-,-	, .	45		0.42	24	81	•	•
221FR-10	1/2	12,5	0.92	23	500	3,5	2-1/4	55	0.39	0,58	20	68	•	•
221FR-12	5/8	16	1.08	27	500	3,5	2-3/4	70	0.41	0,61	20	68	•	•
221FR-16	7/8	22	1.23	31	500	3,5	3-1/2	90	0.47	0,70	20	68	•	•

ISO 7840 with 26 Series fittings ONLY.

Application: Gasoline, ethanol blends, diesel fuels, petroleum base hydraulic fluid, and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: One-braid steel wire.

Cover: Synthetic rubber, blue, MSHA accepted.

Temperature Range: -4°F to +212°F (-20°C to +100°C).

Fittings: 26 Series - pg. B-9. 20 Series - pg. B-145.

22 Series - pg. B-163.

• See Section B for Field Attachable Assembly Instructions.

• See Section C for Parkrimp Assembly Instructions.

• Temperature Range of other media listed in Section E.

MARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

B

REFRIGERANT

285 Barrier Air Conditioning Hose

Markets



B



Parker 285 Barrier Hose is designed to deliver consistency and reliability with a pressure range of 350-500 psi for air conditioning systems.

Parker 285 Hose exceeds current industry standards for ultra-low refrigerant permeation and is designed, built, and tested to meet SAE J3062 Type Cu performance specifications. The hose is designed to meet Automotive OEM requirements for R134a and the next generation R1234yf refrigerants.

- Highly flexible
- Exceeds Automotive OEM requirements
- Exceeds SAE J3062 "Ultra Low" refrigerant permeation rating (1.5 kg/m²/yr R134a)
- Compatible with Parker's 26 series fittings

285 Refrigerant

SAE J3062 TYPE Cu



view on web page

# Part Number	Hose I.D.		Hose I.D.		lose I.D. Hose O.D		Working Pressure		Minimum Bend Radius		kg Weight		Vacuum Rating inches		Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m			26 Series		
285-4	3/16	5,08	0.490	12,45	500	3,4	1	25	0.09	0,13	28	95	•		
285-6	5/16	8,23	0.580	14,73	500	3,4	1-1/2	40	0.10	0,14	28	95	•		
285-8	13/32	10,67	0.680	17,27	500	3,4	2	50	0.13	0,17	28	95	•		
285-10	1/2	12,95	0.765	19,43	500	3,4	2-1/2	65	0.15	0,19	28	95	•		
285-12	5/8	16,13	1.000	25,4	500	3,4	3	75	0.19	0,27	28	95	•		
285-14	3/4	19,05	1.080	27,4	350	2,4	3-1/2	89	0.24	0,34	28	95			

Application: Refrigerants R134a / PAG Oil & R1234yf / PAG Oil.

Inner Tube: Synthetic rubber with nylon barrier.

Reinforcement: Synthetic fiber.

Cover: Synthetic rubber.

Temperature Range: -40°F to +257°F (-40°C to +125°C).

Fittings: 26 Series - pg. B-9.

- See Section C for Parkrimp Assembly
- Temperature Range of other media listed in Section E.

WARNING: This product can expose you to chemicals including ethylene thiourea, which is known to the State of California to cause cancer and birth defect or other reproductive harm. For more information go to www.p65warnings.ca.gov.

> A-52 Updated 11/2022

REFRIGERANT

244

Markets





Parker's 244 hose is a one braid steel wire refrigerant hose that has a pressure range of 350 to 500 psi, designed for the rigorous requirements of bus and transit applications.

- Air conditioning hose
- Excellent effusion rate
- Long service life
- Resists moisture ingression
- Parkrimp compatible

244 Refrigerant SAE J2064 B CLASS I



view on web page

# Part Number	Hose	I.D.	Hose	O.D.	Worl		Mini	mum Radius	Wei	g ght	Vacu Rati	um	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	inches of Hg	kPa	26 Series
244-16	7/8	22	1.23	31	500	3,5	7-1/2	190	0.51	0,76	28	95	•
244-20	1-1/8	29	1.50	38	500	3,5	9	230	0.56	0,83	28	95	•
244-24	1-3/8	35	1.75	44	350	2,4	10-1/2	270	0.62	0,92	28	95	•

Application: Refrigerant 134a. Inner Tube: Butyl rubber.

Reinforcement: One-braid steel wire.

Cover: Fiber braid.

Temperature Range: -22°F to +257°F (-30°C to +125°C).

Fittings: 26 Series - pg. B-9.

- See Section B for Field Attachable Assembly Instructions.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in

Section E.

WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

B





VIEW VISUAL INDEX

Fittings

Parkrimp (Crimp) Series Field Attachable Series

Parkrimp (crimp) Serie	es of Fittings
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26 Series	
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77 Series	
79 Series	
HY Series	. B-130
81 Series	B-193

Field Attachable Series of Fittings

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	E	
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82 Series	E	B-178
88 Series		B-193

How to Read the Fittings Section

Hose Inner Diameter

Measured in 1/16 inch

of a "dash" (-) numbering

increments identified by use

system. i.e., 4/16" = 1/4" = -4.

With more than 750 end configurations, Parker's brass, stainless steel and Chromium-6 free plated steel fittings include O-ring face seal, flare, straight thread, pipe and metric designs, in both crimp and field attachable styles. Along with Parker hose, all fittings have been tested and approved, and meet stringent industry standards worldwide. Fitting page content is defined by the information shown below. Please take a moment and review.

How to Select Parkrimp Hose Fittings

Example: 1JC43-12-8C

1JC43-12-8C - Fitting (1=Crimp, 2=Field attachable, 3=Push-Lok, Blank=Nipple with clamp)

1JC43-12-8C - End Connection 1JC43-12-8C - Fitting Series

1JC43-12-8C - Size of Fitting End Connection

1JC43-12-8C - Hose Size 1JC43-12-8C - Fitting Material No Suffix = Steel

B = Brass
C = 316 Stainless Steel
BA = Brass Nipple with

В

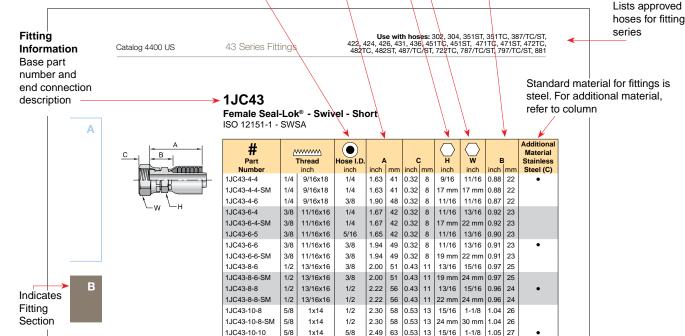
Steel Nut and Socket
BS = Brass Nipple and Nut
with Steel Shell or

Socket
SM = Metric Index
ZJ = XTR Coating

Use to determine the wrench size

Hex size

"B" Dimension (Cutoff Allowance) Dimension used to determine cut length (C.L.) of hose when making a hose assembly



1JC43-10-10-SM

1JC43-12-8

5/8

3/4

1x14

1-3/16x12

"A" Dimension

Overall Length

Continued on next page

2.49 63 0.53 13

2.48

63 0.57 14

24 mm 30 mm 1.05 27

1-1/8 1-3/8

5/8

Catalog 4400 US How To Read

How to select hose fittings

To make ordering Parker products easier, we have outlined the nomenclature for hose and fittings on this page. For information on ordering hose assemblies, see Section A.

How to Select Hose

Example: 487TC-4

487TC-4 - Hose type

487TC-4 - Indicates the special feature of the hose

(in this case, 'Tough Cover')

487TC-4 - Hose inside diameter dash size (in this case, 4/16" or 1/4")



How to Select Parkrimp Hose Fittings

Example: 1JC43-12-8C

JC43-12-8C - Fitting (1 = Crimp, 2 = Field Attachable, 3 = Push-Lok, Blank = Nipple with clamp or shell)

1JC43-12-8C - End connection (In this case, a female Seal-Lok – swivel – straight)

1JC43-12-8C - Fitting series

1JC43-12-8C - Size of fitting end connection (In this case, 12/16" or 3/4")

1JC43-12-8C - Hose size (In this case, 8/16" or 1/2")

1JC43-12-8C - Fitting material:

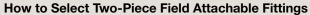
No Suffix = Steel

B = Brass

C = 316 Stainless Steel

BA = Brass Nipple with Steel Nut and Socket BS = Brass Nipple with Brass Nut and Socket

SM = Metric Hex



When selecting a two-piece field attachable fitting, the fitting part number (found in Section B of this catalog)

needs to be broken down into two distinct numbers for the nipple and the socket.

Example: 20120-16-16B

Socket Part Number
Example: 20020-16B

20020-16B - Fitting (1 = Crimp, 2 = Field Attachable, 3 = Push-Lok, Blank = Nipple with clamp or shell)

20020-16B - End connection ("00" represents that it is a socket)

20020-16B - Fitting series

20020-<mark>16</mark>B - Hose size (In this case, 16/16" or 1")

20020-16B - Fitting material:

No Suffix = Steel

B = Brass

C = 316 Stainless Steel

BA = Brass Nipple with Steel Nut and Socket BS = Brass Nipple with Brass Nut and Socket

SM = Metric Hex

Nipple Part Number

Example: 0120-16-16B

_0120-16-16B - Fitting (1 = Crimp, 2 = Field Attachable, 3 = Push-Lok, Blank = Nipple with clamp or shell)

0120-16-16B - End connection (In this case, a male NPTF Pipe - rigid - straight)

0120-16-16B - Fitting series

0120-16-16B - Size of fitting end connection (In this case, 16/16" or 1")

0120-16-16B - Hose size (In this case, 16/16" or 1")

0120-16-16B - Fitting material:

No Suffix = Steel

B = Brass

C = 316 Stainless Steel

BA = Brass Nipple with Steel Nut and Socket BS = Brass Nipple with Brass Nut and Socket

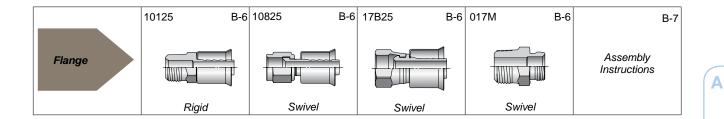
SM = Metric Hex





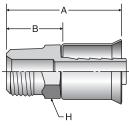






10125

Male NPTF Pipe - Rigid

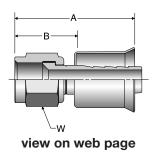


#								
Part	Thread	Hose I.D.			Н		В	
Number	inch	inch	inch	mm	inch	inch	mm	
10125-6-6B-VS	3/8X18	3/8	1.72	44	11/16	1.00	25	
10125-6-8B-VS	3/8X18	1/2	1.72	44	11/16	1.00	25	
10125-8-6B-VS	1/2X14	3/8	2.05	52	7/8	1.33	34	
10125-8-8B-VS	1/2X14	1/2	2.05	52	7/8	1.33	34	

view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Female SAE 45° - Swivel



В

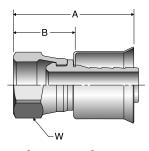
# Part	Thread	Hose I.D.	,	A	H		В
Number	inch	inch	inch	mm	inch	inch	mm
10825-6-6B	5/8X18	3/8	1.82	46	3/4	1.10	28
10825-8-6B	3/4X16	3/8	1.80	46	7/8	1.08	27
10825-8-8B	3/4X16	1/2	1.95	50	7/8	1.22	31

10825

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

17B25

Female Air Brake Jounce Line - Swivel - Straight



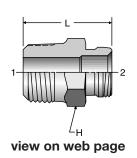
Thread	Hose I.D.	A		н		8
inch	inch	inch	mm	inch	inch	mm
3/4X20	3/8	1.59	40	7/8	0.87	22
3/4X20	1/2	1.59	40	7/8	0.87	22
	Thread inch 3/4X20	Thread inch inch 3/4X20 3/8	Thread inch inch 3/4X20 3/8 1.59	Thread inch inch inch inch 3/4X20 3/8 1.59 40	Thread inch inch inch inch 3/4X20 3/8 1.59 40 7/8	Thread inch inch inch inch inch 3/4X20 3/8 1.59 40 7/8 0.87

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

view on web page

017M

Air Brake Adapter



#		·····	۵	·····			
Part Number	1	ad End 1 ΓF inch		ad End 2 IEFinch	inch	mm	H inch
017M-6-8B	6	3/8X18	8	3/4X20	1.13	29	3/4
017M-8-8B	8	1/2X14	8	3/4X20	1.33	34	7/8

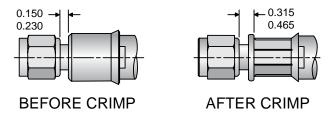
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Use with hose: 271

1. On the 08 end configurations only, the use of a mandrel is required. This mandrel is designed to set the proper gap between the nut and the shell. To match the correct fitting with the proper mandrel part number refer to the table below.



- 2. The assembly mandrels can be used with a common bench vise or on the TH2-7 push-on stand. Refer to Bulletin 4480-T13-USA for push-on stand instructions.
- 3. When using a common bench vise, place the mandrel in the vise, put the fitting on the mandrel (nut first) then push on the hose until it bottoms. Visually check the sight hole on the side of the shell to assure that the hose is fully inserted.
- 4. Remove mandrel from fitting and check for proper gap between nut and shell. (See table below).
- 5. Now crimp the fitting onto the hose. Refer to CrimpSource for correct crimp dies and crimping dimensions.
- 6. Check for proper gap between nut and shell after crimp. (See table below)



NOTE: B dimension is measured from the back of the fully-seated nut to the start of the crimp length. The nut must be free to swivel after crimping of the shell.

-		A Le	ngth	B Length		
Fitting Part Number	Required Assembly Tool	mm	inch	mm	inch	
10625-6-6B	TH2-7M25-6					
10825-6-6B		3,80	0.150 0.230	8,00 11,80	0.310 0.465	
10625-8-8B	TH2-7M25-8	5,85	0.230	11,00	0.400	
10825-8-8B	I □Z-1 IVIZƏ-0					

NOTE: The "Required Assembly Tool" must be used to assemble all fittings listed above.

7. For all other 25 series fittings, use of mandrel is not necessary. Push fitting onto hose until it bottoms. Visually check sight hole on the side of the shell to assure that the hose is fully inserted.

Notes

Α

В

C

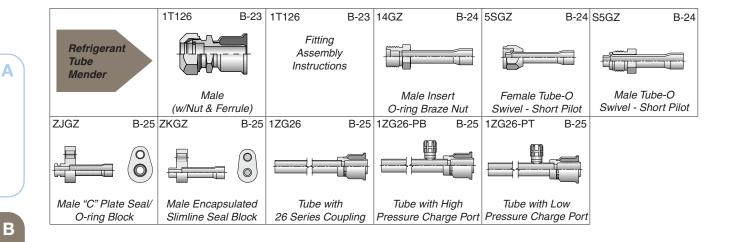
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Ē

A

В

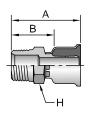
C



B-10

10126 Male NPTF Pipe - Rigid

#									Additional
Part	Thread	Hose I.D.	A	:	H	ı	В		Material
Number	inch	inch	inch	mm	inch	mm	inch	mm	Brass (B)
10126-2-4	1/8x27	3/16	1.65	42	7/16	0.78	0.78	20	
10126-4-4	1/4x18	3/16	1.88	48	9/16	1.01	1.01	26	
10126-4-5	1/4x18	1/4	1.88	48	9/16	1.01	1.01	26	
10126-4-6	1/4x18	5/16	1.88	48	3/4	1.02	1.02	26	•
10126-6-6	3/8x18	5/16	1.89	48	11/16	1.03	1.03	26	•
10126-6-8	3/8x18	13/32	1.89	48	11/16	1.03	1.03	26	•
10126-8-8	1/2x14	13/32	2.14	54	7/8	1.28	1.28	33	•
10126-8-10	1/2x14	1/2	2.25	57	7/8	1.30	1.30	33	•
10126-12-12	3/4x14	5/8	2.31	59	1-1/16	1.37	1.37	35	
10126-16-16	1x11-1/2	7/8	2.61	66	1-3/8	1.57	1.57	40	
10126-20-20	1-1/4x11-1/2	1-1/8	2.83	72	1-3/4	1.77	1.77	45	
10126-24-24	1-1/2x11-1/2	1-3/8	3.01	76	2	1.93	1.93	49	
10126-32-32	2x11-1/2	1-13/16	3.44	87	2-1/2	2.18	2.18	55	



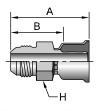
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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

10326

Male JIC 37° - Rigid

# Part	_	······································	Hose I.D.	Α	ı.	(h) I	Е	3	Additional Material
Number	inch		inch	inch	mm	inch	mm	inch	mm	Brass (B)
10326-4-4	1/4	7/16x20	3/16	2.02	50	1/2	1.15	1.15	29	•
10326-6-6	3/8	9/16x18	5/16	2.12	54	3/4	1.26	1.26	32	
10326-8-8	1/2	3/4X16	13/32	1.94	49	13/16	1.08	1.08	27	
10326-10-10	5/8	7/8X14	1/2	2.49	64	15/16	1.54	1.54	39	



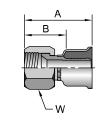
view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

В

10626

Female JIC 37° - Swivel



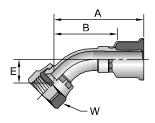
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# Part	_	·//···································	Hose I.D.	A		W	В		Additional Material
Number		inch	inch	inch	mm	inch	inch	mm	Brass (B)
10626-6-6	3/8	9/16x18	5/16	1.81	45	11/16	0.95	23	•
10626-6-8	3/8	9/16x18	13/32	1.67	52	11/16	1.19	30	•
10626-12-12	3/4	1-1/16x12	5/8	2.29	58	1-1/4	1.35	34	•
10626-16-16	1	1-5/16x12	7/8	2.53	64	1-1/2	1.49	38	•
10626-20-20	1-1/4	1-5/8x12	1-1/8	2.56	65	2	1.50	38	
10626-24-24	1-1/2	1-7/8x12	1-3/8	2.77	70	2-1/4	1.69	43	
10626-32-32	2	2-1/2x12	1-13/16	3.30	84	2-7/8	2.04	52	

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

13726

Female JIC 37° - Swivel - 45° Elbow - Short Drop



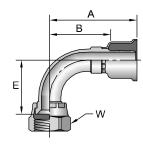
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#	_	·····					_			
Part	Т	hread	Hose I.D.	A	1	E	-	W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
13726-4-4	1/4	7/16x20	3/16	2.01	51	0.39	10	9/16	1.14	29
13726-6-6	3/8	9/16x18	5/16	2.72	69	0.43	11	11/16	1.86	47
13726-8-8	1/2	3/4x16	13/32	2.82	72	0.55	15	7/8	1.96	50
13726-10-10	5/8	7/8x14	1/2	2.96	75	0.63	16	1	2.01	51
13726-12-12	3/4	1-1/16x12	5/8	3.44	87	0.83	21	1-1/4	2.50	63
13726-16-16	1	1-5/16x12	7/8	3.34	85	0.90	23	1-1/2	2.30	58
13726-20-20	1-1/4	1-5/8x12	1-1/8	3.74	95	1.18	30	2	2.68	68
13726-24-24	1-1/2	1-7/8x12	1-3/8	3.92	100	1.16	29	2-1/4	2.84	72

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

13926

Female JIC 37° - Swivel - 90° Elbow - Short Drop



view on web page

# Part		www.	Hose I.D.		A	E	.	\bigcirc	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
13926-4-4	1/4	7/16x20	3/16	1.82	46	0.83	21	9/16	0.95	24
13926-6-6	3/8	9/16x18	5/16	2.15	55	0.91	23	11/16	1.29	33
13926-8-8	1/2	3/4x16	13/32	2.22	56	1.09	28	7/8	1.36	35
13926-10-10	5/8	7/8x14	1/2	2.23	57	1.26	32	1	1.28	33
13926-10-12	5/8	7/8x14	5/8	2.52	64	1.23	31	1	1.58	40
13926-12-12	3/4	1-1/16x12	5/8	2.28	58	1.82	46	1-1/4	1.30	34
13926-16-16	1	1-5/16x12	7/8	3.30	84	2.14	54	1-1/2	2.26	57
13926-20-20	1-1/4	1-5/8x12	1-1/8	3.60	91	2.57	65	2	2.62	67
13926-24-24	1-1/2	1-7/8x12	1-3/8	3.92	100	2.82	72	2-1/4	2.84	72

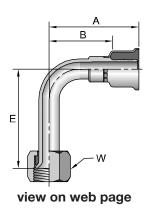
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

14126

Female JIC 37° - Swivel - 90° Elbow - Long Drop

# Part			Hose I.D.	A	A inch mm		.	\bigcirc	В	
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
14126-4-4	1/4	7/16x20	1/4	2.05	52	1.81	46	9/16	1.18	30
14126-6-6	3/8	9/16x18	5/16	2.02	51	2.13	54	11/16	1.16	29
14126-8-8	1/2	3/4X16	13/32	2.35	60	2.43	62	7/8	1.49	38
14126-10-10	5/8	7/8x14	1/2	2.11	54	2.76	70	1	1.16	29
14126-16-16	1	1-5/16x12	7/8	3.17	81	4.33	110	1-1/2	2.13	54

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



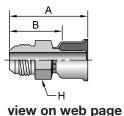
В

10426

Male SAE 45° - Rigid

# Part		······································	Hose I.D.		A			В
Number	i	nch	inch	inch	inch mm		inch	mm
10426-6-6	3/8	5/8x18	5/16	2.04	52	11/16	1.18	30

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

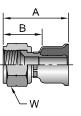


10826

Female SAE 45° - Swivel

# Part	_	······································	Hose I.D.	Α		W	В		Additional Material
Number		inch	inch	inch	mm	inch	inch	mm	Brass (B)
10826-6-6	3/8	5/8x18	5/16	1.84	47	3/4	0.98	25	•
10826-10-8	5/8	7/8x14	13/32	2.21	56	1	1.35	34	
10826-10-10	5/8	7/8x14	1/2	2.13	54	1	1.18	30	
10826-12-12	3/4	1-1/16x14	5/8	2.19	56	1-1/4	1.25	32	•

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



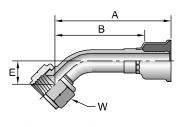
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17726

Female SAE 45° - Swivel - 45° Elbow

# Part		/////	Hose I.D.	A	A.	E	.	\bigcirc	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	inch	mm
17726-4-4	1/4	7/16x20	3/16	2.29	58	0.39	10	9/16	1.43	36
17726-6-6	3/8	5/8x18	5/16	2.72	69	0.43	11	11/16	1.86	47
17726-8-8	1/2	3/4x16	13/32	2.82	72	0.59	14	7/8	1.96	50
17726-10-10	5/8	7/8x14	1/2	2.96	75	0.63	16	1	2.01	51
17726-12-12	3/4	1-1/16x14	5/8	3.43	87	0.83	21	1-1/4	2.49	63

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

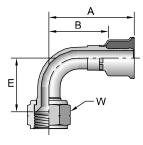


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Notch on nut signifies SAE 45° flare fitting.

17926

Female SAE 45° - Swivel - 90° Elbow



view on web page

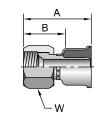
# Part			Hose I.D.	1 1		Ę		\bigcirc		В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
17926-4-4	1/4	7/16x20	3/16	1.75	44	0.83	21	9/16	0.89	23
17926-6-6	3/8	5/8x18	5/16	2.15	55	0.91	23	3/4	1.29	33
17926-8-8	1/2	3/4x16	13/32	2.31	58.7	1.00	25.4	7/8	1.45	37
17926-10-10	5/8	7/8x14	1/2	2.23	57	1.26	32	1	1.28	33
17926-12-12	3/4	1-1/16x14	5/8	2.28	58	1.82	46	1-1/4	1.34	34

Notch on nut signifies 45° flare fitting.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

16826

Female JIC 37° / SAE 45° - Dual Flare - Swivel



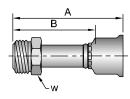
view on web page

# Part Number	TI	hread	Hose I.D.	inch	\ mm	W inch	I inch	3	Additional Material Brass (B)
16826-4-4	1/4	7/16x20	3/16	1.67	42	9/16	0.80	20	• ` ´
16826-4-5	1/4	7/16x20	1/4	1.55	48	9/16	1.03	26	
16826-4-6	1/4	7/16x20	5/16	1.92	49	9/16	1.06	27	
16826-5-5	5/16	1/2x20	1/4	1.77	45	5/8	0.90	23	
16826-8-6	1/2	3/4x16	5/16	1.76	56	7/8	1.34	34	
16826-8-8	1/2	3/4x16	13/32	1.91	49	7/8	1.05	27	
16826-8-10	1/2	3/4x16	1/2	2.36	60	7/8	1.41	36	•
16826-10-10	5/8	7/8x14	1/2	2.17	55	1	1.23	31	•
16826-10-12	5/8	7/8x14	5/8	1.96	61	1	1.53	37	

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

12826

Male Inverted SAE 45° - Swivel



view on web page

# Part		······································	Hose I.D.	,	\	W		В
Number	inch 1/4 7/16x24		inch	inch	mm	inch	inch	mm
12826-4-4	1/4	7/16x24	3/16	2.43	62	7/16	1.56	40
12826-5-5	5/16	1/2x20	1/4	2.56	65	1/2	1.69	43
12826-6-6	3/8	5/8x18	5/16	2.87	73	5/8	2.01	51
12826-8-8	1/2	3/4x18	13/32	3.00	76	3/4	2.14	54
12826-10-10	5/8	7/8x18	1/2	3.17	81	7/8	2.22	56

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

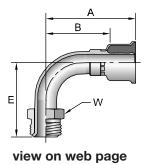
See Accessories Section for O-Rings and Flange Kits.

16926

Male Inverted SAE 45° - Swivel - 90° Elbow

# Part		vvvv	Hose I.D.	1	A	E	<u> </u>	○	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	inch	mm
16926-4-4	1/4	7/16x24	3/16	2.27	58	1.56	40	7/16	1.40	36
16926-6-6	3/8	5/8x18	5/16	1.89	48	1.48	38	5/8	1.03	26
16926-8-8	1/2	3/4x18	13/32	2.25	57	1.88	48	3/4	1.39	35

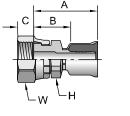
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



1JC26

Female Seal-Lok® - Swivel - Short

#	٥	······						\bigcirc			
Part	1	Γhread	Hose I.D.	1	١	(;	Н	W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	mm
1JC26-4-4	1/4	9/16x18	3/16	1.66	42	0.31	8	9/16	11/16	0.79	20
1JC26-6-6	3/8	11/16x16	5/16	1.70	43	0.34	9	11/16	13/16	0.84	21
1JC26-8-8	1/2	13/16x16	13/32	1.76	45	0.43	11	13/16	15/16	0.90	23
1JC26-10-10	5/8	1x14	1/2	2.16	55	0.53	13	15/16	1-1/8	1.21	31
1JC26-12-12	3/4	1-3/16x12	5/8	2.13	54	0.55	14	1-1/8	1-3/8	1.19	30
1JC26-16-16	1	1-7/16x12	7/8	2.39	61	0.56	14	1-3/8	1-5/8	1.35	34
1JC26-20-20	1-1/4	1-11/16x12	1-1/8	2.45	62	0.59	15	1-7/8	1-7/8	1.39	35



view on web page

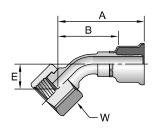
When measuring overall length to the end of the nut, B + C must be used to calculate cut-off allowance. See Accessories Section for O-Rings.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

В

B

1J726 Female Seal-Lok® - Swivel - 45° Elbow



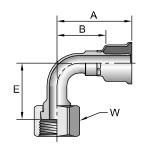
view on web page

#	(·////								
Part		Thread	Hose I.D.	1	A	E		W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J726-4-4	1/4	9/16x18	3/16	1.99	51	0.39	10	11/16	1.12	28
1J726-6-6	3/8	11/16x16	5/16	2.43	62	0.43	11	13/16	1.57	40
1J726-8-8	1/2	13/16x16	13/32	2.77	70	0.59	15	15/16	1.91	49
1J726-10-10	5/8	1x14	1/2	3.26	83	0.63	16	1-1/8	2.31	59
1J726-12-12	3/4	1-3/16x12	5/8	3.13	80	0.83	21	1-3/8	2.19	56
1J726-16-16	1	1-7/16x12	7/8	3.61	92	0.94	24	1-5/8	2.57	65
1J726-20-20	1-1/4	1-11/16x12	1-1/8	3.93	100	1.00	25	1-7/8	2.87	73
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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1J926

Female Seal-Lok® - Swivel - 90° Elbow - Short Drop



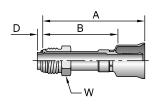
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# Part	_	······································	Hose I.D.	ļ	١	E	.	⊘	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J926-4-4	1/4	9/16x18	3/16	1.80	46	0.83	21	11/16	0.93	24
1J926-6-6	3/8	11/16x16	5/16	1.86	47	0.91	23	13/16	1.00	25
1J926-8-8	1/2	13/16X16	13/32	2.14	54	1.14	29	15/16	1.28	33
1J926-10-10	5/8	1x14	1/2	2.53	64	1.26	32	1-1/8	1.58	40
1J926-12-12	3/4	1-3/16x12	5/8	2.51	64	1.89	48	1-3/8	1.57	40
1J926-16-16	1	1-7/16X12	7/8	3.56	90	2.21	56	1-5/8	2.52	64
1J926-20-20	1-1/4	1-11/16X12	1-1/8	4.05	103	2.51	64	1-7/8	2.99	76

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1S526

Male Tube-O - Swivel - Short Pilot



view	On	Weh	nage

# Part		////// hread	Hose I.D.	,	١	г	1	\bigcirc		3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1S526-6-6	3/8	5/8x18	5/16	2.54	65	0.18	4.7	5/8	1.68	43
1S526-8-8	1/2	3/4x18	13/32	2.68			,	3/4	1.82	46
					68	0.18	4,7		_	- 1
1S526-10-10		7/8x18	1/2	3.46	88	0.18	4,7	7/8	2.51	64
1S526-10-12	5/8	7/8x18	5/8	3.63	92	0.18	4,7	7/8	2.69	68
1S526-12-12	3/4	1-1/16x16	5/8	4.00	102	0.18	4,7	1-1/16	3.06	78

When measuring overall length to the end of the nut, B+D must be used to calculate cut-off allowance.



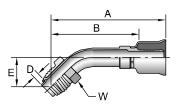
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings.

15R26

Male Tube-O - Swivel - 45° Elbow - Short Pilot

Part		hread	Hose I.D.	A	١		þ		=	w	E	3
Number		inch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15R26-6-6	3/8	5/8x18	5/16	2.52	64	0.18	4,7	0.85	22	5/8	1.66	42
15R26-8-8	1/2	3/4x18	13/32	2.53	64	0.18	4,7	1.05	27	3/4	1.67	42
15R26-10-10	5/8	7/8x18	1/2	2.99	76	0.18	4,7	1.25	32	7/8	2.04	52
15R26-10-12	5/8	7/8x18	5/8	3.16	80	0.18	4,7	1.25	32	7/8	2.22	56



view on web page

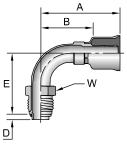
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov

15K26

Male Tube-O - Swivel - 90° Elbow - Short Pilot

# Part		///// hread	Hose I.D.		A)	E	.	\bigcirc	E	3
Number		inch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15K26-6-6	3/8	5/8X18	5/16	2.06	52	0.18	4,7	1.76	45	5/8	1.19	30
15K26-8-8	1/2	3/4x18	13/32	2.06	52	0.18	4,7	1.74	44	3/4	1.20	30
15K26-10-10	5/8	7/8x18	1/2	2.34	59	0.18	4,7	2.20	56	7/8	1.39	35
15K26-10-12	5/8	7/8x18	5/8	2.51	64	0.18	4,7	2.20	56	7/8	1.57	40

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



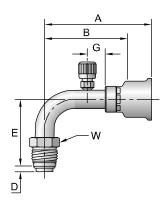
view on web page

15K26-PB

Male Tube-O - Swivel - 90° Elbow - Short Pilot with High Pressure Charge Port for R134a

# Part	Thread inch		Hose I.D.	Hose I.D. A		[þ	E		G		\bigcirc	В	
Number	ir	nch	inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15K26-8-8-PB	1/2	3/4x18	13/32	2.70	69	0.18	4,6	1.74	44	0.60	15	3/4	1.88	48

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

В

C

D

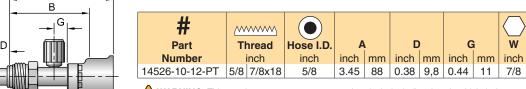
inch | mm

2.51

В

14526-PT

Male Tube-O - Swivel - Long Pilot With With Low Pressure Charge Port for R134a

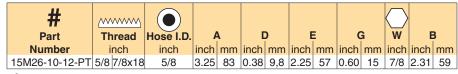


view on web page

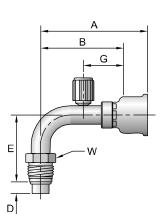
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

15M26-PT

Male Tube-O - Swivel - 90° Elbow - Long Pilot With Low Pressure Charge Port for R134a



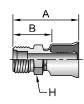
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

15G26

Male Tube-O - Rigid - Internal Long Pilot (3-Step)



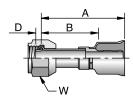
view on web page

# Part		vvvv	Hose I.D.	,	A	H	E	3
Number	i	nch	inch	inch	mm	inch	inch	mm
15G26-6-6	3/8	5/8x18	5/16	1.78	45	0.625	0.92	23
15G26-8-8	1/2	3/4x16	13/32	1.95	50	3/4	1.09	28
15G26-10-10	5/8	7/8x14	1/2	4.05	103	7/8	3.10	79
15G26-10-12	5/8	7/8x14	5/8	2.19	56	0.875	1.25	32

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

15S26

Female Tube-O - Swivel - Short Pilot



view on web page

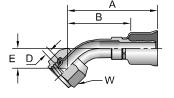
# Part		hread	Hose I.D.	ı	λ.		p	○	В	
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
15S26-6-6	3/8	5/8x18	5/16	2.54	65	0.18	4,7	3/4	1.68	43
15S26-8-8	1/2	3/4x16	13/32	2.68	68	0.18	4,7	7/8	1.82	46
15S26-10-10	5/8	7/8x14	1/2	2.84	72	0.18	4,7	1-1/16	1.89	48
15S26-10-12	5/8	7/8x14	5/8	3.63	92	0.18	4,7	1-1/16	2.69	68
15S26-12-12	3/4	1-1/16x14	5/8	4.00	102	0.18	4,7	1-1/4	3.06	78

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

15H26

Female Tube-O - Swivel 45° Elbow - Short Pilot

# Part		vvvvv	Hose I.D.	Α		D)	E		\bigcirc	ļ	В
Number	i	nch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15H26-6-6	3/8	5/8x18	5/16	2.35	60	0.18	4,7	0.54	14	3/4	1.49	38
15H26-8-8	1/2	3/4x16	13/32	2.48	63	0.18	4,7	0.60	15	7/8	1.62	41
15H26-10-10	5/8	7/8x14	1/2	3.23	82	0.18	4,7	0.67	17	1 1/16	2.28	58
15H26-10-12	5/8	7/8x14	5/8	3.43	87	0.18	4,7	0.67	17	1-1/16	2.46	62



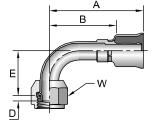
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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

15T26

Female Tube-O - Swivel - 90° Elbow - Short Pilot

# Part	_	////// Γhread	Hose I.D.	Д	١	0)	E		\bigcirc	ı	3
Number		inch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15T26-6-6	3/8	5/8x18	5/16	1.89	48	0.18	4,7	1.15	29	3/4	1.03	26
15T26-8-8	1/2	3/4x16	13/32	2.34	59	0.18	4,7	1.46	37	7/8	1.48	38
15T26-10-10	5/8	7/8x14	1/2	2.08	53	0.18	4,7	1.75	44	1-1/16	1.08	27
15T26-10-12	5/8	7/8x14	5/8	2.20	56	0.18	4,7	1.53	39	1-1/16	1.26	32
15T26-12-12	3/4	1-1/16x14	5/8	2.63	67	0.18	4,7	1.75	44	1-1/4	1.69	43



В

view on web page

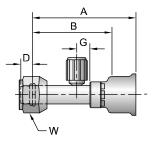
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

15926-PB

Female Tube-O - Swivel - Long Pilot With High Pressure Charge Port for R134a

# Part		www.	Hose I.D.	Д	\)	G	à	\bigcirc	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15926-6-6-PB	3/8	5/8x18	5/16	3.25	83	0.28	7,1	0.75	19	3/4	2.39	61
15926-8-8-PB	1/2	3/4x16	13/32	2.74	70	0.38	9,8	0.50	13	7/8	1.88	48

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



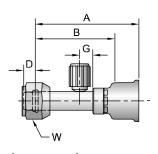
view on web page

15926-PT

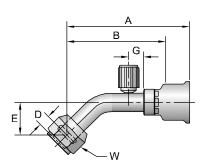
Female Tube-O - Swivel - Long Pilot With Low Pressure Charge Port for R134a

# Part	Th		Hose I.D.	A	\ 	D		G	i	W	E in ab	3
Number	- 11	nch	inch	incn	mm	incn	mm	inch	mm	inch	inch	mm
15926-10-12-PT	5/8	7/8x14	5/8	3.47	88	0.38	9,8	0.60	15	1-1/16	2.53	64

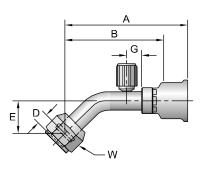
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



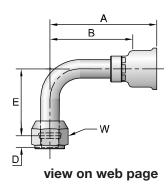
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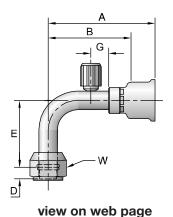


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15N26-PB

Female Tube-O - Swivel - 45° Elbow - Long Pilot With High Pressure Charge Port for R134a

#											\bigcirc		
Part	Thread	Hose I.D.	F	Α			E		G	ì	W		В
Number	inch	inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15N26-8-8-PB	1/2 3/4x16	13/32	3.67	93	0.38	9,8	0.90	23	0.60	15	7/8	2.81	72

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

15N26-PT

Female Tube-O - Swivel - 45° Elbow - Long Pilot With Low Pressure Charge Port for R134a

# Part		······································	Hose I.D.	A)	E		G		⟨ W	В	3
Number		nch			mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15N26-10-12-PT	5/8	7/8x14	5/8	3.92	100	0.38	9,8	1.21	31	0.60	15	1-1/16	2.98	76

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

15L26

Female Tube-O - Swivel - 90° Elbow - Long Pilot

# Part		^////	Hose I.D.	A	<u> </u>	[þ	E	.	\bigcirc	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15L26-8-8	1/2	3/4x16	13/32	2.14	54	0.38	9,8	1.46	37	7/8	1.28	33

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

15L26-PB

Female Tube-O - Swivel - 90° Elbow - Long Pilot With High Pressure Charge Port for R134a

# Part		······	Hose I.D.	Δ	.	D		E		G		$\bigcirc_{\mathbf{W}}$	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15L26-6-6-PB	3/8	5/8x18	5/16	2.50	64	0.28	7,1	1.22	31	0.50	13	3/4	1.64	42
15L26-8-8-PB	1/2	3/4x16	13/32	2.80	71	0.38	9,8	1.46	37	0.60	15	7/8	1.94	49

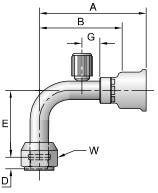
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

15L26-PT

Female Tube-O - Swivel - 90° Elbow - Long Pilot With Low Pressure Charge Port for R134a

Part	-	Γhread	Hose I.D.	4	١	D)	E		G	ì	w	Е	3
Number		inch	inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15L26-10-10-PT	5/8	7/8X14	1/2	2.95	75	0.38	9,8	2.25	57	0.60	15	1-1/16	2.00	51
15L26-10-12-PT	5/8	7/8x14	5/8	3.25	83	0.38	9,8	2.25	57	0.60	15	1-1/16	2.31	59

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



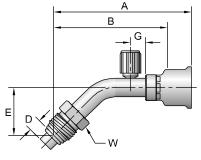
view on web page

15P26-PT

Male Tube-O - Swivel - 45° Elbow - Long Pilot With Low Pressure Charge Port for R134a

# Part		Hose I.D.	A		П)	E		G		\bigcirc	E	3
Number	inch			mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15P26-10-12-PT	5/8 7/8x18	5/8	3.81	97	0.38	9,8	1.21	31	0.60	15	7/8	2.87	73

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

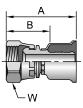


17B26 view on web page

Female Air Brake Jounce Line - Swivel

Thread		Hose	Α		W	E	3	
inch		inch	inch	mm	inch	inch	mm	
1/2	3/4x20	5/16	1.75	44	11/16	0.89	23	
1/2	3/4x20	13/32	1.75	44	11/16	0.89	23	
	Th ii 1/2	Thread inch	Thread Hose inch 1/2 3/4x20 5/16	Thread Hose inch inch 1/2 3/4x20 5/16 1.75	Thread inch Hose inch A inch mm 1/2 3/4x20 5/16 1.75 44	Thread Hose A W inch 1/2 3/4x20 5/16 1.75 44 11/16	Thread inch Hose inch A inch W inch Inch 1/2 3/4x20 5/16 1.75 44 11/16 0.89	

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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В

view on web page

15V26

Female Compressor - Swivel - 45° Elbow

# Part		Hose I.D.	4	A		E		E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
15V26-12-8	1x14	13/32	2.72	69	0.75	19	1-1/8	1.86	47
15V26-12-12	1x14	5/8	3.39	86	0.76	19	1-1/8	2.45	62

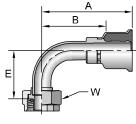
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Female Compressor - Swivel - 90° Elbow

#									
Part	Thread	Hose I.D.	<i> </i>	4	E		W	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
15W26-12-8	1x14	13/32	2.24	57	1.25	32	1.125	1.38	35
15W26-12-12	1x14	5/8	3.04	77	1.63	41	1.125	2.10	53

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

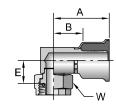
15W26



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15**Z**26

Female Compressor - Swivel - 90° Elbow - Block Type



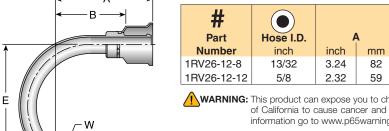
view on web page

#									
Part	Thread	Hose I.D.	, ,	١.	E		W	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
15Z26-12-8	1X14	13/32	1.79	45	0.80	20	1.125	0.93	24
15Z26-12-12	1X14	5/8	1.87	47	0.80	20	1.125	0.93	24

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1**RV**26

Female Compressor - Swivel - 135° Elbow



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

inch

3.21

3.21

mm

82

82

inch

1-1/8

1-1/8

inch

2.38

1.38

mm

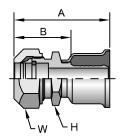
60



1T126

Male Refrigerant Tube Mender (with Nut and Ferrule)

# Part			Hose I.D.		A	H	ı	3
Number	iı	nch	inch	inch	mm	inch	inch	mm
1T126-6-6	3/8	5/8x18	5/16	1.96	50	11/16	1.10	28
1T126-8-8	1/2	3/4x16	13/32	2.07	53	13/16	1.21	31
1T126-10-10	5/8	7/8x14	1/2	2.28	58	15/16	1.33	34
1T126-10-12	5/8	7/8x14	5/8	2.27	58	15/16	1.33	34
1T126-12-12	3/4	1-1/16x14	5/8	2.33	59	1-1/8	1.39	35



1T126 Assembly instructions below.

MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

view on web page

1T126

Fitting Installation Instructions

- 1. Cut the tube off squarely next to the hose fitting. At least 7/8" straight length is required and the outside diameter of the tube should be smooth and free from deep lengthwise scratches.
- C

b

- 2. To prevent cutting the inside of the O-Ring, smoothly chamfer the outside diameter of the cut end 15° to 30°. Deburr the inside diameter.
- 3. Remove the nut, compression sleeve, and O-Ring from the fitting and lubricate the O-Ring with a lubricant that is compatible with the refrigerant used in the system.
- 4. Place the lubricated O-Ring in the counterbore of the fitting.
- 5. Slip the compression sleeve, small end, into the nut and assemble the nut on the fitting fingertight. Make sure the compression sleeve is not cocked in the nut. Back the nut off 1/6 to 1/3 turn (one to two hex flats).
- 6. Insert the chamfered tube end through the nut into the fitting. If high resistance is felt when the end of the tube contacts the O-Ring, remove the tube. The end of the tube may require a large chamfer and/or the O-Ring may require more lubrication on the inside diameter. Repeat the previous steps.
- 7. (a) Make sure the tube is bottomed in the fitting
 - (b) Tighten the nut finger tight
 - (c) Mark the fitting and nut hex indicating the starting point (see illustration)
 - (d) Wrench tighten the nut 1 to 1-1/6 turns (6 to 7 hex flats).
- 8. Later, if it is ever necessary to loosen the connection, re-assemble the nut 1/6 turn (one hex flat) after finger tight.



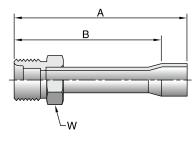
B

B-23

Hose Products Division prides itself on delivering exceptional quality and reliability when it comes to air conditioning components. Parker's male and female end tube connections with or without a pilot as well as our 26 series fittings for hose connections were specifically designed for the rigorous requirements of automotive, mobile, bus and transit applications. Utilizing both of these types of fittings as well as our 285 hose will give you the ability to make your own custom hose tube assembly for air conditioner applications.

14GZ

Male Insert O-ring Braze Nut

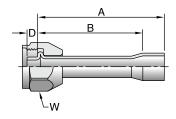


# Part Number	Thread		Δ .		W inch	B inch mm		
14GZ-6-6	3/8	5/8 - 18	4.0	101.6	5/8	3.62	mm 92.0	
14GZ-8-8	1/2	3/4 - 16	4.0	101.6	3/4	3.62	92.0	
14GZ-10-10	5/8	7/8 - 14	4.0	101.6	7/8	3.62	92.0	

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

5SGZ

Female Tube-O - Swivel - Short Pilot

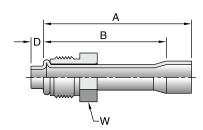


# Part	_			A		D		В	
Number		inch	inch	mm	inch	mm	inch	inch	mm
5SGZ-6-6	3/8	5/8 - 18	4.0	101.6	0.18	4.7	3/4	3.62	92.0
5SGZ-8-8	1/2	3/4 - 16	4.0	101.6	0.18	4.7	7/8	3.62	92.0
5SGZ-10-10	5/8	7/8 - 14	4.0	101.6	0.18	4.7	1 1/16	3.62	92.0

MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

S5GZ

Male Tube-O - Swivel - Short Pilot



# Part				A		D		ı	В	
Number		inch	inch	mm	inch	mm	inch	inch	mm	
S5GZ-6-6	3/8	5/8 - 18	4.0	101.6	0.18	4.7	5/8	3.62	92.0	
S5GZ-8-8	1/2	3/4 - 18	4.0	101.6	0.18	4.7	3/4	3.62	92.0	
S5GZ-10-10	5/8	7/8 - 18	4.0	101.6	0.18	4.7	7/8	3.62	92.0	

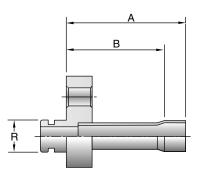
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

ZJGZ

Male "C" Plate Seal / O-ring Block

#			_			_	
Part	A		F	3	В		
Number	inch	mm	inch	mm	inch	mm	
ZJGZ-8-8	4.0	101.6	0.606	15.4	3.62	92.0	

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.





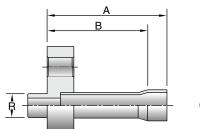
ZKGZ

Male Encapsulated Slimline Seal Block

# Part	Ą		F	3	В		
Number	inch	mm	inch	mm	inch	mm	
ZKGZ-8-8	4.0	101.6	0.459	11.65	3.62	92.0	



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.





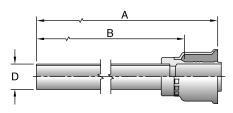
1**ZG**26

Tube with 26 Series Coupling

#			_			_	_	
Part	Hose I.D.		A		D		B	
Number	ind	ch	inch	mm	inch	mm	inch	mm
1ZG26-6-6	5/16	-6	25.8	654	3/8	9.5	24	609
1ZG26-8-8	13/32	-8	25.8	654	1/2	12.7	24	609
1ZG26-10-10	1/2	-10	25.8	654	5/8	15.9	24	609



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



1ZG26-PB

Tube with High Pressure Charge Port

	#						_			
	Part	Hose I.D.		<i>F</i>	\	ı.)	Charge		В
	Number	inc	h	inch	mm	inch	mm	Port	inch	mm
	1ZG26-6-6-PB	5/16	-6	25.8	654	3/8	9.5	368014	24	609



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

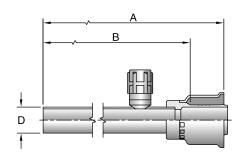
1ZG26-PT

Tube with Low Pressure Charge Port

#									
Part	Hose I.D.		A		D		Charge	E	3
Number	inch		inch	mm	inch	mm	Port	inch	mm
1ZG26-10-10-PT	1/2	-10	25.8	654	5/8	15.9	737826	24	609



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



B-25

Instructions for Custom Hose Assembly Repairs

Learn how to select the appropriate fittings and couplings to properly prepare tube and hose assemblies that meet SAE J2064 requirements below.

1. FITTING SELECTION

The first thing to determine when making a custom hose tube assembly are the fittings to use. Utilizing both tube couplings and hose fittings will give you the ability to make your own custom hose assembly that can be bent to fit a variety of applications.

. TUBE PREPARATION

Next you will need to cut the tube end to achieve the desired length using a Parker Kloskut or similar tubing cutter. Many times, an assembly will only be repaired due to a quality issue with the fitting and doesn't require a complete replacement. In those circumstances, simply cut the tube in a location that enables you to easily replace that particular fitting. Kloskut tube cutters feature a hardened and burnished tool-steel cutting wheel, flare cut-off grooves in rollers for removal of old flares and a swing-away reamer for removing internal burrs.

3. **BRAZING**

The third step in the assembly process is to braze both the tube coupling and hose fitting shell to each end of the tube.

4. CLEANING

After the brazed area has been cleaned and dried, it is recommended that the brazed area be spray painted to prevent rust from forming in the area where the plating on the parts was removed during the brazing process. After you've brazed the assembly, you have to clean it. To make cleaning easier, add braze cleaner to the hot water. This sudden cooling cracks the braze flux residue, making it easier to remove. Any remaining residue can be removed by careful wire brushing. Braze cleaner does not provide corrosion protection.

5. CORROSION PROTECTION

This is an extremely important step following brazing and even more so following the use of a braze cleaner. The residue left on the surface by the cleaner, especially on the I.D. of the tube, can cause rusting in carbon steel tubes rather quickly if it is not neutralized. Therefore, it is important to neutralize the cleaner residue after cleaning with a solution such as Bernite 1362 (mix 4 ounces of Bernite 136 with one gallon of water).

6. PAINTING

After the brazed area has been cleaned and dried, it is recommended that the brazed area be spray painted to prevent rust from forming in the area where the plating on the parts was removed during the brazing process.

7. **BENDING TUBE END**

The tube ends can be custom cut and bent after brazing.

8. HOSE SELECTION

The last step in the process is choosing the proper hose to be attached to the newly created tube assembly. Parker's 285 hose is designed specifically for the rigorous requirements automotive, mobile, bus and transit applications. This air conditioning hose has a long service life, resists moisture ingression and minimizes refrigerant permeation due to a nylon barrier. Our 285 hose is Parkrimp compatible and is available in from -4 to -12 sizes. Hoses should be cut to desired length using Parker's cut-off tool prior to crimping.

9. HOSE CRIMPING

To properly attach 26 series fittings to Parker's 285 hose, please reference CrimpSource for crimping instructions. CrimpSource is Parker's exclusive online software application that supplies you with the necessary crimp specifications in order to adhere to our strict safety standards. You can access CrimpSource by visiting www.parker.com/crimpsource











A

В

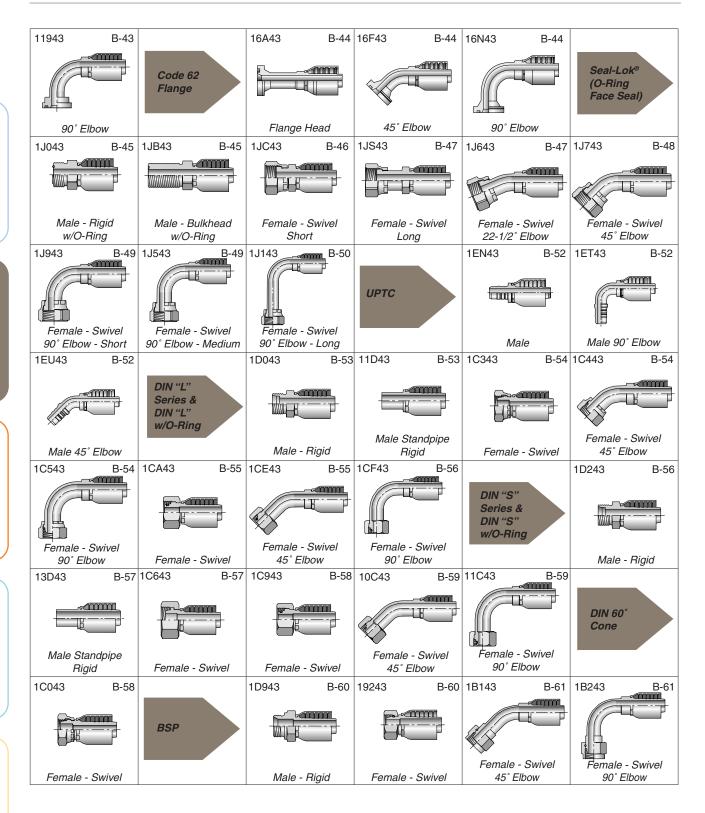
C

D

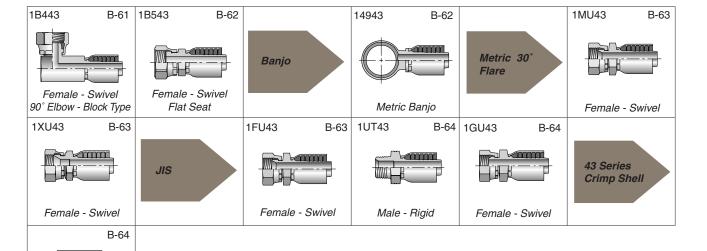


C

D



43 Series Crimp Shell (for -40 only)



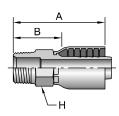
A

В

C

)

10143 Male NPTF Pipe - Rigid



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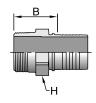
Part	Thread	Hose I.D.	Α		н	В		Additional Material Stainless
Number	inch	inch	inch	mm	inch	inch	mm	Steel (C)
10143-2-4	1/8x27	1/4	1.80	46	9/16	1.05	27	,
10143-4-4	1/4x18	1/4	2.01	51	9/16	1.26	32	•
10143-4-5	1/4x18	5/16	1.94	49	11/16	1.19	30	
10143-4-6	1/4x18	3/8	2.28	58	3/4	1.25	32	
10143-6-4	3/8x18	1/4	1.86	47	11/16	1.11	28	
10143-6-5	3/8x18	5/16	1.94	49	11/16	1.19	30	
10143-6-6	3/8x18	3/8	2.37	60	3/4	1.34	34	•
10143-6-8	3/8x18	1/2	2.59	66	7/8	1.33	34	
10143-6-10	3/8x18	5/8	2.61	66	15/16	1.17	30	
10143-8-4	1/2x14	1/4	2.13	54	7/8	1.38	35	
10143-8-6	1/2x14	3/8	2.39	61	7/8	1.36	35	
10143-8-8	1/2x14	1/2	2.84	72	7/8	1.58	40	•
10143-8-10	1/2x14	5/8	3.04	77	15/16	1.59	40	
10143-8-12	1/2x14	3/4	3.04	77	1-1/16	1.60	41	
10143-12-8	3/4x14	1/2	2.68	68	1-1/16	1.42	36	
10143-12-10	3/4x14	5/8	2.87	73	1-1/16	1.43	36	
10143-12-12	3/4x14	3/4	3.09	78	1-1/16	1.65	42	•
10143-12-16	3/4x14	1	3.40	86	1-3/8	1.78	45	
10143-16-12	1x11-1/2	3/4	3.09	78	1-3/8	1.65	42	
10143-16-16	1x11-1/2	1	3.59	66	1-3/8	1.97	50	•
10143-20-20	1-1/4x11-1/2	1-1/4	4.08	104	1-3/4	2.39	61	•
10143-24-24	1-1/2x11-1/2	1-1/2	3.50	89	2	2.13	54	
10143-32-32	2x11-1/2	2	4.05	103	2-1/2	2.27	58	

Stainless steel fittings must be assembled with Karrykrimp 2, PHastkrimp, Superkrimp or Parkrimp 2. See CrimpSource for more information.

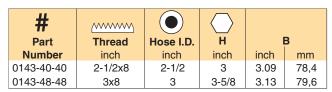


WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

0143 Male NPTF Pipe - Rigid



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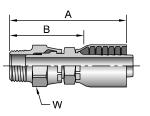
-40 size sold as a two piece fitting. See page B-64 for -40 shell.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

11343 Male NPTF Pipe - Swivel

#							
Part	Thread	Hose I.D.	1	4	W	В	
Number	inch	inch	inch	mm	inch	inch	mm
11343-2-4	1/8x27	1/4	2.94	75	5/8	2.19	56
11343-4-4	1/4x18	1/4	2.68	68	5/8	1.93	49
11343-4-6	1/4x18	3/8	3.01	76	5/8	1.98	50
11343-6-4	3/8x18	1/4	2.81	71	3/4	2.06	52
11343-6-6	3/8x18	3/8	3.08	78	3/4	2.05	52
11343-6-8	3/8x18	1/2	3.30	84	3/4	2.04	52
11343-8-6	1/2x14	3/8	3.30	84	7/8	2.27	58
11343-8-8	1/2x14	1/2	3.52	89	7/8	2.26	57
11343-12-12	3/4x14	3/4	3.93	100	1-1/4	2.49	63
11343-16-16	1x11-1/2	1	4.52	115	1-1/2	2.90	74



view on web page

O-Ring not compatible with Phosphate Ester fluids.

Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on continuous or extensive swiveling.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

11L43 Male NPTF Pipe - Swivel - 90° Elbow

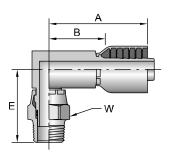
# Part		Hose I.D.	,	4	E	.	\bigcirc	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11L43-4-4	1/4x18	1/4	2.23	57	1.79	45	5/8	1.48	38
11L43-4-6	1/4x18	3/8	2.53	64	1.85	47	5/8	1.50	38
11L43-6-6	3/8x18	3/8	2.53	64	1.94	49	3/4	1.50	38
11L43-8-6	1/2x14	3/8	2.66	68	2.17	55	7/8	1.63	41
11L43-8-8	1/2x14	1/2	2.96	75	2.17	55	7/8	1.70	43
11L43-12-12	3/4x14	3/4	3.32	84	2.46	62	1-1/4	1.88	48

O-Ring not compatible with Phosphate Ester fluids.

Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on continuous or extensive swiveling.



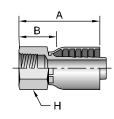
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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10243

Female NPTF Pipe - Rigid



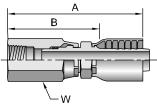
view on web page

# Part		Hose I.D.	A		H		В
Number	inch	inch	inch	mm	inch	inch	mm
10243-2-4	1/8x27	1/4	1.68	43	5/8	0.93	24
10243-4-4	1/4x18	1/4	1.78	45	11/16	1.03	26
10243-4-6	1/4x18	3/8	2.05	52	3/4	1.02	26
10243-6-4	3/8x18	1/4	2.05	52	7/8	1.30	33
10243-6-6	3/8x18	3/8	2.32	59	7/8	1.29	33
10243-8-6	1/2x14	3/8	2.40	61	1-1/8	1.37	35
10243-8-8	1/2x14	1/2	2.62	67	1-1/8	1.36	35
10243-12-12	3/4x14	3/4	2.72	69	1-1/4	1.28	33

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1S243

Female NPTF Pipe - Swivel



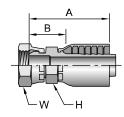
# Part	Thread	Hose I.D.	ı	١	\bigcirc	WB	
Number	inch	inch	inch	mm	inch	inch	mm
1S243-4-4	1/4x18	1/4	3.33	85	3/4	2.58	66

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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10743

Female NPSM Pipe - Swivel - (60° Cone)



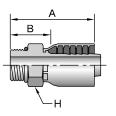
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#								Б
Part	Thread	Hose I.D.	, ,	1	Н	W		В
Number	inch	inch	inch	mm	inch	inch	inch	mm
10743-2-4	1/8x27	1/4	1.69	43	9/16	9/16	0.94	24
10743-4-4	1/4x18	1/4	1.74	44	9/16	11/16	0.99	25
10743-6-6	3/8x18	3/8	2.09	53	11/16	7/8	1.06	27
10743-8-8	1/2x14	1/2	2.32	59	15/16	1	1.06	27
10743-12-12	3/4x14	3/4	2.70	69	1-1/16	1-1/4	1.47	37
10743-16-16	1x11-1/2	1	3.09	78	1-3/8	1-1/2	1.47	37
10743-20-20	1-1/4x11-1/2	1-1/4	3.28	83	1-7/8	1-7/8	1.59	40

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

10543 Male SAE Straight Thread with O-Ring - Rigid

#	<u>~~</u>	·///\						
Part Number		nread nch	Hose I.D. inch	A in ab mm		H	B	
10543-4-4	1/4	7/16x20	1/4	inch 1.64	mm 42	inch 9/16	inch 0.89	mm 23
10543-4-4	5/16		1/4	1.80	46			23 27
		1/2x20				5/8	1.05	
10543-6-4	3/8	9/16x18	1/4	1.67	42	11/16	0.92	23
10543-6-6	3/8	9/16x18	3/8	2.10	53	11/16	1.07	27
10543-6-8	3/8	9/16x18	1/2	2.32	59	13/16	1.06	27
10543-8-6	1/2	3/4x16	3/8	2.11	54	7/8	1.08	27
10543-8-8	1/2	3/4x16	1/2	2.46	62	7/8	1.20	30
10543-8-10	1/2	3/4x16	5/8	2.63	67	1	1.19	30
10543-10-6	5/8	7/8x14	3/8	2.13	54	1	1.10	28
10543-10-8	5/8	7/8x14	1/2	2.35	60	1	1.09	28
10543-10-10	5/8	7/8x14	5/8	2.77	70	1	1.33	34
10543-12-8	3/4	1-1/16x12	1/2	2.61	66	1-1/4	1.35	34
10543-12-10	3/4	1-1/16x12	5/8	2.80	71	1-1/4	1.36	35
10543-12-12	3/4	1-1/16x12	3/4	2.81	71	1-1/4	1.37	35
10543-16-12	1	1-5/16x12	3/4	2.81	71	1-1/2	1.37	35
10543-16-16	1	1-5/16x12	1	3.37	86	1-1/2	1.75	44
10543-20-20	1-1/4	1-5/8x12	1-1/4	3.69	94	1-7/8	2.00	51

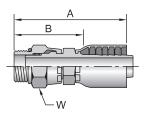


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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

10G43 Male SAE Straight Thread with O-Ring - Swivel

# Part			Hose I.D.		4	⊘	В	
Number	in	ch	inch	inch	mm	inch	inch	mm
10G43-5-4	5/16	1/2x20	1/4	2.98	76	3/4	2.23	57
10G43-6-4	3/8	9/16x18	1/4	2.98	76	3/4	2.23	57
10G43-6-6	3/8	9/16x18	3/8	3.25	83	3/4	2.22	56
10G43-8-6	1/2	3/4x16	3/8	3.06	78	7/8	2.06	52
10G43-8-8	1/2	3/4x16	1/2	3.21	82	7/8	1.95	50
10G43-10-6	5/8	7/8x14	3/8	3.01	76	1	2.01	51
10G43-10-8	5/8	7/8x14	1/2	3.27	83	1	2.01	51
10G43-12-12	3/4	1-1/16x12	3/4	3.78	96	1-1/4	2.34	59



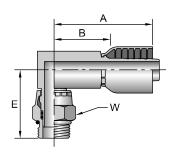
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O-Ring not compatible with Phosphate Ester fluids.

Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on continuous or extensive swiveling.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

10L43 Male SAE Straight Thread with O-Ring - Swivel - 90° Elbow



view on web page

# Part			Hose I.D.	lose I.D. A		Ę		\bigcirc		В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
10L43-6-6	3/8	9/16x18	3/8	2.53	64	2.10	53	3/4	1.50	38
10L43-8-6	1/2	3/4x16	3/8	2.66	68	1.86	47	7/8	1.63	41
10L43-8-8	1/2	3/4x16	1/2	2.96	75	1.87	47	7/8	1.70	43
10L43-10-8	5/8	7/8x14	1/2	2.96	75	1.92	49	1	1.70	43
10L43-12-12	3/4	1-1/16x12	3/4	3.22	82	2.30	58	1-1/4	1.88	48

O-Ring not compatible with Phosphate Ester fluids.

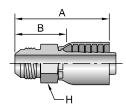
See Technical Section for pressure limitations.

Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on continuous or extensive swiveling.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

10343 Male JIC 37° - Rigid ISO 12151-5



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#		····						
Part	Th	read	Hose I.D.	1	A	Н		В
Number	ir	nch	inch	inch	mm	inch	inch	mm
10343-4-4	1/4	7/16x20	1/4	1.99	51	9/16	1.24	31
10343-5-4	5/16	1/2x20	1/4	1.83	46	9/16	1.08	27
10343-5-6	5/16	1/2x20	3/8	2.26	57	3/4	1.23	31
10343-6-4	3/8	9/16x18	1/4	1.84	47	11/16	1.09	28
10343-6-6	3/8	9/16x18	3/8	2.36	60	3/4	1.33	34
10343-8-6	1/2	3/4x16	3/8	2.30	58	7/8	1.27	32
10343-8-8	1/2	3/4x16	1/2	2.68	68	7/8	1.42	36
10343-8-10	1/2	3/4x16	5/8	2.85	72	7/8	1.41	36
10343-10-6	5/8	7/8x14	3/8	2.40	61	15/16	1.37	35
10343-10-8	5/8	7/8x14	1/2	2.62	67	15/16	1.36	35
10343-10-10	5/8	7/8x14	5/8	3.03	77	15/16	1.59	40
10343-12-8	3/4	1-1/16x12	1/2	2.76	70	1-1/8	1.50	38
10343-12-10	3/4	1-1/16x12	5/8	3.07	78	1-1/8	1.63	41
10343-12-12	3/4	1-1/16x12	3/4	3.19	81	1-1/8	1.75	44
10343-14-12	7/8	1-3/16x12	3/4	3.11	79	1-1/4	1.67	42
10343-16-12	1	1-5/16x12	3/4	3.04	77	1-3/8	1.60	41
10343-16-16	1	1-5/16x12	1	3.63	92	1-3/8	2.01	51
10343-20-20	1-1/4	1-5/8x12	1-1/4	3.96	101	1-7/8	2.27	58
10343-24-20	1-1/2	1-7/8x12	1-1/4	3.71	94	2	2.02	51



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

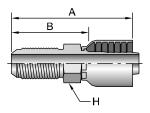
1LB43

Male JIC 37° - Bulkhead without Locknut

# Part	Thread		Hassin	lose I.D. A				В
Number	inch		inch	inch	mm	H inch	inch	mm
1LB43-4-4	1/4	7/16x20	1/4	2.64	67	9/16	1.89	48
1LB43-6-6	3/8	9/16x18	3/8	3.08	78	3/4	2.05	52
1LB43-8-8	1/2	3/4x16	1/2	3.46	88	7/8	2.20	56

Fittings are stocked less locknut (part no. WLN). Locknuts are manufactured by the Parker Tube Fittings Division and must be ordered separately.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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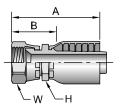
В

10643

Female JIC 37° - Swivel

ISO 12151-5

#	_	······								Additional Material
Part	Т	hread	Hose I.D.	_	4	Н	W	E	I .	Stainless
Number	414	inch	inch	inch	mm	inch	inch	inch		Steel (C)
10643-4-4	1/4	7/16x20	1/4	1.94	49,0	9/16	9/16	1.19	30,0	•
10643-4-6	1/4	7/16x20	3/8	2.20	56,0	11/16	9/16	1.17	30,0	
10643-5-4	5/16	1/2x20	1/4	2.03	52,0	9/16	5/8	1.28	33,0	
10643-5-5	5/16	1/2x20	5/16	2.08	53,0	11/16	5/8	1.33	34,0	
10643-5-6	5/16	1/2x20	3/8	2.26	57,0	11/16	5/8	1.23	31,0	
10643-6-4	3/8	9/16x18	1/4	2.05	52,0	9/16	11/16	1.30	33,0	
10643-6-5	3/8	9/16x18	5/16	2.10	53,0	11/16	11/16	1.35	34,0	
10643-6-6	3/8	9/16x18	3/8	2.29	58,0	11/16	11/16	1.26	32,0	•
10643-6-8	3/8	9/16x18	1/2	2.51	64,0	13/16	11/16	1.25	32,0	
10643-8-6	1/2	3/4x16	3/8	2.49	63,0	11/16	7/8	1.46	37,0	•
10643-8-8	1/2	3/4x16	1/2	2.77	67,0	13/16	7/8	1.51	35,0	•
10643-8-10	1/2	3/4x16	5/8	2.82	72,0	15/16	7/8	1.38	35,0	
10643-8-12	1/2	3/4x16	3/4	2.83	72,0	1-1/16	7/8	1.39	35,0	
10643-10-6	5/8	7/8x14	3/8	2.51	64,0	7/8	1	1.48	38,0	
10643-10-8	5/8	7/8x14	1/2	2.85	72,0	7/8	1	1.59	40,0	
10643-10-10	5/8	7/8x14	5/8	2.93	74,0	15/16	1	1.49	38,0	•
10643-10-12	5/8	7/8x14	3/4	2.93	74,0	1-1/16	1	1.49	38,0	
10643-12-8	3/4	1-1/16x12	1/2	2.78	71,0	1-1/16	1-1/4	1.52	39,0	
10643-12-10	3/4	1-1/16x12	5/8	3.10	79,0	1-1/16	1-1/4	1.66	42,0	
10643-12-12	3/4	1-1/16x12	3/4	3.17	81,0	1-1/16	1-1/4	1.73	44,0	•
10643-12-16	3/4	1-1/16x12	1	3.29	84,0	1-3/8	1-1/4	1.67	42,0	
10643-14-12	7/8	1-3/16x12	3/4	3.18	81,0	1-1/4	1-3/8	1.74	44,0	
10643-16-12	1	1-5/16x12	3/4	3.31	84,0	1-1/4	1-1/2	1.87	47,0	
10643-16-16	1	1-5/16x12	1	3.88	98,6	1-3/8	1-1/2	2.26	57,5	•
10643-20-16	1-1/4	1-5/8x12	1	3.81	97,0	1-5/8	2	2.19	56,0	
10643-20-20	1-1/4	1-5/8x12	1-1/4	3.94	100,0	1-7/8	2	2.25	57,0	•
10643-24-24	1-1/2	1-7/8x12	1-1/2	3.84	98,0	2-1/8	2-1/4	2.47	63,0	
10643-32-32	2	2-1/2x12	2	4.73	120,0	2-1/2	2-7/8	2.95	75,0	



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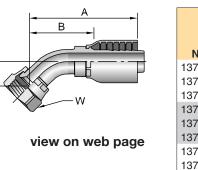
Stainless steel fittings must be assembled with Karrykrimp 2, PHastkrimp, Superkrimp or Parkrimp 2. See CrimpSource for more information.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



13743 Female JIC 37° - Swivel - 45° Elbow - Short Drop ISO 12151-5

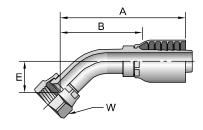


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#		//////								
Part	Т	hread	Hose I.D.	1	Α	E		W	- 1	В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
13743-4-4	1/4	7/16x20	1/4	1.96	50.0	0.39	10	9/16	1.21	31.0
13743-5-4	5/16	1/2x20	1/4	2.19	56.0	0.39	10	5/8	1.26	37.0
13743-6-4	3/8	9/16x18	1/4	2.23	57.0	0.39	10	11/16	1.48	38.0
13743-6-6	3/8	9/16x18	3/8	2.76	70.0	0.39	10	11/16	1.73	43.9
13743-8-6	1/2	3/4x16	3/8	2.74	70.0	0.55	14	7/8	1.74	44.0
13743-8-8	1/2	3/4x16	1/2	3.20	81.2	0.55	14	7/8	1.94	49.3
13743-10-8	5/8	7/8x14	1/2	2.93	74.0	0.63	16	1	1.67	42.0
13743-10-10	5/8	7/8x14	5/8	3.17	81.0	0.63	16	1	1.73	44.0
13743-12-10	3/4	1-1/16x12	5/8	3.62	92.0	0.83	21	1-1/4	2.08	53.0
13743-12-12	3/4	1-1/16x12	3/4	3.63	92.0	0.78	20	1-1/4	2.19	56.0
13743-16-16	1	1-5/16x12	1	4.34	110.0	0.95	24	1-1/2	2.72	69.0
13743-20-20	1-1/4	1-5/8x12	1-1/4	4.59	117.0	1.19	30	2	2.82	72.0
13743-24-24	1-1/2	1-7/8x12	1-1/2	5.50	140.0	1.47	37	2-1/4	4.18	106.0

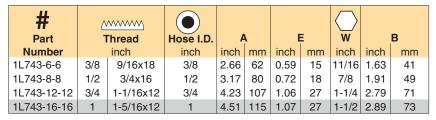
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1L743

Female JIC 37° - Swivel - 45° Elbow - Medium Drop ISO 12151-5



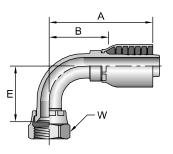
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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

13943 Female JIC 37° - Swivel - 90° Elbow - Short Drop ISO 12151-5

#		·····								
Part	Т	hread	Hose I.D.	1	A	E		W	ı	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
13943-4-4	1/4	7/16x20	1/4	1.78	45	0.83	21	9/16	1.03	26
13943-4-6	1/4	7/16x20	3/8	2.11	54	0.83	21	9/16	1.08	27
13943-5-4	5/16	1/2x20	1/4	1.88	48	0.83	21	5/8	1.13	29
13943-5-5	5/16	1/2x20	5/16	1.96	50	0.83	21	5/8	1.21	31
13943-6-4	3/8	9/16x18	1/4	2.12	54	0.85	22	11/16	1.37	35
13943-6-6	3/8	9/16x18	3/8	2.21	56	0.91	23	11/16	1.18	30
13943-6-8	3/8 9/16x18		1/2	2.51	64	0.85	22	11/16	1.25	32
13943-8-6	1/2	3/4x16	3/8	2.52	64	1.09	28	7/8	1.49	38
13943-8-8	1/2	3/4x16	1/2	2.62	67	1.14	29	7/8	1.36	35
13943-10-8	5/8	7/8x14	1/2	2.74	70	1.26	32	1	1.48	38
13943-10-10	5/8	7/8x14	5/8	2.97	75	1.26	32	1	1.69	39
13943-12-8	3/4	1-1/16x12	1/2	3.25	83	1.83	46	1-1/4	1.99	51
13943-12-10	3/4	1-1/16x12	5/8	3.07	78	1.89	48	1-1/4	1.63	41
13943-12-12	3/4	1-1/16x12	3/4	3.49	89	1.89	48	1-1/4	2.05	52
13943-16-12	1	1-5/16x12	3/4	3.49	89	2.00	51	1-1/2	2.05	52
13943-16-16	1	1-5/16x12	1	4.28	109	2.20	56	1-1/2	2.66	68
13943-20-20	1-1/4	1-5/8x12	1-1/4	4.43	113	2.59	66	2	2.74	70
13943-24-24	1-1/2	1-7/8x12	1-1/2	5.50	140	3.81	81	2-1/4	4.13	105
13943-32-32	2	2-1/2x12	2	6.75	171,4	4.62	117	2-7/8	4.97	126,2



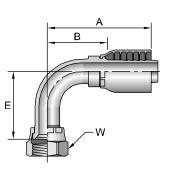
view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1L943

Female JIC 37 $^{\circ}$ - Swivel - 90 $^{\circ}$ Elbow - Medium Drop ISO 12151-5

# Part	1		Hose I.D.		A		Ę			В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1L943-4-4	1/4	7/16x20	1/4	1.84	47	1.26	32	9/16	1.09	28
1L943-6-4	3/8	9/16x18	1/4	2.12	54	1.50	38	11/16	1.37	35
1L943-6-6	3/8	9/16x18	3/8	2.29	58	1.50	38	11/16	1.26	32
1L943-8-6	1/2	3/4x16	3/8	2.51	64	1.61	41	7/8	1.48	38
1L943-8-8	1/2	3/4x16	1/2	2.64	67	1.61	41	7/8	1.38	35
1L943-10-8	5/8	7/8x14	1/2	3.25	83	1.75	44	1	1.99	51
1L943-12-12	3/4	1-1/16x12	3/4	3.49	89	2.28	58	1-1/4	2.05	52
1L943-16-16	1	1-5/16x12	1	4.44	113	2.50	64	1-1/2	2.82	72

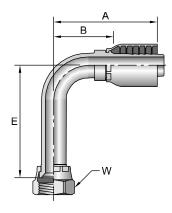


view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

14143

Female JIC 37° - Swivel - 90° Elbow - Long Drop ISO 12151-5



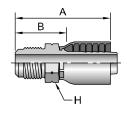
view on web page

#										
Part	Т	hread	Hose I.D.	Ą		E		W		В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
14143-4-4	1/4	7/16x20	1/4	1.96	50	1.81	46	9/16	1.21	31
14143-5-4	5/16	1/2x20	1/4	1.93	49	1.80	46	5/8	1.18	30
14143-6-6	3/8	9/16x18	3/8	2.27	58	2.18	55	11/16	1.27	32
14143-8-6	1/2	3/4x16	3/8	2.56	65	2.43	62	7/8	1.56	40
14143-8-8	1/2 3/4x16		1/2	2.62	67	2.52	64	7/8	1.36	35
14143-10-8	5/8	7/8x14	1/2	2.78	71	2.58	66	1	1.52	39
14143-10-10	5/8	7/8x14	5/8	3.16	80	2.58	66	1	1.75	44
14143-12-12	3/4	1-1/16x12	3/4	3.49	89	3.74	95	1-1/4	2.05	52
14143-14-12	7/8	1-3/16x12	3/4	3.38	86	3.93	100	1-3/8	1.95	50
14143-16-16	1 1-5/16x12		1	3.90	99	4.32	110	1-1/2	2.31	59
14143-20-20	1-1/4	1-5/8x12	1-1/4	4.39	112	5.28	134	2	2.73	69

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

10443

Male SAE 45° - Rigid



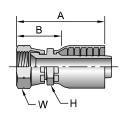
view on web page

#		·····						
Part	Thread		Hose I.D.	Ą		Н		В
Number	inch		inch	inch	mm	inch	inch	mm
10443-6-6	3/8	5/8x18	3/8	2.21	56	3/4	1.21	31
10443-12-12	3/4	1-1/16x14	3/4	3.20	81	1-1/8	1.77	45

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

10843

Female SAE 45° - Swivel



view on web page

# Part	_	/////// [hread	Hose I.D.	Ą		H	⊘		В
Number	inch		inch	inch	mm	inch	inch	inch	mm
10843-6-4	3/8	5/8x18	1/4	2.11	54	3/4	3/4	1.36	35
10843-6-6	3/8 5/8x18		3/8	2.38	60	3/4	3/4	1.35	34
10843-12-12	3/4	1-1/16x14	3/4	3.17	81	1-1/16	1-1/4	1.73	44

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

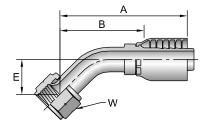
Notch on nut signifies SAE 45° flare.

17743

Female SAE 45° - Swivel - 45° Elbow

# Part	TI	www.	Hose I.D.		A		≡	W		В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
17743-4-6	1/4 7/16x20		3/8	2.28	58	0.33	8	9/16	1.25	32

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



В

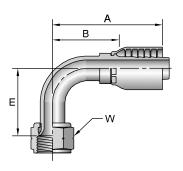
view on web page

17943

Female SAE 45° - Swivel - 90° Elbow

# Part	inch		Hose I.D.		4	E	<u> </u>	\bigcirc	ı	В
Number	i	nch	inch	inch	mm	inch	mm	inch	inch	mm
17943-6-6	3/8	5/8x18	3/8	2.13	54	0.85	22	3/4	1.13	29

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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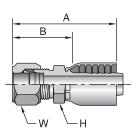
11143

Male Ferulok Flareless - Rigid (24° Cone with Nut and Ferrule)

#		·····							
Part		hread	Hose I.D.	<i>!</i>		H	W		B
Number		inch	inch	inch	mm	inch	inch	inch	mm
11143-4-4	1/4	7/16x20	1/4	2.13	54	9/16	9/16	1.40	36
11143-4-6	1/4	7/16x20	3/8	2.44	62	3/4	9/16	1.44	37
11143-5-4	5/16	1/2x20	1/4	2.13	54	9/16	5/8	1.40	36
11143-5-6	5/16	1/2x20	3/8	2.44	62	3/4	5/8	1.44	37
11143-6-6	3/8	9/16x18	3/8	2.50	64	3/4	11/16	1.50	38
11143-8-8	1/2	3/4x16	1/2	2.93	74	7/8	7/8	1.68	43
11143-10-8	5/8	7/8x14	1/2	3.07	78	15/16	1	1.82	46
11143-12-12	3/4 1-1/16x12		3/4	3.39	86	1-1/8	1-1/4	1.96	50
11143-16-16	1	1-5/16x12	1	3.80	97	1-3/8	1-1/2	2.18	55

The Parker Ferrul-Fix fitting makes it possible to salvage the bent tube section from a hose assembly for quick, easy on-the-job repairs. For additional information see Ferrule-Fix installation instructions in the Technical Section.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

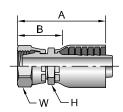


view on web page

Notch on nut signifies SAE 45° flare.

11243

Female Ferulok Flareless - Swivel - (24° Cone)



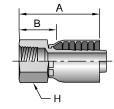
view on web page

# Part		····· ead	Hose I.D.	1	A	H	\bigcirc	E	3
Number	in	ch	inch	inch	mm	inch	inch	inch	mm
11243-6-6	3/8	9/16x18	3/8	2.51	64	11/16	11/16	1.48	38
11243-8-6	1/2	3/4x16	3/8	2.67	68	7/8	7/8	1.64	42
11243-8-8	1/2	3/4x16	1/2	2.89	73	7/8	7/8	1.63	41

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1GJ43

Female Grease Connection - SPL - PTF Taper Thread Rigid - 1/2 x 27



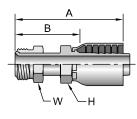
view on web page

# Part		Hose I.D.		Α.	H		В
Number	inch	inch	inch	mm	inch	inch	mm
1GJ43-4-4	1/2x27	1/4	1.79	45	3/4	1.04	26

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

12843

Male Inverted SAE 45° - Swivel



view on web page

#	////	VVVV							
Part	Thr	ead	Hose I.D.	-	A	Н	W		В
Number	in	ch	inch	inch	mm	inch	inch	inch	mm
12843-4-4	1/4	7/16x24	1/4	2.32	59	9/16	7/16	1.57	40
12843-4-6	1/4	7/16x24	3/8	2.65	67	11/16	7/16	1.62	41
12843-5-4	5/16	1/2x20	1/4	2.60	66	9/16	1/2	1.85	47
12843-5-6	5/16	1/2x20	3/8	2.74	70	11/16	1/2	1.71	43
12843-6-6	3/8	5/8x18	3/8	2.86	73	11/16	5/8	1.83	46
12843-8-8	1/2	3/4x18	1/2	3.11	79	13/16	3/4	1.85	47
12843-10-10	5/8	7/8x18	5/8	3.55	90	3/4	7/8	2.11	54
	Part	Part Number in 12843-4-4 1/4 12843-4-6 1/4 12843-5-4 5/16 12843-5-6 3/8 12843-8-8 1/2	Part Number Thread inch 12843-4-4 1/4 7/16x24 12843-4-6 1/4 7/16x24 12843-5-4 5/16 1/2x20 12843-5-6 5/16 1/2x20 12843-6-6 3/8 5/8x18 12843-8-8 1/2 3/4x18	Part Number Thread inch Hose I.D. inch 12843-4-4 1/4 7/16x24 1/4 12843-4-6 1/4 7/16x24 3/8 12843-5-4 5/16 1/2x20 1/4 12843-5-6 5/16 1/2x20 3/8 12843-6-6 3/8 5/8x18 3/8 12843-8-8 1/2 3/4x18 1/2	Part Number Thread inch Hose I.D. inch Inch 12843-4-4 1/4 7/16x24 1/4 2.32 12843-4-6 1/4 7/16x24 3/8 2.65 12843-5-4 5/16 1/2x20 1/4 2.60 12843-5-6 5/16 1/2x20 3/8 2.74 12843-6-6 3/8 5/8x18 3/8 2.86 12843-8-8 1/2 3/4x18 1/2 3.11	Part Number Thread inch Hose I.D. inch A inch 12843-4-4 1/4 7/16x24 1/4 2.32 59 12843-4-6 1/4 7/16x24 3/8 2.65 67 12843-5-4 5/16 1/2x20 1/4 2.60 66 12843-5-6 5/16 1/2x20 3/8 2.74 70 12843-6-6 3/8 5/8x18 3/8 2.86 73 12843-8-8 1/2 3/4x18 1/2 3.11 79	Part Number Thread inch Hose I.D. inch A inch H inch 12843-4-4 1/4 7/16x24 1/4 2.32 59 9/16 12843-4-6 1/4 7/16x24 3/8 2.65 67 11/16 12843-5-4 5/16 1/2x20 1/4 2.60 66 9/16 12843-5-6 5/16 1/2x20 3/8 2.74 70 11/16 12843-6-6 3/8 5/8x18 3/8 2.86 73 11/16 12843-8-8 1/2 3/4x18 1/2 3.11 79 13/16	Part Number Thread inch Hose I.D. inch A inch H winch inch 12843-4-4 1/4 7/16x24 1/4 2.32 59 9/16 7/16 12843-4-6 1/4 7/16x24 3/8 2.65 67 11/16 7/16 12843-5-4 5/16 1/2x20 1/4 2.60 66 9/16 1/2 12843-5-6 5/16 1/2x20 3/8 2.74 70 11/16 1/2 12843-6-6 3/8 5/8x18 3/8 2.86 73 11/16 5/8 12843-8-8 1/2 3/4x18 1/2 3.11 79 13/16 3/4	Part Number Thread inch Hose I.D. inch A inch H inch inch inch inch inch inch inch inch

MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

16743

Male Inverted SAE 45° - Swivel - 45° Elbow

# Part		············	Hose I.D.	ı	\	E	=	\bigcirc	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	inch	mm
16743-4-4	1/4	7/16x24	1/4	2.09	53	0.63	16	7/16	1.34	34
16743-5-4	5/16	1/2x20	1/4	2.34	59	0.70	18	1/2	1.59	40
16743-5-6	5/16	1/2x20	3/8	2.48	63	0.70	18	1/2	1.45	37
16743-6-6	3/8	5/8x18	3/8	2.93	74	0.94	24	5/8	1.90	48
16743-8-8	1/2	3/4x18	1/2	3.23	82	1.09	28	3/4	1.97	50

view on web page

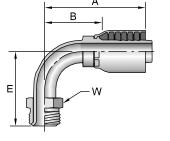
В

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

16943

Male Inverted SAE 45° - Swivel - 90° Elbow

# Part			Hose I.D.	,	۸.	E	.	\bigcirc		В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
16943-4-4	1/4	7/16x24	1/4	2.16	55	1.56	40	7/16	1.41	36
16943-4-6	1/4	7/16x24	3/8	2.49	63	1.56	40	7/16	1.46	37
16943-5-4	5/16	1/2x20	1/4	2.41	61	1.65	42	1/2	1.66	42
16943-5-6	5/16	1/2x20	3/8	2.59	66	1.65	42	1/2	1.56	40
16943-6-6	3/8	5/8x18	3/8	2.61	66	1.69	43	5/8	1.58	40
16943-8-8	1/2	3/4x18	1/2	2.81	71	1.88	48	3/4	1.55	39



view on web page

В

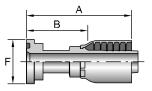
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

11543

SAE Code 61 Flange Head

ISO 12151-3 - S - L

# Part	Flange	Hose I.D.	Ą		Ø	В	3
Number	inch	inch	inch	mm	inch	inch	mm
11543-8-8	1/2	1/2	3.48	88	1-3/16	2.22	56
11543-10-10	5/8	5/8	3.78	96,0	1-11/32	2.34	59,4
11543-12-8	3/4	1/2	2.46	62,5	1-1/2	1.20	30,5
11543-12-12	3/4	3/4	3.54	90	1-1/2	2.42	61,5
11543-16-12	1	3/4	2.74	70	1-3/4	1.30	33
11543-16-16	1	1	4.25	108	1-3/4	2.63	67
11543-20-16	1-1/4	1	3.19	81	2	1.57	40
11543-20-20	1-1/4	1-1/4	4.70	119	2	3.01	76
11543-24-20	1-1/2	1-1/4	3.22	82	2-3/8	1.53	39
11543-24-24	1-1/2	1-1/2	4.59	117	2-3/8	3.22	82
11543-24-32	1-1/2	2	5.65	144	2-7/8	3.87	98
11543-32-20	2	1-1/4	4.29	109	2-13/16	2.60	66
11543-32-24	2	1-1/2	3.14	80	2-7/8	1.77	45
11543-32-32	2	2	4.99	127	2-13/16	3.21	82



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

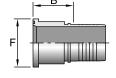
1543

SAE Code 61 Flange Head

ISO 12151-3 - S - L

# Part	Flange	Hose I.D.	Ø F	E	3
Number	inch	inch	inch	inch	mm
1543-40-40	2-1/2x8	2-1/2	3-15/16	2.73	69,2
1543-48-48	3	3	4	3.54	90,0

-40 size sold as a two piece fitting. See page B-64 for -40 shell. Approved for 187 Hose only.



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

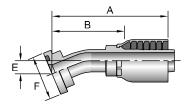
See Accessories Section for O-Rings and Flange Kits.

Updated 4/2022

11643

SAE Code 61 Flange Head - 22-1/2° Elbow

ISO 12151-3 - E22M - L



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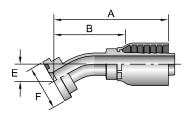
# Part	Flange	Hose I.D.	A	A	E	.	Ø	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11643-12-12	3/4	3/4	3.90	99	0.44	11	1-1/2	2.47	63
11643-16-12	1	3/4	3.89	99	0.44	11	1-3/4	2.46	62
11643-16-16	1	1	4.25	108	0.44	11	1-3/4	2.66	68
11643-20-16	1-1/4	1	4.25	108	0.44	11	2	2.66	68
11643-20-20	1-1/4	1-1/4	4.65	118	0.50	13	2	3.00	76
11643-24-20	1-1/2	1-1/4	4.66	118	0.51	13	2-3/8	3.01	76

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

12643

SAE Code 61 Flange Head - 30° Elbow

ISO 12151-3 - E30S - L (1 Piece: ISO 12151-3 - E30M - L)



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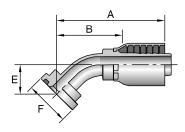
# Part	Flange	Hose I.D.	ı	١	E	.	F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
12643-12-12	3/4	3/4	3.90	99	0.59	15	1-1/2	2.46	62
12643-16-16	1	1	4.38	111	0.62	16	1-3/4	2.76	70
12643-20-16	1-1/4	1	4.38	111	0.62	16	2	2.76	70
12643-20-20	1-1/4	1-1/4	4.39	112	0.72	18	2	2.70	69

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

11743

SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3 - E45S - L (1 Piece: ISO 12151-3 - E45M - L)



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#			٨				Ž		
Part	Flange	Hose I.D.	A		E		F	E	
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11743-8-8	1/2	1/2	2.99	76	0.75	19	1-3/16	1.73	44
11743-10-10	5/8	5/8	4.63	118	0.94	24	1-11/32	3.19	81
11743-12-8	3/4	1/2	3.30	84	0.87	22	1-1/2	2.04	52
11743-12-12	3/4	3/4	3.85	98	1.02	26	1-1/2	2.41	61
11743-16-12	1	3/4	3.85	98	1.02	26	1-3/4	2.41	61
11743-16-16	1	1	4.76	121	1.26	32	1-3/4	3.14	80
11743-20-16	1-1/4	1	4.76	121	1.26	32	2	3.14	80
11743-20-20	1-1/4	1-1/4	5.61	142	1.50	38	2	3.92	100
11743-20-24	1-1/4	1-1/2	5.45	138	1.38	35	2	4.08	104
11743-24-20	1-1/2	1-1/4	5.55	141	1.50	38	2-3/8	3.86	98
11743-24-24	1-1/2	1-1/2	5.50	140	1.42	36	2-3/8	4.13	105
11743-32-24	2	1-1/2	5.49	139	1.42	36	2-13/16	4.12	105
11743-32-32	2	2	7.67	195	2.21	56	2-13/16	5.89	150

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

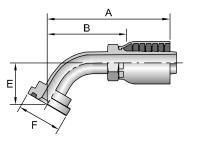
12743

SAE Code 61 Flange Head - 60° Elbow

ISO 12151-3 - E60S - L (1 Piece: ISO 12151-3 - E60M - L)

# Part	Flange	Hose I.D.	А		E	=	Ø	ı	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
12743-12-12	3/4	3/4	4.16	105	1.43	36	1-1/2	2.72	69
12743-16-12	1	3/4	4.15	105	1.39	35	1-3/4	2.71	69
12743-16-16	1	1	4.45	113	1.50	38	1-3/4	2.83	72
12743-20-20	1-1/4	1-1/4	5.09	129	1.69	43	2	3.40	86

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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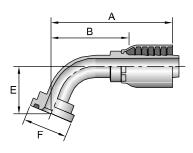
11843

SAE Code 61 Flange Head - 67-1/2° Elbow

ISO 12151-3 - E67S - L (1 Piece: ISO 12151-3 - E67M - L)

# Part	Flange	Hose I.D.	1	١	E	.	Ø		В
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11843-12-12	3/4	3/4	4.09	104	1.60	41	1-1/2	2.66	68
11843-16-16	1	1	4.66	118	1.75	44	1-3/4	3.07	78
11843-20-20	1-1/4	1-1/4	5.04	128	1.94	49	2	3.37	86

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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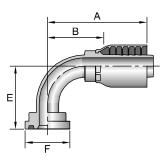
11943

SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - L)

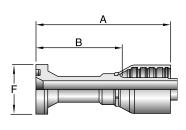
#						_	Ø	В	
Part	Flange	Hose I.D.	A		Ę		F	_	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11943-8-8	1/2	1/2	2.93	74	1.60	41	1-3/16	1.67	42
11943-10-10	5/8	5/8	3.71	94	2.10	53	1-11/32	2.27	58
11943-12-8	3/4	1/2	2.93	74	1.66	42	1-1/2	1.67	42
11943-12-10	3/4	5/8	3.71	94	2.10	53	1-1/2	2.27	58
11943-12-12	3/4	3/4	3.51	89	2.28	58	1-1/2	2.07	53
11943-16-12	1	3/4	3.59	91	2.24	57	1-3/4	2.15	55
11943-16-16	1	1	4.28	109	2.78	71	1-3/4	2.66	68
11943-20-16	1-1/4	1	4.25	108	2.76	70	2	2.63	67
11943-20-20	1-1/4	1-1/4	5.12	130	3.54	90	2	3.43	87
11943-20-24	1-1/4	1-1/2	4.19	106	2.49	63	2	2.82	72
11943-24-20	1-1/2	1-1/4	5.09	129	3.54	90	2-3/8	3.40	86
11943-24-24	1-1/2	1-1/2	5.50	140	4.09	79	2-3/8	4.13	105
11943-32-24	2	1-1/2	5.48	139	3.10	79	2-13/16	4.11	104
11943-32-32	2	2	6.75	171	5.43	114	2-13/16	4.97	126

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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See Accessories Section for O-Rings and Flange Kits.



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16A43

SAE Code 62 Flange Head

ISO 12151-3 - S - S

# Part	Flange	Hose I.D.	Ą		Е	3	Ø F
Number	inch	inch	inch	mm	inch	mm	inch
16A43-12-12	3/4	3/4	4.12	104,6	2.68	68,0	1-5/8
16A43-16-12	1	3/4	3.10	78,7	1.66	42,2	1-7/8
16A43-16-16	1	1	4.81	122,2	3.19	81,0	1-7/8
16A43-20-16	1-1/4	1	3.61	91,7	1.99	50,5	2-1/8
16A43-20-20	1-1/4	1-1/4	5.01	127,3	3.32	84,3	2-1/8

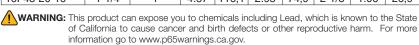
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

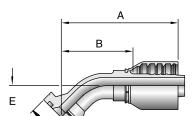
16F43

SAE Code 62 Flange Head - 45° Elbow

ISO 12151-3 - E45S - S (1 Piece 12151-3-E45M-S)

# Part	Flange	Hose I.D.	,	A	E	3	F	E	
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16F43-12-12	3/4	3/4	3.82	97,0	2.38	60,5	1-5/8	1.02	25,9
16F43-16-16	1	1	4.66	118,4	3.04	77,2	1-7/8	1.26	32,0
16F43-20-16	1-1/4	1	4.57	116,1	2.95	74,9	2-1/8	1.06	26,9





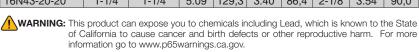
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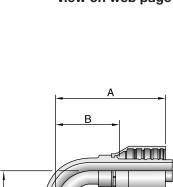
16N43

SAE Code 62 Flange Head - 90° Elbow

ISO 12151-3 - E90S - S (1 Piece 12151-3-E90M-S)

# Part	Flange	Hose I.D.	,	A	Е	3	Ø F	E	.
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16N43-12-12	3/4	3/4	3.51	89,2	2.07	52,6	1-5/8	2.28	57,9
16N43-16-12	1	3/4	3.49	88,6	2.05	52,1	1-7/8	2.28	57,9
16N43-16-16	1	1	4.28	108,7	2.66	67,6	1-7/8	2.76	70,1
16N43-20-16	1-1/4	1	4.28	108,7	2.66	67,6	2-1/8	2.76	70,1
16N43-20-20	1-1/4	1-1/4	5.09	129,3	3.40	86,4	2-1/8	3.54	90,0





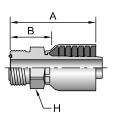
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1J043

Male Seal-Lok® - Rigid - (with O-Ring)

SAE J516 (Apr2016)

# Part	_	hread	Hose I.D.	,	A	\bigcirc		3
Number		inch	inch	inch	mm	inch	inch	mm
1J043-4-4	1/4	9/16x18	1/4	1.73	44	5/8	0.98	25
1J043-6-6	3/8	11/16x16	3/8	2.08	53	3/4	1.05	27
1J043-8-6	1/2	13/16x16	3/8	2.20	56	7/8	1.17	30
1J043-8-8	1/2	13/16x16	1/2	2.42	61	7/8	1.17	30
1J043-10-8	5/8	1x14	1/2	2.61	66	1-1/16	1.35	34
1J043-10-10	5/8	1x14	5/8	2.73	69	1-1/16	1.34	34
1J043-12-10	3/4	1-3/16x12	5/8	2.89	73	1-1/4	1.45	37
1J043-12-12	3/4	1-3/16x12	3/4	2.90	74	1-1/4	1.46	37
1J043-16-12	1	1-7/16x12	3/4	2.93	74	1-1/2	1.49	38
1J043-16-16	1	1-7/16x12	1	3.29	84	1-1/2	1.67	42
1J043-20-20	1-1/4	1-11/16x12	1-1/4	3.32	84	1-3/4	1.63	41



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Supplied with Parker's exclusive Trap-Seal™, which leads to improved retention within Seal-Lok's™ ORFS groove and virtually eliminates costly leakage and/or time consuming pre-assembly handling.

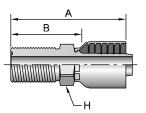
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1JB43

Male Seal-Lok® - Bulkhead without Locknut - (with O-Ring)

End Connection per SAE J516 (Apr2016)

# Part		^////\\	Hose I.D.	ı	A	H	E	3
Number		inch	inch	inch	mm	mm	inch	mm
1JB43-4-4	1/4	9/16x18	1/4	2.67	68	22	1.92	49
1JB43-6-6	3/8	11/16x16	3/8	3.08	78	27	2.05	52
1JB43-8-8	1/2	13/16x16	1/2	3.44	87	30	2.18	55
1JB43-10-8	5/8	1x14	1/2	3.69	94	36	2.43	62
1JB43-10-10	5/8	1x14	5/8	3.88	99	36	2.44	62
1JB43-12-12	3/4	1-3/16x12	3/4	3.95	100	41	2.51	64



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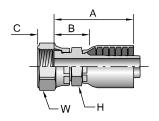
Fittings are stocked less locknut (part no. WLNL). Locknuts are manufactured by the Parker Tube Fittings Division and must be ordered separately.

Supplied with Parker's exclusive Trap-Seal™, which leads to improved retention within Seal-Lok's™ ORFS groove and virtually eliminates costly leakage and/or time consuming pre-assembly handling.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

1JC43 Female Seal-Lok® - Swivel - Short ISO 12151-1 - SWSA



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В

			_									
#	_ ^	·····										Additional Material
Part	_	Thread	Hose I.D.	A		c	;	H	w	В	3	Stainless
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	mm	Steel (C)
1JC43-4-4	1/4	9/16x18	1/4	1.63	41	0.32	8	9/16	11/16	0.88	22	•
1JC43-4-4-SM	1/4	9/16x18	1/4	1.63	41	0.32	8	17 mm	17 mm	0.88	22	
1JC43-4-6	1/4	9/16x18	3/8	1.90	48	0.32	8	11/16	11/16	0.87	22	
1JC43-6-4	3/8	11/16x16	1/4	1.67	42	0.32	8	11/16	13/16	0.92	23	
1JC43-6-4-SM	3/8	11/16x16	1/4	1.67	42	0.32	8	17 mm	22 mm	0.92	23	
1JC43-6-5	3/8	11/16x16	5/16	1.65	42	0.32	8	11/16	13/16	0.90	23	
1JC43-6-6	3/8	11/16x16	3/8	1.94	49	0.32	8	11/16	13/16	0.91	23	•
1JC43-6-6-SM	3/8	11/16x16	3/8	1.94	49	0.32	8	19 mm	22 mm	0.91	23	
1JC43-8-6	1/2	13/16x16	3/8	2.00	51	0.43	11	13/16	15/16	0.97	25	
1JC43-8-6-SM	1/2	13/16x16	3/8	2.00	51	0.43	11	19 mm	24 mm	0.97	25	
1JC43-8-8	1/2	13/16x16	1/2	2.22	56	0.43	11	13/16	15/16	0.96	24	•
1JC43-8-8-SM	1/2	13/16x16	1/2	2.22	56	0.43	11	22 mm	24 mm	0.96	24	
1JC43-10-8	5/8	1x14	1/2	2.30	58	0.53	13	15/16	1-1/8	1.04	26	
1JC43-10-10	5/8	1x14	5/8	2.49	63	0.53	13	15/16	1-1/8	1.05	27	•
1JC43-10-10-SM	5/8	1x14	5/8	2.49	63	0.53	13	24 mm	30 mm	1.05	27	
1JC43-12-8	3/4	1-3/16x12	1/2	2.48	63	0.57	14	1-1/8	1-3/8	1.22	31	
1JC43-12-10	3/4	1-3/16x12	5/8	2.67	68	0.57	14	1-1/8	1-3/8	1.23	31	
1JC43-12-12	3/4	1-3/16x12	3/4	2.68	68	0.57	14	1-1/8	1-3/8	1.24	31	•
1JC43-12-12-SM	3/4	1-3/16x12	3/4	2.68	68	0.57	14	32 mm	36 mm	1.24	31	
1JC43-12-16	3/4	1-3/16x12	1	2.99	76	0.57	14	1-5/16	1-3/8	1.37	35	
1JC43-16-12	1	1-7/16x12	3/4	2.83	72	0.58	15	1-3/8	1-5/8	1.39	35	
1JC43-16-16	1	1-7/16x12	1	3.14	80	0.58	15	1-3/8	1-5/8	1.52	39	•
1JC43-20-20	1-1/4	1-11/16x12	1-1/4	3.27	83	0.59	15	1-7/8	1-7/8	1.58	40	•

When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance. Stainless steel fittings must be assembled with Karrykrimp 2, PHastkrimp, Superkrimp or Parkrimp 2. See CrimpSource for more information.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

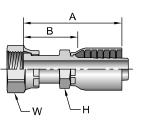
See Accessories Section for O-Rings.

1JS43

Female Seal-Lok® - Swivel - Long

ISO 12151-1 SWSB

#		·····							
Part	Т	hread	Hose I.D.	1	A	H	W	E	3
Number		inch	inch	inch	mm	inch	inch	inch	mm
1JS43-4-4	1/4	9/16x18	1/4	2.07	53	9/16	11/16	1.32	34
1JS43-4-6	1/4	9/16x18	3/8	2.21	56	11/16	11/16	1.18	30
1JS43-6-4	3/8	11/16x16	1/4	2.14	54	9/16	13/16	1.39	35
1JS43-6-6	3/8	11/16x16	3/8	2.28	58	11/16	13/16	1.25	32
1JS43-6-8	3/8	11/16x16	1/2	2.50	64	13/16	13/16	1.24	31
1JS43-8-4	1/2	13/16x16	1/4	2.26	57	11/16	15/16	1.51	38
1JS43-8-6	1/2	13/16x16	3/8	2.53	64	11/16	15/16	1.50	38
1JS43-8-8	1/2	13/16x16	1/2	2.65	67	13/16	15/16	1.39	35
1JS43-8-10	1/2	13/16x16	5/8	2.82	72	15/16	15/16	1.38	35
1JS43-10-6	5/8	1x14	3/8	2.63	67	11/16	1-1/8	1.62	41
1JS43-10-8	5/8	1x14	1/2	2.89	73	13/16	1-1/8	1.63	41
1JS43-10-10	5/8	1x14	5/8	3.07	78	15/16	1-1/8	1.66	42
1JS43-10-12	5/8	1x14	3/4	3.08	78	1-1/16	1-1/8	1.64	42
1JS43-12-8	3/4	1-3/16x12	1/2	2.90	74	15/16	1-3/8	1.64	42
1JS43-12-10	3/4	1-3/16x12	5/8	3.19	81	1-1/8	1-3/8	1.75	44
1JS43-12-12	3/4	1-3/16x12	3/4	3.31	84	1-1/8	1-3/8	1.87	47
1JS43-12-16	3/4	1-3/16x12	1	3.53	90	1-5/16	1-3/8	1.91	49
1JS43-16-12	1	1-7/16x12	3/4	3.37	86	1-3/8	1-5/8	1.93	49
1JS43-16-16	1	1-7/16x12	1	3.62	92	1-3/8	1-5/8	2.00	51
1JS43-16-20	1	1-7/16x12	1-1/4	3.77	96	1-3/4	1-5/8	2.08	53
1JS43-20-16	1-1/4	1-11/16x12	1	3.64	92	1-3/8	1-7/8	2.02	51
1JS43-20-20	1-1/4	1-11/16x12	1-1/4	3.77	96	1-3/4	1-7/8	2.15	53
1JS43-24-20	1-1/2	2x12	1-1/4	3.88	99	1-3/4	2-1/4	2.23	57
1JS43-24-24	1-1/2	2x12	1-1/2	3.91	99	1-7/8	2-1/4	2.26	65



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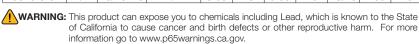
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

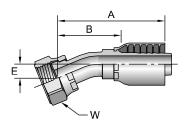
1J643

Female Seal-Lok® - Swivel - 22-1/2° Elbow

End Connection per ISO 8434-3-SWE

# Part	Thread	Hose I.D.	A	۸	E	<u> </u>	\bigcirc	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1J643-8-8	1/2 13/16x16	1/2	3.06	78	0.39	10	15/16	1.80	46

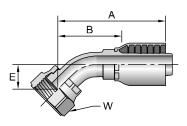




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See Accessories Section for O-Rings.

1J743 Female Seal-Lok® - Swivel - 45° Elbow ISO 12151-1 - SWE45



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	1									
#	/	VVVVVV								
Part	_	Thread	Hose I.D.		Α	Е		w		В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J743-4-4	1/4	9/16x18	1/4	1.97	50.0	0.39	10	11/16	1.22	31.0
1J743-4-4-SM	1/4	9/16x18	1/4	1.97	50.0	0.39	10	17 mm	1.22	31.0
1J743-4-6	1/4	9/16x18	3/8	2.23	57.0	0.39	10	11/16	1.20	30.0
1J743-6-4	3/8	11/16x16	1/4	2.08	53.0	0.43	11	13/16	1.33	34.0
1J743-6-4-SM	3/8	11/16x16	1/4	2.08	53.0	0.43	11	22 mm	1.33	34.0
1J743-6-5	3/8	11/16x16	5/16	2.37	60.0	0.43	11	13/16	1.62	41.0
1J743-6-6	3/8	11/16x16	3/8	2.74	69.5	0.43	11	13/16	1.71	43.4
1J743-6-8	3/8	11/16x16	1/2	2.66	68.0	0.43	11	13/16	1.41	36.0
1J743-8-4	1/2	13/16x16	1/4	2.56	65.0	0.59	15	15/16	1.81	46.0
1J743-8-6	1/2	13/16x16	3/8	2.53	64.0	0.59	15	15/16	1.50	38.0
1J743-8-6-SM	1/2	13/16x16	3/8	2.53	64.0	0.59	15	24 mm	1.50	38.0
1J743-8-8	1/2	13/16x16	1/2	3.20	81.2	0.59	15	15/16	1.94	49.3
1J743-8-8-SM	1/2	13/16x16	1/2	3.20	81.2	0.59	15	24 mm	1.94	49.3
1J743-8-10	1/2	13/16x16	5/8	3.09	78.0	0.59	15	15/16	1.65	42.0
1J743-10-8	5/8	1x14	1/2	2.93	74.0	0.63	16	1-1/8	1.67	42.0
1J743-10-10	5/8	1x14	5/8	3.17	81.0	0.63	16	1-1/8	1.73	44.0
1J743-10-12	5/8	1x14	3/4	3.36	85.0	0.65	16	1-1/8	1.93	49.0
1J743-12-8	3/4	1-3/16x12	1/2	3.57	91.0	0.82	21	1-3/8	2.31	59.0
1J743-12-10	3/4	1-3/16x12	5/8	3.62	92.0	0.83	21	1-3/8	2.18	55.0
1J743-12-12	3/4	1-3/16x12	3/4	3.63	92.0	0.83	21	1-3/8	2.19	56.0
1J743-12-16	3/4	1-3/16x12	1	3.67	93.0	0.81	21	1-3/8	2.05	52.0
1J743-16-12	1	1-7/16x12	3/4	4.02	102.0	0.94	24	1-5/8	2.59	66.0
1J743-16-16	1	1-7/16x12	1	4.38	111.0	0.94	24	1-5/8	2.76	70.0
1J743-16-20	1	1-7/16x12	1-1/4	4.59	117.0	0.94	24	1-5/8	2.94	75.0
1J743-20-16	1-1/4	1-11/16x12	1	4.52	115.0	1.00	25	1-7/8	2.93	74.0
1J743-20-20	1-1/4	1-11/16x12	1-1/4	4.78	121.0	1.00	25	1-7/8	3.09	78.0
1J743-24-20	1-1/2	2x12	1-1/4	4.99	127.0	1.11	28	2-1/4	3.30	84.0
1J743-24-24	1-1/2	2x12	1-1/2	4.70	119.0	1.07	27	2-1/4	3.33	85.0

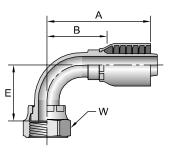
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1J943

Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

ISO 12151-1 - SWES90

#		·····								
Part	1	Thread	Hose I.D.	P	1	E		w	В	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J943-4-4	1/4	9/16x18	1/4	1.78	45	0.83	21	11/16	1.03	26
1J943-4-6	1/4	9/16x18	3/8	2.05	52	0.83	21	11/16	1.02	26
1J943-6-4	3/8	11/16x16	1/4	1.93	49	0.91	23	13/16	1.18	30
1J943-6-6	3/8	11/16x16	3/8	2.21	56	0.91	23	13/16	1.18	30
1J943-6-8	3/8	11/16x16	1/2	2.53	64	0.90	23	13/16	1.27	32
1J943-8-4	1/2	13/16x16	1/4	2.28	58	1.15	29	15/16	1.53	39
1J943-8-6	1/2	13/16x16	3/8	2.28	58	1.14	29	15/16	1.25	32
1J943-8-8	1/2	13/16x16	1/2	2.59	66	1.14	29	15/16	1.33	34
1J943-8-8-SM	1/2	13/16x16	1/2	2.59	66	1.14	29	24 mm	1.33	34
1J943-8-10	1/2	13/16x16	5/8	2.81	71	1.15	29	15/16	1.37	35
1J943-10-8	5/8	1x14	1/2	2.74	70	1.26	32	1-1/8	1.48	38
1J943-10-10	5/8	1x14	5/8	2.97	75	1.26	32	1-1/8	1.53	39
1J943-10-10-SM	5/8	1x14	5/8	2.97	75	1.26	32	30 mm	1.53	39
1J943-10-12	5/8	1x14	3/4	3.08	78	1.27	32	1-1/8	1.64	42
1J943-12-8	3/4	1-3/16x12	1/2	3.21	82	1.89	48	1-3/8	1.95	50
1J943-12-10	3/4	1-3/16x12	5/8	3.49	89	1.89	48	1-3/8	2.05	52
1J943-12-12	3/4	1-3/16x12	3/4	3.06	78	1.89	48	1-3/8	2.05	52
1J943-12-16	3/4	1-3/16x12	1	3.88	99	1.89	48	1-3/8	2.26	57
1J943-16-12	1	1-7/16x12	3/4	4.06	103	2.22	56	1-5/8	2.62	67
1J943-16-16	1	1-7/16x12	1	4.31	109	2.20	56	1-5/8	2.69	68
1J943-16-20	1	1-7/16x12	1-1/4	4.56	116	2.21	56	1-5/8	2.87	73
1J943-20-16	1-1/4	1-11/16x12	1	4.64	118	2.54	65	1-7/8	3.02	80
1J943-20-20	1-1/4	1-11/16x12	1-1/4	4.88	124	2.51	64	1-7/8	3.19	81
1J943-24-24	1-1/2	2x12	1-1/2	5.50	140	2.68	68	2-1/4	4.13	105



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В

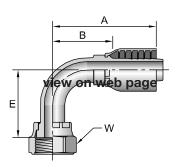
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1J543

Female Seal-Lok® - Swivel - 90° Elbow - Medium Drop

ISO 12151-1 - SWEM90

#	~	·····								
Part	Т	hread	Hose I.D.	A	A	E	.	W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J543-4-4	1/4	9/16x18	1/4	2.07	53	1.26	32	11/16	1.32	34
1J543-6-4	3/8	11/16x16	1/4	2.12	54	1.50	38	13/16	1.41	36
1J543-6-6	3/8	11/16x16	3/8	2.40	61	1.50	38	13/16	1.37	35
1J543-8-6	1/2	13/16x16	3/8	2.48	63	1.61	41	15/16	1.45	37
1J543-8-8	1/2	13/16x16	1/2	2.59	66	1.61	41	15/16	1.33	34
1J543-10-8	5/8	1x14	1/2	2.74	70	1.85	47	1-1/8	1.48	38
1J543-10-10	5/8	1x14	5/8	2.97	75	1.85	47	1-1/8	1.53	39
1J543-10-12	5/8	1x14	3/4	3.12	79	1.88	48	1-1/8	1.68	43
1J543-12-12	3/4	1-3/16x12	3/4	3.49	89	2.28	58	1-3/8	2.05	52
1J543-16-16	1	1-7/16x12	1	4.86	123	2.78	71	1-5/8	3.27	83
1J543-20-20	1-1/4	1-11/16x12	1-1/4	4.89	124	3.09	78	1-7/8	3.20	81

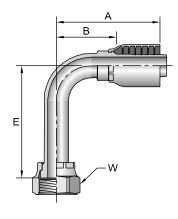


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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings.

1J143 Female Seal-Lok® - Swivel - 90° Elbow - Long Drop ISO 12151-1 - SWEL90



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#		VVVVV								
Part		Thread	Hose I.D.	1	A	E	Ξ	W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J143-4-4	1/4	9/16x18	1/4	2.02	51	1.81	46	11/16	1.27	32
1J143-6-4	3/8	11/16x16	1/4	2.26	57	2.13	54	13/16	1.51	38
1J143-6-6	3/8	11/16x16	3/8	2.39	61	2.13	54	13/16	1.36	35
1J143-8-6	1/2	13/16x16	3/8	2.45	62	2.52	64	15/16	1.42	36
1J143-8-8	1/2	13/16x16	1/2	2.59	66	2.52	64	15/16	1.33	34
1J143-10-8	5/8	1x14	1/2	2.74	70	2.79	71	1-1/8	1.48	38
1J143-10-10	5/8	1x14	5/8	2.97	75	2.76	70	1-1/8	1.53	39
1J143-10-12	5/8	1x14	3/4	3.15	80	2.76	70	1-1/8	1.73	44
1J143-12-12	3/4	1-3/16x12	3/4	3.49	89	3.78	96	1-3/8	2.05	52
1J143-16-16	1	1-7/16x12	1	4.28	109	4.49	114	1-5/8	2.66	68
1J143-20-20	1-1/4	1-11/16x12	1-1/4	4.84	123	5.09	129	1-7/8	3.15	80
1J143-24-20	1-1/2	2x12	1-1/4	4.77	121	5.54	141	2-1/4	3.12	79

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Universal Push-to-Connect (UPTC) Introduction

Traditionally, the fluid power industry has used threaded connectors to make a leak free connection. The speed of making connections is slow and the reliability of the connection is dependent on proper assembly procedures. Parker's UPTC connectors rely on a mechanical retaining mechanism (other than threads) to create a seal.

Tools are not required for assembly, and the reliability and speed of making connections with the UPTC design is greatly improved compared to traditional threaded connections.

Features

- Available in sizes 1/4", 3/8", 1/2", 5/8", and 3/4"
- Uses standard Seal-Lok adapters for a wide variety of configurations, as well as excellent field serviceability
- Meets or exceeds SAE 100R2 pressure ratings (see Fig. 2)
- Includes visual and tactile installation indicators
- Seal-aligning nipple eliminates hose twist during assembly
- No special tooling required for disassembly
- Uses elastomeric seals, including Parker's patented Trap-Seal

Design and Construction

UPTC Seal-Lok consists of a base Seal-Lok ORFS fitting, a UPTC nut (including internal sealing and retaining elements), a dust O-Ring, and a UPTC hose assembly or rigid tube, as shown in figure 1. The base ORFS fitting is a highly reliable and widely available off-the-shelf standard SAE J1453 adapter. The sealing O-Ring is supported by a pressure energized anti-extrusion ring that prevents O-Ring extrusion and ensures tight sealing even under high pressure.

Once fully engaged, the retaining element is positively trapped between the male and UPTC nut. The dust O-Ring keeps contamination out and serves as a full engagement visual indicator. A clear tactile feeling at the end of the push indicates a proper connection. Once a proper connection is made, the dust O-Ring is covered by the UPTC nut. This also serves as a positive visual indicator of full engagement for easy inspection and quality control.

Once connected, the UPTC nut is permanently attached to the UPTC hose end similar to a traditional swivel nut. To disconnect, just use a wrench to unscrew the UPTC nut from the base adapter. Re-connect is possible by tightening the UPTC nut back to the base adapter, if the connection is not damaged. If the hose or tube is damaged, they can be replaced by installing a new UPTC assembly or a readily available standard Seal-Lok ORFS hose or tube assembly.



Fig 1a

Fig. 1b

Fig. 1a — This is a Tube Fittings Division part. Information can be found in Catalog 4300.

UPTC Pressure Ratings

Size	Pressure (psi)	Pressure (Bar)
-4	5800	400
-6	5000	345
-8	4250	293
-10	4000	276
-12	3125	216

A

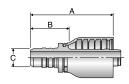
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C

D

F

1EN43 UPTC Male

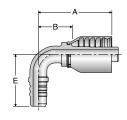


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# Part	Hose End Size	A	В	Non Conn Si	C ninal ection ze
Number	inch	inch	inch	inch	mm
1EN43-8-4	1/4	1.83	1.08	0.31	8
1EN43-12-6	3/8	2.15	1.12	0.47	12
1EN43-15-8	1/2	2.51	1.25	0.59	15
1EN43-18-10	5/8	2.78	1.34	0.71	18
1EN43-22-12	3/4	2.81	1.37	0.87	22

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1ET43UPTC Male 90° Elbow

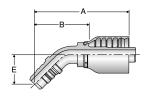


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# Part	Hose End Size	A	В	Nom Conne Siz	E	
Number	inch	inch	inch	inch	mm	inch
1ET43-8-4	1/4	1.78	1.03	0.31	8	1.54
1ET43-12-6	3/8	2.21	1.18	0.47	12	1.54
1ET43-15-8	1/2	2.51	1.25	0.59	15	1.77
1ET43-18-10	5/8	2.97	1.53	0.71	18	2.24
1ET43-22-12	3/4	3.43	1.99	0.87 22		2.50

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1EU43UPTC Male 45° Elbow



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# Part	Hose End Size	A	В	Nom Conne Si	E	
Number	inch	inch	inch	inch	mm	inch
1EU43-8-4	1/4	2.48	1.73	0.31	8	0.91
1EU43-12-6	3/8	2.83	1.80	0.47	12	0.91
1EU43-15-8	1/2	3.17	1.91	0.59	15	0.99
1EU43-18-10	5/8	3.68	2.24	0.71	18	1.26
1EU43-22-12	3/4	3.76	2.32	0.87	22	1.30

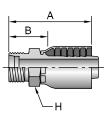
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1D043

Male Metric L - Rigid - (24° Cone)

ISO 12151-2

#								_
Part	Th	read	Hose I.D.	A		Н		В
Number		mm	inch	inch	mm	mm	inch	mm
1D043-6-4	6	M12x1,5	1/4	1.73	44	14	0.93	24
1D043-8-4	8	M14x1,5	1/4	1.61	41	14	0.93	24
1D043-10-5	10	M16x1,5	5/16	1.97	50	19	0.83	21
1D043-10-6	10	M16x1,5	3/8	1.97	50	19	0.83	21
1D043-12-6	12	M18x1,5	3/8	1.97	50	19	0.83	21
1D043-15-6	15	M22x1,5	3/8	1.93	49	22	1.02	26
1D043-15-8	15	M22x1,5	1/2	2.28	58	22	0.94	24
1D043-18-10	18	M26x1,5	5/8	2.68	68	27	1.14	29
1D043-18-12	18	M26x1,5	3/4	2.68	68	27	1.14	29
1D043-22-12	22	M30x2	3/4	2.72	69	30	1.22	31
1D043-28-16	28	M36x2	1	3.11	79	36	1.30	33
1D043-35-20	35	M45x2	1-1/4	3.35	85	46	1.50	38



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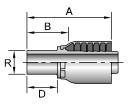
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

11D43

Male Standpipe Metric L - Rigid

End Connection per ISO 8434-1-SDS

# Part	Ø	Hose I.D.	A		r)	В	
Number	mm	inch	inch	mm	inch	mm	inch	mm
11D43-6-4	6	1/4	2.03	52	0.87	22	1.28	33
11D43-10-5	10	5/16	2.36	60	0.91	23	1.45	37
11D43-10-6	10	3/8	2.28	58	0.91	23	1.14	29
11D43-15-8	15	1/2	2.56	65	0.98	25	1.22	31
11D43-18-10	18	5/8	2.99	76	1.02	26	1.48	38
11D43-18-12	18	3/4	2.80	71	1.02	26	1.22	31
11D43-22-12	22	3/4	2.87	73	1.10	28	1.26	32
11D43-28-16	28	1	3.31	84	1.18	30	1.46	37



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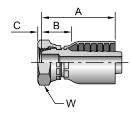
Metric L: Mates with EO "L" Series Fittings. See Accessories Section for O-Rings.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



1C343

Female Metric L - Swivel - (Ball Nose)



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#	~	VVVVV								
Part	Т	hread	Hose I.D.	1	A			W	l I	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1C343-6-4	6	M12x1,5	1/4	1.75	44	0.09	2	14	1.16	29
1C343-8-4	8	M14x1,5	1/4	1.77	45	0.11	3	17	1.16	29
1C343-10-5	10	M16x1,5	5/16	2.01	51	0.06	2	19	1.20	30
1C343-10-6	10	M16x1,5	3/8	2.06	52	0.06	2	19	1.10	28
1C343-12-5	12	M18x1,5	5/16	1.87	47	0.10	3	22	0.70	18
1C343-12-6	12	M18x1,5	3/8	2.23	57	0.10	3	22	1.18	30
1C343-15-6	6	M22x1,5	3/8	1.85	47	0.16	4	27	0.71	18
1C343-15-8	15	M22x1,5	1/2	2.42	61	0.17	4	27	1.29	33
1C343-18-10	18	M26x1,5	5/8	2.65	67	0.10	3	32	1.23	31
1C343-18-12	18	M26x1,5	3/4	2.80	71	0.10	3	32	1.37	35
1C343-22-12	22	M30x2	3/4	2.87	73	0.18	5	36	1.42	36
1C343-28-16	28	M36x2	1	3.35	85	0.22	6	46	1.76	45

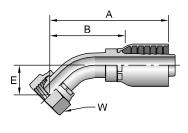
When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1C443

Female Metric L - Swivel - 45° Elbow - (Ball Nose)



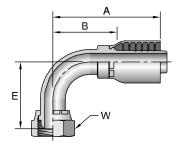
view on web page

#						_				
Part	Thread		Hose I.D.	A		Ę		W		В
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1C443-8-4	8	M14x1,5	1/4	2.40	61	0.59	15	17	1.50	38
1C443-10-5	10	M16x1,5	5/16	2.60	66	0.67	17	19	1.61	41
1C443-10-6	10	M16x1,5	3/8	2.76	70	0.67	17	19	1.61	41
1C443-12-6	12	M18x1,5	3/8	2.76	70	0.67	17	22	1.61	41
1C443-15-8	15	M22x1,5	1/2	3.35	85	0.79	20	27	1.97	50
1C443-18-10	18	M26x1,5	5/8	4.09	104	1.14	29	32	2.52	64
1C443-22-12	22	M30x2	3/4	3.78	96	0.91	23	36	2.20	56
1C443-28-16	28	M36x2	1	4.53	115	1.10	28	46	2.81	71

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1C543

Female Metric L - Swivel - 90° Elbow - (Ball Nose)



view on web page

Metric L: Mates with EO "L" Series Fittings.

# Part			Thread Hose I.D.		A		Ę		₩	E	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm	
1C543-8-4	8	M14x1,5	1/4	2.05	52	1.10	28	17	1.18	30	
1C543-10-5	10	M16x1,5	5/16	2.20	56	1.18	30	19	1.22	31	
1C543-10-6	10	M16x1,5	3/8	2.40	61	1.18	30	19	1.40	36	
1C543-12-6	12	M18x1,5	3/8	2.40	61	1.22	31	22	1.40	36	
1C543-15-8	15	M22x1,5	1/2	2.95	75	1.57	40	27	1.57	40	
1C543-18-10	18	M26x1,5	5/8	3.58	91	2.36	60	32	2.05	52	
1C543-22-12	22	M30x2	3/4	3.58	91	1.97	50	36	2.00	51	
1C543-28-16	28	M36x2	1	4.33	110	2.48	63	46	2.56	65	

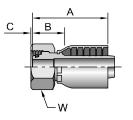
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1CA43

Female Metric L - Swivel - (24° Cone with O-Ring)

ISO 12151-2 - SWS

#		·····							
Part	TI	hread	Hose I.D.	1	A	С	W	E	3
Number		mm	inch	inch	mm	inch	mm	inch	mm
1CA43-6-4	6	M12x1,5	1/4	1.73	44	-0.02	14	0.88	22
1CA43-8-4	8	M14x1,5	1/4	1.73	44	-0.01	17	0.88	22
1CA43-8-5	8	M14x1,5	5/16	1.97	50	0.00	17	1.02	26
1CA43-10-4	10	M16x1,5	1/4	1.81	46	0.04	19	0.87	22
1CA43-10-5	10	M16x1,5	5/16	1.81	46	0.04	19	0.87	22
1CA43-10-6	10	M16x1,5	3/8	2.08	53	0.02	19	1.05	27
1CA43-12-5	12	M18x1,5	5/16	1.81	46	0.04	22	0.91	23
1CA43-12-6	12	M18x1,5	3/8	1.89	48	0.03	22	0.75	19
1CA43-15-8	15	M22x1,5	1/2	2.20	56	0.07	27	0.82	21
1CA43-18-10	18	M26x1,5	5/8	2.44	62	0.02	32	0.87	22
1CA43-18-12	18	M26x1,5	3/4	2.56	65	0.02	32	1.02	26
1CA43-22-12	22	M30x2	3/4	2.48	63	0.13	36	1.05	24
1CA43-28-16	28	M36x2	1	3.07	78	0.14	41	1.30	33
1CA43-35-20	35	M45x2	1-1/4	3.23	82	0.00	50	1.38	35
1CA43-42-24	42	M52x2	1-1/2	3.02	77	0.07	60	1.65	42



view on web page

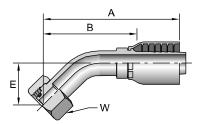
When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

1CE43

Female Metric L - Swivel - 45° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE45

# Part	//////// Thread		Hose I.D.	A		Ę		E W		⊘		3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm		
1CE43-6-4	6	M12x1,5	1/4	2.68	68	0.75	19	14	1.77	45		
1CE43-8-4	8	M14x1,5	1/4	2.32	59	0.63	16	17	1.38	35		
1CE43-10-5	10	M16x1,5	5/16	2.64	67	0.59	15	19	1.69	43		
1CE43-10-6	10	M16x1,5	3/8	2.95	75	0.75	19	19	1.85	47		
1CE43-12-6	12	M18x1,5	3/8	2.72	69	0.75	19	22	1.53	39		
1CE43-15-8	15	M22x1,5	1/2	3.19	81	0.87	22	27	1.81	46		
1CE43-18-10	18	M26x1,5	5/8	3.50	89	0.91	23	32	1.93	49		
1CE43-22-12	22	M30x2	3/4	3.86	98	1.02	26	36	2.28	58		
1CE43-28-16	28	M36x2	1	4.92	125	1.34	34	41	3.30	84		



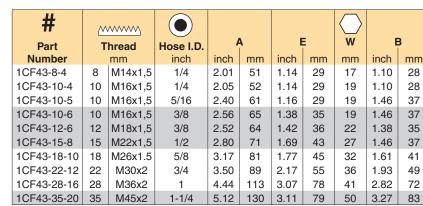
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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



1CF43

Female Metric L - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE



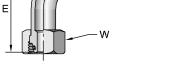
Metric L: Mates with EO "L" Series Fittings.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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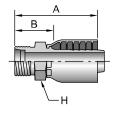
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### 1D243

### Male Metric S - Rigid - (24° Cone)

ISO 12151-2



view on web page

| #           |        |         |           |      |    |    |      |    |
|-------------|--------|---------|-----------|------|----|----|------|----|
| Part        | Thread |         | Hose I.D. | A    |    | Н  | B    |    |
| Number      | mm     |         | inch      | inch | mm | mm | inch | mm |
| 1D243-8-4   | 8      | M16x1,5 | 1/4       | 1.73 | 44 | 17 | 0.87 | 22 |
| 1D243-10-4  | 10     | M18x1,5 | 1/4       | 1.73 | 44 | 19 | 0.87 | 22 |
| 1D243-12-5  | 12     | M20x1,5 | 5/16      | 2.20 | 56 | 22 | 1.29 | 33 |
| 1D243-12-6  | 12     | M20x1,5 | 3/8       | 1.97 | 50 | 22 | 1.02 | 26 |
| 1D243-14-6  | 14     | M22x1,5 | 3/8       | 2.17 | 55 | 22 | 0.98 | 25 |
| 1D243-16-8  | 16     | M24x1,5 | 1/2       | 2.36 | 60 | 24 | 1.17 | 30 |
| 1D243-20-10 | 20     | M30x2   | 5/8       | 2.95 | 75 | 30 | 1.44 | 37 |
| 1D243-25-12 | 25     | M36x2   | 3/4       | 2.87 | 73 | 36 | 1.30 | 33 |
| 1D243-30-16 | 30     | M42x2   | 1         | 3.39 | 86 | 46 | 1.54 | 39 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

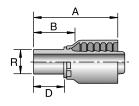


### 13D43

### Male Standpipe Metric S - Rigid

End Connection per ISO 8434-1-SDS

| #<br>Part   | R  | Hose I.D. | A    | 4  |      | )  |      | В  |
|-------------|----|-----------|------|----|------|----|------|----|
| Number      | mm | inch      | inch | mm | inch | mm | inch | mm |
| 13D43-10-4  | 10 | 1/4       | 2.13 | 54 | 1.02 | 26 | 1.26 | 32 |
| 13D43-16-8  | 16 | 1/2       | 2.68 | 68 | 1.18 | 30 | 1.42 | 36 |
| 13D43-20-10 | 20 | 5/8       | 3.39 | 86 | 1.42 | 36 | 1.88 | 48 |
| 13D43-20-12 | 20 | 3/4       | 3.19 | 81 | 1.42 | 36 | 1.57 | 40 |
| 13D43-25-12 | 25 | 3/4       | 3.35 | 85 | 1.57 | 40 | 1.73 | 44 |



view on web page

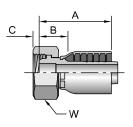
Light Series 11D43-6-4, 11D43-8-4 and 11D43-12-6 are used in place of their Heavy Series equivalent size and accept the EO Heavy "S" Series ferrules and nuts.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 1C643

### Female Metric S - Swivel - (Ball Nose)

| #<br>Part   |    |         | Hose I.D. | A    |    | С    |    | $\bigcirc$ | E    | 2  |
|-------------|----|---------|-----------|------|----|------|----|------------|------|----|
| Number      | ٠, | mm      | inch      | inch | mm | inch | mm | mm         | inch | mm |
| 1C643-8-4   | 8  | M16x1,5 | 1/4       | 1.57 | 40 | 0.15 | 4  | 19         | 1.20 | 30 |
| 1C643-10-4  | 10 | M18x1,5 | 1/4       | 1.63 | 41 | 0.10 | 3  | 22         | 1.20 | 30 |
| 1C643-12-6  | 12 | M20x1,5 | 3/8       | 1.76 | 45 | 0.08 | 2  | 24         | 1.32 | 34 |
| 1C643-12-8  | 12 | M20x1,5 | 1/2       | 2.18 | 55 | 0.08 | 2  | 24         | 1.30 | 33 |
| 1C643-14-6  | 14 | M22x1,5 | 3/8       | 1.94 | 49 | 0.17 | 4  | 27         | 1.32 | 34 |
| 1C643-16-8  | 16 | M24x1,5 | 1/2       | 2.13 | 54 | 0.19 | 5  | 30         | 1.39 | 35 |
| 1C643-20-10 | 20 | M30x2   | 5/8       | 2.38 | 60 | 0.21 | 5  | 36         | 1.39 | 35 |
| 1C643-20-12 | 20 | M30x2   | 3/4       | 2.46 | 62 | 0.21 | 5  | 40         | 1.03 | 37 |
| 1C643-25-12 | 25 | M36x2   | 3/4       | 2.48 | 63 | 0.28 | 7  | 46         | 1.56 | 40 |
| 1C643-30-16 | 30 | M42x2   | 1         | 2.89 | 73 | 0.37 | 9  | 50         | 1.95 | 50 |



view on web page

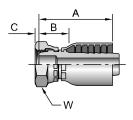
Metric L: Mates with EO "L" Series Fittings. Metric S: Mates with EO "S" Series Fittings.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 1C043

### Female Metric - Swivel - (Ball Nose)



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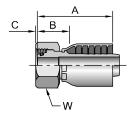
| #<br>Part   |    | ····································· | Hose I.D. | Ą    |    | Ç    |    | $\bigcirc$ | E    | 3  |
|-------------|----|---------------------------------------|-----------|------|----|------|----|------------|------|----|
| Number      |    | mm                                    | inch      | inch | mm | inch | mm | mm         | inch | mm |
| 1C043-20-12 | 20 | M30x1,5                               | 3/4       | 2.48 | 63 | 0.21 | 5  | 36         | 0.94 | 24 |
| 1C043-25-16 | 25 | M38x1,5                               | 1         | 2.99 | 76 | 0.28 | 7  | 46         | 1.14 | 29 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 1C943

### Female Metric S - Swivel - (24° Cone with O-Ring)

ISO 12151-2 - SWS



view on web page

| #           | ^  | ·····   |           |      |    |      |    |    |      |    |
|-------------|----|---------|-----------|------|----|------|----|----|------|----|
| Part        | 1  | Thread  | Hose I.D. | 1    | A  | (    |    | W  | E    | 3  |
| Number      |    | mm      | inch      | inch | mm | inch | mm | mm | inch | mm |
| 1C943-6-4   | 6  | M14x1,5 | 1/4       | 1.89 | 48 | 0.01 | 0  | 17 | 1.02 | 26 |
| 1C943-8-4   | 8  | M16x1,5 | 1/4       | 1.77 | 45 | 0.01 | 0  | 19 | 0.91 | 23 |
| 1C943-10-4  | 10 | M18x1,5 | 1/4       | 1.81 | 46 | 0.01 | 0  | 22 | 0.87 | 22 |
| 1C943-10-6  | 10 | M18x1,5 | 3/8       | 1.97 | 50 | 0.01 | 0  | 22 | 0.83 | 21 |
| 1C943-12-5  | 12 | M20x1,5 | 5/16      | 1.89 | 48 | 0.03 | 1  | 24 | 0.94 | 24 |
| 1C943-12-6  | 12 | M20x1,5 | 3/8       | 2.05 | 52 | 0.03 | 1  | 24 | 0.87 | 22 |
| 1C943-14-6  | 14 | M22x1,5 | 3/8       | 1.97 | 50 | 0.03 | 1  | 27 | 0.83 | 21 |
| 1C943-16-8  | 16 | M24x1,5 | 1/2       | 2.33 | 59 | 0.09 | 2  | 30 | 0.94 | 24 |
| 1C943-20-10 | 20 | M30x2   | 5/8       | 2.59 | 66 | 0.05 | 1  | 36 | 1.06 | 27 |
| 1C943-20-12 | 20 | M30x2   | 3/4       | 2.59 | 66 | 0.05 | 1  | 36 | 1.06 | 27 |
| 1C943-25-12 | 25 | M36x2   | 3/4       | 2.67 | 68 | 0.10 | 3  | 46 | 1.10 | 28 |
| 1C943-25-16 | 25 | M36x2   | 1         | 3.07 | 78 | 0.08 | 2  | 46 | 1.30 | 33 |
| 1C943-30-16 | 30 | M42x2   | 1         | 3.03 | 77 | 0.19 | 5  | 50 | 1.26 | 32 |
| 1C943-38-20 | 38 | M52x2   | 1-1/4     | 3.15 | 80 | 0.23 | 6  | 60 | 1.30 | 33 |

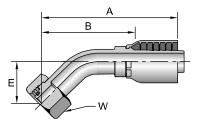
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



### 10C43

### Female Metric S - Swivel - 45° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE45

| #             | ~  | ·····   |           |      |     |      |    |    |      |    |
|---------------|----|---------|-----------|------|-----|------|----|----|------|----|
| Part          | 1  | Thread  | Hose I.D. | 1    | A   | E    |    | W  |      | В  |
| Number        |    | mm      | inch      | inch | mm  | inch | mm | mm | inch | mm |
| 10C43-8-4     | 8  | M16x1,5 | 1/4       | 2.32 | 59  | 0.63 | 16 | 19 | 1.38 | 35 |
| 10C43-12-6    | 12 | M20x1,5 | 3/8       | 2.72 | 69  | 0.79 | 20 | 24 | 1.57 | 40 |
| 10C43-14-6    | 14 | M22x1,5 | 3/8       | 2.99 | 76  | 0.79 | 20 | 27 | 1.96 | 50 |
| 10C43-16-8    | 16 | M24x1,5 | 1/2       | 3.23 | 82  | 0.94 | 24 | 30 | 1.89 | 48 |
| 10C43-20-10   | 20 | M30x2   | 5/8       | 3.58 | 91  | 0.98 | 25 | 36 | 2.05 | 52 |
| 10C43-20-12   | 20 | M30x2   | 3/4       | 3.94 | 100 | 1.14 | 29 | 36 | 2.36 | 60 |
| 10C43-25-12   | 25 | M36x2   | 3/4       | 3.97 | 101 | 1.18 | 30 | 46 | 2.40 | 61 |
| 10C43-30-16   | 30 | M42x2   | 1         | 4.96 | 126 | 1.42 | 36 | 50 | 3.11 | 79 |
| 10C43-38-20^^ | 38 | M52x2   | 1-1/4     | 5.59 | 142 | 1.50 | 38 | 60 | 3.74 | 95 |



В

view on web page

^Must be assembled with Die Part No. 83C-A20H in a Superkrimp or Parkrimp 2.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 11C43

### Female Metric S - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE

| #             | ۷  | ·····   |           |      |     |      |          |    |      |    |
|---------------|----|---------|-----------|------|-----|------|----------|----|------|----|
| Part          | 7  | Thread  | Hose I.D. |      | 4   | E    | <b>=</b> | W  |      | В  |
| Number        |    | mm      | inch      | inch | mm  | inch | mm       | mm | inch | mm |
| 11C43-8-4     | 8  | M16x1,5 | 1/4       | 1.89 | 48  | 1.14 | 29       | 19 | 1.02 | 26 |
| 11C43-10-4    | 10 | M18x1,5 | 1/4       | 1.97 | 50  | 1.14 | 29       | 22 | 1.02 | 26 |
| 11C43-12-5    | 12 | M20x1,5 | 5/16      | 2.36 | 60  | 1.26 | 32       | 24 | 1.42 | 36 |
| 11C43-12-6    | 12 | M20x1,5 | 3/8       | 2.56 | 65  | 1.46 | 37       | 24 | 1.38 | 35 |
| 11C43-14-6    | 14 | M22x1,5 | 3/8       | 2.56 | 65  | 1.46 | 37       | 27 | 1.38 | 35 |
| 11C43-16-8    | 16 | M24x1,5 | 1/2       | 2.83 | 72  | 1.77 | 45       | 30 | 1.46 | 37 |
| 11C43-20-10   | 20 | M30x2   | 5/8       | 3.11 | 79  | 1.89 | 48       | 36 | 1.57 | 40 |
| 11C43-20-12   | 20 | M30x2   | 3/4       | 3.52 | 89  | 2.26 | 58       | 36 | 2.08 | 53 |
| 11C43-25-12   | 25 | M36x2   | 3/4       | 3.50 | 89  | 2.32 | 59       | 46 | 1.93 | 49 |
| 11C43-25-16   | 25 | M36x2   | 1         | 4.29 | 109 | 2.72 | 69       | 46 | 2.67 | 68 |
| 11C43-30-16   | 30 | M42x2   | 1         | 4.53 | 115 | 2.99 | 76       | 50 | 2.68 | 68 |
| 11C43-38-20^^ | 38 | M52x2   | 1-1/4     | 5.12 | 130 | 3.15 | 80       | 60 | 3.27 | 83 |

В

view on web page

^Must be assembled with Die Part No. 83C-A20H in a Superkrimp or Parkrimp 2.



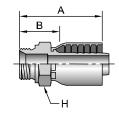
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

When used in a port, a bonded seal must be used. See Accessories Section for more information.

### 1D943

### Male BSP Parallel Pipe - Rigid - (60° Cone)

ISO 12151-6



view on web page

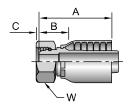
| 100 12101 0 |                 |           |      |    |    |      |    |
|-------------|-----------------|-----------|------|----|----|------|----|
| #<br>Part   | //////// Thread | Hose I.D. |      | 4  | H  |      | 3  |
| Number      | inch            | inch      | inch | mm | mm | inch | mm |
| 1D943-4-4   | 1/4x19          | 1/4       | 1.77 | 45 | 19 | 0.91 | 23 |
| 1D943-6-5   | 3/8x19          | 5/16      | 2.13 | 54 | 22 | 1.22 | 31 |
| 1D943-6-6   | 3/8x19          | 3/8       | 2.13 | 54 | 22 | 1.22 | 31 |
| 1D943-8-6   | 1/2x14          | 3/8       | 2.36 | 60 | 27 | 1.22 | 31 |
| 1D943-8-8   | 1/2x14          | 1/2       | 2.44 | 62 | 27 | 1.10 | 28 |
| 1D943-12-12 | 3/4x14          | 3/4       | 2.76 | 70 | 32 | 1.18 | 30 |
| 1D943-16-16 | 1x11            | 1         | 3.23 | 82 | 41 | 1.38 | 35 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 19243

### Female BSP Parallel Pipe - Swivel - (60° Cone)

ISO 12151-6



view on web page

| #           |          |           |      |    |      |    |    |      |    |
|-------------|----------|-----------|------|----|------|----|----|------|----|
| Part        | Thread   | Hose I.D. | Δ    | 1  | (    |    | W  | E    | 3  |
| Number      | inch     | inch      | inch | mm | inch | mm | mm | inch | mm |
| 19243-2-4   | 1/8x28   | 1/4       | 1.61 | 41 | 0.20 | 5  | 14 | 0.67 | 17 |
| 19243-4-4   | 1/4x19   | 1/4       | 1.95 | 50 | 0.22 | 6  | 19 | 1.20 | 30 |
| 19243-6-4   | 3/8x19   | 1/4       | 1.73 | 44 | 0.26 | 7  | 22 | 0.79 | 20 |
| 19243-6-6   | 3/8x19   | 3/8       | 2.35 | 60 | 0.26 | 7  | 22 | 1.32 | 34 |
| 19243-6-8   | 3/8x19   | 1/2       | 2.17 | 55 | 0.26 | 7  | 22 | 0.79 | 20 |
| 19243-8-6   | 1/2x14   | 3/8       | 2.01 | 51 | 0.28 | 7  | 27 | 0.87 | 22 |
| 19243-8-8   | 1/2x14   | 1/2       | 2.72 | 69 | 0.28 | 7  | 27 | 1.46 | 37 |
| 19243-10-8  | 5/8x14   | 1/2       | 2.80 | 71 | 0.37 | 9  | 30 | 1.54 | 39 |
| 19243-10-10 | 5/8x14   | 5/8       | 2.99 | 76 | 0.37 | 9  | 30 | 1.55 | 39 |
| 19243-12-10 | 3/4x14   | 5/8       | 3.11 | 79 | 0.35 | 9  | 36 | 1.67 | 42 |
| 19243-12-12 | 3/4x14   | 3/4       | 3.19 | 81 | 0.35 | 9  | 36 | 1.75 | 44 |
| 19243-16-16 | 1x11     | 1         | 3.67 | 93 | 0.44 | 11 | 41 | 2.05 | 52 |
| 19243-20-20 | 1-1/4x11 | 1-1/4     | 3.11 | 79 | 0.41 | 11 | 50 | 1.26 | 32 |

When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

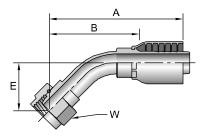
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 1B143

### Female BSP Parallel Pipe - Swivel - 45° Elbow - (60° Cone)

ISO 12151-6

| #<br>Part   |        | Hose I.D. | A    |     | E    |    | $\bigcirc$ | E    | 2  |
|-------------|--------|-----------|------|-----|------|----|------------|------|----|
| Number      | inch   | inch      | inch | mm  | inch | mm | mm         | inch | mm |
|             | -      | -         |      |     |      |    |            |      |    |
| 1B143-4-4   | 1/4x19 | 1/4       | 2.26 | 57  | 0.61 | 15 | 19         | 1.51 | 38 |
| 1B143-6-6   | 3/8x19 | 3/8       | 2.61 | 66  | 0.67 | 17 | 22         | 1.59 | 40 |
| 1B143-8-8   | 1/2x14 | 1/2       | 3.10 | 78  | 0.79 | 20 | 27         | 1.85 | 46 |
| 1B143-10-10 | 5/8x14 | 5/8       | 3.53 | 89  | 0.91 | 23 | 30         | 2.08 | 52 |
| 1B143-12-10 | 3/4x14 | 5/8       | 3.47 | 88  | 0.87 | 22 | 32         | 2.02 | 51 |
| 1B143-12-12 | 3/4x14 | 3/4       | 3.77 | 95  | 0.98 | 24 | 32         | 2.34 | 59 |
| 1B143-16-16 | 1x11   | 1         | 4.72 | 119 | 1.22 | 30 | 41         | 3.10 | 78 |



В

view on web page

When used in a port, a bonded seal must be used. See Accessories Section for more information.



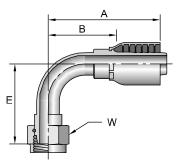
MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 1B243

### Female BSP Parallel Pipe - Swivel - 90° Elbow - (60° Cone)

ISO 12151-6

| #           |          |           |      |     |      |    |       |      |    |   |
|-------------|----------|-----------|------|-----|------|----|-------|------|----|---|
| Part        | Thread   | Hose I.D. |      |     | Ę    |    | A E W |      | E  | 3 |
| Number      | inch     | inch      | inch | mm  | inch | mm | mm    | inch | mm |   |
| 1B243-2-4   | 1/8x28   | 1/4       | 1.97 | 50  | 1.10 | 28 | 14    | 1.02 | 26 |   |
| 1B243-4-4   | 1/4x19   | 1/4       | 1.83 | 46  | 1.12 | 28 | 19    | 1.08 | 27 |   |
| 1B243-6-6   | 3/8x19   | 3/8       | 2.32 | 59  | 1.46 | 37 | 22    | 1.32 | 34 |   |
| 1B243-8-8   | 1/2x14   | 1/2       | 2.95 | 75  | 1.57 | 40 | 27    | 1.57 | 40 |   |
| 1B243-10-8  | 5/8x14   | 1/2       | 2.91 | 74  | 1.57 | 40 | 30    | 1.54 | 39 |   |
| 1B243-10-10 | 5/8x14   | 5/8       | 3.13 | 80  | 1.57 | 40 | 30    | 1.72 | 44 |   |
| 1B243-12-10 | 3/4x14   | 5/8       | 3.62 | 92  | 2.32 | 59 | 32    | 2.05 | 52 |   |
| 1B243-12-12 | 3/4x14   | 3/4       | 3.58 | 91  | 2.32 | 59 | 32    | 2.00 | 51 |   |
| 1B243-16-16 | 1x11     | 1         | 4.33 | 110 | 2.48 | 63 | 41    | 2.56 | 65 |   |
| 1B243-20-20 | 1-1/4x11 | 1-1/4     | 4.72 | 120 | 2.99 | 76 | 50    | 2.87 | 73 |   |



view on web page

Metric S: Mates with EO "S" Series Fittings.

When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.



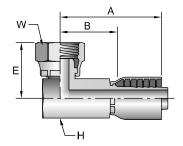
MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 1B443

Female BSP Parallel Pipe - Swivel - 90° Elbow - Block Type - (60° Cone)

ISO 228-1

| #<br>Part | Thread | Hose I.D. | A    | <b>A</b> | E    | <b>.</b> | ( )<br>H | $\bigcirc$ | E    | 3  |
|-----------|--------|-----------|------|----------|------|----------|----------|------------|------|----|
| Number    | inch   | inch      | inch | mm       | inch | mm       | mm       | mm         | inch | mm |
| 1B443-4-4 | 1/4x19 | 1/4       | 2.40 | 61       | 1.14 | 29       | 17       | 19         | 1.40 | 36 |
| 1B443-6-6 | 3/8x19 | 3/8       | 2.76 | 70       | 1.02 | 26       | 19       | 22         | 1.42 | 36 |
| 1B443-8-8 | 1/2x14 | 1/2       | 3.19 | 81       | 1.02 | 26       | 22       | 27         | 1.57 | 40 |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

view on web page

Metric S: Mates with EO "S" Series Fittings.



mm

19

24

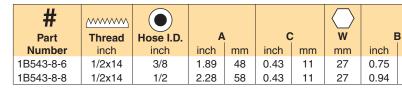
В

### 1B543

### Female BSP Parallel Pipe - Swivel - (Flat Seat)

information go to www.p65warnings.ca.gov.

ISO 228-1

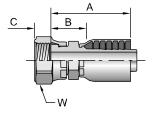


When measuring overall length to the end of the nut, B+C dimensions must be used to calculate



cut-off allowance. WARNING: This product can expose you to chemicals including Lead, which is known to the State

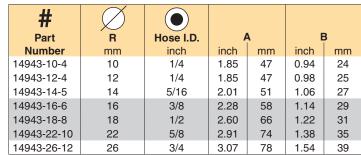
of California to cause cancer and birth defects or other reproductive harm. For more



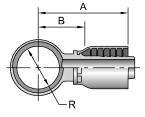
view on web page

### 14943

### **DIN Metric Banjo**



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

### AM Banjo Bolt w/DIN Metric Thread



| # Part Number | F<br>Thr | ead     | H<br>mm | Copper<br>Washer<br>2 |
|---------------|----------|---------|---------|-----------------------|
| AM-03         | 8        | M8x1    | 12      | 853009-8              |
| AM-04         | 10       | M10x1   | 14      | 853009-10             |
| AM-06         | 12       | M12x1,5 | 17      | 853009-12             |
| AM-08         | 14       | M14x1,5 | 19      | 853009-14             |
| AM-10         | 16       | M16x1,5 | 22      | 853009-16             |
| AM-13         | 18       | M18x1,5 | 24      | 853009-18             |
| AM-16         | 22       | M22x1,5 | 27      | 853009-22             |
| AM-20         | 26       | M26x1,5 | 32      | 853009-26             |
| AM-30         | 30       | M30x1,5 | 36      | 853009-30             |

Two (2) copper washers per bolt must be ordered separately.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

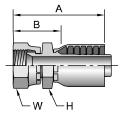
Metric S: Mates with EO "S" Series Fittings.

### **1MU43**

### Female Metric - Swivel - (30° Flare)

| #<br>Part | /////// Thread | Hose I.D. | ,    | A. | H  | W  | В    |    |
|-----------|----------------|-----------|------|----|----|----|------|----|
| Number    | mm             | inch      | inch | mm | mm | mm | inch | mm |
| 1MU43-4-4 | M14x1,5        | 1/4       | 2.07 | 53 | 19 | 19 | 1.32 | 34 |
| 1MU43-6-4 | M18x1,5        | 1/4       | 2.18 | 55 | 24 | 24 | 1.43 | 36 |
| 1MU43-6-6 | M18x1,5        | 3/8       | 2.45 | 62 | 24 | 24 | 1.42 | 36 |
| 1MU43-8-8 | M22x1,5        | 1/2       | 2.84 | 72 | 27 | 27 | 1.58 | 40 |

Japanese Fittings - Female Swivel 30° Flare with Metric Threads. All 30° flared fitting sizes are available by combining the 1MU43 fittings in sizes up to -8 with the 1XU43 fittings in sizes -10 and



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В



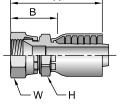
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 1XU43

### Female Metric - Swivel - (30° Flare)

| #<br>Part   |         | Hose I.D. | A    |     | H  | W  | E    | 3  |
|-------------|---------|-----------|------|-----|----|----|------|----|
| Number      | mm      | inch      | inch | mm  | mm | mm | inch | mm |
| 1XU43-10-10 | M24x1,5 | 5/8       | 3.25 | 83  | 30 | 32 | 1.81 | 46 |
| 1XU43-12-12 | M30x1,5 | 3/4       | 3.40 | 86  | 32 | 36 | 1.96 | 50 |
| 1XU43-16-16 | M33x1,5 | 1         | 4.03 | 102 | 36 | 41 | 2.41 | 61 |

Japanese Fittings - Female Swivel 30° Flare with Metric Threads. All 30° flared fitting sizes are available by combining the 1MU43 fittings in sizes up to -8 with the 1XU43 fittings in sizes -10 and



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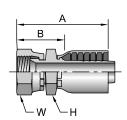
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 1FU43

### Female BSP Parallel Pipe - Swivel - (30° Flare)

B8363 Code F

| #<br>Part   |          | Hose I.D. | Ą    |    | H  | $\bigcirc$ | ı    | 3  |
|-------------|----------|-----------|------|----|----|------------|------|----|
| Number      | inch     | inch      | inch | mm | mm | mm         | inch | mm |
| 1FU43-4-4   | 1/4x19   | 1/4       | 1.90 | 48 | 19 | 19         | 1.15 | 29 |
| 1FU43-6-6   | 3/8x19   | 3/8       | 2.32 | 59 | 22 | 22         | 1.29 | 33 |
| 1FU43-8-8   | 1/2x14   | 1/2       | 2.66 | 68 | 27 | 27         | 1.40 | 36 |
| 1FU43-12-12 | 3/4x14   | 3/4       | 3.06 | 78 | 36 | 36         | 1.62 | 41 |
| 1FU43-16-16 | 1x11     | 1         | 3.53 | 90 | 41 | 41         | 1.91 | 49 |
| 1FU43-20-20 | 1-1/4x11 | 1-1/4     | 3.87 | 98 | 50 | 50         | 2.18 | 55 |



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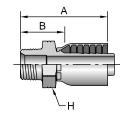
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

B-63

### **1UT43**

### Male BSP Taper Pipe - Rigid - (60° Cone)

B8363 Code R



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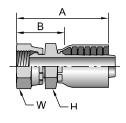
| #<br>Part   |          | Hose I.D. |      | <b>1</b> | H  | ı    | 3  |
|-------------|----------|-----------|------|----------|----|------|----|
| Number      | inch     | inch      | inch | mm       | mm | inch | mm |
| 1UT43-4-4   | 1/4x19   | 1/4       | 1.92 | 49       | 19 | 1.17 | 30 |
| 1UT43-6-6   | 3/8x19   | 3/8       | 2.25 | 57       | 22 | 1.22 | 31 |
| 1UT43-8-8   | 1/2x14   | 1/2       | 2.68 | 68       | 27 | 1.42 | 36 |
| 1UT43-12-12 | 3/4x14   | 3/4       | 2.96 | 75       | 36 | 1.53 | 39 |
| 1UT43-16-16 | 1x11     | 1         | 3.48 | 88       | 41 | 1.86 | 47 |
| 1UT43-20-20 | 1-1/4x11 | 1-1/4     | 3.75 | 95       | 50 | 2.10 | 53 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 1**GU**43

### Female BSP Parallel Pipe - Swivel - (60° Cone)

B8363 Code C



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| #           |                                                                                     |                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part        | Thread                                                                              | Hose I.D.                                                                                                                                                                                                        | Α                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                    | Н                                                                                                                                                                                                                                                                                                                                                                                                                                                   | W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Number      | inch                                                                                | inch                                                                                                                                                                                                             | inch                                                                                                                                                                                                                                                                                              | mm                                                                                                                                                                                                                                                                                                                                                                 | mm                                                                                                                                                                                                                                                                                                                                                                                                                                                  | mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | inch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1GU43-4-4   | 1/4x19                                                                              | 1/4                                                                                                                                                                                                              | 2.08                                                                                                                                                                                                                                                                                              | 53                                                                                                                                                                                                                                                                                                                                                                 | 19                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1.33                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 34                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1GU43-6-6   | 3/8x19                                                                              | 3/8                                                                                                                                                                                                              | 2.45                                                                                                                                                                                                                                                                                              | 62                                                                                                                                                                                                                                                                                                                                                                 | 22                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 22                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1.42                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 36                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1GU43-8-8   | 1/2x14                                                                              | 1/2                                                                                                                                                                                                              | 2.81                                                                                                                                                                                                                                                                                              | 71                                                                                                                                                                                                                                                                                                                                                                 | 27                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 27                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1.56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1GU43-12-12 | 3/4x14                                                                              | 3/4                                                                                                                                                                                                              | 3.24                                                                                                                                                                                                                                                                                              | 82                                                                                                                                                                                                                                                                                                                                                                 | 36                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 36                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1.81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 46                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1GU43-16-16 | 1x11                                                                                | 1                                                                                                                                                                                                                | 3.74                                                                                                                                                                                                                                                                                              | 95                                                                                                                                                                                                                                                                                                                                                                 | 41                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2.12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 54                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1GU43-20-20 | 1-1/4x11                                                                            | 1-1/4                                                                                                                                                                                                            | 4.07                                                                                                                                                                                                                                                                                              | 103                                                                                                                                                                                                                                                                                                                                                                | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|             | Part<br>Number<br>1GU43-4-4<br>1GU43-6-6<br>1GU43-8-8<br>1GU43-12-12<br>1GU43-16-16 | Part Number         Thread inch           1GU43-4-4         1/4x19           1GU43-6-6         3/8x19           1GU43-8-8         1/2x14           1GU43-12-12         3/4x14           1GU43-16-16         1x11 | Part Number         Thread inch         Hose I.D. inch           1GU43-4-4         1/4x19         1/4           1GU43-6-6         3/8x19         3/8           1GU43-8-8         1/2x14         1/2           1GU43-12-12         3/4x14         3/4           1GU43-16-16         1x11         1 | Part Number         Thread inch         Hose I.D. inch           1GU43-4-4         1/4x19         1/4         2.08           1GU43-6-6         3/8x19         3/8         2.45           1GU43-8-8         1/2x14         1/2         2.81           1GU43-12-12         3/4x14         3/4         3.24           1GU43-16-16         1x11         1         3.74 | Part Number         Thread inch         Hose I.D. inch         A inch         mm           1GU43-4-4         1/4x19         1/4         2.08         53           1GU43-6-6         3/8x19         3/8         2.45         62           1GU43-8-8         1/2x14         1/2         2.81         71           1GU43-12-12         3/4x14         3/4         3.24         82           1GU43-16-16         1x11         1         3.74         95 | Part Number         Thread inch         Hose I.D. inch         A inch         H mm           1GU43-4-4         1/4x19         1/4         2.08         53         19           1GU43-6-6         3/8x19         3/8         2.45         62         22           1GU43-8-8         1/2x14         1/2         2.81         71         27           1GU43-12-12         3/4x14         3/4         3.24         82         36           1GU43-16-16         1x11         1         3.74         95         41 | Part Number         Thread inch         Hose I.D. inch         A inch         H mm         W mm           1GU43-4-4         1/4x19         1/4         2.08         53         19         19           1GU43-6-6         3/8x19         3/8         2.45         62         22         22           1GU43-8-8         1/2x14         1/2         2.81         71         27         27           1GU43-12-12         3/4x14         3/4         3.24         82         36         36           1GU43-16-16         1x11         1         3.74         95         41         41 | Part Number         Thread inch         Hose I.D. inch         A mm         H mm         W mm         Inch inch           1GU43-4-4         1/4x19         1/4         2.08         53         19         19         1.33           1GU43-6-6         3/8x19         3/8         2.45         62         22         22         1.42           1GU43-8-8         1/2x14         1/2         2.81         71         27         27         1.56           1GU43-12-12         3/4x14         3/4         3.24         82         36         36         1.81           1GU43-16-16         1x11         1         3.74         95         41         41         2.12 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

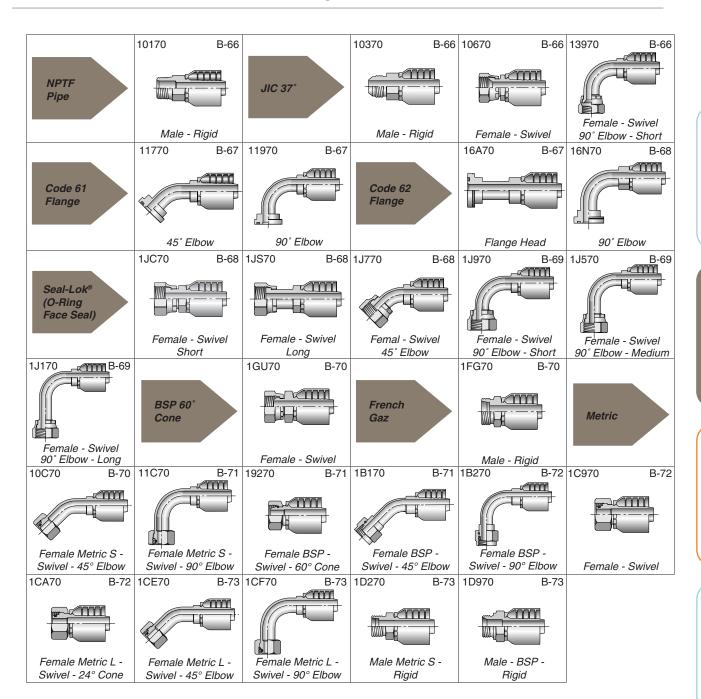
### 43 Series Crimp Shell



| #<br>Part | Hose I.D. | S    |      |
|-----------|-----------|------|------|
| Number    | inch      | inch | mm   |
| 10043-40  | 2-1/2     | 2.63 | 66,8 |
| 10043-48  | 3         | 2.95 | 75,0 |

<sup>-40</sup> size sold as a two piece fitting. Approved for 187 Hose only.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



E

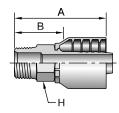
A

В

C

### 10170

### Male NPTF Pipe - Rigid



view on web page

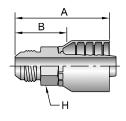
В

| #<br>Part |        | Hose I.D. | Ą    |    | H    | E    | 3  |
|-----------|--------|-----------|------|----|------|------|----|
| Number    | inch   | inch      | inch | mm | inch | inch | mm |
| 10170-6-6 | 3/8x18 | 3/8       | 2.37 | 60 | 3/4  | 1.47 | 37 |
| 10170-8-8 | 1/2x14 | 1/2       | 2.84 | 72 | 7/8  | 1.40 | 36 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 10370

### Male JIC 37° - Rigid



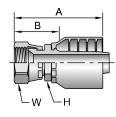
view on web page

| #<br>Part  |                | ······ | Hose I.D. | Δ       |    |       |      | 2  |
|------------|----------------|--------|-----------|---------|----|-------|------|----|
| Number     | Thread<br>inch |        | inch      | inch mm |    | inch  | inch | mm |
| 10370-8-8  | 1/2            | 3/4x16 | 1/2       | 2.68    | 68 | 7/8   | 1.47 | 37 |
| 10370-10-8 | 5/8            | 7/8x14 | 1/2       | 2.62    | 66 | 15/16 | 1.41 | 36 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 10670

### Female JIC 37° - Swivel



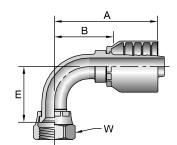
view on web page

| #<br>Part   |     |         | Hose I.D. | A    |    | H     | $\bigcirc$ | В    |    |
|-------------|-----|---------|-----------|------|----|-------|------------|------|----|
| Number      |     | inch    | inch      | inch | mm | inch  | inch       | inch | mm |
| 10670-6-6   | 3/8 | 9/16x18 | 3/8       | 2.29 | 58 | 11/16 | 11/16      | 1.39 | 35 |
| 10670-8-8   | 1/2 | 3/4x16  | 1/2       | 2.62 | 67 | 13/16 | 7/8        | 1.41 | 36 |
| 10670-10-8  | 5/8 | 7/8x14  | 1/2       | 2.85 | 72 | 7/8   | 1          | 1.64 | 42 |
| 10670-10-10 | 5/8 | 7/8x14  | 5/8       | 2.84 | 72 | 15/16 | 1          | 1.59 | 40 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 13970

### Female JIC 37° - Swivel - 90° Elbow - Short Drop



view on web page

| #<br>Part |      |        | Hose I.D. | A    |    | E    |    | $\bigcirc$ | E    | 3  |
|-----------|------|--------|-----------|------|----|------|----|------------|------|----|
| Number    | inch |        | inch      | inch | mm | inch | mm | inch       | inch | mm |
| 13970-8-8 | 1/2  | 3/4x16 | 1/2       | 2.62 | 67 | 1.14 | 29 | 7/8        | 1.41 | 36 |

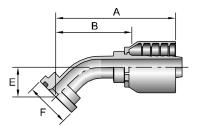
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3 - 45S - L

| #         |        |           |      |    | _    |    | Ø      |      |    |
|-----------|--------|-----------|------|----|------|----|--------|------|----|
| Part      | Flange | Hose I.D. | Ą    |    | E    |    | F      | E    | 3  |
| Number    | inch   | inch      | inch | mm | inch | mm | inch   | inch | mm |
| 11770-8-8 | 1/2    | 1/2       | 3.28 | 83 | 0.77 | 20 | 1-3/16 | 2.07 | 53 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



#### view on web page

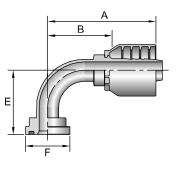
# 11970

#### SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L

| #       | <b>‡</b> |        | •         |      |          | _    |    | Ø      |      |    |
|---------|----------|--------|-----------|------|----------|------|----|--------|------|----|
| Pa      | rt       | Flange | Hose I.D. | 4    | <b>A</b> | E    | i  | F      | E    | 3  |
| Num     | ber      | inch   | inch      | inch | mm       | inch | mm | inch   | inch | mm |
| 11970-8 | 8-8      | 1/2    | 1/2       | 2.93 | 74       | 1.60 | 41 | 1-3/16 | 1.72 | 44 |
| 11970-1 | 2-10     | 3/4    | 5/8       | 3.54 | 90       | 2.02 | 51 | 1-1/2  | 2.29 | 58 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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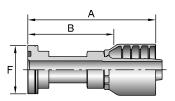
# 16A70

#### **SAE Code 62 Flange Head**

ISO 12151-3 - S - S

| #<br>Part | Flange | Hose I.D. | ı    | <b>A</b> | F     | E    | 3    |
|-----------|--------|-----------|------|----------|-------|------|------|
| Number    | inch   | inch      | inch | mm       | inch  | inch | mm   |
| 16A70-8-8 | 1/2    | 1/2       | 3.50 | 88,9     | 1-1/4 | 2.29 | 56,9 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



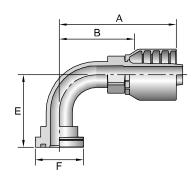
view on web page

F

# 16N70

#### SAE Code 62 Flange Head - 90° Elbow

ISO 12151-3 - E90S - S ( 1 Piece: ISO 12151-3 - E90M - S)



В

| #         |        |           |          |          |      |    | Q     | _    |    |
|-----------|--------|-----------|----------|----------|------|----|-------|------|----|
| Part      | Flange | Hose I.D. | <i> </i> | <b>A</b> | E    | Ξ  | F     | E    | 3  |
| Number    | inch   | inch      | inch     | mm       | inch | mm | inch  | inch | mm |
| 16N70-8-8 | 1/2    | 1/2       | 2.60     | 66       | 1.61 | 41 | 1-1/4 | 1.34 | 34 |

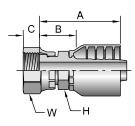
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### view on web page

# **1JC70**

#### Female Seal-Lok® - Swivel - Short

ISO 12151-1-SWSA



| view | on | web | page |
|------|----|-----|------|

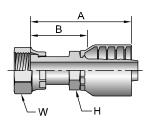
| #<br>Part   | _   | ····································· | Hose I.D. | A    | ١  | C    | ;  | Н     | $\bigcirc$ | E    | 3  |
|-------------|-----|---------------------------------------|-----------|------|----|------|----|-------|------------|------|----|
| Number      |     | inch                                  | inch      | inch | mm | inch | mm | inch  | inch       | inch | mm |
| 1JC70-6-6   | 3/8 | 11/16x16                              | 3/8       | 1.94 | 49 | 0.34 | 9  | 11/16 | 13/16      | 1.04 | 26 |
| 1JC70-8-6   | 1/2 | 13/16x16                              | 3/8       | 2.00 | 51 | 0.43 | 11 | 13/16 | 15/16      | 1.10 | 28 |
| 1JC70-8-8   | 1/2 | 13/16x16                              | 1/2       | 2.22 | 56 | 0.43 | 11 | 13/16 | 15/16      | 1.01 | 26 |
| 1JC70-10-10 | 5/8 | 1x14                                  | 5/8       | 2.40 | 61 | 0.53 | 13 | 15/16 | 1-1/8      | 1.15 | 29 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **1JS70**

#### Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB



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| #              | _   | ······         |           | A    |    | H     | $\bigcirc$ | F    | 2  |
|----------------|-----|----------------|-----------|------|----|-------|------------|------|----|
| Part<br>Number |     | Thread<br>inch | Hose I.D. | inch | mm | inch  | inch       | inch | mm |
| 1JS70-6-6      | 3/8 | 11/16x16       | 3/8       | 2.28 | 58 |       | 13/16      |      | 35 |
| 1JS70-8-8      | 1/2 | 13/16x16       | 1/2       | 2.65 | 67 | 13/16 | 15/16      | 1.44 | 37 |
| 1JS70-12-8     | 3/4 | 1-3/16x12      | 1/2       | 2.90 | 74 | 1-1/8 | 1-3/8      | 1.69 | 43 |
| 1JS70-12-10    | 3/4 | 1-3/16x12      | 5/8       | 3.10 | 79 | 1-1/8 | 1-3/8      | 1.85 | 47 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

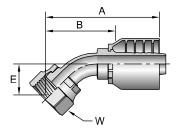
#### **1J770**

#### Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45

| #<br>Part   |     | ^///\ | Hose I.D. | Į.   | <b>A</b> | E    | <b>=</b> | $\bigcirc$ | E    | 3  |
|-------------|-----|-------|-----------|------|----------|------|----------|------------|------|----|
| Number      | i   | nch   | inch      | inch | mm       | inch | mm       | inch       | inch | mm |
| 1J770-10-10 | 5/8 | 1x14  | 5/8       | 3.08 | 78       | 0.63 | 16       | 1-1/8      | 1.83 | 46 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



#### **1J970**

#### Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

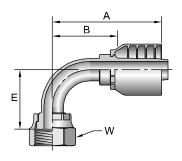
ISO 12151-1 - SWES90

| #          | ~   | ·····     |           | A    |    | F    |    |       | _    |    |
|------------|-----|-----------|-----------|------|----|------|----|-------|------|----|
| Part       | Т   | hread     | Hose I.D. | /    | 4  | L L  | =  | W     | E    | 5  |
| Number     |     | inch      | inch      | inch | mm | inch | mm | inch  | inch | mm |
| 1J970-8-8  | 1/2 | 13/16x16  | 1/2       | 2.59 | 66 | 1.14 | 29 | 15/16 | 1.38 | 35 |
| 1J970-12-8 | 3/4 | 1-3/16x12 | 1/2       | 3.21 | 82 | 1.88 | 48 | 1-3/8 | 2.00 | 51 |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### view on web page



#### view on web page

# **1J570**

#### Female Seal-Lok® - Swivel - 90° Elbow - Medium Drop ISO 12151-1 - SWEM90

| #<br>Part   | <u> </u> | ······································ | Hose I.D. | A    | 1  | E    | <u> </u> | $\bigcirc$ | E    | 3  |
|-------------|----------|----------------------------------------|-----------|------|----|------|----------|------------|------|----|
| Number      |          | inch                                   | inch      | inch | mm | Inch | mm       | inch       | inch | mm |
| 1J570-10-10 | 5/8      | 1x14                                   | 5/8       | 2.88 | 73 | 1.85 | 47       | 1-1/8      | 1.63 | 41 |



MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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# 1J170

#### Female Seal-Lok® - Swivel - 90° Elbow - Long Drop ISO 12151-1 - SWEL90

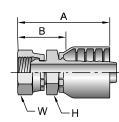
| #           |     |      |           |            | ,  |      |    | $\bigcirc$ |      | 2  |
|-------------|-----|------|-----------|------------|----|------|----|------------|------|----|
| Part        | 1   |      | Hose I.D. | l <b>′</b> | Ì  |      | _  |            |      | ĺ  |
| Number      |     | inch | inch      | inch       | mm | Inch | mm | inch       | inch | mm |
| 1J170-10-10 | 5/8 | 1x14 | 5/8       | 2.88       | 73 | 2.76 | 70 | 1-1/8      | 1.63 | 41 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

# 1GU70

#### Female BSP Parallel Pipe - Swivel - (60° Cone)

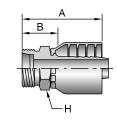


| #<br>Part |        | Hose I.D. | ı    | Ą  |    | A inch mm |      | A  |  | $\bigcirc$ | E | 3 |
|-----------|--------|-----------|------|----|----|-----------|------|----|--|------------|---|---|
| Number    | Inch   | inch      | inch | mm | mm | inch      | inch | mm |  |            |   |   |
| 1GU70-8-8 | 1/2x14 | 1/2       | 2.82 | 72 | 27 | NA        | 1.61 | 41 |  |            |   |   |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 1FG70

#### Male French Gaz Series - Rigid - (24° Cone)



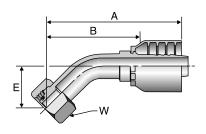
| #           | ۵  | ·····   |           |      |    |      |     |      |    |  |
|-------------|----|---------|-----------|------|----|------|-----|------|----|--|
| Part        | 1  | Thread  | Hose I.D. | A    | A  |      | ļ Ḥ |      | 3  |  |
| Number      |    | mm      | inch      | inch | mm | inch | mm  | inch | mm |  |
| 1FG70-21-10 | 21 | M30x1.5 | 5/8       | 2.87 | 73 | 1.18 | 30  | 1.62 | 41 |  |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### view on web page

# 10C70

#### Female Metric S - Swivel - 45° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE45



| #<br>Part   |                                            | hread                                              | Hose I.D.                                                                                                                     | А                                                                                                                                                                            |                                                                                                                                                                                                                       | E                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                | W                                                                                       | E                                                                                                                                                                                                                                                                                                                                                       | 3                                                                                       |
|-------------|--------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Number      |                                            | mm                                                 | inch                                                                                                                          | inch                                                                                                                                                                         | mm                                                                                                                                                                                                                    | inch                                                                                                                                                                                                                                                   | mm                                                                                                                                                                                                                                                                                             | mm                                                                                      | inch                                                                                                                                                                                                                                                                                                                                                    | mm                                                                                      |
| 10C70-12-6  | 12                                         | M20x1,5                                            | 3/8                                                                                                                           | 2.72                                                                                                                                                                         | 69                                                                                                                                                                                                                    | 0.79                                                                                                                                                                                                                                                   | 20                                                                                                                                                                                                                                                                                             | 24                                                                                      | 1.57                                                                                                                                                                                                                                                                                                                                                    | 40                                                                                      |
| 10C70-16-8  | 16                                         | M24x1,5                                            | 1/2                                                                                                                           | 3.27                                                                                                                                                                         | 83                                                                                                                                                                                                                    | 0.94                                                                                                                                                                                                                                                   | 24                                                                                                                                                                                                                                                                                             | 30                                                                                      | 1.89                                                                                                                                                                                                                                                                                                                                                    | 48                                                                                      |
| 10C70-20-10 | 20                                         | M30x2                                              | 5/8                                                                                                                           | 3.58                                                                                                                                                                         | 91                                                                                                                                                                                                                    | 0.98                                                                                                                                                                                                                                                   | 25                                                                                                                                                                                                                                                                                             | 36                                                                                      | 2.05                                                                                                                                                                                                                                                                                                                                                    | 52                                                                                      |
|             | Part<br>Number<br>10C70-12-6<br>10C70-16-8 | Part T<br>Number<br>10C70-12-6 12<br>10C70-16-8 16 | Part Number         Thread mm           10C70-12-6         12         M20x1,5           10C70-16-8         16         M24x1,5 | Part Number         Thread mm         Hose I.D. inch           10C70-12-6         12         M20x1,5         3/8           10C70-16-8         16         M24x1,5         1/2 | Part Number         Thread mm         Hose I.D. inch         A inch           10C70-12-6         12         M20x1,5         3/8         2.72           10C70-16-8         16         M24x1,5         1/2         3.27 | Part Number         Thread mm         Hose I.D. inch         A inch         mm           10C70-12-6         12         M20x1,5         3/8         2.72         69           10C70-16-8         16         M24x1,5         1/2         3.27         83 | Part Number         Thread mm         Hose I.D. inch         A inch inch         E inch inch         mm inch           10C70-12-6         12 M20x1,5         3/8         2.72         69         0.79           10C70-16-8         16 M24x1,5         1/2         3.27         83         0.94 | Part Number         Thread mm         Hose I.D. inch inch inch inch inch inch inch inch | Part Number         Thread mm         Hose I.D. inch         A inch inch         E inch inch         W mm           10C70-12-6         12         M20x1,5         3/8         2.72         69         0.79         20         24           10C70-16-8         16         M24x1,5         1/2         3.27         83         0.94         24         30 | Part Number         Thread mm         Hose I.D. inch inch inch inch inch inch inch inch |

view on web page

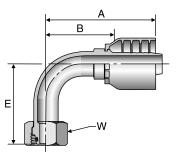
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 11C70

#### Female Metric S - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE

| #<br>Part   | _  | ····································· | Hose I.D. | A    |    | Ę    |    | W  | E    | 3  |
|-------------|----|---------------------------------------|-----------|------|----|------|----|----|------|----|
| Number      |    | mm                                    | inch      | inch | mm | inch | mm | mm | inch | mm |
| 11C70-12-6  | 12 | M20X1,5                               | 3/8       | 2.64 | 67 | 1.46 | 37 | 24 | 1.50 | 38 |
| 11C70-20-10 | 20 | M30X2                                 | 5/8       | 3.11 | 79 | 1.89 | 48 | 36 | 1.57 | 40 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

#### 19270

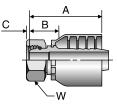
# Female BSP Parallel Pipe - Swivel - (60° Cone)

ISO 228-1

| #<br>Part   |        | Hose I.D. | A    |    | Ç    |    | $\bigcirc$ | W    |    |
|-------------|--------|-----------|------|----|------|----|------------|------|----|
| Number      | inch   | inch      | inch | mm | inch | mm | mm         | inch | mm |
| 19270-8-8   | 1/2x14 | 1/2       | 2.24 | 57 | 0.28 | 7  | 27         | 0.87 | 22 |
| 19270-10-10 | 5/8x14 | 5/8       | 2.24 | 57 | 0.35 | 9  | 30         | 0.83 | 21 |
| 19270-12-10 | 3/4x14 | 5/8       | 2.40 | 61 | 0.35 | 9  | 32         | 0.87 | 22 |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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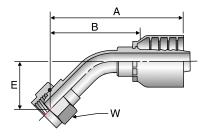
# 1B170

# Female BSP Parallel pipe - Swivel- 45° Elbow - (60° Cone)

ISO 228-1

| #<br>Part | //////// Thread | Hose I.D. | Į.      | A  |         |    | $\bigcirc$ | В    |    |
|-----------|-----------------|-----------|---------|----|---------|----|------------|------|----|
| Number    | inch            | inch      | inch    | mm | inch    | mm | mm         | inch | mm |
| 1B170-8-8 | 1/2x14          | 1/2       | 3.11 79 |    | 0.79 20 |    | 27         | 1.77 | 45 |

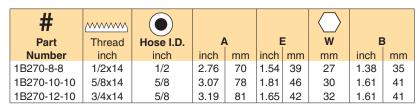
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



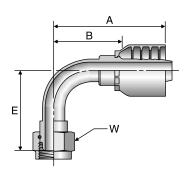
view on web page

#### 1B270

#### Female BSP Parallel Pipe - Swivel - 90° Elbow - (60° Cone) ISO 228-1



MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

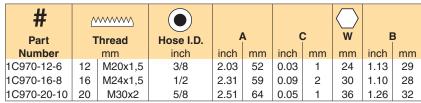


В

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#### 1C970

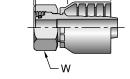
#### Female Metric S - Swivel - (24° Cone with O-Ring)



When measuring overall length to end of nut, B + C dimensions must be used to calculate cut-off allowance.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

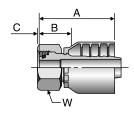


view on web page

# 1CA70

# Female Metric L - Swivel - (24° Cone with O-Ring)

ISO 12151-2 - SWS



view on web page

| #<br>Part   | _  | ····································· | Hose I.D. | Ą    |    | C    |     | W  | E    | 3  |
|-------------|----|---------------------------------------|-----------|------|----|------|-----|----|------|----|
| Number      |    | mm                                    | inch      | inch | mm | inch | mm  | mm | inch | mm |
| 1CA70-12-6  | 12 | M18x1,5                               | 3/8       | 2.09 | 53 | 0.04 | 1   | 22 | 0.94 | 24 |
| 1CA70-15-8  | 15 | M22x1,5                               | 1/2       | 2.09 | 62 | 0.07 | 2   | 22 | 0.94 | 27 |
| 1CA70-18-10 | 18 | M26x1,5                               | 5/8       | 2.44 | 62 | 0.02 | 0.5 | 32 | 1.02 | 26 |

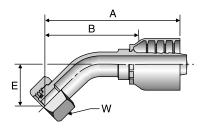
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 1CE70

#### Female Metric L - Swivel - 45° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE45

| #<br>Part   | Thread     | Hose I.D. | A    | ١  | E    |    | W  | E    | 3  |
|-------------|------------|-----------|------|----|------|----|----|------|----|
| Number      | mm         | inch      | inch | mm | inch | mm | mm | inch | mm |
| 1CE70-18-10 | 18 M26x1,5 | 5/8       | 3.58 | 91 | 0.98 | 25 | 32 | 2.05 | 52 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



В

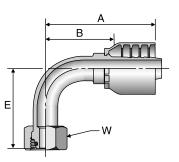
#### view on web page

# 1CF70

#### Female Metric L - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE

| #<br>Part |      |    | ······································ | Hose I.D. | Δ    | ١  | E    | <b>.</b> | $\bigcirc$ | Е    |    |
|-----------|------|----|----------------------------------------|-----------|------|----|------|----------|------------|------|----|
| Numbe     | er   |    | mm                                     | inch      | inch | mm | inch | mm       | mm         | inch | mm |
| 1CF70-15  | 5-8  | 15 | M22x1,5                                | 1/2       | 2.91 | 74 | 1.77 | 45       | 27         | 1.54 | 39 |
| 1CF70-18  | 3-10 | 18 | M26x1,5                                | 5/8       | 3.11 | 79 | 1.93 | 49       | 32         | 1.65 | 42 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



#### view on web page

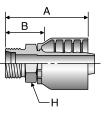
#### 1D270

# Male Metric S - Rigid - (24° Cone )

ISO 12151-2

| #           | ~  | ·····   |           |      |    | $\bigcirc$ |      |    |
|-------------|----|---------|-----------|------|----|------------|------|----|
| Part        | 1  | Thread  | Hose I.D. | l A  | A  |            | E    | 3  |
| Number      |    | mm      | inch      | inch | mm | mm         | inch | mm |
| 1D270-16-8  | 16 | M24x1,5 | 1/2       | 2.44 | 62 | 24         | 1.10 | 28 |
| 1D270-20-10 | 20 | M30x2   | 5/8       | 2.95 | 75 | 30         | 1.26 | 32 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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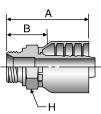
# 1D970

# Male BSP Parellel Pipe - Rigid - (60° Cone)

ISO 228-1

| #         |        |           |      |    |    |      |    |
|-----------|--------|-----------|------|----|----|------|----|
| Part      | Thread | Hose I.D. | P    | A  |    | E    | 3  |
| Number    | inch   | inch      | inch | mm | mm | inch | mm |
| 1D970-8-8 | 1/2x14 | 1/2       | 2.44 | 62 | 27 | 1.10 | 28 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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B-73

Notes

Α

В

C

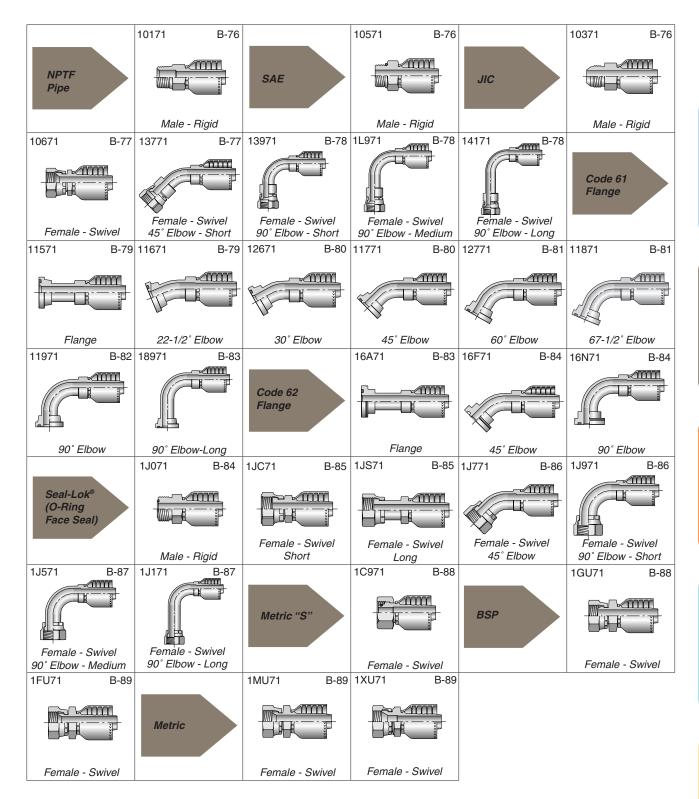
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Ē

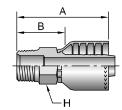
A

В

C



# 10171 Male NPTF Pipe - Rigid



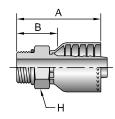
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В

| #<br>Part   |              | Hose I.D | A    |     | H       | E    | 3  |
|-------------|--------------|----------|------|-----|---------|------|----|
| Number      | inch         | inch     | inch | mm  | inch    | inch | mm |
| 10171-6-6   | 3/8x18       | 3/8      | 2.36 | 60  | 3/4     | 1.47 | 37 |
| 10171-8-8   | 1/2x14       | 1/2      | 2.82 | 72  | 7/8     | 1.63 | 41 |
| 10171-12-8  | 3/4x14       | 1/2      | 2.67 | 68  | 1-1/16  | 1.47 | 37 |
| 10171-12-12 | 3/4x14       | 3/4      | 3.08 | 78  | 1-1/16  | 1.71 | 43 |
| 10171-16-12 | 1x11-1/2     | 3/4      | 3.08 | 78  | 1-3/8   | 1.72 | 44 |
| 10171-16-16 | 1x11-1/2     | 1        | 3.63 | 92  | 1-3/8   | 2.04 | 52 |
| 10171-20-16 | 1-1/4x11-1/2 | 1        | 3.49 | 89  | 1-11/16 | 1.90 | 48 |
| 10171-20-20 | 1-1/4x11-1/2 | 1-1/4    | 4.06 | 103 | 1-3/4   | 2.39 | 61 |
| 10171-24-24 | 1-1/2x11-1/2 | 1-1/2    | 4.32 | 110 | 2       | 2.19 | 56 |
| 10171-32-32 | 2x11-1/2     | 2        | 4.72 | 118 | 2-1/2   | 2.52 | 64 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 10571 Male SAE Straight Thread with O-Ring - Rigid

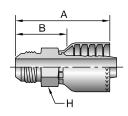


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| #<br>Part   |       | ·//··································· | Hose I.D. | <b>A</b> |    | $\bigcirc$ | E    | 3  |
|-------------|-------|----------------------------------------|-----------|----------|----|------------|------|----|
| Number      |       | inch                                   | inch      | inch     | mm | inch       | inch | mm |
| 10571-8-8   | 1/2   | 3/4x16                                 | 1/2       | 2.44     | 62 | 7/8        | 1.25 | 32 |
| 10571-12-12 | 3/4   | 1-1/16x12                              | 3/4       | 2.79     | 71 | 1-1/4      | 1.43 | 36 |
| 10571-16-16 | 1     | 1-5/16x12                              | 1         | 3.42     | 87 | 1-1/2      | 1.77 | 45 |
| 10571-20-20 | 1-1/4 | 1-5/8x12                               | 1-1/4     | 3.67     | 93 | 1-7/8      | 2.00 | 51 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 10371 Male JIC 37° - Rigid



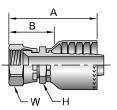
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| #           |        |           |           |      |     |       |      |    |
|-------------|--------|-----------|-----------|------|-----|-------|------|----|
| Part        | Thread |           | Hose I.D. | A    |     | Н     | E    | 3  |
| Number      |        | inch      | inch      | inch | mm  | inch  | inch | mm |
| 10371-6-6   | 3/8    | 9/16x18   | 3/8       | 2.44 | 62  | 3/4   | 1.55 | 39 |
| 10371-8-6   | 1/2    | 3/4x16    | 3/8       | 2.29 | 58  | 7/8   | 1.40 | 36 |
| 10371-8-8   | 1/2    | 3/4x16    | 1/2       | 2.66 | 68  | 7/8   | 1.41 | 36 |
| 10371-10-8  | 5/8    | 7/8x14    | 1/2       | 2.60 | 66  | 15/16 | 1.41 | 36 |
| 10371-10-10 | 5/8    | 7/8x14    | 5/8       | 2.93 | 74  | 15/16 | 1.69 | 43 |
| 10371-12-12 | 3/4    | 1-1/16x12 | 3/4       | 3.17 | 80  | 1-1/8 | 1.81 | 46 |
| 10371-14-12 | 7/8    | 1-3/16x12 | 3/4       | 3.09 | 78  | 1-1/4 | 1.73 | 44 |
| 10371-16-12 | 1      | 1-5/16x12 | 3/4       | 3.02 | 77  | 1-3/8 | 1.66 | 42 |
| 10371-16-16 | 1      | 1-5/16x12 | 1         | 3.68 | 93  | 1-3/8 | 2.03 | 52 |
| 10371-20-16 | 1-1/4  | 1-5/8x12  | 1         | 3.43 | 87  | 1-7/8 | 1.84 | 47 |
| 10371-20-20 | 1-1/4  | 1-5/8x12  | 1-1/4     | 3.94 | 100 | 1-7/8 | 2.27 | 58 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### Female JIC 37° - Swivel

| #<br>Part   | _     | ······································ | Hose I.D. | A    | \<br>\ | H      | $\bigcirc$ | В    |    | Additional<br>Material<br>Stainless |
|-------------|-------|----------------------------------------|-----------|------|--------|--------|------------|------|----|-------------------------------------|
| Number      |       | inch                                   | inch      | inch | mm     | inch   | inch       | inch | mm | Steel (C)                           |
| 10671-6-6   | 3/8   | 9/16x18                                | 3/8       | 2.28 | 58     | 11/16  | 11/16      | 1.39 | 35 |                                     |
| 10671-8-6   | 1/2   | 3/4x16                                 | 3/8       | 2.47 | 63     | 11/16  | 7/8        | 1.58 | 40 |                                     |
| 10671-8-8   | 1/2   | 3/4x16                                 | 1/2       | 2.61 | 66     | 13/16  | 7/8        | 1.41 | 36 |                                     |
| 10671-10-8  | 5/8   | 7/8x14                                 | 1/2       | 2.84 | 72     | 7/8    | 1          | 1.64 | 42 |                                     |
| 10671-10-10 | 5/8   | 7/8x14                                 | 5/8       | 2.83 | 72     | 15/16  | 1          | 1.58 | 40 |                                     |
| 10671-10-12 | 5/8   | 7/8x14                                 | 3/4       | 2.92 | 74     | 1-1/16 | 1          | 1.54 | 39 |                                     |
| 10671-12-8  | 3/4   | 1-1/16x12                              | 1/2       | 2.75 | 70     | 1-1/16 | 1-1/4      | 1.58 | 40 |                                     |
| 10671-12-12 | 3/4   | 1-1/16x12                              | 3/4       | 2.96 | 75     | 1-1/16 | 1-1/4      | 1.60 | 41 | •                                   |
| 10671-12-16 | 3/4   | 1-1/16x12                              | 1         | 3.37 | 86     | 1-3/8  | 1-1/4      | 1.67 | 42 |                                     |
| 10671-16-12 | 1     | 1-5/16x12                              | 3/4       | 3.28 | 83     | 1-1/4  | 1-1/2      | 1.92 | 49 |                                     |
| 10671-16-16 | 1     | 1-5/16x12                              | 1         | 3.60 | 91     | 1-3/8  | 1-1/2      | 2.01 | 51 | •                                   |
| 10671-20-16 | 1-1/4 | 1-5/8x12                               | 1         | 3.80 | 97     | 1-5/8  | 2          | 2.21 | 56 |                                     |
| 10671-20-20 | 1-1/4 | 1-5/8x12                               | 1-1/4     | 3.92 | 100    | 1-7/8  | 2          | 2.25 | 57 |                                     |
| 10671-24-20 | 1-1/2 | 1-7/8x12                               | 1-1/4     | 4.10 | 104    | 2-1/8  | 2-1/4      | 2.43 | 62 |                                     |
| 10671-24-24 | 1-1/2 | 1-7/8x12                               | 1-1/2     | 4.69 | 119    | 2-1/8  | 2-1/4      | 2.50 | 64 | •                                   |
| 10671-32-32 | 2     | 2-1/2x12                               | 2         | 5.39 | 137    | 2-1/2  | 2-7/8      | 3.19 | 81 | •                                   |



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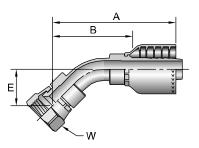
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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 13771

#### Female JIC 37° - Swivel - 45° Elbow - Short Drop

| #           | ~     | ·····     |           | A    |       |      | _  |       |      |      |
|-------------|-------|-----------|-----------|------|-------|------|----|-------|------|------|
| Part        | T     | hread     | Hose I.D. | A    |       | Ę    |    | W     | E    | 3    |
| Number      |       | inch      | inch      | inch | mm    | inch | mm | inch  | inch | mm   |
| 13771-6-6   | 3/8   | 9/16x18   | 3/8       | 2.34 | 59.0  | 0.43 | 11 | 11/16 | 1.44 | 37.0 |
| 13771-8-8   | 1/2   | 3/4x16    | 1/2       | 3.20 | 81.2  | 0.59 | 15 | 7/8   | 1.99 | 50.6 |
| 13771-10-8  | 5/8   | 7/8x14    | 1/2       | 2.93 | 74.0  | 0.63 | 16 | 1     | 1.72 | 44.0 |
| 13771-10-10 | 5/8   | 7/8x14    | 5/8       | 3.08 | 78.0  | 0.63 | 16 | 1     | 1.83 | 46.0 |
| 13771-12-12 | 3/4   | 1-1/16x12 | 3/4       | 3.64 | 92.0  | 0.83 | 21 | 1-1/4 | 2.26 | 57.0 |
| 13771-16-16 | 1     | 1-5/16x12 | 1         | 4.20 | 107.0 | 0.90 | 23 | 1-1/2 | 2.61 | 66.0 |
| 13771-20-20 | 1-1/4 | 1-5/8x12  | 1-1/4     | 5.22 | 133.0 | 1.69 | 43 | 2     | 3.53 | 90.0 |

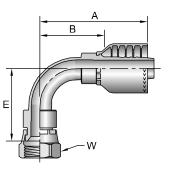


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**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Stainless steel fittings must be assembled with Karrykrimp 2, PHastkrimp, Superkrimp or Parkrimp 2. See CrimpSource for more information.

# 13971 Female JIC 37° - Swivel - 90° Elbow - Short Drop



view on web page

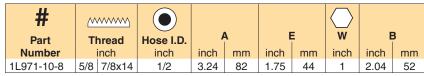
В

| #<br>Part   |       |           | Hose I.D. | A    | \   | E    |     | $\bigcirc$ | Е    | 3   |
|-------------|-------|-----------|-----------|------|-----|------|-----|------------|------|-----|
| Number      | inch  |           | inch      | inch | mm  | inch | mm  | inch       | inch | mm  |
| 13971-6-6   | 3/8   | 9/16x18   | 3/8       | 2.21 | 56  | 0.91 | 23  | 11/16      | 1.31 | 33  |
| 13971-8-8   | 1/2   | 3/4x16    | 1/2       | 2.62 | 67  | 1.14 | 29  | 7/8        | 1.41 | 36  |
| 13971-10-8  | 5/8   | 7/8x14    | 1/2       | 2.74 | 70  | 1.26 | 32  | 1          | 1.53 | 39  |
| 13971-10-10 | 5/8   | 7/8x14    | 5/8       | 2.88 | 73  | 1.26 | 32  | 1          | 1.63 | 41  |
| 13971-12-12 | 3/4   | 1-1/16x12 | 3/4       | 3.50 | 89  | 1.89 | 48  | 1-1/4      | 2.11 | 54  |
| 13971-16-16 | 1     | 1-5/16x12 | 1         | 4.36 | 111 | 2.20 | 56  | 1-1/2      | 2.58 | 66  |
| 13971-20-20 | 1-1/4 | 1-5/8x12  | 1-1/4     | 4.78 | 121 | 3.33 | 85  | 2          | 3.11 | 79  |
| 13971-24-24 | 1-1/2 | 1-7/8x12  | 1-1/2     | 6.33 | 161 | 3.98 | 101 | 2-1/4      | 4.14 | 105 |

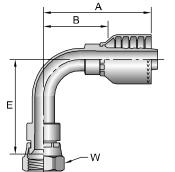
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 1L971

#### Female JIC 37° - Swivel - 90° Elbow - Medium Drop

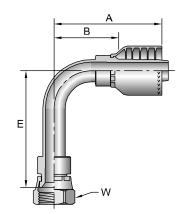


WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



# 14171

#### Female JIC 37° - Swivel - 90° Elbow - Long Drop



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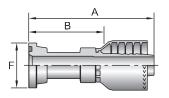
| #<br>Part   | _    | ····································· | Hose I.D. | A    | <b>\</b> | E    |     | W     | Е    | 3  |
|-------------|------|---------------------------------------|-----------|------|----------|------|-----|-------|------|----|
| Number      | inch |                                       | inch      | inch | mm       | inch | mm  | inch  | inch | mm |
| 14171-6-6   | 3/8  | 9/16x18                               | 3/8       | 2.34 | 59       | 2.13 | 54  | 11/16 | 1.44 | 37 |
| 14171-8-8   | 1/2  | 3/4x16                                | 1/2       | 2.58 | 66       | 2.52 | 64  | 7/8   | 1.37 | 35 |
| 14171-12-12 | 3/4  | 1-1/16x14                             | 3/4       | 3.49 | 89       | 3.78 | 96  | 1-1/4 | 2.11 | 54 |
| 14171-16-16 | 1    | 1-5/16x12                             | 1         | 4.36 | 111      | 4.32 | 110 | 1-1/2 | 2.58 | 66 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### **SAE Code 61 Flange Head**

ISO 12151-3 - S - L

| #           |        |           |      |          |         |      |      |
|-------------|--------|-----------|------|----------|---------|------|------|
| Part        | Flange | Hose I.D. | A    | <b>A</b> | F       | E    | 3    |
| Number      | inch   | inch      | inch | mm       | inch    | inch | mm   |
| 11571-8-8   | 1/2    | 1/2       | 3.48 | 88       | 1-3/16  | 2.27 | 58   |
| 11571-10-10 | 5/8    | 5/8       | 3.69 | 93,7     | 1-11/32 | 2.44 | 62,0 |
| 11571-12-8  | 3/4    | 1/2       | 2.46 | 62,5     | 1-1/2   | 1.26 | 32,0 |
| 11571-12-12 | 3/4    | 3/4       | 3.86 | 98       | 1-1/2   | 2.48 | 63   |
| 11571-16-12 | 1      | 3/4       | 2.74 | 70       | 1-3/4   | 1.36 | 35   |
| 11571-16-16 | 1      | 1         | 4.32 | 110      | 1-3/4   | 2.55 | 65   |
| 11571-20-12 | 1-1/4  | 3/4       | 3.90 | 99       | 2       | 2.54 | 65   |
| 11571-20-16 | 1-1/4  | 1         | 3.27 | 83       | 2       | 1.58 | 40   |
| 11571-20-20 | 1-1/4  | 1-1/4     | 4.70 | 119      | 2       | 3.01 | 76   |
| 11571-20-24 | 1-1/4  | 1-1/2     | 5.41 | 137      | 2       | 3.22 | 82   |
| 11571-24-16 | 1-1/2  | 1         | 3.41 | 86,6     | 2-3/8   | 1.63 | 41,4 |
| 11571-24-20 | 1-1/2  | 1-1/4     | 3.48 | 104      | 2-3/8   | 1.36 | 61   |
| 11571-24-24 | 1-1/2  | 1-1/2     | 5.46 | 139      | 2-3/8   | 3.27 | 83   |
| 11571-32-24 | 2      | 1-1/2     | 4.01 | 102      | 2-13/16 | 1.82 | 46   |
| 11571-32-32 | 2      | 2         | 5.65 | 144      | 2-13/16 | 3.45 | 88   |
| 11571-40-32 | 2-1/2  | 2         | 4.51 | 115      | 3-5/16  | 2.31 | 59   |



В

view on web page

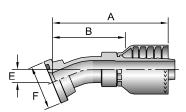
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 11671

# SAE Code 61 Flange Head - 22-1/2° Elbow

ISO 12151-3 - E22M - L

| #<br>Part   | Flange | Hose I.D. | A    |     | E    | <b>.</b> | F       | E    | 3   |
|-------------|--------|-----------|------|-----|------|----------|---------|------|-----|
| Number      | inch   | inch      | inch | mm  | inch | mm       | inch    | inch | mm  |
| 11671-12-12 | 3/4    | 3/4       | 3.90 | 99  | 0.44 | 11       | 1-1/2   | 2.54 | 65  |
| 11671-16-12 | 1      | 3/4       | 3.89 | 99  | 0.44 | 11       | 1-3/4   | 2.53 | 64  |
| 11671-16-16 | 1      | 1         | 4.26 | 108 | 0.44 | 11       | 1-3/4   | 2.67 | 68  |
| 11671-20-20 | 1-1/4  | 1-1/4     | 4.67 | 119 | 0.50 | 13       | 2       | 3.00 | 76  |
| 11671-24-20 | 1-1/2  | 1-1/4     | 4.68 | 119 | 0.53 | 13       | 2-3/8   | 3.01 | 76  |
| 11671-24-24 | 1-1/2  | 1-1/2     | 5.88 | 149 | 0.63 | 16       | 2-3/8   | 3.69 | 94  |
| 11671-32-32 | 2      | 2         | 7.37 | 187 | 0.88 | 22       | 2-13/16 | 5.22 | 133 |

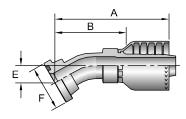


view on web page

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### SAE Code 61 Flange Head - 30° Elbow

ISO 12151-3 - E30S - L (1 Piece: ISO 12151-3 - E30M - L)



В

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|------|----|-----|------|

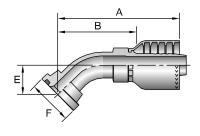
| #<br>Part   | Flange | Hose I.D. | A    | <b>\</b> | E    |    | Ø<br>F  | E    | 3   |
|-------------|--------|-----------|------|----------|------|----|---------|------|-----|
| Number      | inch   | inch      | inch | mm       | inch | mm | inch    | inch | mm  |
| 12671-16-16 | 1      | 1         | 4.46 | 113      | 0.62 | 16 | 1-3/4   | 2.68 | 68  |
| 12671-24-24 | 1-1/2  | 1-1/2     | 6.01 | 153      | 0.88 | 22 | 2-3/8   | 3.82 | 97  |
| 12671-32-32 | 2      | 2         | 7.60 | 193      | 1.25 | 32 | 2-13/16 | 5.40 | 137 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 11771

# SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3 - E45S - L (1 Piece: ISO 12151-3 - E45M - L)



view on web page

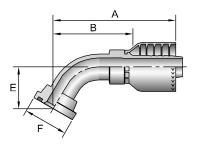
| #           |        |           |      |     | _    |    | $\emptyset$ |      |     |
|-------------|--------|-----------|------|-----|------|----|-------------|------|-----|
| Part        | Flange | Hose I.D. | Ą    |     | Ę    |    | F           | E    | 3   |
| Number      | inch   | inch      | inch | mm  | inch | mm | inch        | inch | mm  |
| 11771-12-8  | 3/4    | 1/2       | 3.27 | 83  | 0.84 | 21 | 1-1/2       | 2.07 | 53  |
| 11771-12-12 | 3/4    | 3/4       | 3.85 | 98  | 1.02 | 26 | 1-1/2       | 2.47 | 63  |
| 11771-16-12 | 1      | 3/4       | 3.85 | 98  | 1.02 | 26 | 1-3/4       | 2.47 | 63  |
| 11771-16-16 | 1      | 1         | 4.84 | 123 | 1.26 | 32 | 1-3/4       | 3.06 | 78  |
| 11771-20-16 | 1-1/4  | 1         | 4.84 | 123 | 1.02 | 26 | 2           | 3.06 | 78  |
| 11771-20-20 | 1-1/4  | 1-1/4     | 5.61 | 142 | 1.50 | 38 | 2           | 3.92 | 100 |
| 11771-24-20 | 1-1/2  | 1-1/4     | 5.55 | 141 | 1.50 | 38 | 2-3/8       | 3.86 | 98  |
| 11771-24-24 | 1-1/2  | 1-1/2     | 6.22 | 158 | 1.41 | 36 | 2-3/8       | 4.03 | 102 |
| 11771-32-24 | 2      | 1-1/2     | 6.19 | 157 | 1.41 | 36 | 2-13/16     | 4.00 | 102 |
| 11771-32-32 | 2      | 2         | 7.94 | 202 | 2.03 | 52 | 2-13/16     | 5.74 | 146 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### SAE Code 61 Flange Head - 60° Elbow

ISO 12151-3 - E60S - L (1 Piece: ISO 12151-3 - E60M - L)

| #<br>Part   | Flange | Hose I.D. | Д    |     | E    |    | Ø<br>F  | E    | 3   |
|-------------|--------|-----------|------|-----|------|----|---------|------|-----|
| Number      | inch   | inch      | inch | mm  | inch | mm | inch    | inch | mm  |
| 12771-12-12 | 3/4    | 3/4       | 4.16 | 106 | 1.43 | 36 | 1-1/2   | 2.78 | 71  |
| 12771-16-16 | 1      | 1         | 4.74 | 120 | 1.49 | 38 | 1-3/4   | 3.36 | 85  |
| 12771-20-20 | 1-1/4  | 1-1/4     | 5.10 | 130 | 1.69 | 43 | 2       | 3.41 | 87  |
| 12771-24-24 | 1-1/2  | 1-1/2     | 6.25 | 159 | 2.03 | 52 | 2-3/8   | 4.06 | 103 |
| 12771-32-32 | 2      | 2         | 7.93 | 201 | 2.88 | 73 | 2-13/16 | 5.73 | 146 |



view on web page

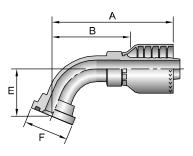
#### 11871

#### SAE Code 61 Flange Head - 67-1/2° Elbow

ISO 12151-3 - E67S - L (1 Piece: ISO 12151-3 - E67M - L)

| #<br>Part   | Flange | Hose I.D. | Ą    |     | Ę    |    | A E F   |      | E   | 3 |
|-------------|--------|-----------|------|-----|------|----|---------|------|-----|---|
| Number      | inch   | inch      | inch | mm  | inch | mm | inch    | inch | mm  |   |
| 11871-12-12 | 3/4    | 3/4       | 4.12 | 105 | 1.62 | 41 | 1-1/2   | 2.74 | 70  |   |
| 11871-16-16 | 1      | 1         | 4.76 | 121 | 1.75 | 44 | 1-3/4   | 2.98 | 76  |   |
| 11871-24-20 | 1-1/2  | 1-1/4     | 5.07 | 129 | 1.95 | 50 | 2-3/8   | 3.38 | 86  |   |
| 11871-24-24 | 1-1/2  | 1-1/2     | 6.20 | 157 | 2.31 | 59 | 2-3/8   | 4.01 | 102 |   |
| 11871-32-32 | 2      | 2         | 7.89 | 200 | 3.31 | 84 | 2-13/16 | 5.69 | 145 |   |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



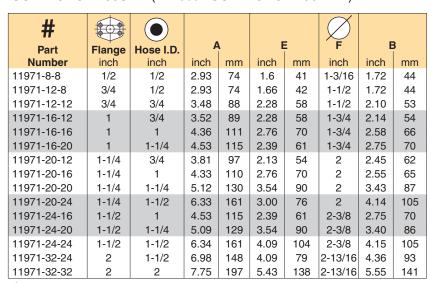
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(E

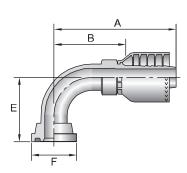
В

# SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - L)



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



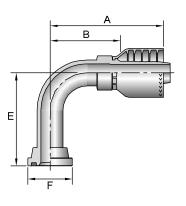
В

view on web page

# 18971 SAE Code 61 Flange Head - 90° Elbow - Long Drop

| #<br>Part   | Flange | Hose I.D. | A    | <b>\</b> | E    | <b>.</b> | F     | E    | 3  |
|-------------|--------|-----------|------|----------|------|----------|-------|------|----|
| Number      | inch   | inch      | inch | mm       | inch | mm       | inch  | inch | mm |
| 18971-12-12 | 3/4    | 3/4       | 3.49 | 89       | 3.03 | 77       | 1-1/2 | 2.11 | 54 |
| 18971-16-16 | 1      | 1         | 4.52 | 115      | 4.60 | 117      | 1-3/4 | 2.74 | 70 |
| 18971-20-16 | 1-1/4  | 1         | 4.53 | 115      | 4.60 | 117      | 2     | 2.75 | 70 |

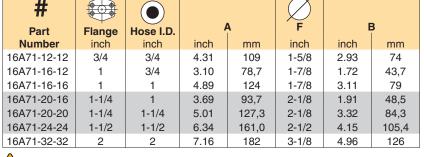
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

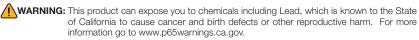


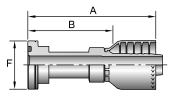
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# 16A71 SAE Code 62 Flange Head ISO 12151-3 - S - S

| #<br>Part   | Flange | Hose I.D. |      | ١     | Ø     | E    | 3     |
|-------------|--------|-----------|------|-------|-------|------|-------|
| Number      | inch   | inch      | inch | mm    | inch  | inch | mm    |
| 16A71-12-12 | 3/4    | 3/4       | 4.31 | 109   | 1-5/8 | 2.93 | 74    |
| 16A71-16-12 | 1      | 3/4       | 3.10 | 78,7  | 1-7/8 | 1.72 | 43,7  |
| 16A71-16-16 | 1      | 1         | 4.89 | 124   | 1-7/8 | 3.11 | 79    |
| 16A71-20-16 | 1-1/4  | 1         | 3.69 | 93,7  | 2-1/8 | 1.91 | 48,5  |
| 16A71-20-20 | 1-1/4  | 1-1/4     | 5.01 | 127,3 | 2-1/8 | 3.32 | 84,3  |
| 16A71-24-24 | 1-1/2  | 1-1/2     | 6.34 | 161,0 | 2-1/2 | 4.15 | 105,4 |
| 16A71-32-32 | 2      | 2         | 7.16 | 182   | 3-1/8 | 4.96 | 126   |







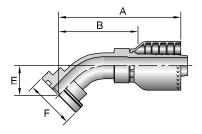
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71 Series Fittings Catalog 4400 US Use with hoses: 722TC, 774

#### 16F71

#### SAE Code 62 Flange Head - 45° Elbow

ISO 12151-3 - E45S - L (1 Piece: ISO 12151-3 - E45M - S)



B

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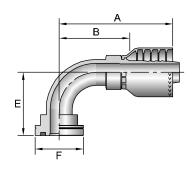
| #<br>Part   | Flange | Hose I.D. |      | A     | E    |    | F     | E    | 3    |
|-------------|--------|-----------|------|-------|------|----|-------|------|------|
| Number      | inch   | inch      | inch | mm    | inch | mm | inch  | inch | mm   |
| 16F71-12-12 | 3/4    | 3/4       | 3.82 | 97    | 1.03 | 26 | 1-5/8 | 2.44 | 62   |
| 16F71-16-16 | 1      | 1         | 4.74 | 120,3 | 1.26 | 32 | 1-7/8 | 2.96 | 75,2 |
| 16F71-20-16 | 1-1/4  | 1         | 4.61 | 117   | 1.06 | 27 | 2-1/8 | 3.02 | 77   |
| 16F71-20-20 | 1-1/4  | 1-1/4     | 5.07 | 129   | 1.19 | 30 | 2-1/8 | 3.38 | 86   |
| 16F71-24-24 | 1-1/2  | 1-1/2     | 6.21 | 158   | 1.44 | 37 | 2-1/2 | 4.02 | 102  |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### 16N71

#### SAE Code 62 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - S)



view on web page

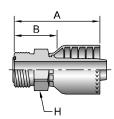
| #<br>Part  | Flanc      | Hose I.D. |      | A   |      | Ē   | F     | E    | 3   |
|------------|------------|-----------|------|-----|------|-----|-------|------|-----|
| Number     |            |           | inch | mm  | inch | mm  | inch  | inch | mm  |
| 16N71-12-  | 12 3/4     | 3/4       | 3.51 | 89  | 2.28 | 58  | 1-5/8 | 2.13 | 54  |
| 16N71-16-  | 12 1       | 3/4       | 3.49 | 89  | 2.29 | 58  | 1-7/8 | 2.11 | 54  |
| 16N71-16-  | 16 1       | 1         | 4.36 | 111 | 2.76 | 70  | 1-7/8 | 2.58 | 66  |
| 16N71-20-  | 1-1/4      | 1 1       | 4.36 | 111 | 2.76 | 70  | 2-1/8 | 2.58 | 66  |
| 16N71-20-2 | 20   1-1/4 | 1-1/4     | 5.09 | 129 | 3.54 | 90  | 2-1/8 | 3.40 | 86  |
| 16N71-24-2 | 24   1-1/2 | 2 1-1/2   | 6.73 | 171 | 4.09 | 104 | 2-1/2 | 4.54 | 115 |
| 16N71-32-3 | 32 2       | 2         | 7.73 | 196 | 4.50 | 114 | 3-1/8 | 5.53 | 140 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 1J071

# Male Seal-Lok® - Rigid - (with O-Ring)

SAE J516 (Apr2016)



view on web page

| #           | _     | ······     |           | ,    |    | $\bigcirc$ |      | 3  |
|-------------|-------|------------|-----------|------|----|------------|------|----|
| Part        |       | Thread     | Hose I.D. |      | 1  |            |      |    |
| Number      |       | inch       | inch      | inch | mm | inch       | inch | mm |
| 1J071-8-8   | 1/2   | 13/16x16   | 1/2       | 2.40 | 61 | 7/8        | 1.20 | 30 |
| 1J071-10-8  | 5/8   | 1x14       | 1/2       | 2.61 | 66 | 1-1/16     | 1.41 | 36 |
| 1J071-10-10 | 5/8   | 1x14       | 5/8       | 2.69 | 68 | 1-1/16     | 1.44 | 37 |
| 1J071-12-10 | 3/4   | 1-3/16x12  | 5/8       | 2.79 | 71 | 1-1/4      | 1.55 | 39 |
| 1J071-12-12 | 3/4   | 1-3/16x12  | 3/4       | 2.87 | 73 | 1-1/4      | 1.51 | 38 |
| 1J071-16-12 | 1     | 1-7/16x12  | 3/4       | 2.91 | 74 | 1-1/2      | 1.53 | 39 |
| 1J071-16-16 | 1     | 1-7/16x12  | 1         | 3.27 | 83 | 1-1/2      | 1.68 | 43 |
| 1J071-20-20 | 1-1/4 | 1-11/16x12 | 1-1/4     | 3.31 | 84 | 1-3/4      | 1.64 | 42 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings.



Refer to Pressure Rating of Hose End Connections Chart on page E-47. B-84

# **1JC71**

#### Female Seal-Lok® - Swivel - Short

ISO 12151-1 - SWSA

| #<br>Part   |       |            | Hose I.D. | Α    | <u>.</u> | C    | ;  | Н     | $\bigcirc$ | E    | 3  |
|-------------|-------|------------|-----------|------|----------|------|----|-------|------------|------|----|
| Number      |       | inch       | inch      | inch | mm       | inch | mm | inch  | inch       | inch | mm |
| 1JC71-8-8   | 1/2   | 13/16x16   | 1/2       | 2.22 | 56       | 0.43 | 11 | 13/16 | 15/16      | 1.01 | 26 |
| 1JC71-10-10 | 5/8   | 1x14       | 5/8       | 2.40 | 61       | 0.48 | 12 | 15/16 | 1-1/8      | 1.15 | 29 |
| 1JC71-12-12 | 3/4   | 1-3/16x12  | 3/4       | 2.68 | 68       | 0.55 | 14 | 1-1/8 | 1-3/8      | 1.30 | 33 |
| 1JC71-16-16 | 1     | 1-7/16x12  | 1         | 3.22 | 82       | 0.56 | 14 | 1-3/8 | 1-5/8      | 1.44 | 37 |
| 1JC71-20-16 | 1-1/4 | 1-11/16x12 | 1         | 3.16 | 80       | 0.59 | 15 | 1-5/8 | 1-7/8      | 1.38 | 35 |

view on web page

В

When measuring overall length to end of nut, B+C dimensions must be used to calculate cut-off

See Accessories Section for O-Rings and Flange Kits.

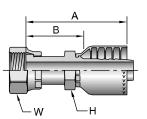
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **1JS71**

#### Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

| #           | ٥     | ·····      |           |      |       | $\bigcirc$ |       |      |      |
|-------------|-------|------------|-----------|------|-------|------------|-------|------|------|
| Part        | -     | Thread     | Hose I.D. | A    |       | Н          | W     | E    | 3    |
| Number      |       | inch       | inch      | inch | mm    | inch       | inch  | inch | mm   |
| 1JS71-6-6   | 3/8   | 11/16x16   | 3/8       | 2.80 | 58    | 11/16      | 13/16 | 1.38 | 35   |
| 1JS71-6-8   | 3/8   | 11/16x16   | 1/2       | 2.50 | 64    | 13/16      | 13/16 | 1.29 | 33   |
| 1JS71-8-8   | 1/2   | 13/16x16   | 1/2       | 2.64 | 67    | 13/16      | 15/16 | 1.44 | 37   |
| 1JS71-10-8  | 5/8   | 1x14       | 1/2       | 2.89 | 23    | 13/16      | 1-1/8 | 1.69 | 43   |
| 1JS71-10-10 | 5/8   | 1x14       | 5/8       | 3.00 | 76    | 15/16      | 1-1/8 | 1.75 | 44   |
| 1JS71-10-12 | 5/8   | 1x14       | 3/4       | 3.08 | 78    | 1-1/16     | 1-1/8 | 1.70 | 43   |
| 1JS71-12-10 | 3/4   | 1-3/16x12  | 5/8       | 3.10 | 79    | 1-1/8      | 1-3/8 | 1.85 | 47   |
| 1JS71-12-12 | 3/4   | 1-3/16x12  | 3/4       | 3.31 | 84    | 1-1/16     | 1-3/8 | 1.93 | 49   |
| 1JS71-16-12 | 1     | 1-7/16x12  | 3/4       | 3.37 | 86    | 1-5/16     | 1-5/8 | 1.99 | 51   |
| 1JS71-16-16 | 1     | 1-7/16x12  | 1         | 3.70 | 94    | 1-5/16     | 1-5/8 | 1.92 | 49   |
| 1JS71-20-16 | 1-1/4 | 1-11/16x12 | 1         | 3.64 | 92    | 1-3/4      | 1-7/8 | 1.94 | 49   |
| 1JS71-20-20 | 1-1/4 | 1-11/16x12 | 1-1/4     | 3.77 | 96    | 1-3/4      | 1-7/8 | 2.08 | 53   |
| 1JS71-24-24 | 1-1/2 | 2x12       | 1-1/2     | 4.51 | 114,6 | 2          | 2-1/4 | 2.32 | 58,9 |



view on web page

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings.



1 Refer to Pressure Rating of Hose End Connections Chart on page E-47.

# 1J771 Female Seal-Lok® - Swivel - 45° Elbow ISO 12151-1 - SWE45

B

В

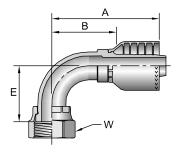
view on web page

| #<br>Part   | _     |            |       | ). A |       | . E  |    | $\bigcirc$ | E    | 3    |
|-------------|-------|------------|-------|------|-------|------|----|------------|------|------|
| Number      |       | inch       | inch  | inch | mm    | inch | mm | inch       | inch | mm   |
| 1J771-6-6   | 3/8   | 11/16x16   | 3/8   | 2.34 | 59.0  | 0.43 | 11 | 13/16      | 1.44 | 37.0 |
| 1J771-8-8   | 1/2   | 13/16x16   | 1/2   | 3.20 | 81.2  | 0.59 | 15 | 15/16      | 1.99 | 50.6 |
| 1J771-10-8  | 5/8   | 1x14       | 1/2   | 2.93 | 74.0  | 0.63 | 16 | 1-1/8      | 1.72 | 44.0 |
| 1J771-10-10 | 5/8   | 1x14       | 5/8   | 3.08 | 78.0  | 0.63 | 16 | 1-1/8      | 1.83 | 46.0 |
| 1J771-12-12 | 3/4   | 1-3/16x12  | 3/4   | 3.63 | 92.0  | 0.83 | 21 | 1-3/8      | 2.25 | 57.0 |
| 1J771-16-16 | 1     | 1-7/16x12  | 1     | 4.46 | 113.0 | 0.94 | 24 | 1-5/8      | 2.68 | 68.0 |
| 1J771-20-20 | 1-1/4 | 1-11/16x12 | 1-1/4 | 4.75 | 121.0 | 1.00 | 25 | 1-7/8      | 3.08 | 78.0 |
| 1J771-24-24 | 1-1/2 | 2x12       | 1-1/2 | 5.43 | 138.0 | 1.07 | 27 | 2-1/4      | 3.23 | 82.0 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 1J971

Female Seal-Lok® - Swivel - 90° Elbow - Short Drop ISO 12151-1 - SWES90



view on web page

| #           |       |            | Hage I D  |      | E   |      | $\bigcirc$ | F     | ,    |     |
|-------------|-------|------------|-----------|------|-----|------|------------|-------|------|-----|
| Part        | 1     | hread      | Hose I.D. |      |     |      | Ī          |       |      |     |
| Number      |       | inch       | inch      | inch | mm  | inch | mm         | inch  | inch | mm  |
| 1J971-6-6   | 3/8   | 11/16x16   | 3/8       | 2.21 | 56  | 0.91 | 23         | 13/16 | 1.31 | 33  |
| 1J971-8-8   | 1/2   | 13/16x16   | 1/2       | 2.59 | 66  | 1.14 | 29         | 15/16 | 1.38 | 35  |
| 1J971-10-8  | 5/8   | 1x14       | 1/2       | 2.74 | 70  | 1.26 | 32         | 1-1/8 | 1.53 | 39  |
| 1J971-10-10 | 5/8   | 1x14       | 5/8       | 2.88 | 73  | 1.26 | 32         | 1-1/8 | 1.63 | 41  |
| 1J971-10-12 | 5/8   | 1x14       | 3/4       | 3.07 | 78  | 1.27 | 32         | 1-1/8 | 1.70 | 43  |
| 1J971-12-10 | 3/4   | 1-3/16x12  | 5/8       | 3.40 | 86  | 1.89 | 48         | 1-3/8 | 2.15 | 55  |
| 1J971-12-12 | 3/4   | 1-3/16x12  | 3/4       | 3.49 | 89  | 1.89 | 48         | 1-3/8 | 2.11 | 54  |
| 1J971-16-16 | 1     | 1-7/16x12  | 1         | 4.36 | 111 | 2.20 | 56         | 1-5/8 | 2.58 | 66  |
| 1J971-20-20 | 1-1/4 | 1-11/16x12 | 1-1/4     | 4.86 | 123 | 2.51 | 64         | 1-7/8 | 3.19 | 81  |
| 1J971-24-24 | 1-1/2 | 2x12       | 1-1/2     | 6.22 | 158 | 2.68 | 68         | 2-1/4 | 4.03 | 102 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

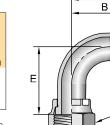
See Accessories Section for O-Rings.

# 1J571

# Female Seal-Lok $^{\mbox{\tiny 8}}$ - Swivel - 90 $^{\circ}$ Elbow - Medium Drop

ISO 12151-1 - SWEM90

| #<br>Part   |     |           | Hose I.D. | Ą    |    | Ę    |    | $\bigcirc$ | В    | 3  |
|-------------|-----|-----------|-----------|------|----|------|----|------------|------|----|
| Number      |     | inch      | inch      | inch | mm | inch | mm | inch       | inch | mm |
| 1J571-8-8   | 1/2 | 13/16x16  | 1/2       | 2.59 | 66 | 1.61 | 41 | 15/16      | 1.38 | 35 |
| 1J571-10-10 | 5/8 | 1x14      | 5/8       | 2.88 | 73 | 1.85 | 47 | 1-1/8      | 1.63 | 41 |
| 1J571-12-12 | 3/4 | 1-3/16x12 | 3/4       | 3.49 | 89 | 2.28 | 58 | 1-3/8      | 2.11 | 54 |



**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

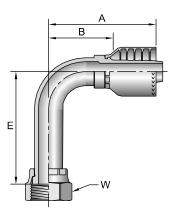
view on web page

# 1J171

# Female Seal-Lok® - Swivel - 90° Elbow - Long Drop

ISO 12151-1 - SWEL90

| #<br>Part   | _   | ····································· | Hose I.D. | A    |     | Ę    |     | $\bigcirc$ | Е    | 3  |
|-------------|-----|---------------------------------------|-----------|------|-----|------|-----|------------|------|----|
| Number      |     | inch                                  | inch      | inch | mm  | inch | mm  | inch       | inch | mm |
| 1J171-6-6   | 3/8 | 11/16x16                              | 3/8       | 2.39 | 61  | 2.13 | 54  | 13/16      | 1.49 | 38 |
| 1J171-8-8   | 1/2 | 13/16x16                              | 1/2       | 2.59 | 66  | 2.52 | 64  | 15/16      | 1.38 | 35 |
| 1J171-10-10 | 5/8 | 1x14                                  | 5/8       | 2.88 | 73  | 2.76 | 70  | 1-1/8      | 1.63 | 41 |
| 1J171-12-12 | 3/4 | 1-3/16x12                             | 3/4       | 3.49 | 89  | 3.78 | 96  | 1-3/8      | 2.11 | 54 |
| 1J171-16-12 | 1   | 1-7/16x12                             | 3/4       | 4.07 | 103 | 4.50 | 114 | 1-5/8      | 2.69 | 68 |
| 1J171-16-16 | 1   | 1-7/16x12                             | 1         | 4.36 | 111 | 4.49 | 114 | 1-5/8      | 2.58 | 66 |



**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

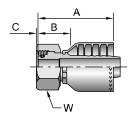
view on web page

E

# 1C971

# Female Metric S - Swivel - (24° Cone with O-Ring)

ISO 12151-2 - SWS - S



| :<br>F | #<br>Part |    | ····································· | Hose I.D. | A    | <b>A</b> | (    | ;  | $\bigcirc$ | E    | 3  |
|--------|-----------|----|---------------------------------------|-----------|------|----------|------|----|------------|------|----|
| Nu     | mber      |    | mm                                    | inch      | inch | mm       | inch | mm | mm         | inch | mm |
| 1C971  | I-16-8    | 16 | M24x1,5                               | 1/2       | 2.33 | 59       | 0.09 | 2  | 30         | 0.94 | 24 |
| 1C971  | I-30-16   | 30 | M42x2                                 | 1         | 3.07 | 78       | 0.19 | 5  | 50         | 1.30 | 33 |

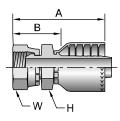
When measuring overall length to end of nut, B+C dimensions must be used to calculate cut-off allowance.

view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 1GU71

# Female BSP Parallel Pipe - Swivel - (60° Cone)



| view | on | web | page |
|------|----|-----|------|

| #<br>Part   | _     | //////hread | Hose I.D. | ,    | 4   | H  | $\bigcirc$ | E    | 3  |
|-------------|-------|-------------|-----------|------|-----|----|------------|------|----|
| Number      |       | inch        | inch      | inch | mm  | mm | mm         | inch | mm |
| 1GU71-8-8   | 1/2   | 1/2x14      | 1/2       | 2.81 | 71  | 27 | 27         | 1.61 | 41 |
| 1GU71-12-12 | 3/4   | 3/4x14      | 3/4       | 3.24 | 82  | 36 | 36         | 1.86 | 47 |
| 1GU71-16-16 | 1     | 1x11        | 1         | 3.82 | 97  | 41 | 41         | 2.04 | 52 |
| 1GU71-20-20 | 1-1/4 | 1-1/4x11    | 1-1/4     | 4.07 | 103 | 50 | 50         | 2.38 | 60 |
| 1GU71-32-32 | 2     | 2x11        | 2         | 5.17 | 131 | 70 | 70         | 2.97 | 75 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

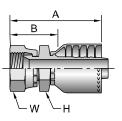
Metric S: Mates with EO "S" Series Fittings. ^ Must be assembled with Die Part No. 83C-D20H in a Superkrimp or Parkrimp 2. See Accessories Section for O-Rings and Flange Kits.

# 1FU71

#### Female BSP Parallel Pipe - Swivel - (30° Flare)

| #<br>Part   |          | Hose I.D. | <b>A</b> |    | H  | $\bigcirc$ | В    |    |
|-------------|----------|-----------|----------|----|----|------------|------|----|
| Number      | inch     | inch      | inch     | mm | mm | mm         | inch | mm |
| 1FU71-12-12 | 3/4x14   | 3/4       | 3.10     | 79 | 36 | 36         | 1.74 | 44 |
| 1FU71-16-16 | 1x11     | 1         | 3.52     | 89 | 41 | 41         | 1.95 | 49 |
| 1FU71-20-20 | 1-1/4x11 | 1-1/4     | 3.87     | 98 | 50 | 50         | 2.20 | 56 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

# 1MU71

#### Female Metric - Swivel - (30° Flare)

| #<br>Part |         | Hose I.D. | A    |    | H  | $\bigcirc$ | E    | 3  |
|-----------|---------|-----------|------|----|----|------------|------|----|
| Number    | mm      | inch      | inch | mm | mm | mm         | inch | mm |
| 1MU71-6-6 | M18x1,5 | 3/8       | 2.45 | 62 | 24 | 24         | 1.56 | 40 |
| 1MU71-8-8 | M22x1,5 | 1/2       | 2.83 | 72 | 27 | 27         | 1.45 | 37 |

Japanese Fittings - Female Swivel 30° Flare with Metric Threads. All 30° flared fitting sizes are available by combining 1MU71 fittings in sizes up to 1/2 with 1XU71 fittings in sizes 5/8 inch and larger.



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

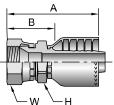
# 1XU71

#### Female Metric - Swivel - (30° Flare)

| #<br>Part   |         | Hose I.D. | 1    | <b>A</b> | H  | $\bigcirc$ | E    | 3  |
|-------------|---------|-----------|------|----------|----|------------|------|----|
| Number      | mm      | inch      | inch | mm       | mm | mm         | inch | mm |
| 1XU71-10-10 | M24x1,5 | 5/8       | 3.16 | 80       | 30 | 32         | 1.91 | 49 |
| 1XU71-12-12 | M30x1,5 | 3/4       | 3.40 | 86       | 32 | 36         | 2.02 | 51 |
| 1XU71-16-16 | M33x1,5 | 1         | 4.11 | 104      | 36 | 41         | 2.33 | 59 |

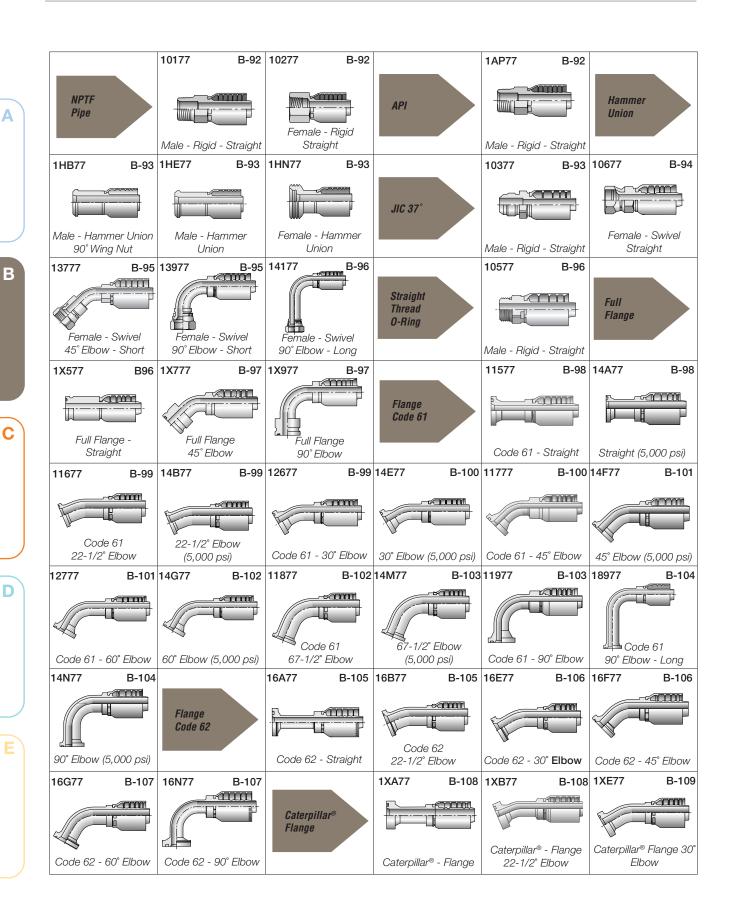
Japanese Fittings - Female Swivel 30° Flare with Metric Threads. All 30° flared fitting sizes are available by combining 1MU71 fittings in sizes up to 1/2 with 1XU71 fittings in sizes 5/8 inch and

information go to www.p65warnings.ca.gov.



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more







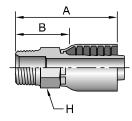




В

#### 10177

# Male NPTF Pipe - Rigid



view on web page

| #<br>Part    | Thread       | Hose I.D. | A    |       | H  | В    |      | Additional<br>Material<br>Stainless |
|--------------|--------------|-----------|------|-------|----|------|------|-------------------------------------|
| Number       | inch         | inch      | inch | mm    | mm | inch | mm   | Steel (C)                           |
| 10177-6-8    | 3/8x18       | 1/2       | 2.51 | 63,9  | 22 | 1.29 | 32,9 |                                     |
| 10177-8-8    | 1/2x14       | 1/2       | 2.72 | 69,2  | 22 | 1.50 | 38,2 | •                                   |
| 10177-8-12   | 1/2x14       | 3/4       | 3.43 | 87,1  | 30 | 1.79 | 45,5 |                                     |
| 10177-12-12  | 3/4x14       | 3/4       | 3.43 | 87,1  | 30 | 1.79 | 45,5 | •                                   |
| 10177-16-16  | 1x11-1/2     | 1         | 4.04 | 102,6 | 36 | 2.09 | 53,1 | •                                   |
| 10177-20-16  | 1-1/4x11-1/2 | 1         | 4.34 | 110,2 | 46 | 2.39 | 60,7 |                                     |
| 10177-20-20  | 1-1/4x11-1/2 | 1-1/4     | 4.57 | 116,1 | 46 | 2.30 | 58,4 | •                                   |
| 10177-24-20  | 1-1/2x11-1/2 | 1-1/4     | 4.76 | 120,9 | 50 | 2.49 | 63,2 |                                     |
| 10177-24-24  | 1-1/2x11-1/2 | 1-1/2     | 4.89 | 124,2 | 50 | 2.50 | 63,5 | •                                   |
| 10177-32-32* | 2x11-1/2     | 2         | 5.64 | 143,1 | 65 | 2.88 | 73,2 | •                                   |

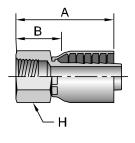
<sup>\*</sup>This specific size in stainless is not able to be crimped in any Parkrimp machine.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 10277

#### Female NPTF Pipe - Rigid



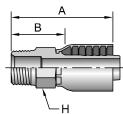
| #           |        |           |      |      |    | _    |      |
|-------------|--------|-----------|------|------|----|------|------|
| Part        | Thread | Hose I.D. | A    |      | н  | В    |      |
| Number      | inch   | inch      | inch | mm   | mm | inch | mm   |
| 10277-12-12 | 3/4x14 | 3/4       | 3.09 | 78,4 | 32 | 1.45 | 36,9 |
| l           |        |           |      | ,    |    |      | .,-  |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### view on web page

# **1AP77**

# Male API Pipe - Rigid



| 1 |
|---|

view on web page

| #<br>Part   | Thread       | Hose I.D. | ,    | <b>A</b> | H  | E    | 3    |
|-------------|--------------|-----------|------|----------|----|------|------|
| Number      | inch         | inch      | inch | mm       | mm | inch | mm   |
| 1AP77-24-24 | 1-1/2x11-1/2 | 1-1/2     | 5.16 | 131,1    | 50 | 2.77 | 70,4 |
| 1AP77-32-24 | 2x11-1/2     | 1-1/2     | 5.71 | 145,0    | 65 | 3.32 | 84,4 |
| 1AP77-32-32 | 2x11-1/2     | 2         | 6.32 | 160,4    | 65 | 3.56 | 90,4 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.



Refer to Pressure Rating of Hose End Connections Chart on page E-47.

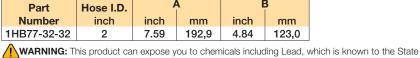
of California to cause cancer and birth defects or other reproductive harm. For more

# 1HB77

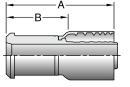
#### Male Hammer Union - 90° Wing Nut

FIG 1502

| #           |           |      |       | В    |       |  |  |
|-------------|-----------|------|-------|------|-------|--|--|
| Part        | Hose I.D. |      | 4     | E    | В     |  |  |
| Number      | inch      | inch | mm    | inch | mm    |  |  |
| 1HB77-32-32 | 2         | 7.59 | 192,9 | 4.84 | 123,0 |  |  |



information go to www.p65warnings.ca.gov.



view on web page

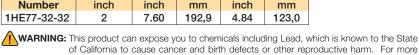
# 1HE77

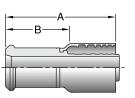
#### **Male Hammer Union**

FIG 1502

| #<br>Part   | Hose I.D. | ,    | Α.    | В    |       |  |
|-------------|-----------|------|-------|------|-------|--|
| Number      | inch      | inch | mm    | inch | mm    |  |
| 1HE77-32-32 | 2         | 7.60 | 192,9 | 4.84 | 123,0 |  |

information go to www.p65warnings.ca.gov.





В

view on web page

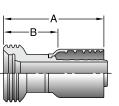
#### 1HN77

#### **Female Hammer Union**

FIG 1502

| #           | <u> </u> |           |      |       |      |       |  |
|-------------|----------|-----------|------|-------|------|-------|--|
| Part        | Thread   | Hose I.D. | A    |       | E    | В     |  |
| Number      | inch     | inch      | inch | mm    | inch | mm    |  |
| 1HN77-32-32 | 4-1/8x3  | 2         | 6.95 | 176,4 | 4.19 | 106,5 |  |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

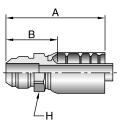


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#### 10377

#### Male JIC 37° - Rigid

| #           | ~     | ·····     |           |      |       |    |      |      |
|-------------|-------|-----------|-----------|------|-------|----|------|------|
| Part        | Т     | hread     | Hose I.D. | -    | 4     | Н  | E    | 3    |
| Number      |       | inch      | inch      | inch | mm    | mm | inch | mm   |
| 10377-8-8   | 1/2   | 3/4x16    | 1/2       | 2.61 | 66,4  | 22 | 1.39 | 35,4 |
| 10377-10-8  | 5/8   | 7/8x14    | 1/2       | 2.71 | 68,9  | 24 | 1.49 | 37,9 |
| 10377-10-10 | 5/8   | 7/8x14    | 5/8       | 3.01 | 76,4  | 24 | 1.66 | 42,2 |
| 10377-12-10 | 3/4   | 1-1/16x12 | 5/8       | 3.22 | 81,8  | 30 | 1.87 | 47,5 |
| 10377-12-12 | 3/4   | 1-1/16x12 | 3/4       | 3.53 | 89,6  | 30 | 1.89 | 48,1 |
| 10377-12-16 | 3/4   | 1-1/16x12 | 1         | 3.94 | 100,0 | 36 | 1.99 | 50,6 |
| 10377-16-12 | 1     | 1-5/16x12 | 3/4       | 3.69 | 93,6  | 36 | 2.05 | 52,2 |
| 10377-16-16 | 1     | 1-5/16x12 | 1         | 3.99 | 101,3 | 36 | 2.04 | 51,8 |
| 10377-20-16 | 1-1/4 | 1-5/8x12  | 1         | 4.33 | 109,9 | 50 | 2.38 | 60,5 |
| 10377-20-20 | 1-1/4 | 1-5/8x12  | 1-1/4     | 4.66 | 118,4 | 50 | 2.39 | 60,7 |
| 10377-24-24 | 1-1/2 | 1-7/8x12  | 1-1/2     | 4.93 | 125,2 | 50 | 2.54 | 64,5 |
| 10377-32-32 | 2     | 2-1/2x12  | 2         | 5.83 | 148,0 | 65 | 3.07 | 78,0 |



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

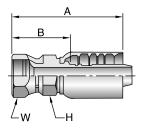
See Accessories Section for O-Rings and Flange Kits.



Refer to Pressure Rating of Hose End Connections Chart on page E-47.

# Female JIC 37° - Swivel

ISO 12151-5



view on web page

| #             |       | WWY       |           |      |            | $\overline{}$ |    |      |      |
|---------------|-------|-----------|-----------|------|------------|---------------|----|------|------|
| Part          | Т     | hread     | Hose I.D. | 1    | <b>A</b> ] | H             | W  | ļ    | В    |
| Number        |       | inch      | inch      | inch | mm         | mm            | mm | inch | mm   |
| 10677-6-8     | 3/8   | 9/16x18   | 1/2       | 2.75 | 69,7       | 22            | 19 | 1.53 | 38,8 |
| 10677-6-8C    | 3/8   | 9/16x18   | 1/2       | 2.75 | 69,7       | 22            | 19 | 1.53 | 38,8 |
| 10677-8-8     | 1/2   | 3/4x16    | 1/2       | 2.79 | 71,1       | 22            | 22 | 1.58 | 40,1 |
| 10677-8-8C    | 1/2   | 3/4x16    | 1/2       | 2.79 | 71,1       | 22            | 22 | 1.58 | 40,1 |
| 10677-10-8    | 5/8   | 7/8x14    | 1/2       | 2.91 | 74,0       | 22            | 27 | 1.69 | 43,0 |
| 10677-10-10   | 5/8   | 7/8x14    | 5/8       | 3.18 | 80,7       | 24            | 27 | 1.83 | 46,5 |
| 10677-10-10C  | 5/8   | 7/8x14    | 5/8       | 3.18 | 80,7       | 24            | 27 | 1.83 | 46,5 |
| 10677-10-12   | 5/8   | 7/8x14    | 3/4       | 3.62 | 91,8       | 30            | 27 | 1.98 | 50,3 |
| 10677-12-8    | 3/4   | 1-1/16x12 | 1/2       | 3.17 | 80,4       | 30            | 32 | 1.95 | 49,5 |
| 10677-12-10   | 3/4   | 1-1/16x12 | 5/8       | 3.30 | 83,9       | 30            | 32 | 1.95 | 49,6 |
| 10677-12-12   | 3/4   | 1-1/16x12 | 3/4       | 3.66 | 93,5       | 30            | 32 | 2.03 | 52,0 |
| 10677-12-12C  | 3/4   | 1-1/16x12 | 3/4       | 3.77 | 95,7       | 30            | 36 | 2.13 | 54,2 |
| 10677-12-16   | 3/4   | 1-1/16x12 | 1         | 4.12 | 104,7      | 36            | 32 | 2.17 | 55,2 |
| 10677-14-12   | 7/8   | 1-3/16x12 | 3/4       | 3.88 | 98,5       | 36            | 36 | 2.24 | 56,9 |
| 10677-16-12   | 1     | 1-5/16x12 | 3/4       | 3.87 | 98,7       | 30            | 41 | 2.24 | 57,3 |
| 10677-16-12C  | 1     | 1-5/16x12 | 3/4       | 4.01 | 101,8      | 36            | 46 | 2.37 | 60,3 |
| 10677-16-16   | 1     | 1-5/16x12 | 1         | 4.15 | 105,7      | 36            | 41 | 2.20 | 56,2 |
| 10677-16-16C  | 1     | 1-5/16x12 | 1         | 4.16 | 105,7      | 36            | 41 | 2.21 | 56,2 |
| 10677-16-20   | 1     | 1-5/16x12 | 1-1/4     | 4.84 | 123,0      | 46            | 41 | 2.57 | 65,3 |
| 10677-20-16   | 1-1/4 | 1-5/8x12  | 1         | 4.38 | 109,1      | 36            | 50 | 2.43 | 59,5 |
| 10677-20-20   | 1-1/4 | 1-5/8x12  | 1-1/4     | 4.86 | 123,5      | 46            | 50 | 2.59 | 65,8 |
| 10677-20-20C  | 1-1/4 | 1-5/8x12  | 1-1/4     | 4.92 | 125,0      | 46            | 60 | 2.65 | 67,3 |
| 10677-24-20   | 1-1/2 | 1-7/8x12  | 1-1/4     | 4.98 | 126,5      | 46            | 60 | 2.71 | 68,6 |
| 10677-24-24   | 1-1/2 | 1-7/8x12  | 1-1/2     | 5.34 | 135,7      | 50            | 60 | 2.95 | 75,0 |
| 10677-24-24C  | 1-1/2 | 1-7/8x12  | 1-1/2     | 5.55 | 140,9      | 50            | 65 | 3.16 | 80,3 |
| 10677-32-32   | 2     | 2-1/2x12  | 2         | 6.29 | 159,8      | 65            | 75 | 3.54 | 89,9 |
| 10677-32-32C* | 2     | 2-1/2x12  | 2         | 6.29 | 159,8      | 65            | 75 | 3.54 | 89,9 |

All sizes of 10677 fittings are rated at 5,000 psi working pressure.

the standard part.

\*This specific size in stainless is not able to be crimped in any Parkrimp machine.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

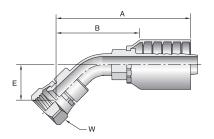


Refer to Pressure Rating of Hose End Connections Chart on page E-47. B-94

<sup>&</sup>quot;C" suffix indicates stainless steel part. Some stainless steel parts are dimensionally different than

#### Female JIC 37° - Swivel - 45° Elbow - Short Drop ISO 12151-5

| #            | ~     | ·····     |           |      |       |      |    |    |      |       |
|--------------|-------|-----------|-----------|------|-------|------|----|----|------|-------|
| Part         | т     | hread     | Hose I.D. | 4    | A     | E    |    | W  |      | В     |
| Number       |       | inch      | inch      | inch | mm    | inch | mm | mm | inch | mm    |
| 13777-8-8    | 1/2   | 3/4x16    | 1/2       | 2.86 | 72,7  | 0.59 | 15 | 22 | 1.64 | 41,8  |
| 13777-8-8C   | 1/2   | 3/4x16    | 1/2       | 2.86 | 72,7  | 0.59 | 15 | 22 | 1.64 | 41,8  |
| 13777-10-8   | 5/8   | 7/8x14    | 1/2       | 3.06 | 77,8  | 0.63 | 16 | 27 | 1.84 | 46,8  |
| 13777-10-10  | 5/8   | 7/8x14    | 5/8       | 3.40 | 86,3  | 0.63 | 16 | 27 | 2.05 | 52,1  |
| 13777-12-12  | 3/4   | 1-1/16x12 | 3/4       | 4.37 | 110,9 | 0.83 | 21 | 32 | 2.73 | 69,4  |
| 13777-12-12C | 3/4   | 1-1/16x12 | 3/4       | 4.37 | 110,9 | 0.83 | 21 | 32 | 2.73 | 69,4  |
| 13777-16-12  | 1     | 1-5/16x12 | 3/4       | 4.49 | 114,0 | 0.94 | 24 | 41 | 2.85 | 72,5  |
| 13777-16-16  | 1     | 1-5/16x12 | 1         | 4.76 | 120,8 | 0.94 | 24 | 41 | 2.81 | 71,3  |
| 13777-20-20  | 1-1/4 | 1-5/8x12  | 1-1/4     | 5.92 | 150,3 | 1.26 | 32 | 50 | 3.64 | 92,6  |
| 13777-32-32* | 2     | 2-1/2x12  | 2         | 8.58 | 218,0 | 2.20 | 56 | 75 | 5.83 | 148,1 |



В

view on web page

All sizes of 13777 fittings are rated at 5,000 psi working pressure.

"C" suffix indicates stainless steel part. Some stainless steel parts are dimensionally different than the standard part.

\*This specific size is not able to be crimped in any Parkrimp machine.

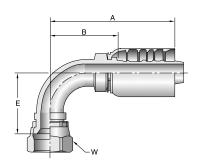


MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### 13977

#### Female JIC 37° - Swivel - 90° Elbow - Short Drop ISO 12151-5

| #            | ^^    | <b>/////</b> |           |      |        |      | (     |    |      |       |
|--------------|-------|--------------|-----------|------|--------|------|-------|----|------|-------|
| Part         | Т     | hread        | Hose I.D. |      | Α      | Ę    |       | W  | ı    | В     |
| Number       |       | inch         | inch      | inch | mm     | inch | mm    | mm | inch | mm    |
| 13977-8-8    | 1/2   | 3/4x16       | 1/2       | 2.78 | 70,7   | 1.14 | 29,0  | 22 | 1.56 | 39,7  |
| 13977-8-8C   | 1/2   | 3/4x16       | 1/2       | 2.78 | 70,7   | 1.14 | 29,0  | 22 | 1.56 | 39,7  |
| 13977-10-8   | 5/8   | 7/8x14       | 1/2       | 2.77 | 70,5   | 1.26 | 32,0  | 27 | 1.55 | 39,5  |
| 13977-10-10  | 5/8   | 7/8x14       | 5/8       | 3.21 | 81,5   | 1.26 | 32,0  | 27 | 1.86 | 47,3  |
| 13977-12-10  | 3/4   | 1-1/16x12    | 5/8       | 3.21 | 81,5   | 1.89 | 48,0  | 32 | 1.86 | 47,3  |
| 13977-12-12  | 3/4   | 1-1/16x12    | 3/4       | 4.23 | 107,4  | 1.89 | 48,0  | 32 | 2.60 | 66,0  |
| 13977-12-12C | 3/4   | 1-1/16x12    | 3/4       | 4.23 | 107,4  | 1.89 | 48,0  | 32 | 2.60 | 66,0  |
| 13977-16-12  | 1     | 1-5/16x12    | 3/4       | 4.23 | 107,4  | 2.93 | 74,5  | 41 | 2.59 | 65,9  |
| 13977-16-16  | 1     | 1-5/16x12    | 1         | 4.65 | 118,1  | 2.93 | 74,4  | 41 | 2.70 | 68,6  |
| 13977-16-16C | 1     | 1-5/16x12    | 1         | 4.72 | 119,9  | 2.93 | 74,4  | 46 | 2.77 | 70,4  |
| 13977-20-20  | 1-1/4 | 1-5/8x12     | 1-1/4     | 5.35 | 136,0  | 3.07 | 78,0  | 50 | 3.08 | 78,3  |
| 13977-20-20C | 1-1/4 | 1-5/8x12     | 1-1/4     | 6.28 | 159,5  | 3.07 | 78,0  | 60 | 4.01 | 101,8 |
| 13977-24-24  | 1-1/2 | 1-7/8x12     | 1-1/2     | 6.24 | 158.45 | 3.39 | 86,0  | 60 | 3.85 | 97.75 |
| 13977-32-32  | 2     | 2-1/2x12     | 2         | 8.75 | 222,1  | 5.51 | 140,0 | 75 | 5.99 | 152,2 |



view on web page

All sizes of 13977 fittings are rated at 5,000 psi working pressure.

"C" suffix indicates stainless steel part. Some stainless steel parts are dimensionally different than

the standard part. WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

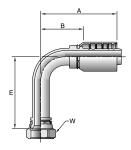
See Accessories Section for O-Rings and Flange Kits.



**!** Refer to Pressure Rating of Hose End Connections Chart on page E-47.

B-95 Updated 10/2022

#### Female JIC 37° - Swivel - 90° Elbow - Long Drop ISO 12151-5



| #<br>Part   | _    | ····································· | Hose I.D. | <b>A</b> |       | E    |       | w  |      | В    | Additional<br>Material<br>Stainless |
|-------------|------|---------------------------------------|-----------|----------|-------|------|-------|----|------|------|-------------------------------------|
| Number      | inch |                                       | inch      | inch     | mm    | inch | mm    | mm | inch | mm   | Steel (C)                           |
| 14177-8-8   | 1/2  | 3/4x16                                | 1/2       | 2.78     | 70,7  | 2.52 | 64,0  | 22 | 1.56 | 39,7 | •                                   |
| 14177-12-12 | 3/4  | 1-1/16x12                             | 3/4       | 4.24     | 107,6 | 3.78 | 96,0  | 32 | 2.60 | 66,1 |                                     |
| 14177-16-16 | 1    | 1-5/16x12                             | 1         | 4.65     | 118,1 | 4.49 | 114,0 | 41 | 2.70 | 68,6 |                                     |

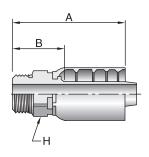
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All sizes of 14177 fittings are rated at 5,000 psi working pressure.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### 10577

#### Male SAE Thread with O-Ring - Rigid

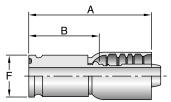


| #<br>Part   |       | ·//··/··  | Hose I.D. |      |       | H     | E    | 3    | Additional<br>Material<br>Stainless |
|-------------|-------|-----------|-----------|------|-------|-------|------|------|-------------------------------------|
| Number      |       | inch      | inch      | inch | mm    | mm    | inch | mm   | Steel (C)                           |
| 10577-8-8   | 1/2   | 3/4x16    | 1/2       | 2.39 | 60,8  | 22    | 1.17 | 29,8 | •                                   |
| 10577-12-12 | 3/4   | 1-1/16x12 | 3/4       | 3.17 | 80,5  | 32    | 1.53 | 38,9 | •                                   |
| 10577-16-16 | 1     | 1-5/16x12 | 1         | 3.73 | 94,7  | 41    | 1.78 | 45,2 |                                     |
| 10577-20-20 | 1-1/4 | 1-5/8x12  | 1-1/4     | 4.17 | 105,9 | 50    | 1.90 | 48,2 |                                     |
| 10577-32-20 | 2     | 2-1/2x12  | 1-1/4     | 4.35 | 110,5 | 2-3/4 | 2.08 | 52,8 |                                     |

view on web page

view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



# 1X577

#### Full Flange - Code 61/62

| #           |        |           |      |          | $\bigotimes$ |      |      |
|-------------|--------|-----------|------|----------|--------------|------|------|
| Part        | Flange | Hose I.D. | /    | <b>A</b> | F            | B    |      |
| Number      | inch   | inch      | inch | mm       | inch         | inch | mm   |
| 1X577-8-8   | 1/2    | 1/2       | 2.44 | 62,1     | 1.02         | 1.22 | 31,1 |
| 1X577-12-12 | 3/4    | 3/4       | 4.06 | 103,0    | 1.37         | 2.42 | 61,6 |
| 1X577-16-12 | 1      | 3/4       | 4.06 | 103,0    | 1.54         | 2.42 | 61,6 |
| 1X577-16-16 | 1      | 1         | 4.45 | 113,0    | 1.54         | 2.50 | 63,5 |
| 1X577-16-20 | 1      | 1-1/4     | 4.73 | 120,2    | 1.54         | 2.46 | 62,5 |
| 1X577-20-16 | 1-1/4  | 1         | 4.45 | 113,0    | 1.81         | 2.50 | 63,5 |
| 1X577-20-20 | 1-1/4  | 1-1/4     | 4.73 | 120,2    | 1.81         | 2.46 | 62,5 |
| 1X577-24-20 | 1-1/2  | 1-1/4     | 4.85 | 123,2    | 2.21         | 2.58 | 65,5 |
| 1X577-24-24 | 1-1/2  | 1-1/2     | 5.07 | 128,8    | 2.21         | 2.68 | 68,1 |
| 1X577-32-32 | 2      | 2         | 6.08 | 154,4    | 2.60         | 3.32 | 84,3 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.



Pressure Rating of Hose End Connections Chart on page E-47.

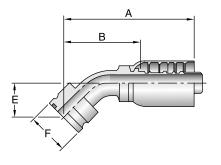
B-96

Updated 8/2021

# 1X777

#### Full Flange - 45° Elbow - Code 61/62

| #           |        |           | Δ        |        |      | _        | Ø    |      |        |
|-------------|--------|-----------|----------|--------|------|----------|------|------|--------|
| Part        | Flange | Hose I.D. | <b>A</b> |        |      | <b>=</b> | F    |      | В      |
| Number      | inch   | inch      | inch mm  |        | inch | mm       | inch | inch | mm     |
| 1X777-12-12 | 3/4    | 3/4       | 4.67     | 118,5  | 1.12 | 28,5     | 1.37 | 3.03 | 77,0   |
| 1X777-16-12 | 1      | 3/4       | 4.66     | 118,3  | 1.12 | 28,5     | 1.54 | 3.02 | 76,8   |
| 1X777-16-16 | 1      | 1         | 5.07     | 128,8  | 1.26 | 32,0     | 1.54 | 3.12 | 79,3   |
| 1X777-16-20 | 1      | 1-1/4     | 5.71     | 145,0  | 1.50 | 38,0     | 1.54 | 3.44 | 87,3   |
| 1X777-20-16 | 1-1/4  | 1         | 5.31     | 134,8  | 1.50 | 38,0     | 1.81 | 3.36 | 85,3   |
| 1X777-20-20 | 1-1/4  | 1-1/4     | 6.23     | 158,3  | 1.58 | 40,0     | 1.81 | 3.96 | 100,6  |
| 1X777-24-20 | 1-1/2  | 1-1/4     | 6.38     | 162,2  | 1.73 | 44,0     | 2.21 | 4.11 | 104,5  |
| 1X777-24-24 | 1-1/2  | 1-1/2     | 7.14     | 181.35 | 1.97 | 50,0     | 2.21 | 4.75 | 120.65 |



В

view on web page

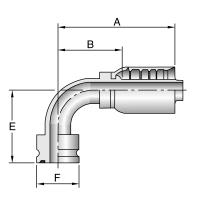
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 1X977

#### Full Flange - 90° Elbow - Code 61/62

| #           |        |           |      |        |      |       | $\bigcirc$ |      |       |
|-------------|--------|-----------|------|--------|------|-------|------------|------|-------|
| Part        | Flange | Hose I.D. |      | Α      |      | Ę     | F          |      | В     |
| Number      | inch   | inch      | inch | mm     | inch | mm    | inch       | inch | mm    |
| 1X977-8-8   | 1/2    | 1/2       | 3.14 | 79,8   | 1.69 | 43,0  | 1.02       | 1.92 | 48,9  |
| 1X977-12-12 | 3/4    | 3/4       | 4.24 | 107,6  | 2.38 | 60,5  | 1.37       | 2.60 | 66,1  |
| 1X977-12-16 | 3/4    | 1         | 4.33 | 109,9  | 2.76 | 70,0  | 1.37       | 2.38 | 60,5  |
| 1X977-16-12 | 1      | 3/4       | 4.24 | 107,6  | 2.38 | 60,5  | 1.54       | 2.60 | 66,1  |
| 1X977-16-16 | 1      | 1         | 4.65 | 118,1  | 2.76 | 70,0  | 1.54       | 2.70 | 68,6  |
| 1X977-16-20 | 1      | 1-1/4     | 5.44 | 138,2  | 3.54 | 90,0  | 1.54       | 3.17 | 80,5  |
| 1X977-20-16 | 1-1/4  | 1         | 4.65 | 118,1  | 3.54 | 90,0  | 1.81       | 2.70 | 68,6  |
| 1X977-20-20 | 1-1/4  | 1-1/4     | 5.35 | 136,0  | 3.54 | 90,0  | 1.81       | 3.08 | 78,3  |
| 1X977-24-20 | 1-1/2  | 1-1/4     | 5.35 | 136,0  | 4.09 | 104,0 | 2.21       | 3.08 | 78,3  |
| 1X977-24-24 | 1-1/2  | 1-1/2     | 6.24 | 158.45 | 4.09 | 104,0 | 2.21       | 3.85 | 97.75 |
| 1X977-32-32 | 2      | 2         | 8.75 | 222,1  | 5.43 | 138,0 | 2.60       | 5.99 | 152,2 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

See Accessories Section for O-Rings and Flange Kits.

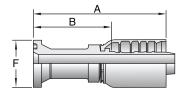


Refer to Pressure Rating of Hose End Connections Chart on page E-47

B-97

# **SAE Code 61 Flange Head**

ISO 12151-3-S-L



view on web page

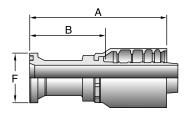
| #<br>Part    | Flange | Hose I.D. | ,    | A     | F       | ı    | В    | Additional<br>Material<br>Stainless |
|--------------|--------|-----------|------|-------|---------|------|------|-------------------------------------|
| Number       | inch   | inch      | inch | mm    | inch    | inch | mm   | Steel (C)                           |
| 11577-8-8    | 1/2    | 1/2       | 3.52 | 89,6  | 1-3/16  | 2.30 | 58,6 | •                                   |
| 11577-10-10  | 5/8    | 5/8       | 3.90 | 99,0  | 1-11/32 | 2.55 | 64,8 |                                     |
| 11577-12-8   | 3/4    | 1/2       | 2.52 | 64,0  | 1-1/2   | 1.30 | 33,0 |                                     |
| 11577-12-12  | 3/4    | 3/4       | 4.23 | 107,4 | 1-1/2   | 2.59 | 65,9 | •                                   |
| 11577-12-16  | 3/4    | 1         | 4.70 | 119,4 | 1-1/2   | 2.75 | 69,8 |                                     |
| 11577-16-12  | 1      | 3/4       | 3.27 | 82,9  | 1-3/4   | 1.63 | 41,5 |                                     |
| 11577-16-16  | 1      | 1         | 4.70 | 119,4 | 1-3/4   | 2.75 | 69,9 |                                     |
| 11577-16-20  | 1      | 1-1/4     | 5.11 | 129,8 | 1-3/4   | 2.84 | 72,1 |                                     |
| 11577-20-12  | 1-1/4  | 3/4       | 3.66 | 92,9  | 2       | 2.31 | 58,6 |                                     |
| 11577-20-20  | 1-1/4  | 1-1/4     | 5.42 | 137,7 | 2       | 3.15 | 80,0 |                                     |
| 11577-20-24  | 1-1/4  | 1-1/2     | 5.76 | 146,3 | 2       | 3.37 | 85,6 |                                     |
| 11577-24-16  | 1-1/2  | 1         | 3.78 | 96,0  | 2-3/8   | 1.83 | 46,5 |                                     |
| 11577-24-20  | 1-1/2  | 1-1/4     | 3.94 | 100,1 | 2-3/8   | 1.67 | 42,4 |                                     |
| 11577-24-24  | 1-1/2  | 1-1/2     | 5.52 | 140,2 | 2-3/8   | 3.13 | 79,5 |                                     |
| 11577-24-32  | 1-1/2  | 2         | 6.42 | 162,9 | 2-3/8   | 3.66 | 93,0 |                                     |
| 11577-32-24  | 2      | 1-1/2     | 4.59 | 116,6 | 2-13/16 | 2.20 | 55,9 |                                     |
| 11577-32-32* | 2      | 2         | 6.43 | 163,2 | 2-13/16 | 3.67 | 93,2 |                                     |
| 11577-40-32  | 2-1/2  | 2         | 5.28 | 133,9 | 3-5/16  | 2.52 | 64,0 |                                     |

<sup>\*</sup>This specific size in stainless is not able to be crimped in any Parkrimp machine.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 14A77

SAE Code 61 Special Flange Head - 5,000\* psi ISO 12151-3-S-L



view on web page

| #<br>Part   | Flange | Hose I.D. |      | Ą     | F       | ı    | 3    |
|-------------|--------|-----------|------|-------|---------|------|------|
| Number      | inch   | inch      | inch | mm    | inch    | inch | mm   |
| 14A77-20-12 | 1-1/4  | 3/4       | 3.66 | 92,9  | 2       | 2.02 | 51,4 |
| 14A77-20-16 | 1-1/4  | 1         | 3.54 | 89,9  | 2       | 1.59 | 40,4 |
| 14A77-20-20 | 1-1/4  | 1-1/4     | 5.42 | 137,7 | 2       | 3.15 | 80,0 |
| 14A77-20-24 | 1-1/4  | 1-1/2     | 5.76 | 146,3 | 2       | 3.37 | 85,6 |
| 14A77-24-16 | 1-1/2  | 1         | 3.78 | 96,0  | 2-3/8   | 1.83 | 46,5 |
| 14A77-24-20 | 1-1/2  | 1-1/4     | 3.94 | 100,1 | 2-3/8   | 1.67 | 42,4 |
| 14A77-24-24 | 1-1/2  | 1-1/2     | 5.52 | 140,2 | 2-3/8   | 3.13 | 79,6 |
| 14A77-24-32 | 1-1/2  | 2         | 6.42 | 162,9 | 2-3/8   | 3.66 | 93,0 |
| 14A77-32-24 | 2      | 1-1/2     | 4.59 | 116,6 | 2-13/16 | 2.20 | 55,9 |
| 14A77-32-32 | 2      | 2         | 6.43 | 163,3 | 2-13/16 | 3.67 | 93,2 |

<sup>\*</sup>Must be used with 5050HK Flange Kits

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

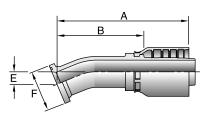


Refer to Pressure Rating of Hose End Connections Chart on page E-47.

#### SAE Code 61 Flange Head - 22-1/2° Elbow

ISO 12151-3-E22M-L

| #<br>Part   | Flange | Hose I.D. | <b>A</b> |        |      | E    | Ø       | ı    | В      |
|-------------|--------|-----------|----------|--------|------|------|---------|------|--------|
| Number      | inch   | inch      | inch     | mm     | inch | mm   | inch    | inch | mm     |
| 11677-12-12 | 3/4    | 3/4       | 4.84     | 122,9  | 0.43 | 11,0 | 1-1/2   | 3.20 | 81,4   |
| 11677-16-12 | 1      | 3/4       | 5.15     | 122,9  | 0.43 | 14,0 | 1-3/4   | 3.51 | 81,4   |
| 11677-16-16 | 1      | 1         | 5.42     | 137,6  | 0.55 | 14,0 | 1-3/4   | 3.47 | 88,1   |
| 11677-20-16 | 1-1/4  | 1         | 5.74     | 145,9  | 0.59 | 15,0 | 2       | 3.80 | 96,4   |
| 11677-20-20 | 1-1/4  | 1-1/4     | 6.65     | 169,0  | 0.59 | 15,0 | 2       | 4.38 | 111,3  |
| 11677-24-20 | 1-1/2  | 1-1/4     | 6.96     | 176,8  | 0.71 | 18,0 | 2-3/8   | 4.69 | 119,1  |
| 11677-24-24 | 1-1/2  | 1-1/2     | 7.45     | 189.35 | 0.71 | 18,0 | 2-3/8   | 5.06 | 128.65 |
| 11677-32-24 | 2      | 1-1/2     | 8.09     | 205.55 | 0.87 | 22,0 | 2-13/16 | 5.70 | 144.85 |
| 11677-32-32 | 2      | 2         | 9.12     | 231,7  | 0.87 | 22,0 | 2-13/16 | 6.37 | 161,7  |



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### 14B77

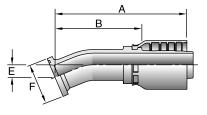
#### SAE Code 61 Special Flange Head - 22-1/2° Elbow - 5,000\* psi ISO 12151-3-E22M-L

| #<br>Part   | Flange | Hose I.D. | A    |        | E    |      | Ø       |      | В      |
|-------------|--------|-----------|------|--------|------|------|---------|------|--------|
| Number      | inch   | inch      | inch | mm     | inch | mm   | inch    | inch | mm     |
| 14B77-20-20 | 1-1/4  | 1-1/4     | 6.65 | 169,0  | 0.59 | 15,0 | 2       | 4.38 | 111,3  |
| 14B77-24-24 | 1-1/2  | 1-1/2     | 7.45 | 189.35 | 0.71 | 18,0 | 2-3/8   | 5.06 | 128.65 |
| 14B77-32-32 | 2      | 2         | 9.12 | 231,7  | 0.87 | 22,0 | 2-13/16 | 6.37 | 161,7  |

\*Must be used with 5050HK Flange Kits



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



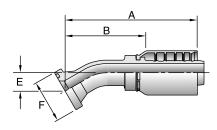
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#### 12677

# SAE Code 61 Flange Head - 30° Elbow

ISO 12151-3-E30M-L

| #<br>Part   | Flange | Hose I.D. | A    |        | E    |      | Ø       |      | В      |
|-------------|--------|-----------|------|--------|------|------|---------|------|--------|
| Number      | inch   | inch      | inch | mm     | inch | mm   | inch    | inch | mm     |
| 12677-12-12 | 3/4    | 3/4       | 4.77 | 121,1  | 0.63 | 16,0 | 1-1/2   | 3.13 | 79,6   |
| 12677-20-16 | 1-1/4  | 1         | 5.64 | 143,3  | 0.87 | 22,0 | 2       | 3.69 | 93,8   |
| 12677-20-20 | 1-1/4  | 1-1/4     | 6.53 | 165,9  | 0.87 | 22,0 | 2       | 4.26 | 108,2  |
| 12677-24-24 | 1-1/2  | 1-1/2     | 7.28 | 184.85 | 1.18 | 30,0 | 2-3/8   | 4.89 | 124.15 |
| 12677-32-24 | 2      | 1-1/2     | 7.92 | 201.25 | 1.26 | 32,0 | 2-13/16 | 5.53 | 140.55 |
| 12677-32-32 | 2      | 2         | 9.01 | 228,9  | 1.26 | 32,0 | 2-13/16 | 6.26 | 159,0  |



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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.



Refer to Pressure Rating of Hose End Connections Chart on page E-47.

B-99

**Updated 2/2023** 



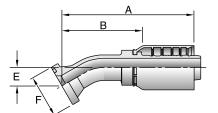






# 14E77

SAE Code 61 Special Flange Head - 30° Elbow - 5,000 psi ISO 12151-3-E30S-L



| #           |        |           |      |        |      | _  | Ø       | _    |        |
|-------------|--------|-----------|------|--------|------|----|---------|------|--------|
| Part        | Flange | Hose I.D. | A    |        | E    |    | F       |      | B      |
| Number      | inch   | inch      | inch | mm     | inch | mm | inch    | inch | mm     |
| 14E77-24-24 | 1-1/2  | 1-1/2     | 7.28 | 184.85 | 1.18 | 30 | 2-3/8   | 4.89 | 124.15 |
| 14E77-32-32 | 2      | 2         | 9.01 | 228,9  | 1.26 | 32 | 2-13/16 | 6.26 | 159,0  |

Must be used with 5050HK Flange Kits

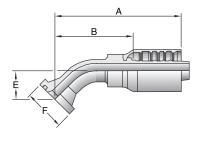
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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#### 11777

#### SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3-E45M-L



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|       |            |     | 1-3- |

| #           |        |           | _    |        | -    |      | Ø       | _    |        |
|-------------|--------|-----------|------|--------|------|------|---------|------|--------|
| Part        | Flange | Hose I.D. |      | A      | Ę    |      | F       |      | В      |
| Number      | inch   | inch      | inch | mm     | inch | mm   | inch    | inch | mm     |
| 11777-8-8   | 1/2    | 1/2       | 3.11 | 79,0   | 0.79 | 20,0 | 1-3/16  | 1.89 | 48,0   |
| 11777-12-8  | 3/4    | 1/2       | 3.33 | 84,7   | 0.87 | 22,0 | 1-1/2   | 2.11 | 53,7   |
| 11777-12-12 | 3/4    | 3/4       | 4.57 | 116,0  | 1.02 | 26,0 | 1-1/2   | 2.93 | 74,5   |
| 11777-16-12 | 1      | 3/4       | 4.80 | 116,0  | 1.02 | 32,0 | 1-3/4   | 3.16 | 74,5   |
| 11777-16-16 | 1      | 1         | 5.07 | 128,8  | 1.26 | 32,0 | 1-3/4   | 3.12 | 79,3   |
| 11777-16-20 | 1      | 1-1/4     | 5.71 | 145,0  | 1.50 | 38,0 | 1-3/4   | 3.44 | 87,3   |
| 11777-20-16 | 1-1/4  | 1         | 5.31 | 134,8  | 1.50 | 38,0 | 2       | 3.36 | 85,3   |
| 11777-20-20 | 1-1/4  | 1-1/4     | 6.15 | 156,2  | 1.50 | 38,0 | 2       | 3.88 | 98,5   |
| 11777-24-20 | 1-1/2  | 1-1/4     | 6.38 | 162,2  | 1.73 | 44,0 | 2-3/8   | 4.11 | 104,5  |
| 11777-24-24 | 1-1/2  | 1-1/2     | 6.90 | 175.35 | 1.73 | 44,0 | 2-3/8   | 4.51 | 114.65 |
| 11777-32-24 | 2      | 1-1/2     | 7.38 | 187.35 | 2.20 | 56,0 | 2-13/16 | 4.99 | 126.65 |
| 11777-32-32 | 2      | 2         | 8.58 | 218,0  | 2.20 | 56,0 | 2-13/16 | 5.83 | 148,1  |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.



Refer to Pressure Rating of Hose End Connections Chart on page E-47.

B-100

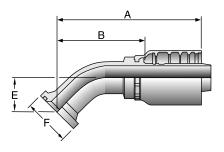
**Updated 2/2023** 

# 14F77

# SAE Code 61 Special Flange Head - 45° - 5,000\* psi

ISO 12151-3-E45M-L

| #           |        |           |      |        | E    |          | Ž       | В    |        |
|-------------|--------|-----------|------|--------|------|----------|---------|------|--------|
| Part        | Flange | Hose I.D. | A    |        | -    | <u>.</u> | F       | В    |        |
| Number      | inch   | inch      | inch | mm     | inch | mm       | inch    | inch | mm     |
| 14F77-20-16 | 1-1/4  | 1         | 5.31 | 134,8  | 1.50 | 38,0     | 2       | 3.36 | 85,3   |
| 14F77-20-20 | 1-1/4  | 1-1/4     | 6.15 | 156,2  | 1.50 | 38,0     | 2       | 3.88 | 98,5   |
| 14F77-20-24 | 1-1/4  | 1-1/2     | 6.72 | 170.75 | 1.73 | 44,0     | 2       | 4.33 | 110.05 |
| 14F77-24-20 | 1-1/2  | 1-1/4     | 6.38 | 162,2  | 1.73 | 44,0     | 2-3/8   | 4.11 | 104,5  |
| 14F77-24-24 | 1-1/2  | 1-1/2     | 6.90 | 175.35 | 1.73 | 44,0     | 2-3/8   | 4.51 | 114.65 |
| 14F77-32-24 | 2      | 1-1/2     | 7.38 | 187.35 | 2.20 | 56,0     | 2-13/16 | 4.99 | 126.65 |
| 14F77-32-32 | 2      | 2         | 8.58 | 218,0  | 2.20 | 56,0     | 2-13/16 | 5.83 | 148,1  |



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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### 12777

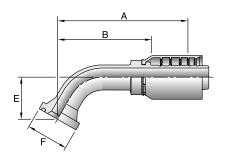
#### SAE Code 61 Flange Head - 60° Elbow

ISO 12151-3-E60M-L

| #           |        |           |          |        | E    |      | Ø       |      |        |
|-------------|--------|-----------|----------|--------|------|------|---------|------|--------|
| Part        | Flange | Hose I.D. | <b>A</b> |        |      | E    | F       | B    |        |
| Number      | inch   | inch      | inch     | mm     | inch | mm   | inch    | inch | mm     |
| 12777-12-12 | 3/4    | 3/4       | 5.27     | 133,8  | 1.46 | 37,0 | 1-1/2   | 3.63 | 92,3   |
| 12777-16-12 | 1      | 3/4       | 5.58     | 133,8  | 1.46 | 44,0 | 1-3/4   | 3.94 | 92,3   |
| 12777-16-16 | 1      | 1         | 5.91     | 150,2  | 1.73 | 44,0 | 1-3/4   | 3.96 | 100,7  |
| 12777-20-20 | 1-1/4  | 1-1/4     | 7.05     | 179,2  | 2.17 | 55,0 | 2       | 4.78 | 121,5  |
| 12777-24-20 | 1-1/2  | 1-1/4     | 7.40     | 188,1  | 2.52 | 64,0 | 2-3/8   | 5.13 | 130,4  |
| 12777-24-24 | 1-1/2  | 1-1/2     | 8.01     | 203.35 | 2.52 | 64,0 | 2-3/8   | 5.62 | 142.65 |
| 12777-32-32 | 2      | 2         | 8.74     | 222,1  | 3.27 | 83,0 | 2-13/16 | 5.99 | 152,1  |

<sup>\*</sup> This specific size is not able to be crimped in any Parkrimp machine.





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See Accessories Section for O-Rings and Flange Kits.

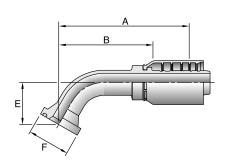


Refer to Pressure Rating of Hose End Connections Chart on page E-47.

www.mfcp.com



<sup>\*</sup>Must be used with 5050HK Flange Kits



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# 14G77

SAE Code 61 Special Flange Head - 60° Elbow - 5,000\* psi ISO 12151-3-E60M-L

| #<br>Part   | Flange | Hose I.D. | A    |        | E    |      | F       |      | 3      |
|-------------|--------|-----------|------|--------|------|------|---------|------|--------|
| Number      | inch   | inch      | inch | mm     | inch | mm   | inch    | inch | mm     |
| 14G77-20-16 | 1-1/4  | 1         | 5.97 | 151,6  | 1.73 | 44,0 | 2       | 4.02 | 102,1  |
| 14G77-24-24 | 1-1/2  | 1-1/2     | 8.14 | 206.65 | 2.52 | 64,0 | 2-3/8   | 5.75 | 145.95 |
| 14G77-32-32 | 2      | 2         | 8.74 | 222,1  | 3.27 | 83,0 | 2-13/16 | 5.99 | 152,1  |

<sup>\*</sup>Must be used with 5050HK Flange Kits

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 11877

SAE Code 61 Flange Head - 67-1/2° Elbow ISO 12151-3-E67M-L



view on web page

| #            |        | A I       |      | A      |      | E    |         |      | В      |
|--------------|--------|-----------|------|--------|------|------|---------|------|--------|
| Part         | Flange | Hose I.D. |      |        |      |      |         |      | Ī      |
| Number       | inch   | inch      | inch | mm     | inch | mm   | inch    | inch | mm     |
| 11877-12-12  | 3/4    | 3/4       | 5.07 | 128,7  | 1.65 | 42,0 | 1-1/2   | 3.43 | 87,2   |
| 11877-16-12  | 1      | 3/4       | 5.31 | 128,7  | 1.65 | 51,0 | 1-3/4   | 3.67 | 87,2   |
| 11877-20-20  | 1-1/4  | 1-1/4     | 6.71 | 170,6  | 2.52 | 64,0 | 2       | 4.44 | 112,9  |
| 11877-24-20  | 1-1/2  | 1-1/4     | 7.01 | 178,0  | 2.91 | 74,0 | 2-3/8   | 4.73 | 120,3  |
| 11877-24-24  | 1-1/2  | 1-1/2     | 7.77 | 197.25 | 2.91 | 74,0 | 2-3/8   | 5.38 | 136.55 |
| 11877-32-24* | 2      | 1-1/2     | 8.50 | 215.95 | 3.82 | 97,0 | 2-13/16 | 6.11 | 155.25 |
| 11877-32-32  | 2      | 2         | 8.72 | 221,4  | 3.82 | 97,0 | 2-13/16 | 5.97 | 151,5  |

<sup>\*</sup>This specific size is not able to be crimped in any Parkrimp machine.

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.



Refer to Pressure Rating of Hose End Connections Chart on page E-47.

#### 14M77

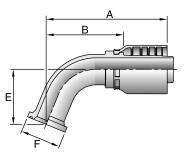
#### SAE Code 61 Special Flange Head - 67-1/2° Elbow - 5,000\* psi

| #           |        |           |      |        |      | _    | $\bigcirc$ |      |        |
|-------------|--------|-----------|------|--------|------|------|------------|------|--------|
| Part        | Flange | Hose I.D. | 4    | A      |      | E    | F          | '    | 8      |
| Number      | inch   | inch      | inch | mm     | inch | mm   | inch       | inch | mm     |
| 14M77-24-24 | 1-1/2  | 1-1/2     | 7.77 | 199.25 | 2.91 | 74,0 | 2-3/8      | 5.38 | 136.55 |

<sup>\*</sup>Must be used with 5050HK Flange Kits



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



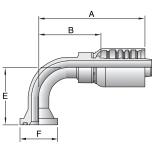
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### 11977

#### SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3-E90M-L

| #              |             |           |      | A      |      | E      | Ø <sub>F</sub> |      | В     | Additional<br>Material |
|----------------|-------------|-----------|------|--------|------|--------|----------------|------|-------|------------------------|
| Part<br>Number | Flange inch | Hose I.D. | inch | mm     | inch | mm     | inch           | inch | mm    | Stainless<br>Steel (C) |
| 11977-8-8      | 1/2         | 1/2       | 2.99 | 76,0   | 1.61 | 41,0   | 1-3/16         | 1.77 | 45,0  | Steel (C)              |
| 11977-10-10    | 5/8         | 5/8       | 3.62 | 91,9   | 2.09 | 53.0   | 1-11/32        |      | 57,7  |                        |
| 11977-10-10    | 3/4         | 1/2       | 2.77 | 70,5   | 1.61 | 41,0   | 1-1/2          | 1.55 | 39,5  |                        |
| 11977-12-10    | 3/4         | 5/8       | 3.40 | 86,3   | 2.09 | 53,0   | 1-1/2          | 2.05 | 52,1  |                        |
| 11977-12-10    | 3/4         | 3/4       | 4.24 | 107,6  | 2.28 | 58,0   | 1-1/2          | 2.60 | 66,1  |                        |
| 11977-12-16    | 3/4         | 1         | 4.41 | 112,0  | 2.76 | 70,0   | 1-1/2          | 2.46 | 62,5  |                        |
| 11977-12-10    | 1           | 5/8       | 3.21 | 81,5   | 2.09 | 53,0   | 1-1/2          | 1.86 | 47,3  |                        |
| 11977-16-12    | -           |           |      |        |      | 1      |                |      |       |                        |
|                | 1           | 3/4       | 4.24 | 107,6  | 2.28 | 70,0   | 1-3/4          | 2.60 | 66,1  |                        |
| 11977-16-16    | 1           | 1         | 4.65 | 118,1  | 2.76 | 70,0   | 1-3/4          | 2.70 | 68,6  | _                      |
| 11977-16-16C   | 1           | 1         | 4.72 | 119,9  | 2.76 | 70,0   | 1-3/4          | 2.77 | 70,4  | •                      |
| 11977-16-20    | 1           | 1-1/4     | 5.05 | 128,3  | 3.54 | 90,0   | 1-3/4          | 2.78 | 70,6  |                        |
| 11977-20-12    | 1-1/4       | 3/4       | 4.23 | 107,4  | 2.28 | 58,0   | 2              | 2.59 | 65,9  |                        |
| 11977-20-16    | 1-1/4       | 1         | 4.65 | 118,1  | 3.54 | 90,0   | 2              | 2.70 | 68,6  |                        |
| 11977-20-20    | 1-1/4       | 1-1/4     | 5.35 | 136,0  | 3.54 | 90,0   | 2              | 3.08 | 78,3  |                        |
| 11977-20-24    | 1-1/4       | 1-1/2     | 5.69 | 144.55 | 4.09 | 104,0  | 2              | 3.30 | 83.85 |                        |
| 11977-24-16    | 1-1/2       | 1         | 4.65 | 118,1  | 2.76 | 70,0   | 2-3/8          | 2.70 | 68,6  |                        |
| 11977-24-20    | 1-1/2       | 1-1/4     | 5.35 | 136,0  | 4.09 | 104,0  | 2-3/8          | 3.08 | 78,3  |                        |
| 11977-24-24    | 1-1/2       | 1-1/2     | 6.24 | 158.45 | 4.09 | 104,0  | 2-3/8          | 3.85 | 97.75 |                        |
| 11977-32-24    | 2           | 1-1/2     | 6.24 | 158.45 | 5.43 | 138.00 | 2-13/16        | 3.85 | 97.75 |                        |
| 11977-32-32    | 2           | 2         | 8.75 | 222,1  | 5.43 | 138,0  | 2-13/16        | 5.99 | 152,2 |                        |



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.



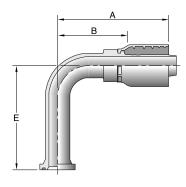
Refer to Pressure Rating of Hose End Connections Chart on page E-47.



В







18977 SAE Code 61 Flange Head - 90° Elbow - Long Drop

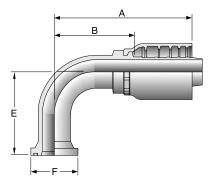
| #<br>Part   | Flange | Hose I.D. | A E F |       | E    | В     |       |      |      |
|-------------|--------|-----------|-------|-------|------|-------|-------|------|------|
| Number      | inch   | inch      | inch  | mm    | inch | mm    | inch  | inch | mm   |
| 18977-12-12 | 3/4    | 3/4       | 4.23  | 107,4 | 5.12 | 130,0 | 1-1/2 | 2.59 | 65,9 |
| 18977-16-16 | 1      | 1         | 4.65  | 118,1 | 4.60 | 116,8 | 1-3/4 | 2.70 | 68,6 |
| 18977-20-16 | 1-1/4  | 1         | 4.65  | 118,1 | 5.51 | 140,0 | 2     | 2.70 | 68,6 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

view on web page

#### 14N77

SAE Code 61 Special Flange Head - 90° Elbow - 5,000\* psi ISO 12151-3-E90M-L



view on web page

| #            |       |           |      | A      |      | E     | Ø       |      | В     | Additional<br>Material |
|--------------|-------|-----------|------|--------|------|-------|---------|------|-------|------------------------|
| Part         |       | Hose I.D. |      |        |      | Ī     | -       |      | Ī     | Stainless              |
| Number       | inch  | inch      | inch | mm     | inch | mm    | inch    | inch | mm    | Steel (C)              |
| 14N77-20-16  | 1-1/4 | 1         | 4.65 | 118,1  | 3.54 | 90,0  | 2       | 2.70 | 68,6  |                        |
| 14N77-20-20  | 1-1/4 | 1-1/4     | 5.35 | 136,0  | 3.54 | 90,0  | 2       | 3.08 | 78,3  |                        |
| 14N77-20-20C | 1-1/4 | 1-1/4     | 6.28 | 159,5  | 3.54 | 90,0  | 2       | 4.00 | 101,8 | •                      |
| 14N77-24-20  | 1-1/2 | 1-1/4     | 5.35 | 136,0  | 4.09 | 104,0 | 2-3/8   | 3.08 | 78,3  |                        |
| 14N77-24-24  | 1-1/2 | 1-1/2     | 6.24 | 158.45 | 4.09 | 104,0 | 2-3/8   | 3.85 | 97.75 |                        |
| 14N77-24-32  | 1-1/2 | 2         | 7.65 | 194,2  | 5.43 | 138,0 | 2-3/8   | 4.89 | 124,2 |                        |
| 14N77-32-24  | 2     | 1-1/2     | 6.24 | 158.45 | 5.43 | 138,0 | 2-13/16 | 3.85 | 97.75 |                        |
| 14N77-32-32  | 2     | 2         | 8.75 | 222,1  | 5.43 | 138,0 | 2-13/16 | 5.99 | 152,2 |                        |

<sup>\*</sup>Must be used with 5050HK Flange Kits

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

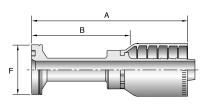


### 16A77

#### **SAE Code 62 Flange Head**

ISO 12151-3-S-S

| #<br>Part    | Flange | Hose I.D. | A    |       | F     |      | В     | Additional<br>Material<br>Stainless |
|--------------|--------|-----------|------|-------|-------|------|-------|-------------------------------------|
| Number       | inch   | inch      | inch | mm    | inch  | inch | mm    | Steel (C)                           |
| 16A77-8-8    | 1/2    | 1/2       | 3.51 | 89,3  | 1-1/4 | 2.29 | 58,3  |                                     |
| 16A77-8-10   | 1/2    | 5/8       | 3.83 | 97,3  | 1-1/4 | 2.48 | 63,0  |                                     |
| 16A77-12-10  | 3/4    | 5/8       | 2.95 | 74,9  | 1-5/8 | 1.60 | 40,7  |                                     |
| 16A77-12-12  | 3/4    | 3/4       | 4.49 | 113,9 | 1-5/8 | 2.85 | 72,5  | •                                   |
| 16A77-12-16  | 3/4    | 1         | 4.96 | 126,0 | 1-5/8 | 3.01 | 76,5  |                                     |
| 16A77-16-12  | 1      | 3/4       | 3.47 | 88,1  | 1-7/8 | 1.83 | 46,6  |                                     |
| 16A77-16-16  | 1      | 1         | 4.45 | 113,0 | 1-7/8 | 2.50 | 63,5  | •                                   |
| 16A77-16-20  | 1      | 1-1/4     | 5.66 | 143,8 | 1-7/8 | 3.39 | 86,1  |                                     |
| 16A77-20-16  | 1-1/4  | 1         | 4.05 | 102,9 | 2-1/8 | 2.10 | 53,4  | •                                   |
| 16A77-20-20  | 1-1/4  | 1-1/4     | 5.73 | 145,6 | 2-1/8 | 3.46 | 87,8  | •                                   |
| 16A77-20-24  | 1-1/4  | 1-1/2     | 6.06 | 153,9 | 2-1/8 | 3.67 | 93,2  |                                     |
| 16A77-24-16  | 1-1/2  | 1         | 4.25 | 108,0 | 2-1/2 | 2.30 | 58,4  |                                     |
| 16A77-24-20  | 1-1/2  | 1-1/4     | 4.65 | 118,1 | 2-1/2 | 2.38 | 60,4  |                                     |
| 16A77-24-24  | 1-1/2  | 1-1/2     | 6.39 | 162,3 | 2-1/2 | 4.00 | 101,6 | •                                   |
| 16A77-32-24  | 2      | 1-1/2     | 5.23 | 132,8 | 3-1/8 | 2.84 | 72,2  |                                     |
| 16A77-32-32* | 2      | 2         | 7.17 | 182,1 | 3-1/8 | 4.41 | 112,0 | •                                   |



view on web page

В

\*This specific size in stainless is not able to be crimped in any Parkrimp machine.



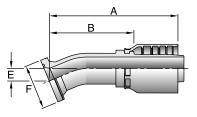
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### 16B77

# SAE Code 62 Flange Head - 22-1/2° Elbow

ISO 12151-3-E22M-S

| #<br>Part   | Flange | Hose I.D. | A    |        | E    |      | Ø F   |      | B      |
|-------------|--------|-----------|------|--------|------|------|-------|------|--------|
| Number      | inch   | inch      | inch | mm     | inch | mm   | inch  | inch | mm     |
| 16B77-16-16 | 1      | 1         | 5.42 | 137,6  | 0.55 | 14,0 | 1-7/8 | 3.47 | 88,1   |
| 16B77-20-20 | 1-1/4  | 1-1/4     | 6.65 | 168,9  | 0.59 | 15,0 | 2-1/8 | 4.38 | 111,2  |
| 16B77-24-24 | 1-1/2  | 1-1/2     | 7.45 | 189.35 | 0.71 | 18,0 | 2-1/2 | 5.06 | 128.65 |
| 16B77-32-32 | 2      | 2         | 9.12 | 231,7  | 0.87 | 22,0 | 3-1/8 | 6.37 | 161,7  |



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.



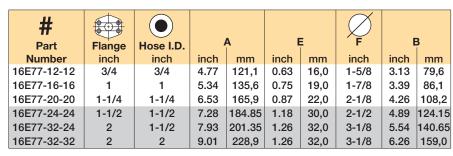


В

# 16E77

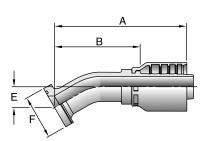
#### SAE Code 62 Flange Head - 30° Elbow

ISO 12151-3-E30M-S





WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

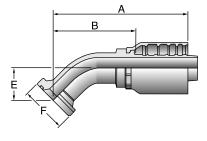


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#### 16F77

# SAE Code 62 Flange Head - 45° Elbow

ISO 12151-3-E45M-S



view on web page

| #<br>Part    |        | Hose I.D. | A    |        |      |      | Ø       |      | В      | Additional<br>Material<br>Stainless |
|--------------|--------|-----------|------|--------|------|------|---------|------|--------|-------------------------------------|
|              | Flange |           | :la  |        | :la  |      | in a la | :la  |        |                                     |
| Number       | inch   | inch      | inch | mm     | inch | mm   | inch    | inch | mm     | Steel (C)                           |
| 16F77-8-8    | 1/2    | 1/2       | 3.11 | 79,0   | 0.75 | 19,0 | 1-1/4   | 1.89 | 48,0   |                                     |
| 16F77-12-10  | 3/4    | 5/8       | 3.77 | 95,7   | 1.00 | 25,5 | 1-5/8   | 2.42 | 61,5   |                                     |
| 16F77-12-12  | 3/4    | 3/4       | 4.57 | 116,0  | 1.02 | 26,0 | 1-5/8   | 2.93 | 74,5   |                                     |
| 16F77-12-16  | 3/4    | 1         | 4.98 | 126,5  | 1.26 | 32,0 | 1-5/8   | 3.03 | 77,0   |                                     |
| 16F77-16-12  | 1      | 3/4       | 4.80 | 116,0  | 1.02 | 32,0 | 1-7/8   | 3.16 | 74,5   |                                     |
| 16F77-16-16  | 1      | 1         | 5.07 | 128,8  | 1.26 | 32,0 | 1-7/8   | 3.12 | 79,3   |                                     |
| 16F77-16-20  | 1      | 1-1/4     | 5.71 | 145,0  | 1.50 | 38,0 | 1-7/8   | 3.44 | 87,3   |                                     |
| 16F77-20-16  | 1-1/4  | 1         | 5.31 | 134,8  | 1.50 | 38,0 | 2-1/8   | 3.36 | 85,3   |                                     |
| 16F77-20-20  | 1-1/4  | 1-1/4     | 6.15 | 156,3  | 1.50 | 38,0 | 2-1/8   | 3.88 | 98,6   |                                     |
| 16F77-20-20C | 1-1/4  | 1-1/4     | 6.66 | 169,2  | 1.50 | 38,0 | 2-1/8   | 4.39 | 111,5  | •                                   |
| 16F77-24-20  | 1-1/2  | 1-1/4     | 6.38 | 162,2  | 1.73 | 44,0 | 2-1/2   | 4.11 | 104,5  |                                     |
| 16F77-24-24  | 1-1/2  | 1-1/2     | 6.90 | 175.35 | 1.73 | 44,0 | 2-1/2   | 4.51 | 114.65 |                                     |
| 16F77-32-24  | 2      | 1-1/2     | 7.38 | 187.35 | 2.20 | 56,0 | 3-1/8   | 4.99 | 126.65 |                                     |
| 16F77-32-32* | 2      | 2         | 8.58 | 218,0  | 2.20 | 56,0 | 3-1/8   | 5.83 | 148,1  |                                     |

<sup>\*</sup>This specific size in stainless is not able to be crimped in any Parkrimp machine.

NATIVING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.



### 16G77

#### SAE Code 62 Flange Head - 60° Elbow

ISO 12151-3-E60M-S

| #           |        |           | Δ    |        |      | _    | Ø     |      |        |
|-------------|--------|-----------|------|--------|------|------|-------|------|--------|
| Part        | Flange | Hose I.D. | A    |        |      | E    |       |      | B      |
| Number      | inch   | inch      | inch | mm     | inch | mm   | inch  | inch | mm     |
| 16G77-12-12 | 3/4    | 3/4       | 5.27 | 133,8  | 1.46 | 37,0 | 1-5/8 | 3.63 | 92,3   |
| 16G77-16-16 | 1      | 1         | 5.91 | 150,1  | 1.73 | 44,0 | 1-7/8 | 3.96 | 100,6  |
| 16G77-24-24 | 1-1/2  | 1-1/2     | 8.14 | 206.65 | 2.52 | 64,0 | 2-1/2 | 5.75 | 145.95 |
| 16G77-32-32 | 2      | 2         | 8.74 | 222,1  | 3.27 | 83,0 | 3-1/8 | 5.99 | 152,1  |

В

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

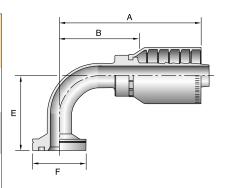
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### 16N77

#### SAE Code 62 Flange Head - 90° Elbow

ISO 12151-3 - E90M - S

| #            |       |           | A    |        |      | _ (    | 7     |      | _             | Additional<br>Material |
|--------------|-------|-----------|------|--------|------|--------|-------|------|---------------|------------------------|
| Part         | _     | Hose I.D. |      | A      |      | E      | F     |      | <b>B</b><br>∣ | Stainless              |
| Number       | inch  | inch      | inch | mm     | inch | mm     | inch  | inch | mm            | Steel (C)              |
| 16N77-8-8    | 1/2   | 1/2       | 2.77 | 70,5   | 1.61 | 41,0   | 1-1/4 | 1.55 | 39,5          |                        |
| 16N77-8-10   | 1/2   | 5/8       | 3.09 | 78,5   | 2.13 | 54,0   | 1-1/4 | 1.74 | 44,2          |                        |
| 16N77-12-12  | 3/4   | 3/4       | 4.24 | 107,6  | 2.28 | 58,0   | 1-5/8 | 2.60 | 66,1          | •                      |
| 16N77-12-16  | 3/4   | 1         | 4.41 | 112,0  | 2.76 | 70,0   | 1-5/8 | 2.46 | 62.5          |                        |
| 16N77-16-12  | 1     | 3/4       | 4.24 | 107,6  | 2.28 | 70,0   | 1-7/8 | 2.60 | 66,1          |                        |
| 16N77-16-16  | 1     | 1         | 4.65 | 118,1  | 2.76 | 70,0   | 1-7/8 | 2.70 | 68,6          |                        |
| 16N77-16-16C | 1     | 1         | 4.72 | 119,9  | 2.76 | 70,0   | 1-7/8 | 2.77 | 70,4          | •                      |
| 16N77-16-20  | 1     | 1-1/4     | 5.05 | 128,3  | 3.54 | 90,0   | 1-7/8 | 2.78 | 70,6          |                        |
| 16N77-16-20C | 1     | 1-1/4     | 5.44 | 138,2  | 3.54 | 90,0   | 1-7/8 | 3.17 | 80,5          | •                      |
| 16N77-20-16  | 1-1/4 | 1         | 4.65 | 118,1  | 3.54 | 90,0   | 2-1/8 | 2.70 | 68,6          |                        |
| 16N77-20-20  | 1-1/4 | 1-1/4     | 5.35 | 136,0  | 3.54 | 90,0   | 2-1/8 | 3.08 | 78,3          |                        |
| 16N77-20-20C | 1-1/4 | 1-1/4     | 6.28 | 159,5  | 3.54 | 90,0   | 2-1/8 | 4.00 | 101,8         | •                      |
| 16N77-20-24  | 1-1/4 | 1-1/2     | 5.69 | 144.55 | 4.09 | 104,0  | 2-1/8 | 3.30 | 83.85         |                        |
| 16N77-24-20  | 1-1/2 | 1-1/4     | 5.35 | 136,0  | 4.09 | 104,0  | 2-1/2 | 3.08 | 78,3          |                        |
| 16N77-24-20C | 1-1/2 | 1-1/4     | 6.28 | 159,5  | 4.09 | 104,0  | 2-1/2 | 4.00 | 101,8         | •                      |
| 16N77-24-24  | 1-1/2 | 1-1/2     | 6.24 | 158.45 | 4.09 | 104,0  | 2-1/2 | 3.85 | 97.75         | •                      |
| 16N77-32-24  | 2     | 1-1/2     | 6.24 | 158.45 | 5.43 | 138.00 | 3-1/8 | 3.85 | 97.75         |                        |
| 16N77-32-32* | 2     | 2         | 8.75 | 222,1  | 5.43 | 138,0  | 3-1/8 | 5.99 | 152,2         | •                      |



В

view on web page

\*This specific size in stainless is not able to be crimped in any Parkrimp machine.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.



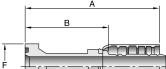
Refer to Pressure Rating of Hose End Connections Chart on page E-47.

B-107

**Updated 2/2023** 







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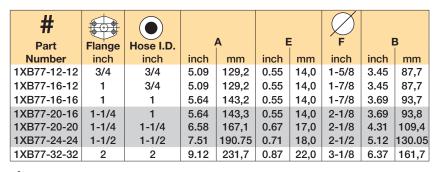
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| #           |        |           | A        |          | Ø     |      |       |
|-------------|--------|-----------|----------|----------|-------|------|-------|
| Part        | Flange | Hose I.D. | <i> </i> | <b>A</b> | F     |      | В     |
| Number      | inch   | inch      | inch     | mm       | inch  | inch | mm    |
| 1XA77-12-12 | 3/4    | 3/4       | 4.48     | 113,7    | 1-5/8 | 2.84 | 72,2  |
| 1XA77-12-16 | 3/4    | 1         | 4.96     | 126,0    | 1-5/8 | 3.01 | 76,5  |
| 1XA77-16-12 | 1      | 3/4       | 3.47     | 88,1     | 1-7/8 | 1.83 | 46,6  |
| 1XA77-16-16 | 1      | 1         | 5.54     | 140,7    | 1-7/8 | 3.59 | 91,2  |
| 1XA77-20-16 | 1-1/4  | 1         | 4.10     | 104,1    | 2-1/8 | 2.15 | 54,6  |
| 1XA77-20-20 | 1-1/4  | 1-1/4     | 5.98     | 151,9    | 2-1/8 | 3.71 | 94,2  |
| 1XA77-20-24 | 1-1/4  | 1-1/2     | 6.32     | 160,5    | 2-1/8 | 3.93 | 99,8  |
| 1XA77-24-20 | 1-1/2  | 1-1/4     | 4.65     | 118,1    | 2-1/2 | 2.38 | 60,4  |
| 1XA77-24-24 | 1-1/2  | 1-1/2     | 6.94     | 176,3    | 2-1/2 | 4.55 | 115,6 |
| 1XA77-32-32 | 2      | 2         | 7.56     | 191,9    | 3-1/8 | 4.80 | 121,9 |
| ^           |        |           |          |          |       |      |       |

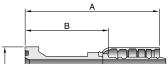
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### 1XB77

#### Caterpillar® Flange Head - 22-1/2° Elbow



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



В





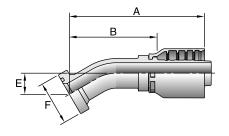
See Accessories Section for O-Rings and Flange Kits.



 $\langle ! \rangle$  Refer to Pressure Rating of Hose End Connections Chart on page E-47.

# 1XE77 Caterpillar® Flange Head - 30° Elbow

| #           |        |           | Δ.       |        |      | _    | Ø     |      |        |
|-------------|--------|-----------|----------|--------|------|------|-------|------|--------|
| Part        | Flange | Hose I.D. | <b>A</b> |        | E    |      | F     |      | В      |
| Number      | inch   | inch      | inch     | mm     | inch | mm   | inch  | inch | mm     |
| 1XE77-12-12 | 3/4    | 3/4       | 5.00     | 126,9  | 0.83 | 21,0 | 1-5/8 | 3.36 | 85,4   |
| 1XE77-16-12 | 1      | 3/4       | 5.02     | 127,4  | 0.75 | 19,0 | 1-7/8 | 3.38 | 86,0   |
| 1XE77-16-16 | 1      | 1         | 5.56     | 141,3  | 0.75 | 19,0 | 1-7/8 | 3.61 | 91,8   |
| 1XE77-20-16 | 1-1/4  | 1         | 5.53     | 140,4  | 0.87 | 22,0 | 2-1/8 | 3.58 | 90,9   |
| 1XE77-20-20 | 1-1/4  | 1-1/4     | 6.45     | 163,9  | 0.94 | 24,0 | 2-1/8 | 4.18 | 106,2  |
| 1XE77-24-24 | 1-1/2  | 1-1/2     | 7.33     | 186.25 | 1.18 | 30,0 | 2-1/2 | 4.94 | 125.55 |
| 1XE77-32-32 | 2      | 2         | 9.01     | 228,9  | 1.26 | 32,0 | 3-1/8 | 6.26 | 159,0  |



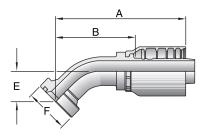
view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 1XF77

#### Caterpillar® Flange Head - 45° Elbow

| #           |        |           |      | •      |          | _    |       |      | _      |
|-------------|--------|-----------|------|--------|----------|------|-------|------|--------|
| Part        | Flange | Hose I.D. | A    |        | <u> </u> |      | F     |      | В      |
| Number      | inch   | inch      | inch | mm     | inch     | mm   | inch  | inch | mm     |
| 1XF77-12-12 | 3/4    | 3/4       | 4.76 | 120,8  | 1.22     | 31,0 | 1-5/8 | 3.12 | 79,3   |
| 1XF77-16-12 | 1      | 3/4       | 4.76 | 120,8  | 1.22     | 31,0 | 1-7/8 | 3.12 | 79,3   |
| 1XF77-16-16 | 1      | 1         | 5.23 | 132,8  | 1.42     | 36,0 | 1-7/8 | 3.28 | 83,3   |
| 1XF77-20-16 | 1-1/4  | 1         | 5.23 | 132,8  | 1.42     | 36,0 | 2-1/8 | 3.28 | 83,3   |
| 1XF77-20-20 | 1-1/4  | 1-1/4     | 6.11 | 155,2  | 1.46     | 37,0 | 2-1/8 | 3.84 | 97.5   |
| 1XF77-24-20 | 1-1/2  | 1-1/4     | 6.11 | 155,2  | 1.46     | 37,0 | 2-1/2 | 3.84 | 97.5   |
| 1XF77-24-24 | 1-1/2  | 1-1/2     | 6.94 | 176.35 | 1.77     | 45,0 | 2-1/2 | 4.55 | 115.65 |
| 1XF77-32-32 | 2      | 2         | 8.58 | 218,0  | 2.20     | 56,0 | 3-1/8 | 5.83 | 148,1  |



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



В

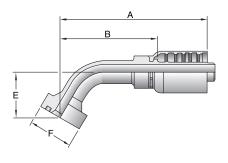
See Accessories Section for O-Rings and Flange Kits.



X

# 1XG77

#### Caterpillar® Flange Head - 60° Elbow



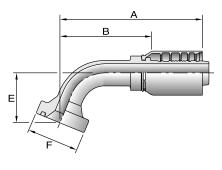
| #           |                   |           |      |        |                |      |                   |      |        |   |  |
|-------------|-------------------|-----------|------|--------|----------------|------|-------------------|------|--------|---|--|
| Part        | Flange            | Hose I.D. |      | A      | Ę              |      | F F               |      | F      | В |  |
| Number      | inch              | inch      | inch | mm     | inch           | mm   | inch              | inch | mm     |   |  |
| 1XG77-12-12 | 3/4               | 3/4       | 5.35 | 135,8  | 1.65           | 42,0 | 1-5/8             | 3.71 | 94,3   |   |  |
| 1XG77-16-12 | 1                 | 3/4       | 5.35 | 135,8  | 1.65           | 42,0 | 1-7/8             | 3.71 | 94,3   |   |  |
| 1XG77-16-16 | 1                 | 1         | 5.93 | 150,7  | 1.97           | 50,0 | 1-7/8             | 3.98 | 101,2  |   |  |
| 1XG77-20-16 | 1-1/4             | 1         | 6.07 | 154,1  | 1.73           | 44,0 | 2-1/8             | 4.12 | 104,6  |   |  |
| 1XG77-20-20 | 1-1/4             | 1-1/4     | 7.31 | 185,7  | 2.01           | 51,0 | 2-1/8             | 5.04 | 128,0  |   |  |
| 1XG77-24-24 | 1-1/2             | 1-1/2     | 8.18 | 207.75 | 2.56           | 65,0 | 2-1/2             | 5.79 | 147.05 |   |  |
| 1XG77-32-32 | 2                 | 2         | 8.74 | 222,1  | 3.27           | 83,0 | 3-1/8             | 5.99 | 152,1  |   |  |
| A WARNING   | Tlada sassa alisa |           |      | -1     | 5.2 a 1 a 15.a |      | . Jeden de de des |      | 01-1-  |   |  |

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**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 1XM77

### Caterpillar® Flange - 67-1/2° Elbow



| #           |        |           |      |       |      |      |       |      |       |
|-------------|--------|-----------|------|-------|------|------|-------|------|-------|
| Part        | Flange | Hose I.D. | 4    | A     |      | E    | F     |      | 3     |
| Number      | inch   | inch      | inch | mm    | inch | mm   | inch  | inch | mm    |
| 1XM77-12-12 | 3/4    | 3/4       | 5.17 | 131,2 | 1.77 | 45,0 | 1-5/8 | 3.53 | 89,8  |
| 1XM77-16-12 | 1      | 3/4       | 5.19 | 131,8 | 1.77 | 45,0 | 1-7/8 | 3.55 | 90,3  |
| 1XM77-16-16 | 1      | 1         | 5.78 | 146,9 | 2.05 | 52,0 | 1-7/8 | 3.83 | 97,4  |
| 1XM77-20-16 | 1-1/4  | 1         | 5.78 | 146,9 | 2.05 | 52,0 | 2-1/8 | 3.83 | 97,4  |
| 1XM77-32-32 | 2      | 2         | 8.72 | 221,4 | 3.82 | 97,0 | 3-1/8 | 5.97 | 151,5 |
|             |        |           |      |       |      |      |       |      |       |

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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

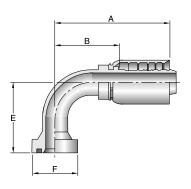


### 1XN77

#### Caterpillar® Flange Head - 90° Elbow

| #           |        |           |      |        |      | _     | Ø     | В    |       |  |
|-------------|--------|-----------|------|--------|------|-------|-------|------|-------|--|
| Part        | Flange | Hose I.D. | A    |        | Ę    |       | F     |      | В     |  |
| Number      | inch   | inch      | inch | mm     | inch | mm    | inch  | inch | mm    |  |
| 1XN77-12-12 | 3/4    | 3/4       | 4.23 | 107,4  | 2.48 | 63,0  | 1-5/8 | 2.59 | 65,9  |  |
| 1XN77-12-16 | 3/4    | 1         | 4.41 | 112,0  | 2.76 | 70,0  | 1-5/8 | 2.46 | 62,5  |  |
| 1XN77-16-12 | 1      | 3/4       | 4.23 | 107,4  | 2.48 | 63,0  | 1-7/8 | 2.59 | 65,9  |  |
| 1XN77-16-16 | 1      | 1         | 4.65 | 118,1  | 2.91 | 74,0  | 1-7/8 | 2.70 | 68,6  |  |
| 1XN77-24-20 | 1-1/2  | 1-1/4     | 5.35 | 136,0  | 3.03 | 77,0  | 2-1/2 | 3.08 | 78,3  |  |
| 1XN77-24-24 | 1-1/2  | 1-1/2     | 6.24 | 158.45 | 4.16 | 105,6 | 2-1/2 | 3.85 | 97.75 |  |
| 1XN77-32-32 | 2      | 2         | 8.75 | 222,1  | 5.24 | 133,0 | 3-1/8 | 5.99 | 152,2 |  |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



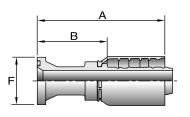
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# 1K577

#### Komatsu® Flange Head

| #<br>Part   | Flange | Hose I.D. | ,    | <b>A</b> | Ø     | E    | 3    |
|-------------|--------|-----------|------|----------|-------|------|------|
| Number      | inch   | inch      | inch | mm       | inch  | inch | mm   |
| 1K577-16-16 | 1      | 1         | 4.70 | 119,4    | 1-3/4 | 2.75 | 69,9 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



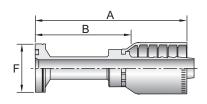
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# **1KA77**

#### Komatsu® High Pressure Flange Head

| #<br>Part   | Flange | Hose I.D. | <b>A</b> |       | F      | ı    | 3     |
|-------------|--------|-----------|----------|-------|--------|------|-------|
| Number      | inch   | inch      | inch     | mm    | inch   | inch | mm    |
| 1KA77-20-16 | 1-1/4  | 1         | 4.05     | 102,9 | 2-1/8  | 2.10 | 53,4  |
| 1KA77-20-20 | 1-1/4  | 1-1/4     | 5.73     | 145,6 | 2-1/8  | 3.46 | 87,9  |
| 1KA77-24-24 | 1-1/2  | 1-1/2     | 6.39     | 162,3 | 2-1/2  | 4.00 | 101,6 |
| 1KA77-32-32 | 2      | 2         | 7.17     | 182,0 | 2-9/16 | 4.41 | 112,0 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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See Accessories Section for O-Rings and Flange Kits.



Refer to Pressure Rating of Hose End Connections Chart on page E-47.

www.mfcp.com



В



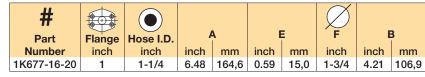




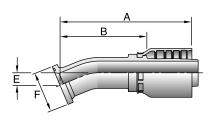
В

# 1K677

#### Komatsu® Flange Head - 22-1/2° Elbow



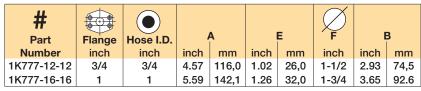
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



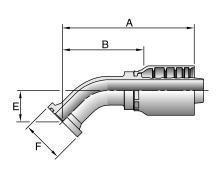
view on web page

#### 1K777

#### Komatsu® Flange Head - 45° Elbow



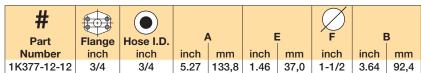




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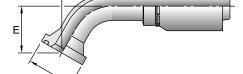
#### 1K377

#### Komatsu® Flange Head - 60° Elbow





of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



В

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See Accessories Section for O-Rings and Flange Kits.



Refer to Pressure Rating of Hose End Connections Chart on page E-47.

B-112

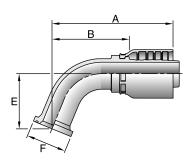
Updated 8/2021

#### 1K877

#### Komatsu® Flange Head - 67-1/2° Elbow

| #           |        |           |      |       | _    | _    | Ø     | В    |       |
|-------------|--------|-----------|------|-------|------|------|-------|------|-------|
| Part        | Flange | Hose I.D. | Ą    |       | Ę    |      | F     | l t  | 3     |
| Number      | inch   | inch      | inch | mm    | inch | mm   | inch  | inch | mm    |
| 1K877-16-16 | 1      | 1         | 5.98 | 151,9 | 2.01 | 51,0 | 1-3/4 | 4.03 | 102,4 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



В

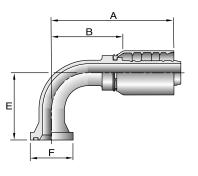
view on web page

#### 1K977

#### Komatsu® Flange Head - 90° Elbow

| #<br>Part   | Flange | Hose I.D. | A    |       | E    |      | F     | В    |      |
|-------------|--------|-----------|------|-------|------|------|-------|------|------|
| Number      | inch   | inch      | inch | mm    | inch | mm   | inch  | inch | mm   |
| 1K977-12-12 | 3/4    | 3/4       | 4.24 | 107,7 | 2.28 | 58,0 | 1-1/2 | 2.60 | 66,0 |
| 1K977-16-12 | 1      | 3/4       | 4.24 | 107,7 | 2.17 | 55,0 | 1-3/4 | 2.60 | 66,0 |
| 1K977-16-16 | 1      | 1         | 4.65 | 118,1 | 2.76 | 70,0 | 1-3/4 | 2.70 | 68,6 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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#### **1JB77**

#### Male Seal-Lok® - Bulkhead without Locknut (with O-Ring) End Connection per SAE J516 (Apr2016)

| #           |           |           | Ą    |       |    |      |      |
|-------------|-----------|-----------|------|-------|----|------|------|
| Part        | Thread    | Hose I.D. |      |       | н  | В    |      |
| Number      | inch      | inch      | inch | mm    | mm | inch | mm   |
| 1JB77-16-16 | 1-7/16x12 | 1         | 4.87 | 123,7 | 46 | 2.92 | 74,2 |

Fittings are stocked less locknut (part no. WLNL). Locknuts are manufactured by the Parker Tube Fittings Division and must be ordered separately.

Supplied with Parker's exclusive Trap-Seal™, which leads to improved retention within Seal-



view on web page

Lok's™ ORFS groove and virtually eliminates costly leakage and/or time consuming pre-assembly WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

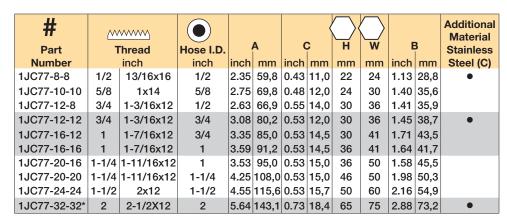


Refer to Pressure Rating of Hose End Connections Chart on page E-47. B-113

Updated 8/2021

B

#### **1JC77** Female Seal-Lok® - Swivel - Short ISO 12151-1-SWSA



<sup>\*</sup>This specific size in stainless is not able to be crimped in any Parkrimp machine.

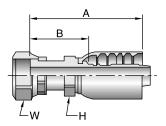
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause  $cancer and birth \, defects \, or \, other \, reproductive \, harm. \, \, For more \, information \, go \, to \, www.p65 warnings. ca.gov. \, and \, birth \, defects \, or \, other \, reproductive \, harm. \, For more information \, go \, to \, www.p65 \, warnings. \, ca.gov. \, and \, birth \, defects \, or \, other \, reproductive \, harm. \, For more information \, go \, to \, www.p65 \, warnings. \, ca.gov. \, and \, birth \, defects \, or \, other \, reproductive \, harm. \, For more information \, go \, to \, www.p65 \, warnings. \, ca.gov. \, and \, birth \, defects \, or \, other \, reproductive \, harm. \, For more information \, go \, to \, www.p65 \, warnings. \, ca.gov. \, and \, birth \, defects \, or \, other \, reproductive \, harm. \, For more information \, go \, to \, www.p65 \, warnings. \, ca.gov. \, and \, birth \, defects \, or \, other \, reproductive \, harm. \, For more information \, go \, to \, www.p65 \, warnings. \, ca.gov. \, and \, birth \, defects \, or \, other \, birth \, birth \, defects \, or \, other \, birth  



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# **1JS77**

Female Seal-Lok® - Swivel - Long ISO 12151-1-SWSB



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| #           | ~     | ·····      |           |      |       |    |    |      |      | Additional<br>Material |
|-------------|-------|------------|-----------|------|-------|----|----|------|------|------------------------|
| Part        | 1     | hread      | Hose I.D. | A    |       | H  | W  | , t  | 3    | Stainless              |
| Number      |       | inch       | inch      | inch | mm    | mm | mm | inch | mm   | Steel (C)              |
| 1JS77-6-8   | 3/8   | 11/16x16   | 1/2       | 2.67 | 67,8  | 22 | 22 | 1.45 | 36,8 |                        |
| 1JS77-8-8   | 1/2   | 13/16x16   | 1/2       | 2.80 | 71,2  | 22 | 24 | 1.58 | 40,2 | •                      |
| 1JS77-10-8  | 5/8   | 1x14       | 1/2       | 2.95 | 75,0  | 24 | 30 | 1.73 | 44,0 |                        |
| 1JS77-10-10 | 5/8   | 1x14       | 5/8       | 3.21 | 81,5  | 24 | 30 | 1.86 | 47,3 |                        |
| 1JS77-10-12 | 5/8   | 1x14       | 3/4       | 3.58 | 90,8  | 30 | 30 | 1.94 | 49,4 |                        |
| 1JS77-12-8  | 3/4   | 1-3/16x12  | 1/2       | 3.15 | 80,1  | 30 | 36 | 1.93 | 49,1 |                        |
| 1JS77-12-10 | 3/4   | 1-3/16x12  | 5/8       | 3.35 | 85,1  | 30 | 36 | 2.00 | 50,8 |                        |
| 1JS77-12-12 | 3/4   | 1-3/16x12  | 3/4       | 3.68 | 93,4  | 30 | 36 | 2.04 | 51,9 |                        |
| 1JS77-12-16 | 3/4   | 1-3/16x12  | 1         | 4.18 | 106,2 | 36 | 36 | 2.23 | 56,7 |                        |
| 1JS77-16-12 | 1     | 1-7/16x12  | 3/4       | 3.90 | 99,0  | 36 | 41 | 2.26 | 57,5 |                        |
| 1JS77-16-16 | 1     | 1-7/16x12  | 1         | 4.19 | 106,4 | 36 | 41 | 2.24 | 56,9 | •                      |
| 1JS77-16-20 | 1     | 1-7/16x12  | 1-1/4     | 4.71 | 119,7 | 46 | 41 | 2.44 | 62,0 |                        |
| 1JS77-20-16 | 1-1/4 | 1-11/16x12 | 1         | 4.29 | 108,9 | 36 | 50 | 2.34 | 59,5 |                        |
| 1JS77-20-20 | 1-1/4 | 1-11/16x12 | 1-1/4     | 4.78 | 121,4 | 46 | 50 | 2.51 | 63,8 | •                      |
| 1JS77-24-24 | 1-1/2 | 2x12       | 1-1/2     | 5.12 | 130,0 | 50 | 60 | 2.73 | 69,4 | •                      |
| 1JS77-32-32 | 2     | 2-1/2x12   | 2         | 6.28 | 159,5 | 65 | 75 | 3.52 | 89,4 |                        |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

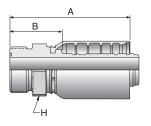


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ho}$  Refer to Pressure Rating of Hose End Connections Chart on page E-47.

B-114

Male Seal-Lok® - Rigid - (with O-Ring) ISO 12151-1-S

| #<br>Part   |            | Hose I.D. | ,    | Ą     |    | E    | 3    |
|-------------|------------|-----------|------|-------|----|------|------|
| Number      | inch       | inch      | inch | mm    | mm | inch | mm   |
| 1J077-8-8   | 13/16x16   | 1/2       | 2.85 | 72,3  | 22 | 1.39 | 35,3 |
| 1J077-10-8  | 1x14       | 1/2       | 3.03 | 77,0  | 27 | 1.57 | 39,9 |
| 1J077-10-10 | 1x14       | 5/8       | 3.30 | 83,8  | 27 | 1.63 | 41,4 |
| 1J077-12-10 | 1-3/16x12  | 5/8       | 3.44 | 87,3  | 32 | 1.77 | 45,0 |
| 1J077-12-12 | 1-3/16x12  | 3/4       | 3.75 | 95,3  | 32 | 1.84 | 46,7 |
| 1J077-16-12 | 1-7/16x12  | 3/4       | 3.93 | 99,8  | 41 | 2.02 | 51,3 |
| 1J077-16-16 | 1-7/16x12  | 1         | 4.33 | 110,0 | 41 | 2.10 | 53,3 |
| 1J077-20-16 | 1-11/16x12 | 1         | 4.41 | 112,0 | 46 | 2.18 | 55,4 |
| 1J077-20-20 | 1-11/16x12 | 1-1/4     | 4.98 | 126,5 | 46 | 2.27 | 57,7 |
| 1J077-24-20 | 2x12       | 1-1/4     | 5.14 | 130,5 | 55 | 2.43 | 61,7 |



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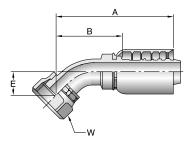
Supplied with Parker's exclusive Trap-Seal™, which leads to improved retention within Seal-Lok's™ ORFS groove and virtually eliminates costly leakage and/or time consuming pre-assembly handling.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **1J777**

Female Seal-Lok® - Swivel - 45° Elbow

| #<br>Part   |       |            | Hose I.D. |      | A      | E    |    | $\bigcirc$ |      | В      |
|-------------|-------|------------|-----------|------|--------|------|----|------------|------|--------|
| Number      |       | inch       | inch      | inch | mm     | inch | mm | mm         | inch | mm     |
| 1J777-8-8   | 1/2   | 13/16x16   | 1/2       | 2.86 | 72,7   | 0.59 | 15 | 24         | 1.64 | 41,8   |
| 1J777-10-8  | 5/8   | 1x14       | 1/2       | 2.97 | 75,5   | 0.63 | 16 | 30         | 1.75 | 44,6   |
| 1J777-10-10 | 5/8   | 1x14       | 5/8       | 3.40 | 86,0   | 0.63 | 16 | 30         | 2.05 | 52,0   |
| 1J777-12-12 | 3/4   | 1-3/16x12  | 3/4       | 4.39 | 111,4  | 0.83 | 21 | 36         | 2.75 | 70,0   |
| 1J777-20-16 | 1-1/4 | 1-11/16x12 | 1         | 4.80 | 121,8  | 0.98 | 25 | 50         | 2.85 | 72,3   |
| 1J777-20-20 | 1-1/4 | 1-11/16x12 | 1-1/4     | 5.64 | 143,2  | 0.98 | 25 | 50         | 3.36 | 85,5   |
| 1J777-24-24 | 1-1/2 | 2x12       | 1-1/2     | 6.82 | 173.35 | 1.65 | 42 | 60         | 4.44 | 112.65 |



view on web page

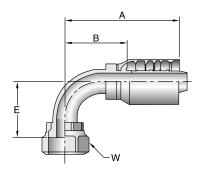
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

В

See Accessories Section for O-Rings and Flange Kits.



#### Female Seal-Lok® - Swivel - 90° Elbow - Short Drop ISO 12151-1-SWES90



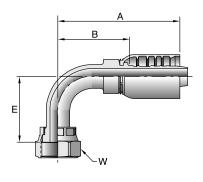
view on web page

| #           | ^     | <b>/////</b> |           |      |          |      |    |    |      |      |
|-------------|-------|--------------|-----------|------|----------|------|----|----|------|------|
| Part        | T     | hread        | Hose I.D. | A    | <b>\</b> | E    |    | W  | E    | 3    |
| Number      |       | inch         | inch      | inch | mm       | inch | mm | mm | inch | mm   |
| 1J977-8-8   | 1/2   | 13/16x16     | 1/2       | 2.78 | 70,7     | 1.14 | 29 | 24 | 1.56 | 39,7 |
| 1J977-10-8  | 5/8   | 1x14         | 1/2       | 2.77 | 70,5     | 1.26 | 32 | 30 | 1.55 | 39,5 |
| 1J977-10-10 | 5/8   | 1x14         | 5/8       | 3.21 | 81,5     | 1.26 | 32 | 30 | 1.86 | 47,3 |
| 1J977-12-8  | 3/4   | 1-3/16x12    | 1/2       | 2.77 | 70,5     | 1.89 | 48 | 36 | 1.55 | 39,5 |
| 1J977-12-10 | 3/4   | 1-3/16x12    | 5/8       | 3.21 | 81,5     | 1.89 | 48 | 36 | 1.86 | 47,3 |
| 1J977-12-12 | 3/4   | 1-3/16x12    | 3/4       | 4.24 | 107,6    | 1.89 | 48 | 36 | 2.60 | 66,1 |
| 1J977-16-12 | 1     | 1-7/16x12    | 3/4       | 4.23 | 107,4    | 2.20 | 56 | 41 | 2.59 | 65,9 |
| 1J977-16-16 | 1     | 1-7/16x12    | 1         | 4.65 | 118,1    | 2.20 | 56 | 41 | 2.70 | 68,6 |
| 1J977-16-20 | 1     | 1-7/16x12    | 1-1/4     | 5.05 | 128,3    | 2.20 | 56 | 41 | 2.78 | 70,6 |
| 1J977-20-16 | 1-1/4 | 1-11/16x12   | 1         | 4.65 | 118,1    | 2.52 | 64 | 50 | 2.70 | 68,6 |
| 1J977-20-20 | 1-1/4 | 1-11/16x12   | 1-1/4     | 5.35 | 136,0    | 2.52 | 64 | 50 | 3.08 | 78,3 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### **1J577**

#### Female Seal-Lok® - Swivel - 90° Elbow - Medium Drop ISO 12151-1 - SWEM90



view on web page

|   | #<br>Part    |       | //////<br>Thread | Hose I.D. |      | A      | E    |    | $\bigcirc$ |      | В     | Additional<br>Material<br>Stainless |
|---|--------------|-------|------------------|-----------|------|--------|------|----|------------|------|-------|-------------------------------------|
|   | Number       |       | inch             | inch      | inch | mm     | inch | mm | mm         | inch | mm    | Steel (C)                           |
|   | 1J577-8-8    | 1/2   | 13/16x16         | 1/2       | 2.77 | 70,5   | 1.61 | 41 | 24         | 1.55 | 39,5  |                                     |
|   | 1J577-10-10  | 5/8   | 1x14             | 5/8       | 4.11 | 104,4  | 1.85 | 57 | 30         | 2.76 | 70,1  |                                     |
| 1 | 1J577-12-12  | 3/4   | 1-3/16x12        | 3/4       | 4.24 | 107,6  | 2.28 | 58 | 36         | 2.60 | 66,1  |                                     |
|   | 1J577-16-12  | 1     | 1-7/16x12        | 3/4       | 4.23 | 107,5  | 2.80 | 71 | 41         | 2.60 | 66,0  |                                     |
|   | 1J577-16-16  | 1     | 1-7/16x12        | 1         | 4.65 | 118,1  | 2.80 | 71 | 41         | 2.70 | 68,6  |                                     |
| 1 | 1J577-20-20  | 1-1/4 | 1-11/16x12       | 1-1/4     | 5.35 | 136,0  | 3.07 | 78 | 50         | 3.08 | 78,3  |                                     |
|   | 1J577-20-20C | 1-1/4 | 1-11/16x12       | 1-1/4     | 6.20 | 157,5  | 3.07 | 78 | 50         | 3.93 | 99,8  | •                                   |
| L | 1J577-24-24  | 1-1/2 | 2x12             | 1-1/2     | 6.24 | 158.45 | 3.39 | 86 | 60         | 3.85 | 97.75 | •                                   |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

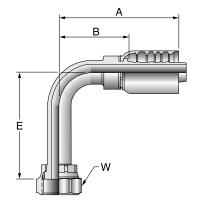


Refer to Pressure Rating of Hose End Connections Chart on page E-47.

Updated 10/2022

#### Female Seal-Lok® - Swivel - 90° Elbow - Long Drop ISO 12151-1-SWEL90

| #<br>Part    |            | Hose I.D. A E W B |      | Additional<br>Material<br>Stainless |      |     |    |      |       |           |
|--------------|------------|-------------------|------|-------------------------------------|------|-----|----|------|-------|-----------|
| Number       | inch       | inch              | inch | mm                                  | inch | mm  | mm | inch | mm    | Steel (C) |
| 1J177-8-8    | 13/16x16   | 1/2               | 2.77 | 70,5                                | 2.52 | 64  | 24 | 1.55 | 39,5  |           |
| 1J177-10-10  | 1x14       | 5/8               | 3.21 | 81,5                                | 2.76 | 70  | 30 | 1.86 | 47,3  |           |
| 1J177-12-10  | 1-3/16x12  | 5/8               | 3.21 | 81,5                                | 3.78 | 96  | 36 | 1.86 | 47,3  |           |
| 1J177-12-12  | 1-3/16x12  | 3/4               | 4.23 | 107,4                               | 3.78 | 96  | 36 | 2.59 | 65,9  |           |
| 1J177-16-12  | 1-7/16x12  | 3/4               | 4.23 | 107,4                               | 4.49 | 114 | 41 | 2.59 | 65,9  |           |
| 1J177-16-16  | 1-7/16x12  | 1                 | 4.65 | 118,1                               | 4.49 | 114 | 41 | 2.70 | 68,6  |           |
| 1J177-20-16  | 1-11/16x12 | 1                 | 4.65 | 118,1                               | 5.08 | 129 | 50 | 2.70 | 68,6  |           |
| 1J177-20-20  | 1-11/16x12 | 1-1/4             | 5.35 | 136,0                               | 5.08 | 129 | 50 | 3.08 | 78,3  |           |
| 1J177-20-20C | 1-11/16x12 | 1-1/4             | 6.29 | 159,8                               | 5.08 | 129 | 50 | 4.02 | 102,1 | •         |



view on web page

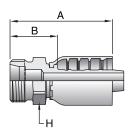
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

### 1D277

#### Male Metric S - Rigid - (24° Cone)

End Connection per ISO 8434-1-BHS

| #<br>Part   |         | Hose I.D. | ,    | Ą     | H  |      | В    |
|-------------|---------|-----------|------|-------|----|------|------|
| Number      | mm      | inch      | inch | mm    | mm | inch | mm   |
| 1D277-16-8  | M24x1,5 | 1/2       | 2.53 | 64,4  | 24 | 1.31 | 33,4 |
| 1D277-20-10 | M30x2   | 5/8       | 2.85 | 72,4  | 30 | 1.50 | 38,1 |
| 1D277-20-12 | M30x2   | 3/4       | 3.29 | 83,6  | 30 | 1.66 | 42,1 |
| 1D277-25-12 | M36x2   | 3/4       | 3.39 | 86,3  | 36 | 1.76 | 44,8 |
| 1D277-30-16 | M42x2   | 1         | 3.91 | 99,3  | 46 | 1.96 | 49,8 |
| 1D277-38-20 | M52x2   | 1-1/4     | 4.50 | 114,3 | 55 | 2.23 | 56,6 |



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



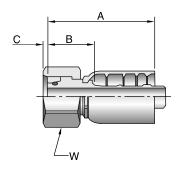
В

See Accessories Section for O-Rings and Flange Kits.



# 1C977

#### Female Metric S - Swivel - (24° Cone with O-Ring) ISO 12151-2-SWS



view on web page

| #           | _  | ······  |           |      | Α.    | c    |     | $\bigcirc$ |      | 3        | Additional<br>Material |
|-------------|----|---------|-----------|------|-------|------|-----|------------|------|----------|------------------------|
| Part        |    | Thread  | Hose I.D. |      | 1     |      |     | VV         |      | <b>.</b> | Stainless              |
| Number      |    | mm      | inch      | inch | mm    | inch | mm  | mm         | inch | mm       | Steel (C)              |
| 1C977-12-8  | 12 | M20x1,5 | 1/2       | 2.39 | 60,8  | 0.03 | 1,0 | 24         | 1.17 | 29,8     |                        |
| 1C977-16-8  | 16 | M24x1,5 | 1/2       | 2.34 | 59,5  | 0.09 | 2,0 | 30         | 1.12 | 28,5     | •                      |
| 1C977-16-10 | 16 | M24x1,5 | 5/8       | 2.64 | 67,0  | 0.09 | 2,0 | 30         | 1.29 | 32,8     |                        |
| 1C977-20-8  | 20 | M30x2   | 1/2       | 2.46 | 62,5  | 0.05 | 1,3 | 36         | 1.24 | 31,5     |                        |
| 1C977-20-10 | 20 | M30x2   | 5/8       | 2.64 | 67,0  | 0.05 | 1,3 | 36         | 1.29 | 32,8     |                        |
| 1C977-20-12 | 20 | M30x2   | 3/4       | 2.97 | 75,5  | 0.05 | 1,3 | 36         | 1.34 | 34,0     | •                      |
| 1C977-25-12 | 25 | M36x2   | 3/4       | 3.00 | 76,5  | 0.10 | 2,6 | 46         | 1.37 | 35,0     |                        |
| 1C977-25-16 | 25 | M36x2   | 1         | 3.60 | 91,4  | 0.10 | 2,6 | 46         | 1.65 | 41,9     |                        |
| 1C977-30-12 | 30 | M42x2   | 3/4       | 3.17 | 80,4  | 0.19 | 5,0 | 50         | 1.53 | 39,0     |                        |
| 1C977-30-16 | 30 | M42x2   | 1         | 3.50 | 89,0  | 0.19 | 5,0 | 50         | 1.55 | 39,5     |                        |
| 1C977-30-20 | 30 | M42x2   | 1-1/4     | 4.09 | 103,9 | 0.19 | 5,0 | 50         | 1.82 | 46,2     |                        |
| 1C977-38-20 | 38 | M52x2   | 1-1/4     | 3.92 | 99,6  | 0.27 | 6,9 | 60         | 1.65 | 42,0     |                        |
| 1C977-38-24 | 38 | M52x2   | 1-1/2     | 4.08 | 103,7 | 0.24 | 6,0 | 60         | 1.69 | 43,1     |                        |

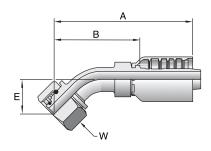
When measuring overall length to end of nut, B + C dimensions must be used to calculate cut-off allowance.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 10C77

#### Female Metric S - Swivel - 45° Elbow - (24° Cone with O-Ring) ISO 12151-2-SWE-45



view on web page

| #<br>Part   |    | ··········· | Hose I.D. |      | A      | E    |      | $\bigcirc$ |      | В      |
|-------------|----|-------------|-----------|------|--------|------|------|------------|------|--------|
| Number      |    | mm          | inch      | inch | mm     | inch | mm   | mm         | inch | mm     |
| 10C77-16-8  | 16 | M24x1,5     | 1/2       | 3.28 | 83,4   | 0.93 | 23,5 | 30         | 2.06 | 52,4   |
| 10C77-20-10 | 20 | M30x2       | 5/8       | 4.20 | 106,7  | 1.10 | 28,0 | 36         | 2.85 | 72,4   |
| 10C77-20-12 | 20 | M30x2       | 3/4       | 4.74 | 120,4  | 1.18 | 30,0 | 36         | 3.10 | 78,8   |
| 10C77-25-12 | 25 | M36x2       | 3/4       | 4.70 | 119,3  | 1.14 | 29,0 | 46         | 3.06 | 77,8   |
| 10C77-25-16 | 25 | M36x2       | 1         | 5.59 | 141,9  | 1.30 | 33,0 | 46         | 3.64 | 92,4   |
| 10C77-30-16 | 30 | M42x2       | 1         | 5.58 | 141,8  | 1.30 | 33,0 | 50         | 3.63 | 92,3   |
| 10C77-38-20 | 38 | M52x2       | 1-1/4     | 6.60 | 167,7  | 1.44 | 36,5 | 60         | 4.33 | 110,0  |
| 10C77-38-24 | 38 | M52x2       | 1-1/2     | 7.09 | 180.05 | 1.93 | 49,0 | 60         | 4.70 | 119.35 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.



Refer to Pressure Rating of Hose End Connections Chart on page E-47.

B-118

Updated 10/2022

# 11C77

#### Female Metric S - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2-SWE

| #           |         | •         |      |          | _    |     |    |      | _     |
|-------------|---------|-----------|------|----------|------|-----|----|------|-------|
| Part        | Thread  | Hose I.D. |      | <b>A</b> | E    | I   | W  |      | В     |
| Number      | mm      | inch      | inch | mm       | inch | mm  | mm | inch | mm    |
| 11C77-16-8  | M24x1,5 | 1/2       | 3.02 | 76,6     | 1.77 | 45  | 30 | 1.80 | 45,6  |
| 11C77-20-10 | M30x2   | 5/8       | 3.62 | 92,0     | 2.09 | 53  | 36 | 2.27 | 57,8  |
| 11C77-20-12 | M30x2   | 3/4       | 4.25 | 107,9    | 2.36 | 60  | 36 | 2.61 | 66,4  |
| 11C77-25-12 | M36x2   | 3/4       | 4.25 | 107,9    | 2.32 | 59  | 46 | 2.61 | 66,4  |
| 11C77-25-16 | M36x2   | 1         | 4.65 | 118,1    | 2.75 | 70  | 46 | 2.70 | 68,6  |
| 11C77-30-16 | M42x2   | 1         | 5.16 | 131,0    | 2.72 | 69  | 50 | 3.21 | 81,6  |
| 11C77-38-20 | M52x2   | 1-1/4     | 6.28 | 159,5    | 3.07 | 78  | 60 | 4.01 | 101,8 |
| 11C77-38-24 | M52x2   | 1-1/2     | 6.24 | 158.45   | 3.98 | 101 | 60 | 3.85 | 97.75 |

В

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

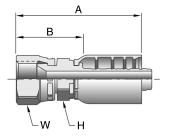
view on web page

# **1FU77**

# Female BSP Parallel Pipe - Swivel - (30° Flare)

B8363 Code F

| #<br>Part   | //////// Thread | Hose I.D. | ,    | <b>A</b> | H  | W  | В    |      |
|-------------|-----------------|-----------|------|----------|----|----|------|------|
| Number      | inch            | inch      | inch | mm       | mm | mm | inch | mm   |
| 1FU77-8-8   | 1/2x14          | 1/2       | 2.89 | 73,4     | 22 | 27 | 1.67 | 42,4 |
| 1FU77-12-12 | 3/4x14          | 3/4       | 3.71 | 94,1     | 32 | 36 | 2.07 | 52,6 |
| 1FU77-16-16 | 1x11            | 1         | 4.31 | 109,5    | 41 | 41 | 2.36 | 60,0 |
| 1FU77-20-20 | 1-1/4x11        | 1-1/4     | 4.88 | 123,9    | 50 | 50 | 2.60 | 66,1 |
| 1FU77-24-24 | 1-1/2x11        | 1-1/2     | 5.42 | 137,7    | 60 | 60 | 3.03 | 77,1 |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

view on web page

See Accessories Section for O-Rings and Flange Kits.



Refer to Pressure Rating of Hose End Connections Chart on page E-47.

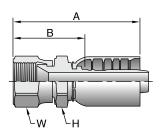
Updated 10/2022

B-119

В

### **1KU77**

Female Metric - Swivel - (30° Flare)



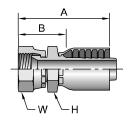
| #<br>Part   | //////// Thread | Hose I.D. | ,    | A     | H  | $\bigvee_{\mathbf{W}}$ | В    |      |
|-------------|-----------------|-----------|------|-------|----|------------------------|------|------|
| Number      | mm              | inch      | inch | mm    | mm | mm                     | inch | mm   |
| 1KU77-10-10 | M24x1,5         | 5/8       | 3.44 | 87,5  | 32 | 32                     | 2.09 | 53,2 |
| 1KU77-12-12 | M30x1,5         | 3/4       | 3.79 | 96,3  | 36 | 36                     | 2.16 | 54,8 |
| 1KU77-16-16 | M33x1,5         | 1         | 4.61 | 117,1 | 41 | 41                     | 2.66 | 67,6 |

view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **1MU77**

Female Metric - Swivel - (30° Flare)



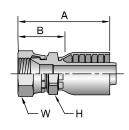
| #<br>Part | //////// Thread | Hose I.D. |      | 4    | H  | w \ | В    |      |
|-----------|-----------------|-----------|------|------|----|-----|------|------|
| Number    | mm              | inch      | inch | mm   | mm | mm  | inch | mm   |
| 1MU77-8-8 | M22x1,5         | 1/2       | 2.89 | 73,4 | 22 | 27  | 1.67 | 42,4 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

view on web page

# 1XU77

Female Metric - Swivel - (30° Flare)



| #<br>Part   | /////// Thread | Hose I.D. |      | <b>A</b> | Н  | W  | В    |      |
|-------------|----------------|-----------|------|----------|----|----|------|------|
| Number      | mm             | inch      | inch | mm       | mm | mm | inch | mm   |
| 1XU77-10-10 | M24x1,5        | 5/8       | 3.44 | 87,5     | 30 | 32 | 2.09 | 53,2 |
| 1XU77-12-12 | M30x1,5        | 3/4       | 3.93 | 99,7     | 32 | 36 | 2.29 | 58,3 |
| 1XU77-16-16 | M33x1,5        | 1         | 4.55 | 115,6    | 36 | 41 | 2.60 | 66,1 |
| 1XU77-20-20 | M36x1,5        | 1-1/4     | 5.18 | 131,4    | 46 | 46 | 2.90 | 73,7 |
| 1XU77-24-24 | M42x1,5        | 1-1/2     | 5.65 | 143,4    | 50 | 55 | 3.26 | 82,7 |

view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

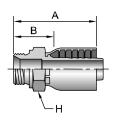


#### 1D977

#### Male BSP Parallel Pipe - Rigid - (60° Cone)

| #           |         |           |      | _    |    |      |      |
|-------------|---------|-----------|------|------|----|------|------|
| Part        | Thread  | Hose I.D. | 4    | A    | Н  |      | B    |
| Number      | inch    | inch      | inch | mm   | mm | inch | mm   |
| 1D977-12-12 | 3/4x14A | 3/4       | 3.43 | 87,0 | 32 | 1.79 | 45,6 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

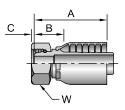
В

# 19277

#### Female BSP Parallel Pipe - Swivel - (60° Cone)

| #<br>Part   | //////// Thread | Hose I.D. | А    |       |      | C    | $\bigcirc$ | E    | 3    |
|-------------|-----------------|-----------|------|-------|------|------|------------|------|------|
| Number      | inch            | inch      | inch | mm    | inch | mm   | mm         | inch | mm   |
| 19277-12-12 | 3/4x12          | 3/4       | 2.86 | 72,6  | 0.35 | 8,9  | 32         | 1.22 | 31,1 |
| 19277-24-24 | 1-1/2x11        | 1-1/2     | 4.07 | 103,4 | 0.45 | 11,5 | 55         | 1.68 | 42,7 |
| 19277-32-32 | 2x11            | 2         | 4.93 | 125,1 | 0.50 | 13,3 | 70         | 2.17 | 55,1 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



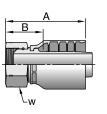
view on web page

#### 1EA77

#### Female BSP Parallel Pipe - Swivel - (60° Cone with O-Ring)

| #<br>Part   |          | Hose I.D. | A    |       | W  | ı    | В    |
|-------------|----------|-----------|------|-------|----|------|------|
| Number      | inch     | inch      | inch | mm    | mm | inch | mm   |
| 1EA77-24-24 | 1-1/2x11 | 1-1/2     | 4.05 | 102,9 | 55 | 1.66 | 42,2 |
| 1EA77-32-32 | 2x11     | 2         | 4.63 | 117,7 | 70 | 1.88 | 47,8 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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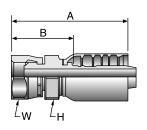
See Accessories Section for O-Rings and Flange Kits.



В



#### Female BSP Parallel Pipe - Swivel - (60° Cone)



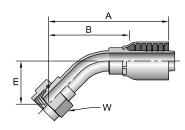
| #<br>Part   | Thread   | Hose I.D. | A    |       | A H |    | В    |      |
|-------------|----------|-----------|------|-------|-----|----|------|------|
| Number      | inch     | inch      | inch | mm    | mm  | mm | inch | mm   |
| 1GU77-8-8   | 1/2x14   | 1/2       | 2.97 | 75,5  | 27  | 27 | 1.75 | 44,5 |
| 1GU77-12-12 | 3/4x14   | 3/4       | 3.74 | 94,9  | 36  | 36 | 2.10 | 53,4 |
| 1GU77-16-16 | 1x11     | 1         | 4.33 | 110,0 | 41  | 41 | 2.38 | 60,5 |
| 1GU77-20-20 | 1-1/4x11 | 1-1/4     | 4.91 | 124,7 | 46  | 50 | 2.64 | 67,0 |
| 1GU77-24-24 | 1-1/2x11 | 1-1/2     | 5.49 | 139,3 | 60  | 60 | 3.09 | 78,6 |
| 1GU77-32-32 | 2x11     | 2         | 6.04 | 153,4 | 70  | 70 | 3.28 | 83,4 |

view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 1B177

#### Female BSP Parallel Pipe - Swivel - 45° Elbow (60° Cone)



| #          |                |                  |                                        |                                             | _                                                |                                                         |                                                            | _                                                   |                                                     |
|------------|----------------|------------------|----------------------------------------|---------------------------------------------|--------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|
| Part       | Thread         | Hose I.D.        | 4                                      | A                                           | Е                                                |                                                         | W                                                          | В                                                   |                                                     |
| Number     | inch           | inch             | inch                                   | mm                                          | inch                                             | mm                                                      | mm                                                         | inch                                                | mm                                                  |
| B177-16-16 | 1x11           | 1                | 5.71                                   | 145,0                                       | 1.42                                             | 36                                                      | 41                                                         | 3.76                                                | 95,5                                                |
|            | Part<br>Number | Part Thread Inch | Part Thread Hose I.D. Number inch inch | Part Thread Hose I.D. Number inch inch inch | Part Thread Hose I.D. A Number inch inch inch mm | Part Thread Hose I.D. A E Number inch inch inch mm inch | Part Thread Hose I.D. A E Number inch inch inch mm inch mm | Part Thread Inch Inch Inch Inch Inch Inch Inch Inch | Part Thread Inch Inch Inch Inch Inch Inch Inch Inch |

view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings and Flange Kits.

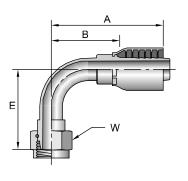


### 1B277

#### Female BSP Parallel Pipe - Swivel - 90° Elbow (60° Cone)

|   | #<br>Part   | Thread | Hose I.D. |      | A     |      | Ę    |    | E    | 3    | Additional<br>Material<br>Stainless |
|---|-------------|--------|-----------|------|-------|------|------|----|------|------|-------------------------------------|
|   | Number      | inch   | inch      | inch | mm    | inch | mm   | mm | inch | mm   | Steel (C)                           |
| 1 | 1B277-12-12 | 3/4x14 | 3/4       | 4.26 | 108,1 | 2.17 | 55,0 | 32 | 2.62 | 66,6 | •                                   |
| Ŀ | 1B277-16-16 | 1x11   | 1         | 4.65 | 118,1 | 2.89 | 73,5 | 41 | 2.70 | 68,6 |                                     |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



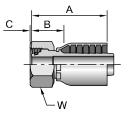
В

view on web page

# 1CA77

#### Female Metric L - Swivel - (24° Cone with O-Ring)

| #<br>Part   |       | Hose I.D. | <b>A</b> |       | C    | W  | E    | 3    |
|-------------|-------|-----------|----------|-------|------|----|------|------|
| Number      | mm    | inch      | inch     | mm    | mm   | mm | inch | mm   |
| 1CA77-22-12 | M30x2 | 3/4       | 2.86     | 72,6  | 0.15 | 36 | 1.22 | 31,1 |
| 1CA77-28-16 | M36x2 | 1         | 3.52     | 89,4  | 0.08 | 41 | 1.57 | 39,9 |
| 1CA77-35-20 | M42x2 | 1-1/4     | 3.95     | 100,4 | 0.06 | 50 | 1.68 | 42,6 |
| 1CA77-42-24 | M52x2 | 1-1/2     | 4.18     | 106,2 | 0.14 | 60 | 1.79 | 45,5 |



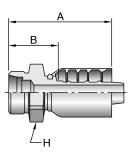
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

view on web page

#### 1**ZM**77

#### Male 24° Cone Metric - Rigid

| #<br>Part   |         | Hose I.D. | 4    | <b>\</b> | H  | E    | 3    |
|-------------|---------|-----------|------|----------|----|------|------|
| Number      | mm      | inch      | inch | mm       | mm | inch | mm   |
| 1ZM77-22-10 | M30x1,5 | 5/8       | 2.83 | 71,8     | 36 | 1.48 | 37,6 |
| 1ZM77-22-12 | M30x1,5 | 3/4       | 3.17 | 80,4     | 36 | 1.53 | 39,0 |
| 1ZM77-28-12 | M36x1,5 | 3/4       | 3.38 | 85,8     | 41 | 1.74 | 44,3 |
| 1ZM77-28-16 | M36x1,5 | 1         | 3.77 | 95,8     | 41 | 1.82 | 46,2 |
| 1ZM77-35-16 | M45x1,5 | 1         | 3.85 | 97,8     | 50 | 1.90 | 48,3 |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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See Accessories Section for O-Rings and Flange Kits.



Refer to Pressure Rating of Hose End Connections Chart on page E-47.

B-123 Updated 8/2021 Notes

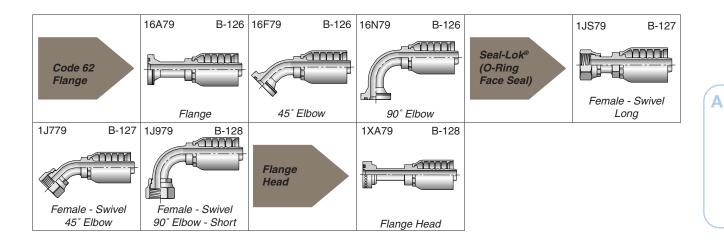
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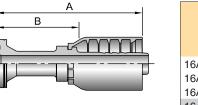
5



# 16A79

#### SAE Code 62 Flange Head

ISO 12151-3 - S - S



view on web page

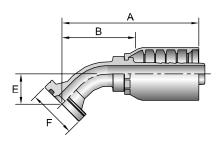
| #<br>Part   | Flange | Hose I.D | 4    | <b>1</b> | F     | E    | 3   |
|-------------|--------|----------|------|----------|-------|------|-----|
| Number      | inch   | inch     | inch | mm       | inch  | inch | mm  |
| 16A79-12-12 | 3/4    | 3/4      | 4.90 | 124      | 1-5/8 | 2.84 | 72  |
| 16A79-16-16 | 1      | 1        | 5.48 | 139      | 1-7/8 | 3.31 | 84  |
| 16A79-20-16 | 1-1/4  | 1        | 4.28 | 109      | 2-1/8 | 2.11 | 54  |
| 16A79-20-20 | 1-1/4  | 1-1/4    | 6.09 | 155      | 2-1/8 | 3.41 | 87  |
| 16A79-24-24 | 1-1/2  | 1-1/2    | 7.11 | 181      | 1-1/2 | 4.07 | 103 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 16F79

#### SAE Code 62 Flange Head - 45° Elbow

ISO 12151-3 - E45S - S (1 Piece: ISO 12151-3 - E45M - S)



В

| #<br>Part   | Flange | Hose I.D. | ,    | <b>\</b> | E    |    | F     | E    | 3   |
|-------------|--------|-----------|------|----------|------|----|-------|------|-----|
| Number      | inch   | inch      | inch | mm       | inch | mm | inch  | inch | mm  |
| 16F79-16-16 | 1      | 1         | 5.33 | 135      | 1.26 | 32 | 1-7/8 | 3.16 | 80  |
| 16F79-20-20 | 1-1/4  | 1-1/4     | 6.77 | 1/2      | 1.50 | 38 | 2-1/8 | 4.09 | 104 |

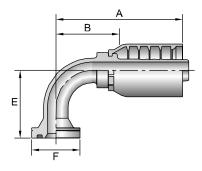
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### view on web page

# 16N79

#### SAE Code 62 Flange Head - 90° Elbow

ISO 12151-3 - E90S - S (1 Piece: ISO 12151-3 - E90M - S)



| view | on | web | page |
|------|----|-----|------|

| #<br>Part   | Flange | Hose I.D. |      | 4   | E    |     | F     | E    | 3   |
|-------------|--------|-----------|------|-----|------|-----|-------|------|-----|
| Number      | inch   | inch      | inch | mm  | inch | mm  | inch  | inch | mm  |
| 16N79-12-12 | 3/4    | 3/4       | 4.27 | 108 | 2.28 | 58  | 1-5/8 | 2.21 | 56  |
| 16N79-16-12 | 1      | 3/4       | 4.27 | 108 | 2.28 | 58  | 1-7/8 | 2.21 | 56  |
| 16N79-16-16 | 1      | 1         | 4.95 | 126 | 2.76 | 70  | 1-7/8 | 2.78 | 71  |
| 16N79-20-16 | 1-1/4  | 1         | 4.95 | 126 | 2.76 | 70  | 2-1/8 | 2.78 | 71  |
| 16N79-20-20 | 1-1/4  | 1-1/4     | 6.31 | 160 | 3.54 | 90  | 2-1/8 | 3.63 | 92  |
| 16N79-24-24 | 1-1/2  | 1-1/2     | 7.50 | 190 | 4.09 | 104 | 2-1/2 | 4.46 | 113 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

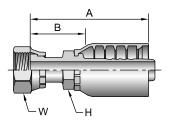
See Accessories Section for O-Rings and Flange Kits.

# **1JS79**

#### Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

| #<br>Part   |       |            | Hose I.D. | I    | ١   | →     H | W     | E    | 3  |
|-------------|-------|------------|-----------|------|-----|---------|-------|------|----|
| Number      |       | inch       | inch      | inch | mm  | inch    | inch  | inch | mm |
| 1JS79-12-12 | 3/4   | 1-3/16x12  | 3/4       | 3.99 | 101 | 1-1/8   | 1-3/8 | 1.93 | 49 |
| 1JS79-16-12 | 1     | 1-7/16x12  | 3/4       | 4.26 | 108 | 1-3/8   | 1-5/8 | 2.20 | 56 |
| 1JS79-16-16 | 1     | 1-7/16x12  | 1         | 4.45 | 113 | 1-3/8   | 1-5/8 | 2.28 | 58 |
| 1JS79-20-16 | 1-1/4 | 1-11/16x12 | 1         | 4.32 | 110 | 1-3/4   | 1-7/8 | 2.15 | 55 |
| 1JS79-20-20 | 1-1/4 | 1-11/16x12 | 1-1/4     | 5.00 | 127 | 1-3/4   | 1-7/8 | 2.32 | 59 |
| 1JS79-24-24 | 1-1/2 | 2x12       | 1-1/2     | 5.28 | 134 | 2       | 2-1/4 | 2.24 | 57 |



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **1J779**

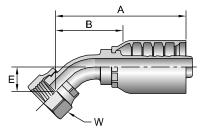
#### Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45

| #<br>Part   | Thread |            | Hose I.D. | Ą    |     | Ę    |    | $\bigcirc$ | E    | 3  |
|-------------|--------|------------|-----------|------|-----|------|----|------------|------|----|
| Number      |        | inch       | inch      | inch | mm  | inch | mm | inch       | inch | mm |
| 1J779-12-12 | 3/4    | 1-3/16x12  | 3/4       | 4.40 | 112 | 0.83 | 21 | 1-3/8      | 2.34 | 59 |
| 1J779-16-16 | 1      | 1-7/16x12  | 1         | 5.01 | 127 | 0.94 | 24 | 1-5/8      | 2.84 | 72 |
| 1J779-20-20 | 1-1/4  | 1-11/16x12 | 1-1/4     | 6.15 | 156 | 1.00 | 25 | 1-7/8      | 3.49 | 89 |

See Accessories Section for O-Rings and Flange Kits.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

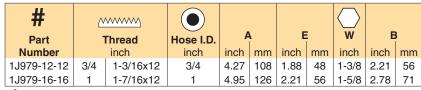


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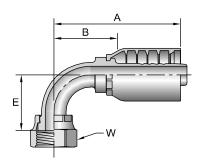
В

# Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

ISO - 12151-1 - SWES90



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

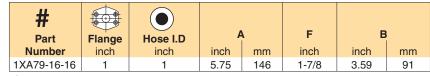


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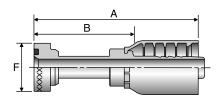
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#### 1XA79

#### Caterpillar® Flange Head



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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Notes

4

В







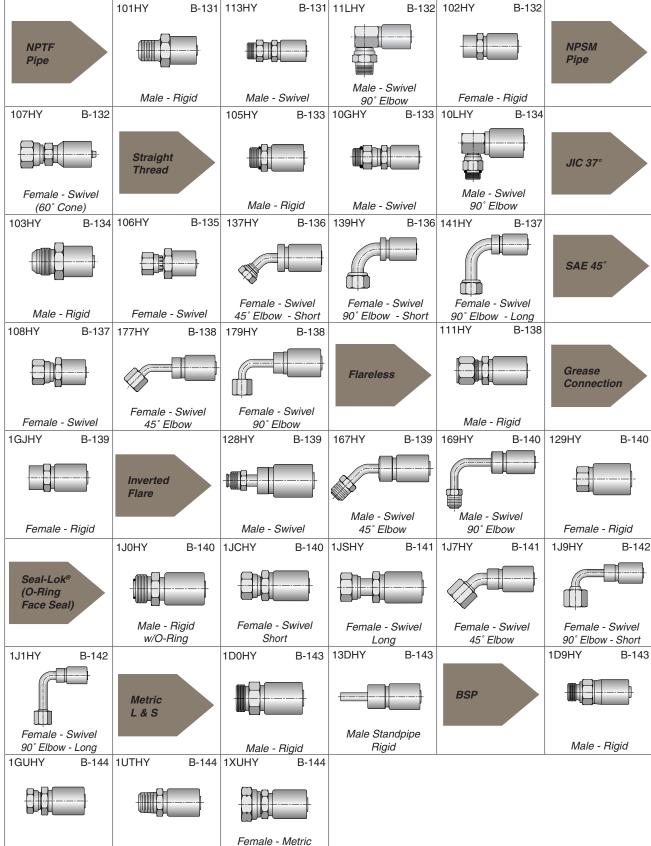
B-131 113HY

A

В

C

D



Swivel

Male - Rigid

Female - Swivel

# **101HY**

#### Male NPTF Pipe - Rigid

| #           |              |           |      |    |        |      |    | Additional<br>Material |
|-------------|--------------|-----------|------|----|--------|------|----|------------------------|
| Part        | Thread       | Hose I.D. |      | 4  | Н      | E    | 3  | Stainless              |
| Number      | inch         | inch      | inch | mm | inch   | inch | mm | Steel (C)              |
| 101HY-2-4   | 1/8x27       | 1/4       | 2.34 | 59 | 5/8    | 1.00 | 25 |                        |
| 101HY-4-4   | 1/4x18       | 1/4       | 2.53 | 64 | 9/16   | 1.19 | 30 | •                      |
| 101HY-4-5   | 1/4x18       | 5/16      | 2.56 | 65 | 11/16  | 1.22 | 31 |                        |
| 101HY-4-6   | 1/4x18       | 3/8       | 2.55 | 65 | 11/16  | 1.19 | 30 |                        |
| 101HY-6-4   | 3/8x18       | 1/4       | 2.53 | 64 | 3/4    | 1.19 | 30 |                        |
| 101HY-6-5   | 3/8x18       | 5/16      | 2.56 | 65 | 3/4    | 1.22 | 31 |                        |
| 101HY-6-6   | 3/8x18       | 3/8       | 2.55 | 65 | 3/4    | 1.19 | 30 | •                      |
| 101HY-6-8   | 3/8x18       | 1/2       | 2.72 | 69 | 7/8    | 1.38 | 35 |                        |
| 101HY-8-4   | 1/2x14       | 1/4       | 2.72 | 69 | 7/8    | 1.38 | 35 |                        |
| 101HY-8-6   | 1/2x14       | 3/8       | 2.73 | 69 | 7/8    | 1.38 | 35 |                        |
| 101HY-8-8   | 1/2x14       | 1/2       | 2.91 | 74 | 7/8    | 1.41 | 40 | •                      |
| 101HY-8-10  | 1/2x14       | 5/8       | 2.94 | 75 | 1-1/8  | 1.59 | 40 |                        |
| 101HY-8-12  | 1/2x14       | 3/4       | 3.08 | 78 | 1-1/4  | 1.50 | 38 |                        |
| 101HY-12-8  | 3/4x14       | 1/2       | 2.91 | 74 | 1-1/16 | 1.56 | 40 |                        |
| 101HY-12-12 | 3/4x14       | 3/4       | 3.08 | 78 | 1-1/4  | 1.50 | 38 | •                      |
| 101HY-12-16 | 3/4x14       | 1         | 3.23 | 82 | 1-3/8  | 1.63 | 41 |                        |
| 101HY-16-12 | 1x11-1/2     | 3/4       | 3.27 | 83 | 1-3/8  | 1.69 | 43 |                        |
| 101HY-16-14 | 1x11-1/2     | 7/8       | 3.27 | 83 | 1-3/8  | 1.78 | 43 |                        |
| 101HY-16-16 | 1x11-1/2     | 1         | 3.42 | 87 | 1-3/8  | 1.81 | 46 | •                      |
| 101HY-20-20 | 1-1/4x11-1/2 | 1-1/4     | 3.84 | 98 | 1-3/4  | 2.00 | 51 |                        |

view on web page

В

Stainless steel fittings must be assembled with Karrykrimp 2, Phastkrimp, Superkrimp or Parkrimp 2. See CrimpSource for more information.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 113HY

### **Male NPTF Pipe - Swivel**

| #           |          | •         | _    |     |       |       |      |    |
|-------------|----------|-----------|------|-----|-------|-------|------|----|
| Part        | Thread   | Hose I.D. | Ą    |     | Н     | W     | E    | 3  |
| Number      | inch     | inch      | inch | mm  | inch  | inch  | inch | mm |
| 113HY-2-4   | 1/8x27   | 1/4       | 2.97 | 75  | 9/16  | 5/8   | 1.63 | 41 |
| 113HY-4-4   | 1/4x18   | 1/4       | 3.06 | 78  | 9/16  | 5/8   | 1.72 | 44 |
| 113HY-4-6   | 1/4x18   | 3/8       | 3.17 | 81  | 11/16 | 11/16 | 1.81 | 46 |
| 113HY-6-4   | 3/8x18   | 1/4       | 3.13 | 80  | 5/8   | 11/16 | 1.78 | 45 |
| 113HY-6-6   | 3/8x18   | 3/8       | 3.11 | 79  | 11/16 | 11/16 | 1.75 | 44 |
| 113HY-6-8   | 3/8x18   | 1/2       | 3.31 | 84  | 7/8   | 7/8   | 1.97 | 50 |
| 113HY-8-6   | 1/2x14   | 3/8       | 3.38 | 86  | 7/8   | 7/8   | 2.03 | 52 |
| 113HY-8-8   | 1/2x14   | 1/2       | 3.50 | 89  | 7/8   | 7/8   | 2.16 | 55 |
| 113HY-12-12 | 3/4x14   | 3/4       | 3.95 | 100 | 1-1/4 | 1-1/4 | 2.38 | 60 |
| 113HY-16-16 | 1x11-1/2 | 1         | 4.23 | 107 | 1-1/2 | 1-1/2 | 2.63 | 67 |

view on web page

Fitting allows minor movement under pressure to relieve stress on hose but is not to be used for continuous swiveling.
See Technical Section for Pressure Limitations.



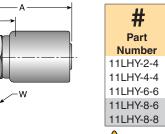
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Updated 10/2022

В

# 11LHY

#### Male NPTF Pipe - Swivel - 90° Elbow



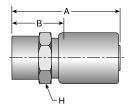
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| #<br>Part | //////// Thread | Hose I.D. | 4    | λ. | E    | <b>.</b> | <b>⊘</b> | E    | 3  |
|-----------|-----------------|-----------|------|----|------|----------|----------|------|----|
| Number    | inch            | inch      | inch | mm | inch | mm       | inch     | inch | mm |
| 11LHY-2-4 | 1/8x27          | 1/4       | 2.31 | 59 | 1.50 | 38       | 5/8      | 0.97 | 25 |
| 11LHY-4-4 | 1/4x18          | 1/4       | 2.31 | 59 | 1.69 | 43       | 11/16    | 0.97 | 25 |
| 11LHY-6-6 | 3/8x8           | 3/8       | 2.33 | 59 | 1.63 | 41       | 11/16    | 0.97 | 25 |
| 11LHY-8-6 | 1/2x14          | 3/8       | 2.73 | 69 | 1.88 | 48       | 7/8      | 0.97 | 25 |
| 11LHY-8-8 | 1/2x14          | 1/2       | 3.00 | 76 | 1.93 | 49       | 7/8      | 1.09 | 28 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 102HY

### Female NPTF Pipe - Rigid



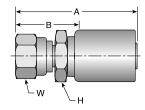
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| #           |          |           | _    |    |       |      |    |
|-------------|----------|-----------|------|----|-------|------|----|
| Part        | Thread   | Hose I.D. | Ą    |    | Н     | E    | 3  |
| Number      | inch     | inch      | inch | mm | inch  | inch | mm |
| 102HY-2-4   | 1/8x27   | 1/4       | 2.34 | 59 | 5/8   | 1.00 | 25 |
| 102HY-4-4   | 1/4x18   | 1/4       | 2.47 | 63 | 11/16 | 1.13 | 29 |
| 102HY-4-6   | 1/4x18   | 3/8       | 2.48 | 63 | 11/16 | 1.13 | 29 |
| 102HY-6-6   | 3/8x18   | 3/8       | 2.48 | 63 | 7/8   | 1.13 | 29 |
| 102HY-8-6   | 1/2x14   | 3/8       | 2.75 | 70 | 1     | 1.41 | 36 |
| 102HY-8-8   | 1/2x14   | 1/2       | 2.84 | 72 | 1     | 1.50 | 38 |
| 102HY-12-12 | 3/4x14   | 3/4       | 2.83 | 72 | 1-1/4 | 1.25 | 32 |
| 102HY-16-16 | 1x11-1/2 | 1         | 3.27 | 83 | 1-1/2 | 1.66 | 42 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **107HY**

#### Female NPSM Pipe - Swivel - (60° Cone)



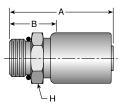
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| #<br>Part   | Thread   | Hose I.D. | Ą    |    | H     | W     | Е    | 3  |
|-------------|----------|-----------|------|----|-------|-------|------|----|
| Number      | inch     | inch      | inch | mm | inch  | inch  | inch | mm |
| 107HY-4-4   | 1/4x18   | 1/4       | 2.66 | 68 | 9/16  | 11/16 | 1.31 | 33 |
| 107HY-6-4   | 3/8x18   | 1/4       | 2.72 | 69 | 3/4   | 7/8   | 1.38 | 35 |
| 107HY-6-6   | 3/8x18   | 3/8       | 2.55 | 65 | 3/4   | 7/8   | 1.19 | 30 |
| 107HY-8-8   | 1/2x14   | 1/2       | 2.91 | 74 | 1     | 1     | 1.56 | 40 |
| 107HY-12-12 | 3/4x14   | 3/4       | 3.22 | 82 | 1-1/4 | 1-1/4 | 1.66 | 42 |
| 107HY-16-16 | 1x11-1/2 | 1         | 3.39 | 86 | 1-3/8 | 1-1/2 | 1.78 | 45 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **105HY**Male SAE Straight Thread with O-Ring - Rigid

| #           |           |           |      |    |       |      |    |
|-------------|-----------|-----------|------|----|-------|------|----|
| Part        | Thread    | Hose I.D. | A    |    | Н     | E    | 3  |
| Number      | inch      | inch      | inch | mm | inch  | inch | mm |
| 105HY-4-4   | 7/16x20   | 1/4       | 2.33 | 59 | 9/16  | 0.97 | 25 |
| 105HY-6-4   | 9/16x18   | 1/4       | 2.42 | 61 | 11/16 | 1.06 | 27 |
| 105HY-6-6   | 9/16x18   | 3/8       | 2.38 | 60 | 11/16 | 1.03 | 26 |
| 105HY-8-6   | 3/4x16    | 3/8       | 2.42 | 61 | 7/8   | 1.06 | 27 |
| 105HY-8-8   | 3/4x16    | 1/2       | 2.59 | 66 | 7/8   | 1.25 | 32 |
| 105HY-10-8  | 7/8x14    | 1/2       | 2.66 | 68 | 1     | 1.31 | 33 |
| 105HY-10-10 | 7/8x14    | 5/8       | 2.80 | 71 | 1-1/8 | 1.41 | 36 |
| 105HY-12-8  | 1-1/16x12 | 1/2       | 2.81 | 71 | 1-1/4 | 1.47 | 37 |
| 105HY-12-12 | 1-1/16x12 | 3/4       | 2.92 | 74 | 1-1/4 | 1.34 | 34 |
| 105HY-16-12 | 1-5/16x12 | 3/4       | 2.92 | 74 | 1-1/2 | 1.34 | 34 |
| 105HY-16-16 | 1-5/16x12 | 1         | 3.08 | 78 | 1-1/2 | 1.47 | 37 |



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**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **10GHY**

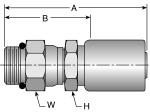
#### Male SAE Straight Thread with O-Ring - Swivel

| #           |           |           |      |     |       |       |      |    |   |   |
|-------------|-----------|-----------|------|-----|-------|-------|------|----|---|---|
| Part        | Thread    | Hose I.D. | Α    |     | Α     |       | Н    | W  | E | 3 |
| Number      | inch      | inch      | inch | mm  | inch  | inch  | inch | mm |   |   |
| 10GHY-4-4   | 7/16x20   | 1/4       | 3.00 | 76  | 9/16  | 5/8   | 1.66 | 42 |   |   |
| 10GHY-6-6   | 9/16x18   | 3/8       | 3.14 | 80  | 11/16 | 11/16 | 1.78 | 45 |   |   |
| 10GHY-8-6   | 3/4x16    | 3/8       | 3.24 | 82  | 13/16 | 7/8   | 1.88 | 48 |   |   |
| 10GHY-8-8   | 3/4x16    | 1/2       | 3.36 | 85  | 7/8   | 7/8   | 2.00 | 51 |   |   |
| 10GHY-10-8  | 7/8x14    | 1/2       | 3.44 | 87  | 1     | 1     | 2.09 | 53 |   |   |
| 10GHY-12-8  | 1-1/16x12 | 1/2       | 3.66 | 93  | 1-1/4 | 1-1/4 | 2.31 | 59 |   |   |
| 10GHY-16-16 | 1-5/16x12 | 1         | 3.95 | 100 | 1-3/8 | 1-1/2 | 2.34 | 59 |   |   |

Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on extensive or continuous swiveling.



**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



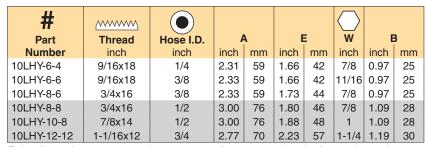
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O-Ring not compatible with Phosphate Ester fluids.

В

# 10LHY

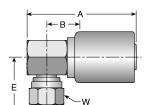
#### Male SAE Straight Thread with O-Ring - Swivel - 90° Elbow



Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on extensive or continuous swiveling.



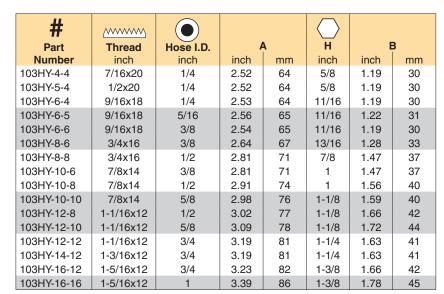
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

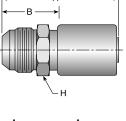


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#### 103HY

#### Male JIC 37° - Rigid





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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 106HY

#### Female JIC 37° - Swivel

| #           | ///////   |           |      |     |       | $\langle \rangle$ |      |    | Additional<br>Material |
|-------------|-----------|-----------|------|-----|-------|-------------------|------|----|------------------------|
| Part        | Thread    | Hose I.D. | Α    |     | H     | w                 | E    | 3  | Stainless              |
| Number      | inch      | inch      | inch | mm  | inch  | inch              | inch | mm | Steel (C)              |
| 106HY-3-4   | 3/8x24    | 1/4       | 2.58 | 66  | 9/16  | 1/2               | 1.22 | 31 |                        |
| 106HY-4-4   | 7/16x20   | 1/4       | 2.60 | 66  | 9/16  | 9/16              | 1.25 | 32 | •                      |
| 106HY-4-6   | 7/16x20   | 3/8       | 2.67 | 68  | 3/4   | 9/16              | 1.31 | 33 |                        |
| 106HY-5-4   | 1/2x20    | 1/4       | 2.65 | 67  | 9/16  | 5/8               | 1.31 | 33 |                        |
| 106HY-5-5   | 1/2x20    | 5/16      | 2.69 | 68  | 5/8   | 5/8               | 1.34 | 34 |                        |
| 106HY-5-6   | 1/2x20    | 3/8       | 2.73 | 69  | 3/4   | 5/8               | 1.38 | 35 |                        |
| 106HY-6-4   | 9/16x18   | 1/4       | 2.67 | 68  | 9/16  | 11/16             | 1.31 | 33 |                        |
| 106HY-6-5   | 9/16x18   | 5/16      | 2.70 | 69  | 5/8   | 11/16             | 1.34 | 34 |                        |
| 106HY-6-6   | 9/16x18   | 3/8       | 2.69 | 68  | 11/16 | 11/16             | 1.34 | 34 | •                      |
| 106HY-8-6   | 3/4x16    | 3/8       | 2.72 | 69  | 7/8   | 7/8               | 1.38 | 35 |                        |
| 106HY-8-8   | 3/4x16    | 1/2       | 2.90 | 74  | 7/8   | 7/8               | 1.41 | 40 | •                      |
| 106HY-8-10  | 3/4x16    | 5/8       | 2.98 | 76  | 1-1/8 | 7/8               | 1.59 | 40 |                        |
| 106HY-8-12  | 3/4x16    | 3/4       | 3.08 | 78  | 1-1/4 | 7/8               | 1.53 | 39 |                        |
| 106HY-10-6  | 7/8x14    | 3/8       | 2.81 | 71  | 7/8   | 1                 | 1.47 | 37 |                        |
| 106HY-10-8  | 7/8x14    | 1/2       | 2.98 | 76  | 1     | 1                 | 1.63 | 41 |                        |
| 106HY-10-10 | 7/8x14    | 5/8       | 3.06 | 78  | 1-1/8 | 1                 | 1.69 | 43 |                        |
| 106HY-10-12 | 7/8x14    | 3/4       | 3.16 | 80  | 1-1/4 | 1                 | 1.59 | 40 |                        |
| 106HY-12-8  | 1-1/16x12 | 1/2       | 3.05 | 77  | 1-1/8 | 1-1/4             | 1.69 | 43 |                        |
| 106HY-12-10 | 1-1/16x12 | 5/8       | 3.12 | 79  | 1-1/8 | 1-1/4             | 1.75 | 44 |                        |
| 106HY-12-12 | 1-1/16x12 | 3/4       | 3.22 | 82  | 1-1/4 | 1-1/4             | 1.66 | 42 | •                      |
| 106HY-12-16 | 1-1/16x12 | 1         | 3.38 | 86  | 1-3/8 | 1-1/4             | 1.75 | 44 |                        |
| 106HY-14-12 | 1-3/16x12 | 3/4       | 3.23 | 82  | 1-1/4 | 1 3/8             | 1.66 | 42 |                        |
| 106HY-16-12 | 1-5/16x12 | 3/4       | 3.30 | 84  | 1-3/8 | 1-1/2             | 1.72 | 44 |                        |
| 106HY-16-14 | 1-5/16x12 | 7/8       | 3.30 | 84  | 1-3/8 | 1-1/2             | 1.72 | 44 |                        |
| 106HY-16-16 | 1-5/16x12 | 1         | 3.45 | 88  | 1-3/8 | 1-1/2             | 1.84 | 47 | •                      |
| 106HY-20-16 | 1-5/8x12  | 1         | 3.70 | 94  | 1-3/4 | 2                 | 2.09 | 53 |                        |
| 106HY-20-20 | 1-5/8x12  | 1-1/4     | 4.09 | 104 | 2     | 2                 | 2.25 | 57 |                        |

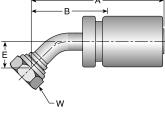
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В

Stainless steel fittings must be assembled with Karrykrimp 2, PHastkrimp, Superkrimp or Parkrimp 2. See CrimpSource for more information.

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.





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# **137HY** Female JIC 37° - Swivel - 45° Elbow - Short Drop

| #           |           |           |      |     |      |    |       |      |    |
|-------------|-----------|-----------|------|-----|------|----|-------|------|----|
| Part        | Thread    | Hose I.D. | Α    |     | E    |    | W     | E    | 3  |
| Number      | inch      | inch      | inch | mm  | inch | mm | inch  | inch | mm |
| 137HY-4-4   | 7/16x20   | 1/4       | 2.59 | 66  | 0.39 | 10 | 9/16  | 1.32 | 34 |
| 137HY-6-4   | 9/16x18   | 1/4       | 2.70 | 69  | 0.43 | 10 | 3/4   | 1.43 | 36 |
| 137HY-6-6   | 9/16x18   | 3/8       | 2.72 | 69  | 0.43 | 11 | 11/16 | 1.44 | 37 |
| 137HY-8-6   | 3/4x16    | 3/8       | 2.88 | 73  | 0.58 | 15 | 7/8   | 1.60 | 41 |
| 137HY-8-8   | 3/4x16    | 1/2       | 3.10 | 79  | 0.59 | 15 | 7/8   | 1.81 | 46 |
| 137HY-10-8  | 7/8x14    | 1/2       | 3.20 | 81  | 0.63 | 16 | 1     | 1.91 | 49 |
| 137HY-10-10 | 7/8x14    | 5/8       | 3.29 | 84  | 0.63 | 16 | 1     | 1.93 | 49 |
| 137HY-12-12 | 1-1/16x12 | 3/4       | 3.82 | 97  | 0.83 | 21 | 1-1/4 | 2.29 | 58 |
| 137HY-16-16 | 1-5/16x12 | 1         | 4.31 | 109 | 0.89 | 23 | 1-1/2 | 2.69 | 68 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.









# 139HY

#### Female JIC 37° - Swivel - 90° Elbow - Short Drop

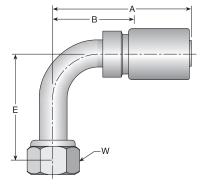
| #           |           |           |      |     |      |    |       |      |    |
|-------------|-----------|-----------|------|-----|------|----|-------|------|----|
| Part        | Thread    | Hose I.D. | A    |     | Ę    |    | W     | E    | 3  |
| Number      | inch      | inch      | inch | mm  | inch | mm | inch  | inch | mm |
| 139HY-4-4   | 7/16x20   | 1/4       | 2.40 | 61  | 0.83 | 21 | 9/16  | 1.13 | 29 |
| 139HY-5-4   | 1/2x20    | 1/4       | 2.50 | 64  | 0.83 | 21 | 5/8   | 1.23 | 31 |
| 139HY-6-4   | 9/16x18   | 1/4       | 2.65 | 67  | 0.91 | 23 | 3/4   | 1.38 | 35 |
| 139HY-6-6   | 9/16x18   | 3/8       | 2.57 | 65  | 0.91 | 23 | 11/16 | 1.29 | 33 |
| 139HY-8-6   | 3/4x16    | 3/8       | 2.64 | 67  | 1.14 | 29 | 7/8   | 1.37 | 35 |
| 139HY-8-8   | 3/4x16    | 1/2       | 2.85 | 72  | 1.14 | 29 | 7/8   | 1.56 | 40 |
| 139HY-10-8  | 7/8x14    | 1/2       | 3.01 | 76  | 1.26 | 32 | 1     | 1.72 | 44 |
| 139HY-10-10 | 7/8x14    | 5/8       | 3.09 | 78  | 1.26 | 32 | 1     | 1.73 | 44 |
| 139HY-12-8  | 1-1/16x12 | 1/2       | 3.61 | 92  | 1.83 | 46 | 1-1/4 | 2.25 | 57 |
| 139HY-12-10 | 1-1/16x12 | 5/8       | 3.61 | 92  | 1.89 | 48 | 1-1/4 | 2.25 | 57 |
| 139HY-12-12 | 1-1/16x12 | 3/4       | 3.68 | 93  | 1.89 | 48 | 1-1/4 | 2.15 | 55 |
| 139HY-16-12 | 1-5/16x12 | 3/4       | 4.33 | 110 | 2.14 | 54 | 1-1/2 | 2.78 | 71 |
| 139HY-16-16 | 1-5/16x12 | 1         | 4.31 | 109 | 2.31 | 59 | 1-1/2 | 2.69 | 68 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 141HY

#### Female JIC 37° - Swivel - 90° Elbow - Long Drop

| #           |           |           |      |     |      |     |       |      |    |
|-------------|-----------|-----------|------|-----|------|-----|-------|------|----|
| Part        | Thread    | Hose I.D. | A    |     | E    |     | W     | E    | 3  |
| Number      | inch      | inch      | inch | mm  | inch | mm  | inch  | inch | mm |
| 141HY-4-4   | 7/16x20   | 1/4       | 2.68 | 68  | 1.81 | 46  | 9/16  | 1.41 | 36 |
| 141HY-6-4   | 9/16x18   | 1/4       | 2.89 | 73  | 2.13 | 54  | 11/16 | 1.62 | 41 |
| 141HY-6-6   | 9/16x18   | 3/8       | 2.76 | 70  | 2.13 | 54  | 11/16 | 1.49 | 39 |
| 141HY-8-6   | 3/4x16    | 3/8       | 2.85 | 72  | 2.52 | 64  | 7/8   | 1.58 | 40 |
| 141HY-8-8   | 3/4x16    | 1/2       | 2.89 | 73  | 2.52 | 64  | 7/8   | 1.60 | 41 |
| 141HY-10-8  | 7/8x14    | 1/2       | 3.01 | 76  | 2.76 | 70  | 1     | 1.72 | 44 |
| 141HY-12-12 | 1-1/16x12 | 3/4       | 3.59 | 91  | 3.73 | 95  | 1-1/4 | 2.03 | 52 |
| 141HY-16-16 | 1-5/16x12 | 1         | 4.56 | 116 | 4.33 | 110 | 1-1/2 | 2.94 | 75 |



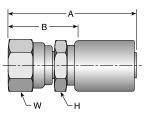
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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# 108HY

#### Female SAE 45° - Swivel

| Thread    | Hose I.D.                                             | A                                                                                |                                                                                                                         | Н                                                                                                                                                                                                                                                                                                                                                                                                 | W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | В                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                      |
|-----------|-------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| inch      | inch                                                  | inch                                                                             | mm                                                                                                                      | inch                                                                                                                                                                                                                                                                                                                                                                                              | inch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | inch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | mm                                                                                   |
| 1/2x20    | 5/16                                                  | 2.68                                                                             | 68                                                                                                                      | 5/8                                                                                                                                                                                                                                                                                                                                                                                               | 5/8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.34                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 34                                                                                   |
| 5/8x18    | 1/4                                                   | 2.73                                                                             | 69                                                                                                                      | 11/16                                                                                                                                                                                                                                                                                                                                                                                             | 3/4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 35                                                                                   |
| 5/8x18    | 5/16                                                  | 2.76                                                                             | 70                                                                                                                      | 5/8                                                                                                                                                                                                                                                                                                                                                                                               | 3/4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 36                                                                                   |
| 5/8x18    | 3/8                                                   | 2.75                                                                             | 70                                                                                                                      | 11/16                                                                                                                                                                                                                                                                                                                                                                                             | 3/4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 36                                                                                   |
| 3/4x16    | 1/2                                                   | 2.90                                                                             | 74                                                                                                                      | 7/8                                                                                                                                                                                                                                                                                                                                                                                               | 7/8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 40                                                                                   |
| 3/4x16    | 3/4                                                   | 3.17                                                                             | 81                                                                                                                      | 1-1/4                                                                                                                                                                                                                                                                                                                                                                                             | 7/8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.59                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 40                                                                                   |
| 1-1/16x12 | 3/4                                                   | 3.41                                                                             | 87                                                                                                                      | 1-1/4                                                                                                                                                                                                                                                                                                                                                                                             | 1-1/4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.84                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 47                                                                                   |
|           | Thread inch 1/2x20 5/8x18 5/8x18 5/8x18 3/4x16 3/4x16 | Thread inch inch 1/2x20 5/16 5/8x18 1/4 5/8x18 5/16 5/8x18 3/4x16 1/2 3/4x16 3/4 | Thread inch inch inch 1/2x20 5/16 2.68 5/8x18 1/4 2.73 5/8x18 5/16 2.76 5/8x18 3/8 2.75 3/4x16 1/2 2.90 3/4x16 3/4 3.17 | Thread inch         Hose I.D. inch         A inch inch         mm           1/2x20         5/16         2.68         68           5/8x18         1/4         2.73         69           5/8x18         5/16         2.76         70           5/8x18         3/8         2.75         70           3/4x16         1/2         2.90         74           3/4x16         3/4         3.17         81 | Thread inch         Hose I.D. inch         A inch inch inch         mm inch inch inch           1/2x20         5/16         2.68         68         5/8           5/8x18         1/4         2.73         69         11/16           5/8x18         5/16         2.76         70         5/8           5/8x18         3/8         2.75         70         11/16           3/4x16         1/2         2.90         74         7/8           3/4x16         3/4         3.17         81         1-1/4 | Thread inch         Hose I.D. inch         A inch inch inch         Imm inch inch inch inch         W inch inch inch inch           1/2x20         5/16         2.68         68         5/8         5/8           5/8x18         1/4         2.73         69         11/16         3/4           5/8x18         5/16         2.76         70         5/8         3/4           5/8x18         3/8         2.75         70         11/16         3/4           3/4x16         1/2         2.90         74         7/8         7/8           3/4x16         3/4         3.17         81         1-1/4         7/8 | Thread inch         Hose I.D. inch         A inch inch inch inch inch inch inch inch |



view on web page

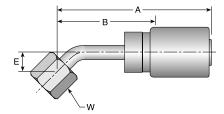
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

E

В

# **177HY**

#### Female SAE 45° - Swivel - 45° Elbow

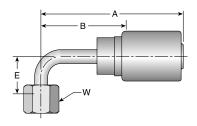


| #<br>Part   |           | Hose I.D. | Δ    |     | F    |    | $\bigcirc$ | R    |    |
|-------------|-----------|-----------|------|-----|------|----|------------|------|----|
| Number      | inch      | inch      | inch | mm  | inch | mm | inch       | inch | mm |
| 177HY-12-12 | 1-1/16x14 | 3/4       | 4.03 | 102 | 0.77 | 20 | 1-1/4      | 2.44 | 62 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 179HY

#### Female SAE 45° - Swivel - 90° Elbow



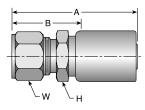
| Thread | Hose I.D.   | Ą                     |                            | Ę                               |                                      | W                           | B                                     |                                                 |
|--------|-------------|-----------------------|----------------------------|---------------------------------|--------------------------------------|-----------------------------|---------------------------------------|-------------------------------------------------|
| inch   | inch        | inch                  | mm                         | inch                            | mm                                   | inch                        | inch                                  | mm                                              |
| 5/8x18 | 3/8         | 3.23                  | 82                         | 0.86                            | 22                                   | 3/4                         | 1.88                                  | 48                                              |
|        | Thread inch | Thread Hose I.D. inch | Thread Hose I.D. inch inch | Thread Hose I.D. A inch inch mm | Thread inch inch inch inch inch inch | Thread inch inch mm inch mm | Thread inch inch inch mm inch mm inch | Thread inch inch inch mm inch mm inch inch inch |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### view on web page

# **111HY**

#### Male Ferulok Flareless - Rigid (24° Cone w/Nut and Ferrule)



view on web page

| #           |           |           |      |    |       |       |      |    |
|-------------|-----------|-----------|------|----|-------|-------|------|----|
| Part        | Thread    | Hose I.D. | A    |    | Н     | W     | B    |    |
| Number      | inch      | inch      | inch | mm | inch  | inch  | inch | mm |
| 111HY-4-4   | 7/16x20   | 1/4       | 2.42 | 61 | 9/16  | 9/16  | 1.06 | 27 |
| 111HY-6-6   | 9/16x18   | 3/8       | 2.45 | 62 | 11/16 | 11/16 | 1.09 | 28 |
| 111HY-8-6   | 3/4x16    | 3/8       | 2.61 | 66 | 7/8   | 7/8   | 1.25 | 32 |
| 111HY-8-8   | 3/4x16    | 1/2       | 2.72 | 69 | 7/8   | 7/8   | 1.38 | 35 |
| 111HY-10-8  | 7/8x14    | 1/2       | 2.78 | 71 | 1     | 1     | 1.44 | 37 |
| 111HY-12-12 | 1-1/16x12 | 3/4       | 3.02 | 77 | 1-1/4 | 1-1/4 | 1.44 | 37 |

The Parker Ferrule-Fix fitting makes it possible to salvage the bent tube section from a hose assembly for quick, easy on the job repairs. For additional information see Ferrule-Fix installation instructions in the Technical Section.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## **1GJHY**

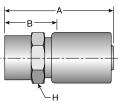
## Female Grease Connection - SPL - PTF Taper

#### Thread - Rigid - 1/2x27

| #<br>Part | //////// Thread | Hose I.D. | A    | Ą  |      |      | 3  |
|-----------|-----------------|-----------|------|----|------|------|----|
| Number    | inch            | inch      | inch | mm | inch | inch | mm |
| 1GJHY-8-4 | 1/2x27          | 1/4       | 2.41 | 61 | 3/4  | 1.06 | 27 |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



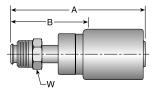
Use with hoses: 801, 836, 611HT

view on web page

## **128HY**

#### Male Inverted SAE 45° - Swivel

| #<br>Part | /////// Thread | Hose I.D. | ,    | 4  | W    | E    | 3  |
|-----------|----------------|-----------|------|----|------|------|----|
| Number    | inch           | inch      | inch | mm | inch | inch | mm |
| 128HY-4-4 | 7/16x24        | 1/4       | 3.28 | 83 | 7/16 | 1.94 | 49 |
| 128HY-5-4 | 1/2x20         | 1/4       | 3.34 | 85 | 1/2  | 2.00 | 51 |
| 128HY-6-5 | 5/8x18         | 5/16      | 3.75 | 95 | 5/8  | 2.41 | 61 |
| 128HY-6-6 | 5/8x18         | 3/8       | 3.73 | 95 | 5/8  | 2.38 | 60 |



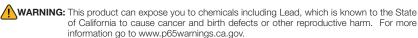
view on web page

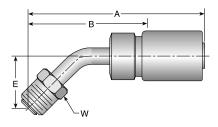
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## **167HY**

#### Male Inverted SAE 45° - Swivel - 45° Elbow

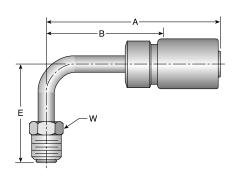
| #         |        |           |      | A   |      | <b>.</b> |      | E    | 2  |
|-----------|--------|-----------|------|-----|------|----------|------|------|----|
| Part      | Thread | Hose I.D. |      |     |      |          |      | Ī    |    |
| Number    | inch   | inch      | inch | mm  | inch | mm       | inch | inch | mm |
| 167HY-6-6 | 5/8x18 | 3/8       | 4.16 | 106 | 0.94 | 24       | 5/8  | 2.81 | 71 |





view on web page

В



#### **169HY**

#### Male Inverted SAE 45° - Swivel - 90° Elbow

|    | #<br>Part |        | Hose I.D. | A    |     | A E  |    | <b>○</b> | E    | В  |  |
|----|-----------|--------|-----------|------|-----|------|----|----------|------|----|--|
|    | Number    | inch   | inch      | inch | mm  | inch | mm | inch     | inch | mm |  |
| 16 | 69HY-5-4  | 1/2x20 | 1/4       | 3.52 | 89  | 1.66 | 42 | 1/2      | 2.16 | 55 |  |
| 16 | 69HY-6-6  | 5/8x18 | 3/8       | 4.03 | 102 | 1.69 | 43 | 5/8      | 2.69 | 68 |  |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### view on web page

## 129HY

## Female Inverted SAE 45° - Rigid

| #         |        | •         |      |    |      |      |    |
|-----------|--------|-----------|------|----|------|------|----|
| Part      | Thread | Hose I.D. | A    |    | Н    | E    | 3  |
| Number    | inch   | inch      | inch | mm | inch | inch | mm |
| 129HY-5-4 | 1/2x20 | 1/4       | 2.25 | 57 | 5/8  | 0.91 | 23 |
| ^         |        |           |      |    |      |      |    |

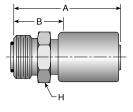
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## view on web page

## **1J0HY**

## Male Seal-Lok® - Rigid - (with O-Ring)

SAE J516 (Apr2016)



| view |  |  |
|------|--|--|
|      |  |  |
|      |  |  |
|      |  |  |

| #<br>Part  | Thread    | Hose I.D. | 4    | ١  | Н     | E    | 3  |
|------------|-----------|-----------|------|----|-------|------|----|
| Number     | inch      | inch      | inch | mm | inch  | inch | mm |
| 1J0HY-4-4  | 9/16x18   | 1/4       | 2.36 | 60 | 5/8   | 1.00 | 25 |
| 1J0HY-6-6  | 11/16x16  | 3/8       | 2.49 | 63 | 3/4   | 1.13 | 29 |
| 1J0HY-8-8  | 13/16x16  | 1/2       | 2.69 | 68 | 7/8   | 1.34 | 34 |
| 1J0HY-12-8 | 1-3/16x12 | 1/2       | 2.91 | 74 | 1-1/4 | 1.56 | 40 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

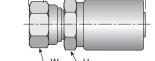
## 1JCHY

#### Female Seal-Lok® - Swivel - Short

ISO 12151-1 - SWSA

| #<br>Part   |           | Hose I.D. | Δ    | <b>\</b> | C    | }    | $\bigcirc$ | $\bigcirc$ | E    | 3  |
|-------------|-----------|-----------|------|----------|------|------|------------|------------|------|----|
| Number      | inch      | inch      | inch | mm       | inch | mm   | inch       | inch       | inch | mm |
| 1JCHY-4-4   | 9/16x18   | 1/4       | 2.61 | 66       | 0.31 | 7,8  | 9/16       | 11/16      | 0.94 | 24 |
| 1JCHY-6-6   | 11/16x16  | 3/8       | 2.69 | 68       | 0.34 | 8,7  | 11/16      | 13/16      | 0.94 | 24 |
| 1JCHY-8-8   | 13/16x16  | 1/2       | 2.91 | 74       | 0.43 | 11,0 | 7/8        | 15/16      | 1.13 | 29 |
| 1JCHY-12-12 | 1-3/16x12 | 3/4       | 3.31 | 84       | 0.55 | 14,0 | 1-1/4      | 1-3/8      | 1.13 | 29 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

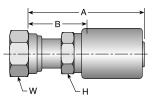
See Accessories Section for O-Rings.

## 1JSHY

## Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

| #           |            |           |      |     |       |       |      |    |
|-------------|------------|-----------|------|-----|-------|-------|------|----|
| Part        | Thread     | Hose I.D. |      | 4   | Н     | W     | В    | 3  |
| Number      | inch       | inch      | inch | mm  | inch  | inch  | inch | mm |
| 1JSHY-4-4   | 9/16x18    | 1/4       | 2.59 | 66  | 9/16  | 11/16 | 1.25 | 32 |
| 1JSHY-6-4   | 11/16x16   | 1/4       | 2.67 | 68  | 5/8   | 13/16 | 1.31 | 33 |
| 1JSHY-6-5   | 11/16x16   | 5/16      | 2.70 | 69  | 5/8   | 13/16 | 1.34 | 34 |
| 1JSHY-6-6   | 11/16x16   | 3/8       | 2.75 | 70  | 11/16 | 13/16 | 1.34 | 34 |
| 1JSHY-8-6   | 13/16x16   | 3/8       | 2.84 | 72  | 7/8   | 15/16 | 1.50 | 38 |
| 1JSHY-8-8   | 13/16x16   | 1/2       | 2.95 | 75  | 7/8   | 15/16 | 1.59 | 40 |
| 1JSHY-10-8  | 1x14       | 1/2       | 3.16 | 80  | 15/16 | 1-1/8 | 1.81 | 46 |
| 1JSHY-10-10 | 1x14       | 5/8       | 3.17 | 81  | 1-1/8 | 1-1/8 | 1.78 | 45 |
| 1JSHY-10-12 | 1x14       | 3/4       | 3.27 | 83  | 1-1/4 | 1-1/8 | 1.69 | 43 |
| 1JSHY-12-10 | 1-3/16x12  | 5/8       | 3.20 | 81  | 1-1/8 | 1-3/8 | 1.81 | 46 |
| 1JSHY-12-12 | 1-3/16x12  | 3/4       | 3.30 | 84  | 1-1/4 | 1-3/8 | 1.72 | 44 |
| 1JSHY-16-12 | 1-7/16x12  | 3/4       | 3.44 | 87  | 1-3/8 | 1-5/8 | 1.88 | 48 |
| 1JSHY-16-16 | 1-7/16x12  | 1         | 3.59 | 91  | 1-3/8 | 1-5/8 | 1.97 | 50 |
| 1JSHY-20-16 | 1-11/16x12 | 1         | 3.47 | 88  | 1-5/8 | 1-7/8 | 1.75 | 59 |
| 1JSHY-20-20 | 1-11/16x12 | 1-1/4     | 3.98 | 101 | 1-3/4 | 1-7/8 | 2.16 | 55 |



В

view on web page

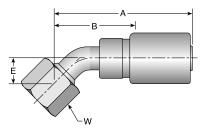
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## **1J7HY**

#### Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45

| #<br>Part   | Thread    | Hose I.D. | A    | 4   | E    | <u> </u> | $\bigcirc$ | E    | 3  |
|-------------|-----------|-----------|------|-----|------|----------|------------|------|----|
| Number      | inch      | inch      | inch | mm  | inch | mm       | inch       | inch | mm |
| 1J7HY-4-4   | 9/16x18   | 1/4       | 2.59 | 66  | 0.39 | 10       | 11/16      | 1.32 | 34 |
| 1J7HY-6-4   | 11/16x16  | 1/4       | 2.70 | 69  | 0.43 | 11       | 13/16      | 1.43 | 36 |
| 1J7HY-6-6   | 11/16x16  | 3/8       | 2.72 | 69  | 0.43 | 11       | 13/16      | 1.44 | 37 |
| 1J7HY-8-4   | 13/16x16  | 1/4       | 2.95 | 75  | 0.59 | 15       | 15/16      | 1.68 | 43 |
| 1J7HY-8-6   | 13/16x16  | 3/8       | 2.89 | 73  | 0.59 | 15       | 15/16      | 1.62 | 41 |
| 1J7HY-8-8   | 13/16x16  | 1/2       | 3.10 | 79  | 0.59 | 15       | 15/16      | 1.81 | 46 |
| 1J7HY-10-8  | 1x14      | 1/2       | 3.20 | 81  | 0.63 | 16       | 1-1/8      | 1.91 | 49 |
| 1J7HY-10-10 | 1x14      | 5/8       | 3.29 | 84  | 0.63 | 16       | 1-1/8      | 1.93 | 49 |
| 1J7HY-12-12 | 1-3/16x12 | 3/4       | 3.82 | 97  | 0.83 | 21       | 1-3/8      | 2.29 | 58 |
| 1J7HY-16-16 | 1-7/16x12 | 1         | 4.55 | 116 | 0.97 | 25       | 1-5/8      | 2.94 | 75 |



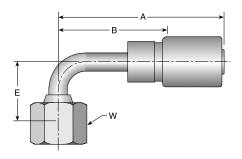
view on web page

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings.

## **1J9HY**

Female Seal-Lok® - Swivel - 90° Elbow - Short Drop ISO 12151-1 - SWES90



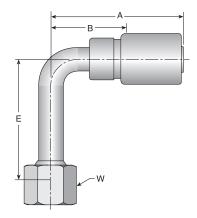
| view  | On  | WAh  | nage |
|-------|-----|------|------|
| AICAA | OII | MACD | paye |

| #           |           |           |      |     |      |          |       |      |    |
|-------------|-----------|-----------|------|-----|------|----------|-------|------|----|
| Part        | Thread    | Hose I.D. | 1    | 4   | E    | <b>.</b> | W     | E    | 3  |
| Number      | inch      | inch      | inch | mm  | inch | mm       | inch  | inch | mm |
| 1J9HY-4-4   | 9/16x18   | 1/4       | 2.40 | 61  | 0.83 | 21       | 11/16 | 1.13 | 29 |
| 1J9HY-4-6   | 9/16x18   | 3/8       | 3.08 | 78  | 0.83 | 21       | 11/16 | 1.72 | 44 |
| 1J9HY-6-4   | 11/16x16  | 1/4       | 2.65 | 67  | 0.91 | 23       | 13/16 | 1.38 | 35 |
| 1J9HY-6-5   | 11/16x16  | 5/16      | 3/14 | 80  |      | 23       | 13/16 | 1.72 | 44 |
| 1J9HY-6-6   | 11/16x16  | 3/8       | 2.57 | 65  | 0.91 | 23       | 13/16 | 1.29 | 33 |
| 1J9HY-8-6   | 13/16x16  | 3/8       | 2.64 | 67  | 1.14 | 29       | 15/16 | 1.37 | 35 |
| 1J9HY-8-8   | 13/16x16  | 1/2       | 2.85 | 72  | 1.14 | 29       | 15/16 | 1.56 | 40 |
| 1J9HY-10-8  | 1x14      | 1/2       | 3.01 | 76  | 1.26 | 32       | 1-1/8 | 1.72 | 44 |
| 1J9HY-10-10 | 1x14      | 5/8       | 3.09 | 78  | 1.26 | 32       | 1-1/8 | 1.73 | 44 |
| 1J9HY-10-12 | 1x14      | 3/4       | 3.52 | 89  | 1.33 | 34       | 1-1/8 | 1.97 | 50 |
| 1J9HY-12-10 | 1-3/16x12 | 5/8       | 3.61 | 92  | 1.89 | 48       | 1-3/8 | 2.25 | 57 |
| 1J9HY-12-12 | 1-3/16x12 | 3/4       | 3.68 | 93  | 1.89 | 48       | 1-3/8 | 2.15 | 55 |
| 1J9HY-16-12 | 1-7/16x12 | 3/4       | 4.27 | 108 | 2.25 | 57       | 1-5/8 | 2.69 | 68 |
| 1J9HY-16-16 | 1-7/16x12 | 1         | 4.45 | 113 | 2.25 | 57       | 1-5/8 | 2.84 | 72 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## **1J1HY**

Female Seal-Lok® - Swivel - 90° Elbow - Long Drop ISO 12151-1 - SWEL90



# ///////// Part Thread Hose I.D. Number inch inch inch mm inch mm inch mm 9/16x18 1J1HY-4-4 2.68 68 1.81 46 11/16 1.41 1/4 36 3/8 1J1HY-6-6 11/16x16 2.76 70 2.13 54 13/16 1.49 38 1J1HY-8-8 13/16x16 64 15/16 1.65 2.94 75 2.52 42 1/2 1J1HY-10-10 1-1/8 2.03 1x14 5/8 3.42 87 2.76 70

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

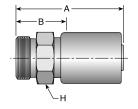
See Accessories Section for O-Rings.

## 1D0HY

## Male Metric L - Rigid - (24° Cone)

ISO 12151-2

| #<br>Part  |    |         | Hose I.D. |         | <b>A</b> | H  | В    |    |
|------------|----|---------|-----------|---------|----------|----|------|----|
| Number     |    |         | inch      | inch mm |          | mm | inch | mm |
| 1D0HY-15-6 | 15 | M22x1.5 | 3/8       | 2.52    | 64       | 24 | 1.16 | 29 |



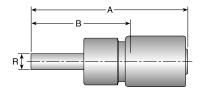
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 13DHY

## Male Standpipe Metric S - Rigid

End Connection per ISO 8434-1-SDS

| #           | Ø  | •         |                                       |          |      |    |
|-------------|----|-----------|---------------------------------------|----------|------|----|
| Part        | R  | Hose I.D. | , , , , , , , , , , , , , , , , , , , | <b>A</b> | E    | 3  |
| Number      | mm | inch      | inch                                  | mm       | inch | mm |
| 13DHY-16-8  | 16 | 1/2       | 3.53                                  | 90       | 2.16 | 55 |
| 13DHY-30-16 | 30 | 1         | 4.15                                  | 105      | 2.53 | 64 |



В

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## **1D9HY**

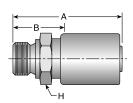
## Male BSP Parallel Pipe - Rigid - (60° Cone)

ISO 228-1

| #<br>Part |        | Hose I.D. | I    | <b>A</b> | H      | E    | 3  |
|-----------|--------|-----------|------|----------|--------|------|----|
| Number    | inch   | inch      | inch | mm       | inch   | inch | mm |
| 1D9HY-8-8 | 1/2x14 | 1/2       | 2.83 | 72       | 1-1/16 | 1.47 | 37 |

When used in a port, a bonded seal must be used. See Accessories Section for more information.





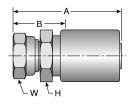
view on web page

Metric L: Mates with EO "L" Series Fittings. Mertic S: Mates with EO "S" Series Fittings.

## **1GUHY**

## Female BSP Parallel Pipe - Swivel - (60° Cone)

ISO 228-1



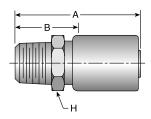
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| #<br>Part   |        | Hose I.D. | A    |    | H     | $\bigcirc$ | E    | 3  |
|-------------|--------|-----------|------|----|-------|------------|------|----|
| Number      | inch   | inch      | inch | mm | inch  | inch       | inch | mm |
| 1GUHY-4-4   | 1/4x19 | 1/4       | 2.62 | 67 | 9/16  | 11/16      | 1.28 | 33 |
| 1GUHY-6-4   | 3/8x19 | 1/4       | 2.69 | 68 | 3/4   | 7/8        | 1.34 | 34 |
| 1GUHY-6-6   | 3/8x19 | 3/8       | 2.70 | 69 | 3/4   | 7/8        | 1.34 | 34 |
| 1GUHY-8-6   | 1/2x14 | 3/8       | 2.84 | 72 | 7/8   | 1          | 1.50 | 38 |
| 1GUHY-8-8   | 1/2x14 | 1/2       | 3.02 | 77 | 7/8   | 1          | 1.66 | 42 |
| 1GUHY-12-12 | 3/4x14 | 3/4       | 3.25 | 83 | 1-1/4 | 1-1/4      | 1.69 | 43 |
| 1GUHY-16-16 | 1x11   | 1         | 3.45 | 88 | 1-3/8 | 1-1/2      | 1.84 | 47 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## **1UTHY**

Male BSP Taper Pipe - Rigid - (60° Cone)

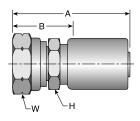


| #<br>Part | //////// Thread | Hose I.D. | A    | <b>A</b> | H    | E    | 3  |
|-----------|-----------------|-----------|------|----------|------|------|----|
| Number    | inch            | inch      | inch | mm       | inch | inch | mm |
| 1UTHY-2-4 | 1/8x28          | 1/4       | 2.34 | 59       | 9/16 | 1.00 | 25 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## **1XUHY**

#### Female Metric Swivel - (30° Flare)



view on web page

| #<br>Part   |    |         | Hose I.D. | ,    | Ą  | H  | $\bigcirc$ | E    | 3  |
|-------------|----|---------|-----------|------|----|----|------------|------|----|
| Number      | mm |         | inch      | inch | mm | mm | mm         | inch | mm |
| 1XUHY-10-10 | 24 | M24x1.5 | 5/8       | 3.22 | 82 | 30 | 30         | 1.84 | 47 |
| 1XUHY-12-12 | 30 | M30x1.5 | 3/4       | 3.31 | 84 | 32 | 38         | 1.75 | 44 |
| 1XUHY-16-16 | 33 | M33x1.5 | 1         | 3.62 | 92 | 36 | 41         | 2.00 | 51 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

A

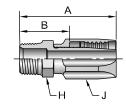
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C

5



## 20120 Male NPTF Pipe - Rigid



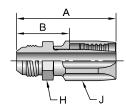
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| #           |              |           |      |     |        |        |      |    | Additional |
|-------------|--------------|-----------|------|-----|--------|--------|------|----|------------|
| Part        | Thread       | Hose I.D. | Δ    |     | н      | J      | В    | ;  | Material   |
| Number      | inch         | inch      | inch | mm  | inch   | inch   | inch | mm | Brass (B)  |
| 20120-2-4   | 1/8x27       | 3/16      | 1.72 | 44  | 7/16   | 5/8    | 0.94 | 24 |            |
| 20120-2-5   | 1/8x27       | 1/4       | 1.82 | 46  | 1/2    | 11/16  | 0.99 | 25 |            |
| 20120-4-4   | 1/4x18       | 3/16      | 1.93 | 49  | 9/16   | 5/8    | 1.15 | 29 |            |
| 20120-4-5   | 1/4x18       | 1/4       | 2.01 | 51  | 9/16   | 11/16  | 1.18 | 30 |            |
| 20120-4-6   | 1/4x18       | 5/16      | 2.11 | 54  | 9/16   | 13/16  | 1.19 | 30 |            |
| 20120-6-6   | 3/8x18       | 5/16      | 2.20 | 56  | 3/4    | 13/16  | 1.28 | 33 |            |
| 20120-6-8   | 3/8x18       | 13/32     | 2.48 | 63  | 3/4    | 15/16  | 1.39 | 35 |            |
| 20120-8-8   | 1/2x14       | 13/32     | 2.73 | 69  | 7/8    | 15/16  | 1.64 | 42 |            |
| 20120-8-10  | 1/2x14       | 1/2       | 2.88 | 73  | 7/8    | 1-1/8  | 1.66 | 42 |            |
| 20120-12-10 | 3/4x14       | 1/2       | 2.95 | 75  | 1-1/16 | 1-1/8  | 1.73 | 44 |            |
| 20120-12-12 | 3/4x14       | 5/8       | 3.25 | 83  | 1-1/16 | 1-1/4  | 1.75 | 44 |            |
| 20120-12-16 | 3/4x14       | 7/8       | 2.81 | 71  | 1-3/8  | 1-7/16 | 1.62 | 41 |            |
| 20120-16-16 | 1x11-1/2     | 7/8       | 2.99 | 76  | 1-3/8  | 1-7/16 | 1.80 | 46 |            |
| 20120-20-20 | 1-1/4x11-1/2 | 1-1/8     | 3.24 | 82  | 1-3/4  | 1-3/4  | 1.96 | 50 |            |
| 20120-24-24 | 1-1/2x11-1/2 | 1-3/8     | 3.50 | 89  | 2      | 2      | 2.13 | 54 | •          |
| 20120-32-32 | 2 x11-1/2    | 1-13/16   | 4.05 | 103 | 2-1/2  | 2-1/2  | 2.31 | 59 | •          |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 20320

## Male JIC 37° - Rigid



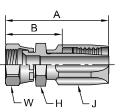
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| #<br>Part   |     |           |       |      | Н  |       | E      | 3    |    |
|-------------|-----|-----------|-------|------|----|-------|--------|------|----|
| Number      |     | inch      | inch  | inch | mm | inch  | inch   | inch | mm |
| 20320-4-4   | 1/4 | 7/16x20   | 3/16  | 1.83 | 46 | 1/2   | 5/8    | 1.05 | 27 |
| 20320-6-6   | 3/8 | 9/16x18   | 5/16  | 2.11 | 54 | 5/8   | 13/16  | 1.19 | 30 |
| 20320-8-8   | 1/2 | 3/4x16    | 13/32 | 2.57 | 65 | 13/16 | 15/16  | 1.48 | 38 |
| 20320-10-10 | 5/8 | 7/8x14    | 1/2   | 2.88 | 73 | 15/16 | 1-1/8  | 1.66 | 42 |
| 20320-12-12 | 3/4 | 1-1/16x12 | 5/8   | 3.35 | 85 | 1-1/8 | 1-1/4  | 1.85 | 47 |
| 20320-16-16 | 1   | 1-5/16x12 | 7/8   | 2.95 | 75 | 1-3/8 | 1-7/16 | 1.76 | 45 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### Female JIC 37° - Swivel

| #              |       | ·····                 |                   |      |     |           |           |           |      |    | Additional<br>Material |
|----------------|-------|-----------------------|-------------------|------|-----|-----------|-----------|-----------|------|----|------------------------|
| Part<br>Number | Т     | <b>'hread</b><br>inch | Hose I.D.<br>inch | inch | i . | H<br>inch | J<br>inch | W<br>inch | inch | mm | Stainless<br>Steel (C) |
|                |       |                       | -                 |      |     |           |           | -         |      |    | Steel (C)              |
| 20620-4-4      | 1/4   | 7/16x20               | 3/16              | 1.94 | 49  | 9/16      | 5/8       | 9/16      | 1.16 | 29 | •                      |
| 20620-4-5      | 1/4   | 7/16x20               | 1/4               | 2.04 | 52  | 9/16      | 11/16     | 9/16      | 1.21 | 31 |                        |
| 20620-5-5      | 5/16  | 1/2x20                | 1/4               | 2.12 | 54  | 5/8       | 11/16     | 5/8       | 1.29 | 33 |                        |
| 20620-6-5      | 3/8   | 9/16x18               | 1/4               | 2.19 | 56  | 11/16     | 11/16     | 11/16     | 1.36 | 35 |                        |
| 20620-6-6      | 3/8   | 9/16x18               | 5/16              | 2.32 | 59  | 11/16     | 13/16     | 11/16     | 1.40 | 36 | •                      |
| 20620-8-6      | 1/2   | 3/4x16                | 5/16              | 2.44 | 62  | 7/8       | 13/16     | 7/8       | 1.52 | 39 |                        |
| 20620-8-8      | 1/2   | 3/4x16                | 13/32             | 2.79 | 71  | 7/8       | 15/16     | 7/8       | 1.70 | 43 | •                      |
| 20620-8-10     | 1/2   | 3/4x16                | 1/2               | 2.99 | 76  | 7/8       | 1-1/8     | 7/8       | 1.77 | 45 |                        |
| 20620-10-8     | 5/8   | 7/8x14                | 13/32             | 2.94 | 75  | 7/8       | 15/16     | 1         | 1.85 | 47 |                        |
| 20620-10-10    | 5/8   | 7/8x14                | 1/2               | 3.10 | 79  | 1         | 1-1/8     | 1         | 1.88 | 48 | •                      |
| 20620-10-12    | 5/8   | 7/8x14                | 5/8               | 3.40 | 86  | 1         | 1-1/4     | 1         | 1.90 | 48 |                        |
| 20620-12-12    | 3/4   | 1-1/16x12             | 5/8               | 3.49 | 89  | 1-1/4     | 1-1/4     | 1-1/4     | 1.99 | 51 | •                      |
| 20620-16-16    | 1     | 1-5/16x12             | 7/8               | 3.20 | 81  | 1-1/2     | 1-7/16    | 1-1/2     | 2.01 | 51 | •                      |
| 20620-20-20    | 1-1/4 | 1-5/8x12              | 1-1/8             | 3.56 | 90  | 2         | 1-3/4     | 2         | 2.28 | 58 |                        |
| 20620-24-24    | 1-1/2 | 1-7/8x12              | 1-3/8             | 3.95 | 100 | 2-1/4     | 2         | 2-1/4     | 2.58 | 66 |                        |
| 20620-32-32    | 2     | 2-1/2x12              | 1-13/16           | 4.71 | 120 | 2-7/8     | 2-1/2     | 2-7/8     | 2.97 | 75 |                        |



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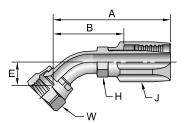
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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www. p65warnings.ca.gov.

## 23720

## Female JIC 37° - Swivel - 45° Elbow - Short Drop

|       | ^^^^                                    |                                                                                                       |                                                                                                                                                 |                                                |                                                |                                                | $\bigcirc$                                                                           |                                                |                                                                          |                                                                          |                                                                  |
|-------|-----------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------|
| Т     | hread                                   | Hose I.D.                                                                                             | Α                                                                                                                                               | ١                                              | E                                              |                                                | Н                                                                                    | J                                              | W                                                                        | Е                                                                        | 3                                                                |
|       | inch                                    | inch                                                                                                  | inch                                                                                                                                            | mm                                             | inch                                           | mm                                             | inch                                                                                 | inch                                           | inch                                                                     | inch                                                                     | mm                                                               |
| 1/4   | 7/16x20                                 | 3/16                                                                                                  | 2.08                                                                                                                                            | 53                                             | 0.33                                           | 8                                              | 3/8                                                                                  | 5/8                                            | 9/16                                                                     | 1.30                                                                     | 33                                                               |
| 5/16  | 1/2x20                                  | 1/4                                                                                                   | 2.36                                                                                                                                            | 60                                             | 0.39                                           | 10                                             | 1/2                                                                                  | 11/16                                          | 5/8                                                                      | 1.55                                                                     | 39                                                               |
| 3/8   | 9/16x18                                 | 5/16                                                                                                  | 2.45                                                                                                                                            | 62                                             | 0.39                                           | 10                                             | 1/2                                                                                  | 13/16                                          | 11/16                                                                    | 1.53                                                                     | 39                                                               |
| 1/2   | 3/4x16                                  | 5/16                                                                                                  | 2.77                                                                                                                                            | 70                                             | 0.55                                           | 14                                             | 5/8                                                                                  | 13/16                                          | 7/8                                                                      | 1.85                                                                     | 47                                                               |
| 5/8   | 7/8x14                                  | 1/2                                                                                                   | 3.35                                                                                                                                            | 85                                             | 0.63                                           | 16                                             | 7/8                                                                                  | 1-1/8                                          | 1                                                                        | 2.14                                                                     | 54                                                               |
| 3/4   | 1-1/16x12                               | 5/8                                                                                                   | 3.94                                                                                                                                            | 100                                            | 0.79                                           | 20                                             | 7/8                                                                                  | 1-1/4                                          | 1-1/4                                                                    | 2.44                                                                     | 62                                                               |
| 1     | 1-5/16x12                               | 7/8                                                                                                   | 3.73                                                                                                                                            | 95                                             | 0.90                                           | 23                                             | 1-1/8                                                                                | 1-7/16                                         | 1-1/2                                                                    | 2.54                                                                     | 65                                                               |
| 1-1/4 | 1-5/8x12                                | 1-1/8                                                                                                 | 4.17                                                                                                                                            | 106                                            | 1.19                                           | 30                                             | 1-1/2                                                                                | 1-3/4                                          | 2                                                                        | 2.89                                                                     | 73                                                               |
|       | 1/4<br>5/16<br>3/8<br>1/2<br>5/8<br>3/4 | 1/4 7/16x20<br>5/16 1/2x20<br>3/8 9/16x18<br>1/2 3/4x16<br>5/8 7/8x14<br>3/4 1-1/16x12<br>1 1-5/16x12 | Thread inch inch inch  1/4 7/16x20 3/16  5/16 1/2x20 1/4  3/8 9/16x18 5/16  1/2 3/4x16 5/16  5/8 7/8x14 1/2  3/4 1-1/16x12 5/8  1 1-5/16x12 7/8 | Thread inch inch inch inch inch inch inch inch | Thread inch inch inch inch inch inch inch inch | Thread inch inch inch inch inch inch inch inch | Thread inch         Hose I.D. inch         A inch inch inch inch inch inch inch inch | Thread inch inch inch inch inch inch inch inch | Thread inch inch inch mm inch mm inch inch inch inch inch inch inch inch | Thread inch inch inch mm inch mm inch inch inch inch inch inch inch inch | Thread inch inch inch mm inch inch inch inch inch inch inch inch |



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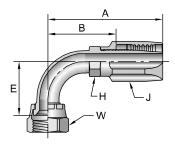
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www. p65warnings.ca.gov.

Updated 11/2022

B-147

## 23920

#### Female JIC 37° - Swivel - 90° Elbow - Short Drop



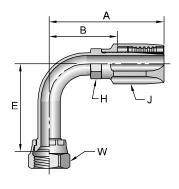
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| #           |       | ·····     |           |      |     |      |    |       |        |       |      |    |
|-------------|-------|-----------|-----------|------|-----|------|----|-------|--------|-------|------|----|
| Part        | Т     | hread     | Hose I.D. | 1    | A   | Ę    |    | Н     | J      | W     | E    | 3  |
| Number      |       | inch      | inch      | inch | mm  | inch | mm | inch  | inch   | inch  | inch | mm |
| 23920-4-4   | 1/4   | 7/16x20   | 3/16      | 1.91 | 49  | 0.83 | 21 | 3/8   | 5/8    | 9/16  | 1.13 | 29 |
| 23920-5-5   | 5/16  | 1/2x20    | 1/4       | 2.28 | 58  | 0.83 | 21 | 1/2   | 11/16  | 5/8   | 1.47 | 37 |
| 23920-6-6   | 3/8   | 9/16x18   | 5/16      | 2.35 | 60  | 0.90 | 23 | 1/2   | 13/16  | 11/16 | 1.43 | 36 |
| 23920-8-8   | 1/2   | 3/4x16    | 13/32     | 2.88 | 73  | 1.09 | 28 | 5/8   | 15/16  | 7/8   | 1.79 | 45 |
| 23920-10-10 | 5/8   | 7/8x14    | 1/2       | 3.20 | 81  | 1.26 | 32 | 7/8   | 1-1/8  | 1     | 1.98 | 50 |
| 23920-12-12 | 3/4   | 1-1/16x12 | 5/8       | 3.86 | 98  | 1.82 | 46 | 7/8   | 1-1/4  | 1-1/4 | 2.36 | 60 |
| 23920-16-16 | 1     | 1-5/16x12 | 7/8       | 3.69 | 94  | 2.14 | 54 | 1-1/8 | 1-7/16 | 1-1/2 | 2.50 | 64 |
| 23920-20-20 | 1-1/4 | 1-5/8x12  | 1-1/8     | 4.01 | 102 | 2.59 | 66 | 1-1/2 | 1-3/4  | 2     | 2.73 | 69 |
| 23920-24-24 | 1-1/2 | 1-7/8x12  | 1-3/8     | 4.43 | 113 | 2.82 | 72 | 1-3/4 | 2      | 2-1/4 | 3.06 | 78 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 24120

## Female JIC 37° - Swivel - 90° Elbow - Long Drop



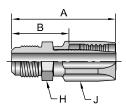
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| #<br>Part   |     | WWW       | Hose I.D. | A    |    | E    |    | ()<br>H |       | $\bigcirc$ | E    | 3  |
|-------------|-----|-----------|-----------|------|----|------|----|---------|-------|------------|------|----|
| Number      |     | inch      | inch      | inch | mm | inch | mm | inch    | inch  | inch       | inch | mm |
| 24120-4-4   | 1/4 | 7/16x20   | 3/16      | 2.08 | 53 | 1.80 | 46 | 3/8     | 5/8   | 9/16       | 1.30 | 33 |
| 24120-6-6   | 3/8 | 9/16x18   | 5/16      | 2.34 | 59 | 2.18 | 55 | 1/2     | 13/16 | 11/16      | 1.42 | 36 |
| 24120-8-8   | 1/2 | 3/4x16    | 13/32     | 2.95 | 75 | 2.43 | 62 | 5/8     | 15/16 | 7/8        | 1.86 | 47 |
| 24120-10-10 | 5/8 | 7/8x14    | 1/2       | 3.27 | 83 | 2.76 | 70 | 7/8     | 1-1/8 | 1          | 2.05 | 52 |
| 24120-12-12 | 3/4 | 1-1/16x12 | 5/8       | 3.78 | 96 | 3.74 | 95 | 7/8     | 1-1/4 | 1-1/4      | 2.28 | 58 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 20420

#### Male SAE 45° - Rigid



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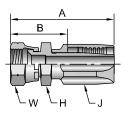
| #<br>Part | _   | ······································ | Hose I.D. |      | A H J |       |       | В    | 1  |
|-----------|-----|----------------------------------------|-----------|------|-------|-------|-------|------|----|
| Number    |     | inch                                   | inch      | inch | mm    | inch  | inch  | inch | mm |
| 20420-4-4 | 1/4 | 7/16x20                                | 3/16      | 1.80 | 46    | 1/2   | 5/8   | 1.02 | 26 |
| 20420-6-6 | 3/8 | 5/8x18                                 | 5/16      | 2.17 | 55    | 11/16 | 13/16 | 1.25 | 32 |
| 20420-8-8 | 1/2 | 3/4x16                                 | 13/32     | 2.67 | 68    | 13/16 | 15/16 | 1.58 | 40 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

B-148 Updated 11/2022

#### Female SAE 45° - Swivel

| #           | ٥    | ······    |           |      |    |       |       |       |      |    |
|-------------|------|-----------|-----------|------|----|-------|-------|-------|------|----|
| Part        | 1    | Thread    | Hose I.D. | A    | 1  | Н     | J     | W     | E    | 3  |
| Number      |      | inch      | inch      | inch | mm | inch  | inch  | inch  | inch | mm |
| 20820-4-4   | 1/4  | 7/16x20   | 3/16      | 1.94 | 49 | 9/16  | 5/8   | 9/16  | 1.16 | 29 |
| 20820-5-5   | 5/16 | 1/2x20    | 1/4       | 2.12 | 54 | 5/8   | 11-16 | 5/8   | 1.29 | 33 |
| 20820-6-6   | 3/8  | 5/8x18    | 5/16      | 2.36 | 60 | 3/4   | 13/16 | 3/4   | 1.44 | 37 |
| 20820-8-8   | 1/2  | 3/4x16    | 13/32     | 2.79 | 71 | 7/8   | 15/16 | 7/8   | 1.70 | 43 |
| 20820-8-10  | 1/2  | 3/4x16    | 1/2       | 2.99 | 76 | 7/8   | 1-1/8 | 7/8   | 1.77 | 45 |
| 20820-10-10 | 5/8  | 7/8x14    | 1/2       | 3.10 | 79 | 1     | 1-1/8 | 1     | 1.88 | 48 |
| 20820-12-12 | 3/4  | 1-1/16x14 | 5/8       | 3.49 | 89 | 1-1/4 | 1-1/4 | 1-1/4 | 1.99 | 51 |



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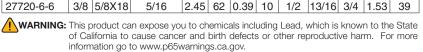
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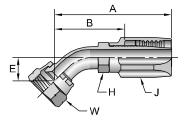
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 27720

#### Female SAE 45° - Swivel - 45° Elbow

| #<br>Part | Thread     | Hose I.D. | Д    |    | E    |    | →     H |       | $\bigcirc$ | ı    | 3  |
|-----------|------------|-----------|------|----|------|----|---------|-------|------------|------|----|
| Number    | inch       | inch      | inch | mm | inch | mm | inch    | inch  | inch       | inch | mm |
| 27720-6-6 | 3/8 5/8X18 | 5/16      | 2.45 | 62 | 0.39 | 10 | 1/2     | 13/16 | 3/4        | 1.53 | 39 |



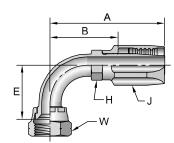


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## 27920

#### Female SAE 45° - Swivel - 90° Elbow

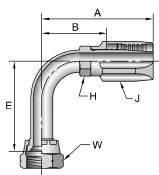
| #<br>Part   |     | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Hose I.D. | 4    | ١  | E    |    | ( <u></u> |       | $\bigcirc$ | E    | 3  |
|-------------|-----|----------------------------------------|-----------|------|----|------|----|-----------|-------|------------|------|----|
| Number      |     | inch                                   | inch      | inch | mm | inch | mm | inch      | inch  | inch       | inch | mm |
| 27920-4-4   | 1/4 | 7/16x20                                | 3/16      | 1.91 | 49 | 0.83 | 21 | 3/8       | 5/8   | 9/16       | 1.13 | 29 |
| 27920-6-6   | 3/8 | 5/8x18                                 | 5/16      | 2.33 | 59 | 0.85 | 22 | 1/2       | 13/16 | 3/4        | 1.41 | 36 |
| 27920-8-8   | 1/2 | 3/4x16                                 | 13/32     | 2.86 | 73 | 1.09 | 28 | 5/8       | 15/16 | 7/8        | 1.77 | 45 |
| 27920-10-10 | 5/8 | 7/8x14                                 | 1/2       | 3.20 | 81 | 1.24 | 31 | 3/4       | 1-1/8 | 1          | 1.98 | 50 |



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Notch in nut signifies 45° flare.



#### Female SAE 45° - Swivel - 90° Elbow - Long Drop

information go to www.p65warnings.ca.gov.

information go to www.p65warnings.ca.gov.

| #         |      | ·····         | 0    |      |    |      |    | $\bigcirc$ |       | $\bigcirc$ |      |    |
|-----------|------|---------------|------|------|----|------|----|------------|-------|------------|------|----|
| Part      | Т    | Thread Hose I |      | P    | À. | E    |    | Н          | J     | W          | E    | 3  |
| Number    | inch |               | inch | inch | mm | inch | mm | inch       | inch  | inch       | inch | mm |
| 28120-6-6 | 3/8  | 5/8x18        | 5/16 | 2.34 | 59 | 2.18 | 55 | 1/2        | 13/16 | 3/4        | 1.42 | 36 |

of California to cause cancer and birth defects or other reproductive harm. For more

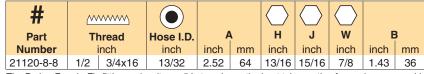
Notch in nut signifies 45° flare.

WARNING: This product can expose you to chemicals including Lead, which is known to the State

view on web page

## 21120

## Male Ferulok Flareless - Rigid (24° Cone with Nut and Ferrule)



The Parker Ferrule-Fix fitting makes it possible to salvage the bent tube section from a hose assembly for quick, easy on the job repairs. For additional information see Ferrule-Fix installation instructions in

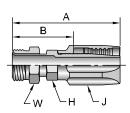
of California to cause cancer and birth defects or other reproductive harm. For more

WARNING: This product can expose you to chemicals including Lead, which is known to the State

view on web page

## 22820

#### Male Inverted SAE 45° - Swivel



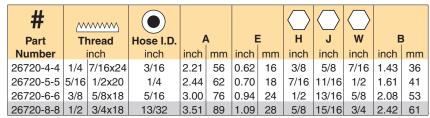
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|   | #          | _    | <u> </u> |           | ,    |    | Н    |       | $\bigcirc$ | E    | 2  |
|---|------------|------|----------|-----------|------|----|------|-------|------------|------|----|
|   | Part       |      | hread    | Hose I.D. | _    | Ī  |      |       |            |      |    |
|   | Number     |      | inch     | inch      | inch | mm | inch | inch  | inch       | inch | mm |
| 2 | 2820-4-4   | 1/4  | 7/16x24  | 3/16      | 2.45 | 62 | 3/8  | 5/8   | 7/16       | 1.67 | 42 |
| 2 | 2820-5-5   | 5/16 | 1/2x20   | 1/4       | 2.70 | 69 | 7/16 | 11/16 | 1/2        | 1.87 | 47 |
| 2 | 2820-6-6   | 3/8  | 5/8x18   | 5/16      | 2.95 | 75 | 1/2  | 13/16 | 5/8        | 2.03 | 52 |
| 2 | 2820-8-8   | 1/2  | 3/4x18   | 13/32     | 3.36 | 85 | 5/8  | 15/16 | 3/4        | 2.27 | 58 |
| 2 | 2820-10-10 | 5/8  | 7/8x18   | 1/2       | 3.64 | 92 | 3/4  | 1-1/8 | 7/8        | 2.42 | 61 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

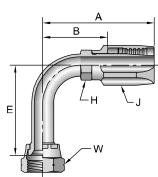
## 26720

#### Male Inverted SAE 45° - Swivel - 45° Elbow



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

B-150

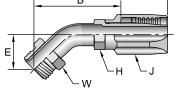


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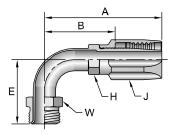
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#### Male Inverted SAE 45° - Swivel - 90° Elbow

| #<br>Part | Thread |         | Hose I.D. | Α    |    | E    |    | Н    |       | ⟨<br>w | E    | 3  |
|-----------|--------|---------|-----------|------|----|------|----|------|-------|--------|------|----|
| Number    | inch   |         | inch      | inch | mm | inch | mm | inch | inch  | inch   | inch | mm |
| 26920-4-4 | 1/4    | 7/16x24 | 3/16      | 2.29 | 58 | 1.56 | 40 | 3/8  | 5/8   | 7/16   | 1.51 | 38 |
| 26920-5-5 | 5/16   | 1/2x20  | 1/4       | 2.55 | 65 | 1.65 | 42 | 7/16 | 11/16 | 1/2    | 1.72 | 44 |
| 26920-6-6 | 3/8    | 5/8x18  | 5/16      | 2.67 | 68 | 1.69 | 43 | 1/2  | 13/16 | 5/8    | 1.75 | 44 |
| 26920-8-8 | 1/2    | 3/4x18  | 13/32     | 3.09 | 78 | 1.88 | 48 | 5/8  | 15/16 | 3/4    | 2.00 | 51 |



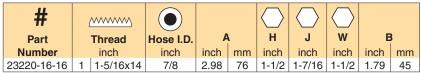
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

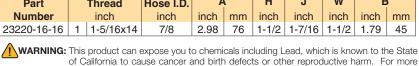


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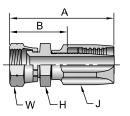
## 23220

#### Female PTT 30° - Swivel





information go to www.p65warnings.ca.gov.



view on web page

## 26120

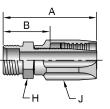
## **Male SAE Compression Seat**

(without Nut or Sleeve)

| #           | ۵   | ······   |           |      |          |      |       |      |    |
|-------------|-----|----------|-----------|------|----------|------|-------|------|----|
| Part        |     | Thread   | Hose I.D. | P    | <b>\</b> | Н    | J     | E    | 3  |
| Number      |     | inch     | inch      | inch | mm       | inch | inch  | inch | mm |
| 26120-10-10 | 5/8 | 13/16x18 | 1/2       | 2.64 | 67       | 7/8  | 1-1/8 | 1.42 | 36 |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

## 21520

#### SAE Code 61 Flange Head

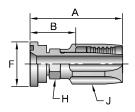
ISO 12151-3-S-L

| #           |        |           |      |    | Ø    |       |       |      |    |
|-------------|--------|-----------|------|----|------|-------|-------|------|----|
| Part        | Flange | Hose I.D. | F    | 1  | F    | Н     | J     | E    | 5  |
| Number      | inch   | inch      | inch | mm | inch | inch  | inch  | inch | mm |
| 21520-20-20 | 1-1/4  | 1-1/8     | 3.58 | 91 | 2    | 1-1/2 | 1-3/4 | 2.30 | 58 |

See Accesories Section for O-Rings and Flange Kits.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

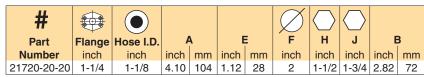


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В

#### SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3- E45S - L (1 Piece: ISO 12151-3- E45M - L)





WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

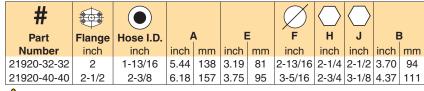
## view on web page

В

## 21920

#### SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3- E90S - L (1 Piece: ISO 12151-3- E90M - L)



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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## **2JS20**

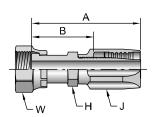
## Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

| #           | (   | ·····     |           |      |    |       |       |       |      |    |
|-------------|-----|-----------|-----------|------|----|-------|-------|-------|------|----|
| Part        |     | Thread    | Hose I.D. | Α    | 1  | Н     | J     | W     | Е    | 3  |
| Number      |     | inch      | inch      | inch | mm | inch  | inch  | inch  | inch | mm |
| 2JS20-4-4   | 1/4 | 9/16x18   | 3/16      | 2.07 | 53 | 9/16  | 5/8   | 11/16 | 1.29 | 33 |
| 2JS20-6-6   | 3/8 | 11/16x16  | 5/16      | 2.36 | 60 | 1/2   | 13/16 | 13/16 | 1.44 | 37 |
| 2JS20-8-8   | 1/2 | 13/16x16  | 13/32     | 2.92 | 74 | 5/8   | 15/16 | 15/16 | 1.83 | 46 |
| 2JS20-10-10 | 5/8 | 1x14      | 1/2       | 3.15 | 80 | 3/4   | 1-1/8 | 1-1/8 | 1.93 | 49 |
| 2JS20-12-12 | 3/4 | 1-3/16x12 | 5/8       | 3.66 | 93 | 1-1/8 | 1-1/4 | 1-3/8 | 2.16 | 55 |



MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



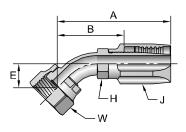
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## **2J720**

#### Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45

| #<br>Part   | _   | ····································· | Hose I.D. | Δ    |    | E    |    | Н    | $\bigcirc$ | $\bigcirc$ | E    | 3  |
|-------------|-----|---------------------------------------|-----------|------|----|------|----|------|------------|------------|------|----|
| Number      |     | inch                                  | inch      | inch | mm | inch | mm | inch | inch       | inch       | inch | mm |
| 2J720-4-4   | 1/4 | 9/16x18                               | 3/16      | 2.24 | 57 | 0.41 | 10 | 7/16 | 5/8        | 11/16      | 1.46 | 37 |
| 2J720-6-6   | 3/8 | 11/16x16                              | 5/16      | 2.52 | 64 | 0.43 | 11 | 1/2  | 13/16      | 13/16      | 1.60 | 41 |
| 2J720-8-8   | 1/2 | 13/16x16                              | 13/32     | 3.19 | 81 | 0.59 | 15 | 5/8  | 15/16      | 15/16      | 2.10 | 53 |
| 2J720-10-10 | 5/8 | 1x14                                  | 1/2       | 3.46 | 88 | 0.65 | 17 | 3/4  | 1-1/8      | 1-1/8      | 2.24 | 57 |



view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

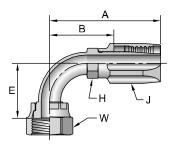
See Accessories Section for O-Rings and Flange Kits.

3.74 95 1.85 47 7/8 1-1/4 1-3/8 2.24 57

## 2J920

## Female Seal-Lok® - Swivel 90° Elbow - Short Drop ISO 12151-1 - SWE90

| #           | (   | ·····    |           |      |    |      |    |       |       |       |      |    |
|-------------|-----|----------|-----------|------|----|------|----|-------|-------|-------|------|----|
| Part        |     | Thread   | Hose I.D. | Α    | 1  | E    |    | Н     | J     | W     | В    |    |
| Number      |     | inch     | inch      | inch | mm | inch | mm | inch  | inch  | inch  | inch | mm |
| 2J920-4-4   | 1/4 | 9/16x18  | 3/16      | 2.22 | 56 | 0.82 | 21 | 7/16  | 5/8   | 11/16 | 1.44 | 37 |
| 2J920-6-6   | 3/8 | 11/16x16 | 5/16      | 2.39 | 61 | 0.90 | 23 | 1/2   | 13/16 | 13/16 | 1.47 | 37 |
| 2J920-8-8   | 1/2 | 13/16x16 | 13/32     | 2.91 | 74 | 1.15 | 29 | 5/8   | 15/16 | 15/16 | 1.82 | 46 |
| 2J920-10-10 | 5/8 | 1x14     | 1/2       | 3.20 | 81 | 1.26 | 32 | 15/16 | 1-1/8 | 1-1/8 | 1.98 | 20 |



**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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## 2J120

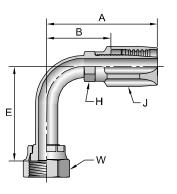
2J920-12-12 3/4 1-3/16x12

## Female Seal-Lok® - Swivel - 90° Elbow - Long Drop ISO 12151-1 - SWEL90

5/8

| #         | ۵   | ······   | •         |      |    |      |    |      |       |       |      |    |
|-----------|-----|----------|-----------|------|----|------|----|------|-------|-------|------|----|
| Part      | -   | Thread   | Hose I.D. | Α    | 1  | E    |    | Н    | J     | W     | E    | 3  |
| Number    |     | inch     | inch      | inch | mm | inch | mm | inch | inch  | inch  | inch | mm |
| 2J120-6-6 | 3/8 | 11/16x16 | 5/16      | 2.48 | 63 | 2.13 | 54 | 1/2  | 13/16 | 13/16 | 1.56 | 40 |
| 2J120-8-8 | 1/2 | 13/16x16 | 13/32     | 2.93 | 74 | 2.52 | 64 | 3/4  | 15/16 | 15/16 | 1.88 | 48 |

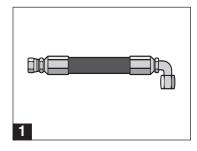
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

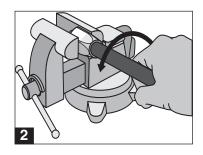


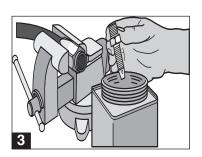
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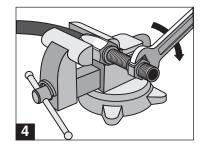
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D









#### 20 Series

#### **Hose Assembly Instructions**

- Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table. Properly measure, mark and cut hose to desired length using fine tooth hacksaw or cutoff machine. Care should be taken to ensure a square, clean cut is obtained.
- Air or solvent flush cut end of hose as necessary to produce a clean hose ID prior to assembly. Place socket in vice and screw in hose counter clockwise until hose bottoms. Back hose out ½ turn.
- 3. Oil inside of hose and nipple threads liberally with Hose-Oil. (See Section C). Do not oil hose cover.
- 4. Screw nipple assembly into socket using a wrench on the nipple hex until the nipple hex shoulders against the socket. A 1/32" to 1/16" gap between the nipple hex and socket is allowed for displacement angle adjustment when two elbow fittings are used.

**Inspection.** Examine hose assembly internally for cut or bulged tube, obstructions and cleanliness. Clean ID of hose as necessary. Swivel nuts should turn freely. Check the layline of the hose to be sure the assembly is not twisted. Cap the ends of the assembly to keep clean.

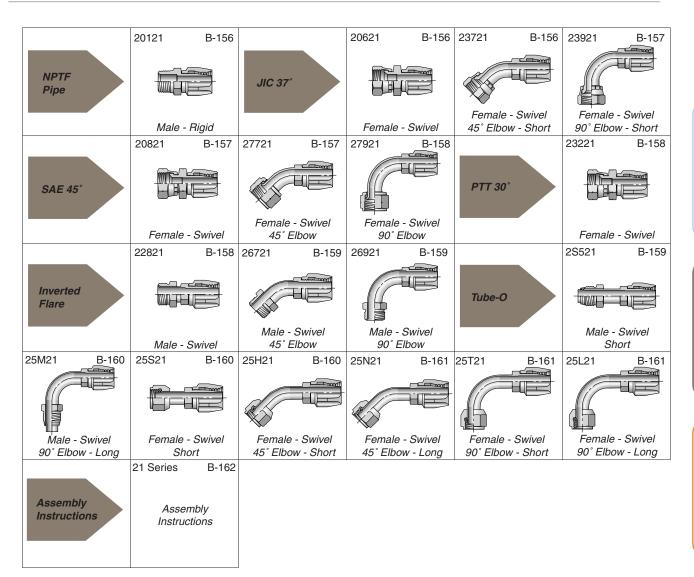
Special Instructions for stainless steel fittings. When assembling fittings made with 316 stainless steel, lubricate the threads of both the socket and nipple with Accrolube High Efficiency Lubricant (see Section C) or equivalent metal assembly lubricant.

Note: Disassemble in reverse order.

**Use with hoses:** 213, 293



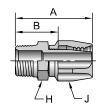




21 Series Fittings **Use with hoses: 213, 293** Catalog 4400 US

## 20121

## Male NPTF Pipe - Rigid



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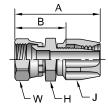
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| #           |          |           |         |    |       |        |      |    |
|-------------|----------|-----------|---------|----|-------|--------|------|----|
| Part        | Thread   | Hose I.D. |         | A  |       | J      | E    | 3  |
| Number      | inch     | inch      | inch mm |    | inch  | inch   | inch | mm |
| 20121-2-4   | 1/8x27   | 3/16      | 1.55    | 39 | 7/16  | 9/16   | 0.88 | 22 |
| 20121-4-4   | 1/4x18   | 3/16      | 1.77    | 45 | 9/16  | 9/16   | 1.10 | 28 |
| 20121-4-5   | 1/4x18   | 1/4       | 1.79    | 45 | 9/16  | 5/8    | 1.05 | 27 |
| 20121-4-6   | 1/4x18   | 5/16      | 1.92    | 49 | 9/16  | 3/4    | 1.14 | 29 |
| 20121-6-6   | 3/8x18   | 5/16      | 1.95    | 50 | 11/16 | 3/4    | 1.17 | 30 |
| 20121-6-8   | 3/8x18   | 13/32     | 2.10    | 53 | 11/16 | 7/8    | 1.18 | 30 |
| 20121-8-8   | 1/2x14   | 13/32     | 2.34    | 59 | 7/8   | 7/8    | 1.42 | 36 |
| 20121-8-10  | 1/2x14   | 1/2       | 2.44    | 62 | 7/8   | 1-1/16 | 1.44 | 37 |
| 20121-12-12 | 3/4x14   | 5/8       | 2.58    | 66 | 1-1/8 | 1-1/4  | 1.50 | 38 |
| 20121-12-16 | 3/4x14   | 7/8       | 2.50    | 64 | 1-1/4 | 1-7/16 | 1.51 | 38 |
| 20121-16-16 | 1x11-1/2 | 7/8       | 2.69    | 68 | 1-3/8 | 1-7/16 | 1.70 | 43 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 20621

#### Female JIC 37° - Swivel



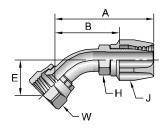
view on web page

| #<br>Part   |       | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Hose I.D. | A    | <b>A</b> | H     | $\bigcirc$ | $\bigcirc$ | E    | 3  |
|-------------|-------|----------------------------------------|-----------|------|----------|-------|------------|------------|------|----|
| Number      |       | inch                                   | inch      | inch | mm       | inch  | inch       | inch       | inch | mm |
| 20621-4-4   | 1/4   | 7/16x20                                | 3/16      | 1.83 | 46       | 9/16  | 9/16       | 9/16       | 1.16 | 29 |
| 20621-5-5   | 5/16  | 1/2x20                                 | 1/4       | 1.92 | 49       | 5/8   | 5/8        | 5/8        | 1.18 | 30 |
| 20621-6-6   | 3/8   | 9/16x18                                | 5/16      | 2.09 | 53       | 11/16 | 3/4        | 11/16      | 1.31 | 33 |
| 20621-8-8   | 1/2   | 3/4x16                                 | 13/32     | 2.46 | 62       | 7/8   | 7/8        | 7/8        | 1.54 | 39 |
| 20621-8-10  | 1/2   | 3/4x16                                 | 1/2       | 2.56 | 65       | 1     | 1-1/16     | 7/8        | 1.56 | 40 |
| 20621-10-10 | 5/8   | 7/8x14                                 | 1/2       | 2.65 | 67       | 1     | 1-1/16     | 1          | 1.65 | 42 |
| 20621-12-12 | 3/4   | 1-1/16x12                              | 5/8       | 2.85 | 72       | 1-1/4 | 1-1/4      | 1-1/4      | 1.77 | 45 |
| 20621-16-16 | 1     | 1-5/16x12                              | 7/8       | 2.94 | 75       | 1-1/2 | 1-7/16     | 1-1/2      | 1.95 | 50 |
| 20621-20-20 | 1-1/4 | 1-5/8x12                               | 1-1/8     | 3.16 | 80       | 2     | 1-3/4      | 2          | 2.12 | 54 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 23721

## Female JIC 37° - Swivel - 45° Elbow - Short Drop



view on web page

| #<br>Part   |     | ·//··/    | Hose I.D. | 1    | ١  | E    |    | Н     | <b>C</b> | $\bigcirc$ | В    | 3  |
|-------------|-----|-----------|-----------|------|----|------|----|-------|----------|------------|------|----|
| Number      |     | inch      | inch      | inch | mm | inch | mm | inch  | inch     | inch       | inch | mm |
| 23721-4-4   | 1/4 | 7/16x20   | 3/16      | 2.11 | 54 | 0.39 | 10 | 3/8   | 9/16     | 9/16       | 1.43 | 36 |
| 23721-6-6   | 3/8 | 9/16x18   | 5/16      | 2.26 | 57 | 0.40 | 10 | 1/2   | 3/4      | 11/16      | 1.48 | 38 |
| 23721-8-8   | 1/2 | 3/4x16    | 13/32     | 2.79 | 71 | 0.59 | 15 | 11/16 | 7/8      | 7/8        | 1.87 | 47 |
| 23721-10-10 | 5/8 | 7/8x14    | 1/2       | 2.97 | 75 | 0.63 | 16 | 7/8   | 1-1/16   | 1          | 1.97 | 50 |
| 23721-12-12 | 3/4 | 1-1/16x12 | 5/8       | 3.30 | 84 | 0.83 | 21 | 7/8   | 1-1/4    | 1-1/4      | 2.22 | 56 |
| 23721-16-16 | 1   | 1-5/16x12 | 7/8       | 3.44 | 87 | 0.90 | 23 | 1-1/8 | 1-7/16   | 1-1/2      | 2.45 | 62 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## Female JIC 37° - Swivel - 90° Elbow - Short Drop

| #<br>Part   |       |           | Hose I.D. | 4    | <b>\</b> | E    |    | (H    | $\bigcirc$ | $\bigcirc$ | Е    | 3  |
|-------------|-------|-----------|-----------|------|----------|------|----|-------|------------|------------|------|----|
| Number      |       | inch      | inch      | inch | mm       | inch | mm | inch  | inch       | inch       | inch | mm |
| 23921-4-4   | 1/4   | 7/16x20   | 3/16      | 1.88 | 48       | 0.83 | 21 | 3/8   | 9/16       | 9/16       | 1.20 | 30 |
| 23921-5-5   | 5/16  | 1/2x20    | 1/4       | 2.07 | 53       | 0.83 | 21 | 1/2   | 5/8        | 5/8        | 1.33 | 34 |
| 23921-6-6   | 3/8   | 9/16x18   | 5/16      | 2.15 | 55       | 0.85 | 22 | 1/2   | 3/4        | 11/16      | 1.37 | 35 |
| 23921-8-8   | 1/2   | 3/4x16    | 13/32     | 2.49 | 63       | 1.14 | 29 | 11/16 | 7/8        | 7/8        | 1.57 | 40 |
| 23921-10-10 | 5/8   | 7/8x14    | 1/2       | 2.78 | 71       | 1.26 | 32 | 7/8   | 1-1/16     | 1          | 1.78 | 45 |
| 23921-12-12 | 3/4   | 1-1/16x12 | 5/8       | 2.88 | 73       | 1.89 | 48 | 7/8   | 1-1/4      | 1-1/4      | 1.80 | 46 |
| 23921-16-16 | 1     | 1-5/16x12 | 7/8       | 3.40 | 86       | 2.14 | 54 | 1-1/8 | 1-7/16     | 1-1/2      | 2.41 | 61 |
| 23921-20-20 | 1-1/4 | 1-5/8x12  | 1-1/8     | 3.64 | 92       | 2.59 | 66 | 1-3/8 | 1-3/4      | 2          | 2.60 | 66 |

view on web page

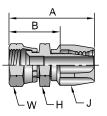
В

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 20821

#### Female SAE 45° - Swivel

| #<br>Part   | _    | ······································ | Hose I.D. | A    | 4  | Н     |        | $\bigcirc$ | E    | 3  |
|-------------|------|----------------------------------------|-----------|------|----|-------|--------|------------|------|----|
| Number      |      | inch                                   | inch      | inch | mm | inch  | inch   | inch       | inch | mm |
| 20821-4-4   | 1/4  | 7/16x20                                | 3/16      | 1.83 | 46 | 9/16  | 9/16   | 9/16       | 1.16 | 29 |
| 20821-5-5   | 5/16 | 1/2x20                                 | 1/4       | 1.91 | 49 | 5/8   | 5/8    | 5/8        | 1.17 | 30 |
| 20821-6-6   | 3/8  | 5/8x18                                 | 5/16      | 2.12 | 54 | 3/4   | 3/4    | 3/4        | 1.34 | 34 |
| 20821-8-8   | 1/2  | 3/4x16                                 | 13/32     | 2.46 | 62 | 7/8   | 7/8    | 7/8        | 1.54 | 39 |
| 20821-10-10 | 5/8  | 7/8x14                                 | 1/2       | 2.65 | 67 | 1     | 1-1/16 | 1          | 1.65 | 42 |
| 20821-12-12 | 3/4  | 1-1/16x14                              | 5/8       | 2.85 | 72 | 1-1/4 | 1-1/4  | 1-1/4      | 1.77 | 45 |



view on web page

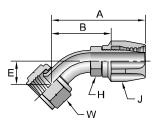
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 27721

#### Female SAE 45° - Swivel - 45° Elbow

| #<br>Part | Thread |        | Hose I.D. | A    | <b>\</b> | E    |    | (H)  | $\bigcirc$ | $\bigcirc$ | E    | 3  |
|-----------|--------|--------|-----------|------|----------|------|----|------|------------|------------|------|----|
| Number    | inch   |        | inch      | inch | mm       | inch | mm | inch | inch       | inch       | inch | mm |
| 27721-6-6 | 3/8    | 5/8x18 | 5/16      | 2.26 | 57       | 0.40 | 10 | 1/2  | 3/4        | 3/4        | 1.48 | 38 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

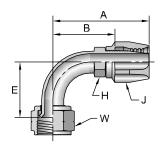
Notch in nut signifies 45° flare.

Updated 11/2022

21 Series Fittings **Use with hoses: 213, 293** Catalog 4400 US

## 27921

#### Female SAE 45° - Swivel - 90° Elbow



| #         |     | ·····  |           |      |    |      |    |      | $\bigcup_{i \in \mathcal{A}_i}$ |      |      |    |
|-----------|-----|--------|-----------|------|----|------|----|------|---------------------------------|------|------|----|
| Part      | 1   | Γhread | Hose I.D. | F    | 1  | Е    |    | Н    | J                               | W    | E    | 3  |
| Number    |     | inch   | inch      | inch | mm | inch | mm | inch | inch                            | inch | inch | mm |
| 27921-6-6 | 3/8 | 5/8x18 | 5/16      | 2.15 | 55 | 0.85 | 22 | 1/2  | 3/4                             | 3/4  | 1.37 | 35 |
|           |     |        |           |      |    |      |    |      |                                 |      |      |    |

Notch in nut signifies 45° flare.

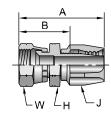
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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В

## 23221

#### Female PTT 30° - Swivel



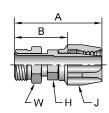
| #           | ^ | ·····     |           |      | Δ  |       | $\bigcirc$ | $\bigcirc$ |      |    |
|-------------|---|-----------|-----------|------|----|-------|------------|------------|------|----|
| Part        | T | hread     | Hose I.D. | A    |    | Н     | J          | W          | E    | 5  |
| Number      |   | inch      | inch      | inch | mm | inch  | inch       | inch       | inch | mm |
| 23221-16-16 | 1 | 1-5/16x14 | 7/8       | 2.70 | 69 | 1-1/2 | 1-7/16     | 1-1/2      | 1.71 | 43 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

view on web page

## 22821

#### Male Inverted SAE 45° - Swivel



| #<br>Part | _    | ^///\/  | Hose I.D. | A    | ١  | H    | $\bigcirc$ | $\bigcirc$ | E    | 3  |
|-----------|------|---------|-----------|------|----|------|------------|------------|------|----|
| Number    |      | inch    | inch      | inch | mm | inch | inch       | inch       | inch | mm |
| 22821-4-4 | 1/4  | 7/16x24 | 3/16      | 2.36 | 60 | 3/8  | 9/16       | 7/16       | 1.68 | 43 |
| 22821-5-5 | 5/16 | 1/2x20  | 1/4       | 2.34 | 59 | 7/16 | 5/8        | 1/2        | 1.60 | 41 |
| 22821-5-6 | 5/16 | 1/2x20  | 5/16      | 2.47 | 63 | 1/2  | 3/4        | 1/2        | 1.69 | 43 |
| 22821-6-6 | 3/8  | 5/8x18  | 5/16      | 2.45 | 62 | 1/2  | 3/4        | 5/8        | 1.67 | 42 |
| 22821-8-8 | 1/2  | 3/4x18  | 13/32     | 2.84 | 72 | 5/8  | 7/8        | 3/4        | 1.92 | 49 |

view on web page

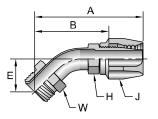
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Notch in nut signifies 45° flare.

#### Male Inverted SAE 45° - Swivel - 45° Elbow

| #         |     | ·····  |           |      |          |      | _  |      | $\bigcirc$ |      |      |    |
|-----------|-----|--------|-----------|------|----------|------|----|------|------------|------|------|----|
| Part      |     |        | Hose I.D. |      | <b>A</b> | E    | =  | н    | J          | W    | В    |    |
| Number    | i   | nch    | inch      | inch | mm       | inch | mm | inch | inch       | inch | inch | mm |
| 26721-6-6 | 3/8 | 5/8x18 | 5/16      | 2.73 | 69       | 0.94 | 24 | 1/2  | 3/4        | 5/8  | 1.95 | 50 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



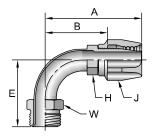
view on web page

## 26921

#### Male Inverted SAE 45° - Swivel - 90° Elbow

| #<br>Part |      | ·········· | Hose I.D. | Д    | <b>\</b> | E    | <b>=</b> | <u>H</u> | $\bigcirc$ | $\bigcirc$ | E    | 3  |
|-----------|------|------------|-----------|------|----------|------|----------|----------|------------|------------|------|----|
| Number    |      | inch       | inch      | inch | mm       | inch | mm       | inch     | inch       | inch       | inch | mm |
| 26921-5-5 | 5/16 | 1/2x20     | 1/4       | 2.25 | 57       | 1.65 | 42       | 7/16     | 5/8        | 1/2        | 1.51 | 38 |
| 26921-6-6 | 3/8  | 5/8x18     | 5/16      | 2.37 | 60       | 1.63 | 41       | 1/2      | 3/4        | 5/8        | 1.59 | 40 |
| 26921-8-8 | 1/2  | 3/4x18     | 13/32     | 2.63 | 67       | 1.78 | 45       | 5/8      | 7/8        | 3/4        | 1.71 | 43 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



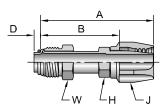
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#### **2S521**

#### Male Tube-O - Swivel - Short Pilot

| #<br>Part |     | ············ | Hose I.D. |      | A  | [    | )   | Н    |      | $\bigcirc$ | E    | 3  |
|-----------|-----|--------------|-----------|------|----|------|-----|------|------|------------|------|----|
| Number    |     | nch          |           | inch | mm | inch | mm  | inch | inch | inch       | inch | mm |
| 2S521-6-6 | 3/8 | 5/8x18       | 5/16      | 2.64 | 67 | 0.18 | 4,7 | 1/2  | 3/4  | 5/8        | 1.86 | 47 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



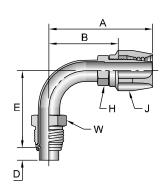
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## 25M21

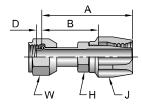
## Male Tube-O - Swivel - 90° Elbow - Long Pilot

|     | #          |     | ·····  | •         | _    |    |      |     |      |    |      |        |      |      |    |
|-----|------------|-----|--------|-----------|------|----|------|-----|------|----|------|--------|------|------|----|
|     | Part       | TI  | hread  | Hose I.D. | A    | 1  | D    |     | E    |    | Н    | J      | W    | E    | 3  |
| N   | umber      |     | inch   | inch      | inch | mm | inch | mm  | inch | mm | inch | inch   | inch | inch | mm |
| 251 | M21-8-8    | 1/2 | 3/4x18 | 13/32     | 2.49 | 63 | 0.38 | 9,8 | 2.12 | 54 | 5/8  | 7/8    | 3/4  | 1.57 | 40 |
| 25N | //21-10-10 | 5/8 | 7/8x18 | 1/2       | 3.27 | 83 | 0.38 | 9,8 | 1.95 | 50 | 3/4  | 1-1/16 | 7/8  | 2.27 | 58 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## **25S21**

#### Female Tube-O - Swivel - Short Pilot

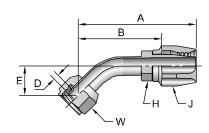


| #              |     | ·····                |           | ,    | <b>.</b> |      | )   | H    |      | $\bigcirc$ |      | 3  |
|----------------|-----|----------------------|-----------|------|----------|------|-----|------|------|------------|------|----|
| Part<br>Number |     | <b>nread</b><br>inch | Hose I.D. | inch | mm       | inch | mm  | inch | inch | inch       | inch | mm |
| 25S21-6-6      | 3/8 | 5/8x18               | 5/16      | 2.66 | 68       | 0.18 | 4,7 | 1/2  | 3/4  | 3/4        | 1.88 | 48 |
| 25S21-8-8      | 1/2 | 3/4x16               | 13/32     | 2.86 | 73       | 0.18 | 4,7 | 5/8  | 7/8  | 7/8        | 1.94 | 49 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 25H21

#### Female Tube-O - Swivel - 45° Elbow - Short Pilot



| #         |            | 0         | ,    |    | _          | ,   |      | •  |      | $\bigcirc$ | $\bigcirc$ |      | ,  |
|-----------|------------|-----------|------|----|------------|-----|------|----|------|------------|------------|------|----|
| Part      | Thread     | Hose I.D. | _ ^  | 1  | _ <u>-</u> |     | -    |    | - "  | J          | VV         |      |    |
| Number    | inch       | inch      | inch | mm | inch       | mm  | inch | mm | inch | inch       | inch       | inch | mm |
| 25H21-8-8 | 1/2 3/4x16 | 13/32     | 2.74 | 70 | 0.18       | 4,7 | 0.60 | 15 | 5/8  | 7/8        | 7/8        | 1.82 | 46 |

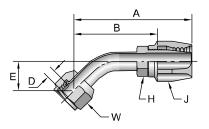
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 25N21

#### Female Tube-O - Swivel - 45° Elbow - Long Pilot

| #         |            | 0         |      |    |      |     |      |    |      |      |      |      |    |
|-----------|------------|-----------|------|----|------|-----|------|----|------|------|------|------|----|
| Part      | Thread     | Hose I.D. | F    | 1  |      | )   | E    |    | Н    | J    | W    | E    | 3  |
| Number    | inch       | inch      | inch | mm | inch | mm  | inch | mm | inch | inch | inch | inch | mm |
| 25N21-8-8 | 1/2 3/4x16 | 13/32     | 3.24 | 82 | 0.38 | 9,8 | 0.98 | 25 | 5/8  | 7/8  | 7/8  | 2.32 | 59 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

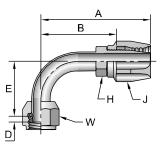


## 25T21

#### Female Tube-O - Swivel - 90° Elbow - Short Pilot

| #<br>Part   |     | ··········· | Hose I.D. | A    |    |      | )   | E    |    | (H)  |        | $\bigcirc$ | В    | 3  |
|-------------|-----|-------------|-----------|------|----|------|-----|------|----|------|--------|------------|------|----|
| Number      | l i | inch        | inch      | inch | mm | inch | mm  | inch | mm | inch | inch   | inch       | inch | mm |
| 25T21-6-6   | 3/8 | 5/8x18      | 5/16      | 2.35 | 60 | 0.18 | 4,7 | 1.21 | 31 | 1/2  | 3/4    | 3/4        | 1.57 | 40 |
| 25T21-8-8   | 1/2 | 3/4x16      | 13/32     | 2.83 | 72 | 0.18 | 4,7 | 1.31 | 33 | 5/8  | 7/8    | 7/8        | 1.91 | 49 |
| 25T21-10-10 | 5/8 | 7/8x14      | 1/2       | 3.33 | 85 | 0.18 | 4,7 | 1.50 | 38 | 3/4  | 1-1/16 | 1-1/16     | 2.33 | 59 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

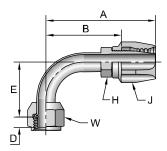


## 25L21

#### Female Tube-O - Swivel - 90° Elbow - Long Pilot

| #<br>Part   | -   | ······································ | Hose I.D. | Į.   | ١  | C    | )   | E    |    | Н    |        | $\bigcirc$ | E    | 3  |
|-------------|-----|----------------------------------------|-----------|------|----|------|-----|------|----|------|--------|------------|------|----|
| Number      |     | inch                                   | inch      | inch | mm | inch | mm  | inch | mm | inch | inch   | inch       | inch | mm |
| 25L21-6-6   | 3/8 | 5/8x18                                 | 5/16      | 2.28 | 58 | 0.28 | 7,1 | 1.43 | 36 | 1/2  | 3/4    | 3/4        | 1.50 | 38 |
| 25L21-8-8   | 1/2 | 3/4x16                                 | 13/32     | 2.50 | 64 | 0.38 | 9,8 | 1.46 | 37 | 5/8  | 7/8    | 7/8        | 1.58 | 40 |
| 25L21-10-10 | 5/8 | 7/8x14                                 | 1/2       | 2.83 | 72 | 0.38 | 9,8 | 1.75 | 44 | 3/4  | 1-1/16 | 1-1/16     | 1.83 | 46 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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## 21 Series

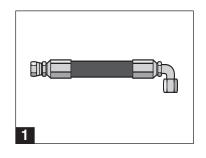
#### **Hose Assembly Instructions**

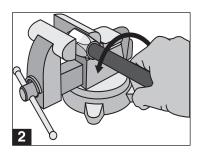
- Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table. Properly measure, mark and cut hose to desired length using fine tooth hacksaw or a cutoff machine. Care should be taken to ensure a square, clean cut is obtained.
- Air or solvent flush cut end of hose as necessary to produce a clean hose ID prior to assembly. Place socket in vice and screw in hose counter clockwise until hose bottoms. Back hose out ½ turn.
- 3. Oil inside of hose and nipple threads liberally with Hose-Oil. (See Section C). Do not oil hose cover.
- 4. Screw nipple assembly into socket using a wrench on the nipple hex until the nipple hex shoulders against the socket. A 1/32" to 1/16" gap between the nipple hex and socket is allowed for displacement angle adjustment when elbow fittings are used.

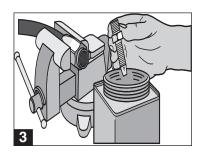
**Inspection.** Examine hose assembly internally for cut or bulged tube, obstructions and cleanliness. Clean ID of hose as necessary. Swivel nuts should turn freely. Check the layline of the hose to be sure the assembly is not twisted. Cap the ends of the assembly to keep clean.

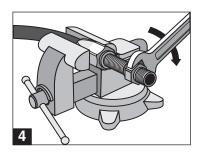
Special instructions for stainless steel fittings. When assembling fittings made with 316 stainless steel, lubricate the threads of both the socket and nipple with Accrolube High Efficiency Lubricant (see Section C) or equivalent metal assembly lubricant.

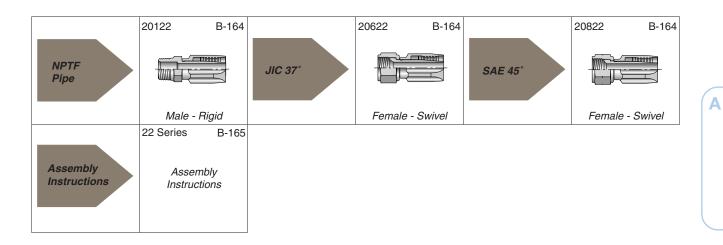
Note: Disassemble in reverse order.











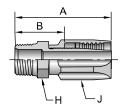
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## 20122

## Male NPTF Pipe - Rigid



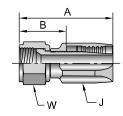
| #         |        |           |      |    |      |       |      |    | Additiona |
|-----------|--------|-----------|------|----|------|-------|------|----|-----------|
| Part      | Thread | Hose I.D. |      | A  | Н    | J     | В    | 3  | Material  |
| Number    | inch   | inch      | inch | mm | inch | inch  | inch | mm | Brass (B) |
| 20122-4-6 | 1/4x18 | 5/16      | 2.11 | 54 | 9/16 | 13/16 | 1.19 | 30 | •         |

MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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## 20622

#### Female JIC 37° - Swivel



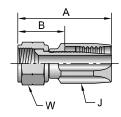
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|------------------|------|----|-----|------|
|------------------|------|----|-----|------|

| #<br>Part   | _     | ·////     | Hose I.D. | ,    | <b>A</b> |        | $\bigcirc_{\mathbf{w}}$ | E    | 3  | Additional<br>Material |
|-------------|-------|-----------|-----------|------|----------|--------|-------------------------|------|----|------------------------|
| Number      |       | inch      | inch      | inch | mm       | inch   | inch                    | inch | mm | Brass (B)              |
| 20622-4-4   | 1/4   | 7/16x20   | 3/16      | 1.74 | 44       | 5/8    | 9/16                    | 0.96 | 24 | •                      |
| 20622-6-6   | 3/8   | 9/16x18   | 5/16      | 2.05 | 52       | 13/16  | 11/16                   | 1.13 | 29 | •                      |
| 20622-8-8   | 1/2   | 3/4x16    | 13/32     | 2.55 | 65       | 15/16  | 7/8                     | 1.46 | 37 | •                      |
| 20622-10-10 | 5/8   | 7/8x14    | 1/2       | 2.80 | 71       | 1-1/8  | 1                       | 1.58 | 40 | •                      |
| 20622-12-12 | 3/4   | 1-1/16x12 | 5/8       | 3.15 | 80       | 1-1/4  | 1-1/8                   | 1.65 | 42 | •                      |
| 20622-16-16 | 1     | 1-5/16x12 | 7/8       | 2.84 | 72       | 1-7/16 | 1-1/2                   | 1.65 | 42 | •                      |
| 20622-20-20 | 1-1/4 | 1-5/8x12  | 1-1/8     | 3.00 | 76       | 1-3/4  | 2                       | 1.72 | 44 | •                      |
| 20622-24-24 | 1-1/2 | 1-7/8x12  | 1-3/8     | 3.30 | 84       | 2      | 2-1/4                   | 1.93 | 49 |                        |
| 20622-32-32 | 2     | 2-1/2x12  | 1-13/16   | 4.05 | 103      | 2-1/2  | 2-7/8                   | 2.31 | 59 | •                      |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 20822

#### Female SAE 45° - Swivel



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| #<br>Part   | _    | ····································· | Hose I.D. | ı    | ١  |       | $\bigcirc$ | E    | 3  | Additional<br>Material |
|-------------|------|---------------------------------------|-----------|------|----|-------|------------|------|----|------------------------|
| Number      |      | inch                                  | inch      | inch | mm | inch  | inch       | inch | mm | Brass (B)              |
| 20822-4-4   | 1/4  | 7/16x20                               | 3/16      | 1.74 | 44 | 5/8   | 9/16       | 0.96 | 24 | •                      |
| 20822-5-5   | 5/16 | 1/2x20                                | 1/4       | 1.91 | 49 | 11/16 | 5/8        | 1.08 | 27 |                        |
| 20822-6-6   | 3/8  | 5/8x18                                | 5/16      | 2.08 | 53 | 13/16 | 3/4        | 1.16 | 29 | •                      |
| 20822-8-8   | 1/2  | 3/4x16                                | 13/32     | 2.45 | 62 | 15/16 | 7/8        | 1.36 | 35 | •                      |
| 20822-10-10 | 5/8  | 7/8x14                                | 1/2       | 2.80 | 71 | 1-1/8 | 1          | 1.58 | 40 | •                      |

Notch in nut for SAE (45°) flare.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 22 Series

#### **Mandrel Assembly Instructions**

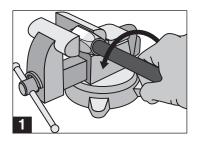
- 1. Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table. Properly measure, mark and cut hose to desired length using fine tooth hacksaw or a cutoff machine. Care should be taken to ensure a square, clean cut is obtained. Air or solvent flush cut end of hose as necessary to produce a clean hose ID prior to assembly. Place socket in vice and screw in hose counter clockwise until hose bottoms. Back hose out ½ turn.
- 2. When assembling male pipe ends, slide nipple onto mandrel.
- 3. When assembling swivel ends, slide swivel nut over nipple. Slide nut and nipple onto mandrel. Screw mandrel threads into nipple and wrench tighten.
- 4. Oil inside of hose and nipple threads liberally with Hose-Oil. (See Section C). **Do not oil hose cover.**
- 5. Push nipple into socket.
  - Male ends: Thread nipple in until it bottoms against socket.
  - Swivel ends: Thread nipple into socket using hex on assembly mandrel. Leave clearance of approximately 1/32" (.784mm) between nut and socket to allow nut to swivel. Remove mandrel.

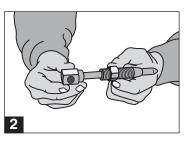
Note: Disassemble in reverse order.

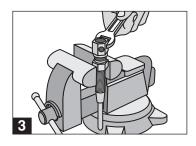
Caution: Do Not Attempt to Assemble These Fittings to the Hose Without Using a Mandrel.

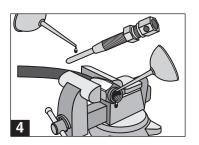
**Inspection.** Examine hose assembly internally for cut or bulged tube, obstructions and cleanliness. Clean ID of hose as necessary. Swivel nuts should turn freely. Check the layline of the hose to be sure the assembly is not twisted. Cap the ends of the assembly to keep clean.

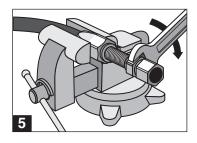
**Special Instructions for Refrigerant Hose.** Oil inside of hose and nipple threads liberally with the same oil used in refrigeration system. **Do not oil hose cover.** Do not allow hose to contact any petroleum base fluids.













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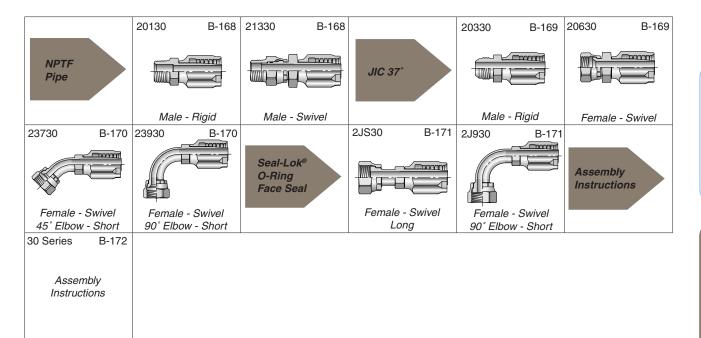
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Use with hose: 302

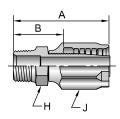








## Male NPTF Pipe - Rigid



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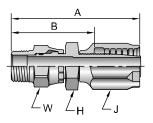
В

| #<br>Part   |          | Hose I.D. | A    |    | H     | $\bigcirc$ | E    | 3  |
|-------------|----------|-----------|------|----|-------|------------|------|----|
| Number      | inch     | inch      | inch | mm | inch  | inch       | inch | mm |
| 20130-2-4   | 1/8x27   | 1/4       | 2.19 | 56 | 9/16  | 3/4        | 1.23 | 31 |
| 20130-4-4   | 1/4x18   | 1/4       | 2.38 | 60 | 9/16  | 3/4        | 1.42 | 36 |
| 20130-6-6   | 3/8x18   | 3/8       | 2.58 | 66 | 3/4   | 15/16      | 1.44 | 37 |
| 20130-8-8   | 1/2x14   | 1/2       | 3.11 | 79 | 7/8   | 1-1/16     | 1.77 | 45 |
| 20130-12-12 | 3/4x14   | 3/4       | 3.20 | 81 | 1-1/8 | 1-3/8      | 1.77 | 45 |
| 20130-16-16 | 1x11-1/2 | 1         | 3.74 | 95 | 1-3/8 | 1-3/4      | 2.03 | 52 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 21330

## Male NPTF Pipe - Swivel



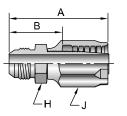
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| #         |        | •         |          |     | H    | $\bigcirc$ | $\bigcirc$ |      |    |
|-----------|--------|-----------|----------|-----|------|------------|------------|------|----|
| Part      | Thread | Hose I.D. | <i>,</i> | A   |      | J          | W          |      | В  |
| Number    | inch   | inch      | inch     | mm  | inch | inch       | inch       | inch | mm |
| 21330-6-6 | 3/8x18 | 3/8       | 3.67     | 93  | 7/8  | 15/16      | 3/4        | 2.53 | 64 |
| 21330-8-8 | 1/2x14 | 1/2       | 4.20     | 107 | 1    | 1-1/16     | 7/8        | 2.86 | 73 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## Male JIC 37° - Rigid

| #<br>Part   | _   | //////hread | Hose I.D. | Ą    |    | H     | $\bigcirc$ | ı    | 3  |
|-------------|-----|-------------|-----------|------|----|-------|------------|------|----|
| Number      |     | inch        | inch      | inch | mm | inch  | inch       | inch | mm |
| 20330-4-4   | 1/4 | 7/16x20     | 1/4       | 2.37 | 60 | 9/16  | 3/4        | 1.41 | 36 |
| 20330-6-6   | 3/8 | 9/16x18     | 3/8       | 2.58 | 66 | 3/4   | 15/16      | 1.44 | 37 |
| 20330-8-8   | 1/2 | 3/4x16      | 1/2       | 3.02 | 77 | 7/8   | 1-1/16     | 1.68 | 43 |
| 20330-10-10 | 5/8 | 7/8x14      | 5/8       | 3.29 | 84 | 15/16 | 1-1/4      | 1.83 | 46 |
| 20330-12-12 | 3/4 | 1-1/16x12   | 3/4       | 3.31 | 84 | 1-1/8 | 1-3/8      | 1.88 | 48 |



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**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www. p65warnings.ca.gov.

## 20630

#### Female JIC 37° - Swivel

| #<br>Part   | _     | hread     | Hose I.D. | A    |     | H     |        | <b>⊘</b> | В    | 3  | Additional<br>Material<br>Stainless |
|-------------|-------|-----------|-----------|------|-----|-------|--------|----------|------|----|-------------------------------------|
| Number      |       | inch      | inch      | inch | mm  | inch  | inch   | inch     | inch | mm | Steel (C)                           |
| 20630-4-4   | 1/4   | 7/16x20   | 1/4       | 2.45 | 62  | 9/16  | 3/4    | 9/16     | 1.49 | 38 | •                                   |
| 20630-5-4   | 5/16  | 1/2x20    | 1/4       | 2.52 | 64  | 5/8   | 3/4    | 5/8      | 1.56 | 40 |                                     |
| 20630-6-4   | 3/8   | 9/16x18   | 1/4       | 2.54 | 65  | 11/16 | 3/4    | 11/16    | 1.58 | 40 |                                     |
| 20630-6-6   | 3/8   | 9/16x18   | 3/8       | 2.74 | 70  | 11/16 | 15/16  | 11/16    | 1.60 | 41 | •                                   |
| 20630-8-8   | 1/2   | 3/4x16    | 1/2       | 3.20 | 81  | 7/8   | 1-1/16 | 7/8      | 1.86 | 47 | •                                   |
| 20630-10-8  | 5/8   | 7/8x14    | 1/2       | 3.30 | 84  | 1     | 1-1/16 | 1        | 1.96 | 50 |                                     |
| 20630-10-10 | 5/8   | 7/8x14    | 5/8       | 3.54 | 90  | 1     | 1-1/4  | 1        | 2.08 | 53 |                                     |
| 20630-16-16 | 1     | 1-5/16x12 | 1         | 3.94 | 100 | 1-1/2 | 1-3/4  | 1-1/2    | 2.23 | 57 |                                     |
| 20630-20-20 | 1-1/4 | 1-5/8x12  | 1-1/4     | 4.96 | 126 | 2     | 2-1/4  | 2        | 2.83 | 72 |                                     |

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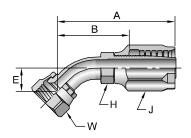
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**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



В

## Female JIC 37° - Swivel - 45° Elbow - Short Drop



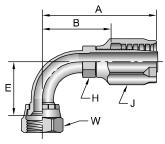
| #<br>Part   |     | ····································· | Hose I.D. | A    |     | E    |    | H     |       | $\bigcirc$ | В    | 3  |
|-------------|-----|---------------------------------------|-----------|------|-----|------|----|-------|-------|------------|------|----|
| Number      |     | inch                                  |           |      | mm  | inch | mm | inch  | inch  | inch       | inch | mm |
| 23730-12-12 | 3/4 | 1-1/16x12                             | 3/4       | 3.93 | 100 | 0.79 | 20 | 15/16 | 1-3/8 | 1-1/4      | 2.50 | 64 |
| ^           |     |                                       |           |      |     |      |    |       |       |            |      |    |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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## 23930

#### Female JIC 37° - Swivel - 90° Elbow - Short Drop



| #<br>Part |     | ······································ | Hose I.D. | Ą    |    | E    |    | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | В    |    |
|-----------|-----|----------------------------------------|-----------|------|----|------|----|------------|------------|------------|------|----|
| Number    |     | inch                                   | inch      | inch | mm | inch | mm | inch       | inch       | inch       | inch | mm |
| 23930-6-6 | 3/8 | 9/16x18                                | 3/8       | 2.95 | 75 | 0.91 | 23 | 9/16       | 15/16      | 11/16      | 1.81 | 46 |
| 23930-8-8 | 1/2 | 3/4x16                                 | 1/2       | 3.40 | 86 | 1.14 | 29 | 11/16      | 1-1/16     | 7/8        | 2.06 | 52 |
| _         |     |                                        |           |      |    |      |    |            |            |            |      |    |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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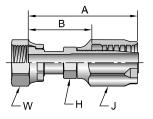
B-170 Updated 11/2022

## **2JS30**

#### Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

| #<br>Part   | _   |           |      | se I.D. |    | H     | <u>ر</u> | $\bigcirc$ | E    | 3  |
|-------------|-----|-----------|------|---------|----|-------|----------|------------|------|----|
| Number      |     | inch      | inch | inch    | mm | inch  | inch     | inch       | inch | mm |
| 2JS30-4-4   | 1/4 | 9/16x18   | 1/4  | 2.62    | 67 | 9/16  | 3/4      | 11/16      | 1.66 | 42 |
| 2JS30-6-6   | 3/8 | 11/16x16  | 3/8  | 2.89    | 73 | 9/16  | 15/16    | 13/16      | 1.75 | 44 |
| 2JS30-8-8   | 1/2 | 13/16x16  | 1/2  | 3.32    | 84 | 11/16 | 1-1/16   | 15/16      | 1.98 | 50 |
| 2JS30-12-12 | 3/4 | 1-3/16x12 | 3/4  | 3.65    | 93 | 15/16 | 1-3/8    | 1-3/8      | 2.22 | 56 |



**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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## **2J930**

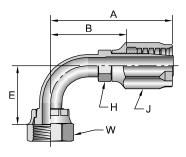
## Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

ISO 12151-1 - SWES90

| #<br>Part | _   | ····································· | Hose I.D. | Α    |    | E    |    | Он   |        | W     | В    | 3  |
|-----------|-----|---------------------------------------|-----------|------|----|------|----|------|--------|-------|------|----|
| Number    |     | inch                                  | inch      |      | mm | inch | mm | inch | inch   | inch  | inch | mm |
| 2J930-4-4 | 1/4 | 9/16x18                               | 1/4       | 2.83 | 72 | 0.82 | 21 | 7/16 | 3/4    | 11/16 | 1.87 | 47 |
| 2J930-8-8 | 1/2 | 13/16x16                              | 1/2       | 3.40 | 86 | 1.14 | 29 | 3/4  | 1-1/16 | 15/16 | 2.06 | 52 |



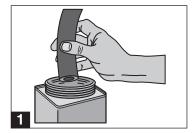
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

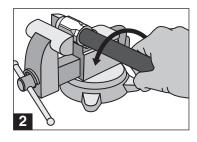


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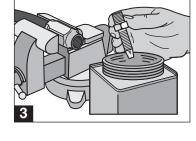
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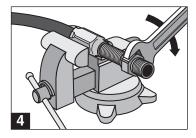




## C



## D

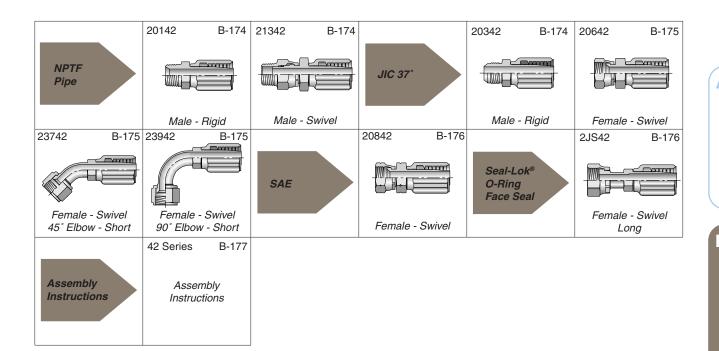


## 30 Series

#### **Hose Assembly Instructions**

- Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table. Properly measure, mark and cut hose to desired length using fine tooth hacksaw or a cutoff machine. Dip hose end into Hose-Oil (See Section C) or heavy oil.
- 2. Place socket in vice and screw in hose counter-clockwise until hose bottoms. Back hose out 1/2 turn.
- Dip hose end of nipple into Hose-Oil or other heavy oil up to the hex. When assembling fittings of 316 stainless steel lubricate the threads of both the socket and nipple with Dow Corning Molykote G-n or equivalent metal assembly lubricant.
- 4. Screw nipple assembly into socket using wrench on nipple hex until nipple hex shoulders against socket.

Note: Disassemble in reverse order.



A

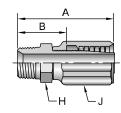
В

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## 20142

## Male NPTF Pipe - Rigid



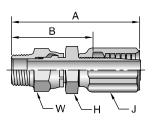
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| #<br>Part   | //////// Thread | Hose I.D. | A    |    | H     |       | E    | 3  |
|-------------|-----------------|-----------|------|----|-------|-------|------|----|
| Number      | inch            | inch      | inch | mm | inch  | inch  | inch | mm |
| 20142-2-4   | 1/8x27          | 1/4       | 2.17 | 55 | 9/16  | 11/16 | 1.25 | 32 |
| 20142-4-4   | 1/4x18          | 1/4       | 2.36 | 60 | 9/16  | 11/16 | 1.44 | 37 |
| 20142-4-5   | 1/4x18          | 5/16      | 2.39 | 61 | 9/16  | 13/16 | 1.44 | 37 |
| 20142-4-6   | 1/4x18          | 3/8       | 2.60 | 66 | 11/16 | 7/8   | 1.45 | 37 |
| 20142-6-6   | 3/8x18          | 3/8       | 2.60 | 66 | 3/4   | 7/8   | 1.45 | 37 |
| 20142-8-8   | 1/2x14          | 1/2       | 3.02 | 77 | 7/8   | 1     | 1.69 | 43 |
| 20142-12-12 | 3/4x14          | 3/4       | 3.23 | 82 | 1-1/8 | 1-3/8 | 1.75 | 44 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 21342

#### Male NPTF Pipe - Swivel



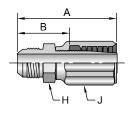
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| #<br>Part |        | Hose I.D. | A    | A  | H    | <b>C</b> | $\bigcirc$ | E    | 3  |
|-----------|--------|-----------|------|----|------|----------|------------|------|----|
| Number    | inch   | inch      | inch | mm | inch | inch     | inch       | inch | mm |
| 21342-4-4 | 1/4x18 | 1/4       | 3.40 | 86 | 9/16 | 11/16    | 5/8        | 2.48 | 63 |
| 21342-6-6 | 3/8x18 | 3/8       | 3.69 | 94 | 7/8  | 7/8      | 3/4        | 2.54 | 65 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

## 20342

#### Male JIC 37° - Rigid



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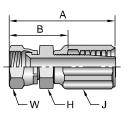
| #<br>Part | _   | ······································ | Hose I.D. | Α    | A  |      | A H J |      |    | E | 3 |
|-----------|-----|----------------------------------------|-----------|------|----|------|-------|------|----|---|---|
| Number    |     | inch                                   | inch      | inch | mm | inch | inch  | inch | mm |   |   |
| 20342-4-4 | 1/4 | 7/16x20                                | 1/4       | 2.35 | 60 | 9/16 | 11/16 | 1.43 | 36 |   |   |
| 20342-6-6 | 3/8 | 9/16x18                                | 3/8       | 2.60 | 66 | 3/4  | 7/8   | 1.45 | 37 |   |   |
| 20342-8-8 | 1/2 | 3/4x16                                 | 1/2       | 2.93 | 74 | 7/8  | 1     | 1.60 | 41 |   |   |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

O-Rings are not compatible with Phosphate Ester fluids.

#### Female JIC 37° - Swivel

| #<br>Part   |     | ······································ | Hose I.D. | Α    | <b>L</b> | H     | $\bigcirc$ | $\bigcirc$ | В    | }  | Additional<br>Material<br>Stainless |
|-------------|-----|----------------------------------------|-----------|------|----------|-------|------------|------------|------|----|-------------------------------------|
| Number      |     | inch                                   | inch      | inch | mm       | inch  | inch       | inch       | inch | mm | Steel (C)                           |
| 20642-4-3   | 1/4 | 7/16x20                                | 3/16      | 2.34 | 59       | 9/16  | 5/8        | 9/16       | 1.56 | 40 |                                     |
| 20642-4-4   | 1/4 | 7/16x20                                | 1/4       | 2.43 | 62       | 9/16  | 11/16      | 9/16       | 1.51 | 38 |                                     |
| 20642-6-4   | 3/8 | 9/16x18                                | 1/4       | 2.52 | 64       | 11/16 | 11/16      | 11/16      | 1.60 | 41 |                                     |
| 20642-6-6   | 3/8 | 9/16x18                                | 3/8       | 2.76 | 70       | 11/16 | 7/8        | 11/16      | 1.61 | 41 | •                                   |
| 20642-8-6   | 1/2 | 3/4x16                                 | 3/8       | 2.88 | 73       | 7/8   | 7/8        | 7/8        | 1.73 | 44 |                                     |
| 20642-8-8   | 1/2 | 3/4x16                                 | 1/2       | 3.11 | 79       | 7/8   | 1          | 7/8        | 1.78 | 45 | •                                   |
| 20642-10-10 | 5/8 | 7/8x14                                 | 5/8       | 3.49 | 89       | 1     | 1-1/8      | 1          | 2.07 | 53 |                                     |
| 20642-12-12 | 3/4 | 1-1/16x12                              | 3/4       | 3.53 | 90       | 1-1/4 | 1-3/8      | 1-1/4      | 2.05 | 52 |                                     |
| 20642-16-16 | 1   | 1-5/16x12                              | 1         | 3.81 | 97       | 1-1/2 | 1-5/8      | 1-1/2      | 2.27 | 58 |                                     |



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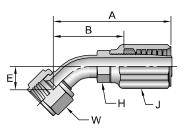
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 23742

#### Female JIC 37° - Swivel - 45° Elbow - Short Drop

| #<br>Part | -   | /////// Thread | Hose I.D. | ļ    | ١  | E    | <u> </u> | Н    |      | $\bigcirc$ | E    | 3  |
|-----------|-----|----------------|-----------|------|----|------|----------|------|------|------------|------|----|
| Number    |     | inch           | inch      | inch | mm | inch | mm       | inch | inch | inch       | inch | mm |
| 23742-6-6 | 3/8 | 9/16x18        | 3/8       | 3.03 | 77 | 0.39 | 10       | 9/16 | 7/8  | 11/16      | 1.88 | 48 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www. p65warnings.ca.gov.



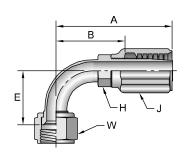
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# 23942

#### Female JIC 37° - Swivel - 90° Elbow - Short Drop

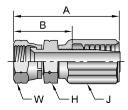
| #         |     |         |           |      |    |      | -  |       | $\bigcirc$ |       |      |    |
|-----------|-----|---------|-----------|------|----|------|----|-------|------------|-------|------|----|
| Part      |     | Thread  | Hose I.D. | -    | ١. | E    | =  | Н     | J          | W     | E    | 5  |
| Number    |     | inch    | inch      | inch | mm | inch | mm | inch  | inch       | inch  | inch | mm |
| 23942-4-4 | 1/4 | 7/16x20 | 1/4       | 2.50 | 64 | 0.83 | 21 | 7/16  | 11/16      | 9/16  | 1.58 | 40 |
| 23942-6-6 | 3/8 | 9/16x18 | 3/8       | 2.93 | 74 | 0.85 | 22 | 9/16  | 7/8        | 11/16 | 1.78 | 45 |
| 23942-8-8 | 1/2 | 3/4x16  | 1/2       | 3.22 | 82 | 1.09 | 28 | 11/16 | 1          | 7/8   | 1.90 | 48 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www. p65warnings.ca.gov.



view on web page

#### Female SAE 45° - Swivel



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| #         |     | ·····  | •         |          |          |      |      |      | _    |    |
|-----------|-----|--------|-----------|----------|----------|------|------|------|------|----|
| Part      | TI  | hread  | Hose I.D. | <i>F</i> | <b>A</b> | н    | J    | W    | E    | 3  |
| Number    |     | inch   | inch      | inch     | mm       | inch | inch | inch | inch | mm |
| 20842-6-6 | 3/8 | 5/8x18 | 3/8       | 2.82     | 72       | 3/4  | 7/8  | 3/4  | 1.67 | 42 |

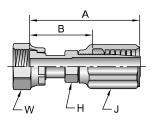
Notch on nut signifies SAE 45° flare.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### **2JS42**

# Female Seal-Lok® - Swivel - Long

ISO - 12151-1 - SWSB

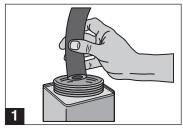


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| #<br>Part | -   | ΛΛΛΛΛΛ<br>Thread | Hose I.D. | A    | ١  | Н     |      | <b>○</b> | E    | 3  |
|-----------|-----|------------------|-----------|------|----|-------|------|----------|------|----|
| Number    |     | inch             | inch      | inch | mm | inch  | inch | inch     | inch | mm |
| 2JS42-6-6 | 3/8 | 11/16x16         | 3/8       | 2.91 | 74 | 9/16  | 7/8  | 13/16    | 1.76 | 45 |
| 2JS42-8-8 | 1/2 | 13/16x16         | 1/2       | 3.23 | 82 | 11/16 | 1    | 15/16    | 1.90 | 48 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

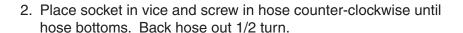




# 42 Series Hose Assemb

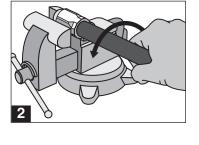
# **Hose Assembly Instructions**

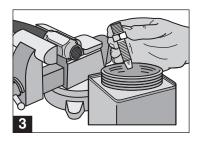
 Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table. Properly measure, mark and cut hose to desired length using fine tooth hacksaw or a cutoff machine. Dip hose end into Hose-Oil (See Section C) or heavy oil.

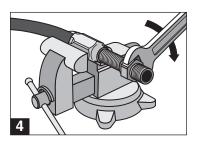


- 3. Dip hose end of nipple into Hose-Oil or other heavy oil up to the hex. When assembling fittings of 316 stainless steel lubricate the threads of both the socket and nipple with Dow Corning Molykote G-n or equivalent metal assembly lubricant.
- 4. Screw assembly into socket using wrench on nipple hex until nipple hex shoulders against socket.

Note: Disassemble in reverse order.

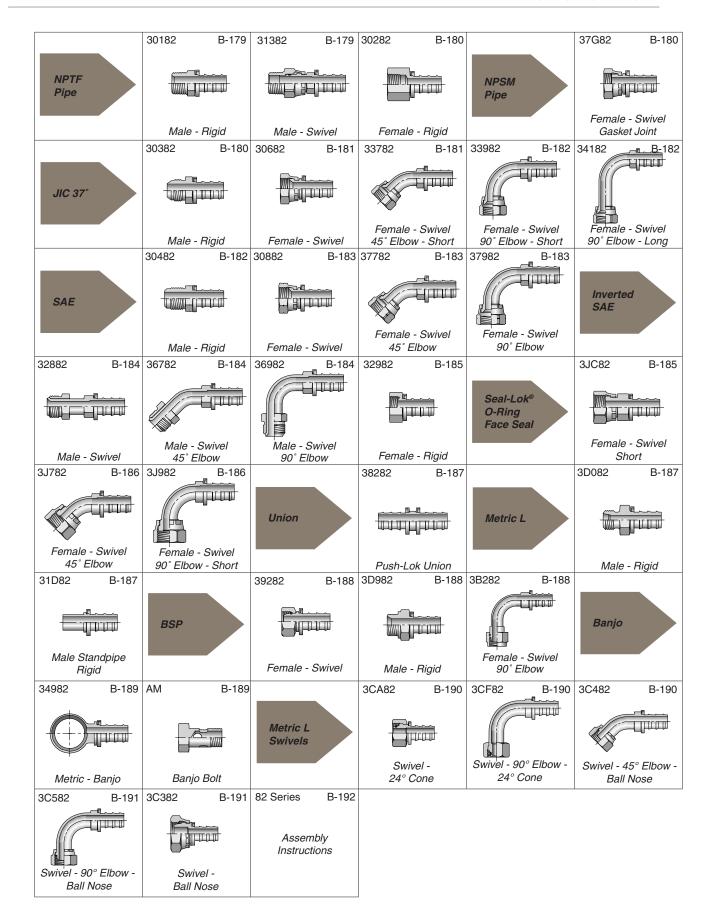






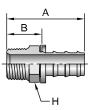






# 30182 Male NPTF Pipe - Rigid

| #           |        |           |      |    |        |      |    |           | tional<br>erial |
|-------------|--------|-----------|------|----|--------|------|----|-----------|-----------------|
| Part        | Thread | Hose I.D. |      | 4  | Н      | I    | 3  |           | Stainless       |
| Number      | inch   | inch      | inch | mm | inch   | inch | mm | Brass (B) | Steel (C)       |
| 30182-2-4   | 1/8x27 | 1/4       | 1.39 | 35 | 7/16   | 0.64 | 16 | •         | •               |
| 30182-4-4   | 1/4x18 | 1/4       | 1.57 | 40 | 9/16   | 0.82 | 21 | •         | •               |
| 30182-4-6   | 1/4x18 | 3/8       | 1.78 | 45 | 9/16   | 0.88 | 22 | •         | •               |
| 30182-4-8   | 1/4x18 | 1/2       | 1.93 | 49 | 5/8    | 0.88 | 22 | •         |                 |
| 30182-6-6   | 3/8x18 | 3/8       | 1.78 | 45 | 11/16  | 0.88 | 22 | •         | •               |
| 30182-6-8   | 3/8x18 | 1/2       | 1.93 | 49 | 11/16  | 0.88 | 22 | •         |                 |
| 30182-8-8   | 1/2x14 | 1/2       | 2.18 | 55 | 7/8    | 1.13 | 29 | •         | •               |
| 30182-8-10  | 1/2x14 | 5/8       | 2.58 | 66 | 7/8    | 1.13 | 29 | •         |                 |
| 30182-12-10 | 3/4x14 | 5/8       | 2.61 | 66 | 1-1/16 | 1.16 | 29 |           |                 |
| 30182-12-12 | 3/4x14 | 3/4       | 2.61 | 66 | 1-1/16 | 1.16 | 29 | •         | •               |



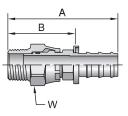
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В

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 31382 Male NPTF Pipe - Swivel

| #<br>Part   |        | Hose I.D. |      | <b>A</b> | W     | ı    | В  | Additional<br>Material |
|-------------|--------|-----------|------|----------|-------|------|----|------------------------|
| Number      | inch   | inch      | inch | mm       | inch  | inch | mm | Brass (B)              |
| 31382-4-4   | 1/4x18 | 1/4       | 1.60 | 41       | 9/16  | 0.85 | 22 |                        |
| 31382-6-6   | 3/8x18 | 3/8       | 1.79 | 45       | 11/16 | 0.89 | 23 |                        |
| 31382-8-8   | 1/2x14 | 1/2       | 2.20 | 56       | 7/8   | 1.15 | 29 |                        |
| 31382-8-10  | 1/2x14 | 5/8       | 3.50 | 90       | 7/8   | 2.05 | 52 | •                      |
| 31382-12-12 | 3/4x14 | 3/4       | 3.70 | 94       | 1-1/4 | 2.25 | 57 |                        |

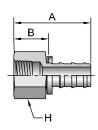


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O-Ring not compatible with Phosphate Ester fluids.

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### Female NPTF Pipe - Rigid



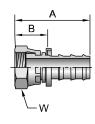
| #<br>Part | Thread | Hose I.D. | Α    |    | H    | В    | ı  | Additional<br>Material |
|-----------|--------|-----------|------|----|------|------|----|------------------------|
| Number    | inch   | inch      | inch | mm | inch | inch | mm | Brass (B)              |
| 30282-4-4 | 1/4x18 | 1/4       | 1.56 | 40 | 3/4  | 0.81 | 21 | •                      |
| 30282-6-6 | 3/8x18 | 3/8       | 1.82 | 46 | 7/8  | 0.92 | 23 | •                      |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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# 37G82

#### Female NPSM Pipe - Gasket Joint - Swivel



| _    |    | _   |      |
|------|----|-----|------|
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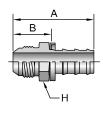
|   | #<br>Part   |        |        | Hose I.D. | A    |    | <b>⊘</b> | E    | 3  |
|---|-------------|--------|--------|-----------|------|----|----------|------|----|
|   | Number      | Gasket | inch   | inch      | inch | mm | inch     | inch | mm |
|   | 37G82-4-4   | 07G-4  | 1/4x18 | 1/4       | 1.55 | 39 | 11/16    | 0.80 | 20 |
|   | 37G82-4-6   | 07G-4  | 1/4x18 | 3/8       | 1.70 | 43 | 11/16    | 0.80 | 20 |
|   | 37G82-6-6   | 07G-6  | 3/8x18 | 3/8       | 1.75 | 44 | 7/8      | 0.85 | 22 |
|   | 37G82-8-8   | 07G-8  | 1/2x14 | 1/2       | 2.07 | 53 | 1        | 1.02 | 26 |
|   | 37G82-8-10  | 07G-8  | 1/2x14 | 5/8       | 2.47 | 63 | 1        | 1.02 | 26 |
| l | 37G82-12-12 | 07G-12 | 3/4x14 | 3/4       | 2.54 | 65 | 1-1/4    | 1.09 | 28 |

Textile gasket included with fitting.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 30382

# Male JIC 37° - Rigid



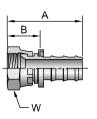
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| #<br>Part   | _   | ······································ | Hose I.D. | A    | <b>A</b> |       | В    |    | Additional<br>Material |
|-------------|-----|----------------------------------------|-----------|------|----------|-------|------|----|------------------------|
| Number      |     | inch                                   | inch      | inch | mm       | inch  | inch | mm | Brass (B)              |
| 30382-4-4   | 1/4 | 7/16x20                                | 1/4       | 1.56 | 40       | 1/2   | 0.81 | 21 |                        |
| 30382-6-6   | 3/8 | 9/16x18                                | 3/8       | 1.78 | 45       | 5/8   | 0.88 | 22 | •                      |
| 30382-8-8   | 1/2 | 3/4x16                                 | 1/2       | 2.06 | 52       | 3/4   | 1.01 | 26 |                        |
| 30382-12-12 | 3/4 | 1-1/16x12                              | 3/4       | 2.72 | 69       | 1-1/8 | 1.27 | 32 |                        |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### Female JIC 37° - Swivel

| #           |      | ·····     | •         |                                              |    |       |      |    |       | itional<br>terial |
|-------------|------|-----------|-----------|----------------------------------------------|----|-------|------|----|-------|-------------------|
| Part        | 1    | Γhread    | Hose I.D. | <i>                                     </i> | 1  | W     | E    | 3  | Brass | Stainless         |
| Number      |      | inch      | inch      | inch                                         | mm | inch  | inch | mm | (B)   | Steel (C)         |
| 30682-4-4   | 1/4  | 7/16x20   | 1/4       | 1.52                                         | 39 | 9/16  | 0.77 | 20 | •     | •                 |
| 30682-5-4   | 5/16 | 1/2x20    | 1/4       | 1.58                                         | 40 | 5/8   | 0.83 | 21 | •     |                   |
| 30682-6-6   | 3/8  | 9/16x18   | 3/8       | 1.75                                         | 44 | 11/16 | 0.85 | 22 | •     | •                 |
| 30682-6-8   | 3/8  | 9/16x18   | 1/2       | 1.90                                         | 48 | 11/16 | 0.85 | 22 | •     |                   |
| 30682-8-6   | 1/2  | 3/4x16    | 3/8       | 1.87                                         | 47 | 7/8   | 0.97 | 25 | •     |                   |
| 30682-8-8   | 1/2  | 3/4x16    | 1/2       | 2.02                                         | 51 | 7/8   | 0.97 | 25 | •     | •                 |
| 30682-10-10 | 5/8  | 7/8x14    | 5/8       | 2.54                                         | 65 | 1     | 1.09 | 28 | •     | •                 |
| 30682-12-12 | 3/4  | 1-1/16x12 | 3/4       | 2.65                                         | 67 | 1-1/4 | 1.20 | 30 | •     | •                 |



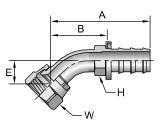
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**WARNING:** For Carbon Steel Fittings Only: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 33782

#### Female JIC 37° - Swivel - 45° Elbow - Short Drop

| #<br>Part   | -   | www.    | Hose I.D. | A    | ١  | E    |    | H    | $\bigcirc$ | E    | 3  |
|-------------|-----|---------|-----------|------|----|------|----|------|------------|------|----|
| Number      |     | inch    | inch      | inch | mm | inch | mm | inch | inch       | inch | mm |
| 33782-4-4   | 1/4 | 7/16x20 | 1/4       | 1.74 | 44 | 0.39 | 10 | 7/16 | 9/16       | 0.99 | 25 |
| 33782-6-6   | 3/8 | 9/16x18 | 3/8       | 1.99 | 51 | 0.43 | 11 | 1/2  | 11/16      | 1.09 | 28 |
| 33782-8-8   | 1/2 | 3/4x16  | 1/2       | 2.58 | 66 | 0.55 | 14 | 5/8  | 7/8        | 1.53 | 39 |
| 33782-10-10 | 5/8 | 7/8x14  | 5/8       | 3.03 | 77 | 0.65 | 17 | 3/4  | 1          | 1.58 | 40 |

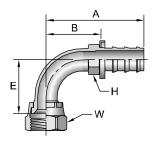


WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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# 33982

#### Female JIC 37° - Swivel - 90° Elbow - Short Drop



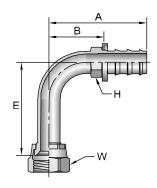
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|-----------------|---|

| #<br>Part   | _   | ····································· | Hose I.D. | A    | <b>\</b> | E    |    | (H   | w     |      | В  |
|-------------|-----|---------------------------------------|-----------|------|----------|------|----|------|-------|------|----|
| Number      |     | inch                                  | inch      | inch | mm       | inch | mm | inch | inch  | inch | mm |
| 33982-4-4   | 1/4 | 7/16x20                               | 1/4       | 1.55 | 39       | 0.83 | 21 |      | 9/16  | 0.80 | 20 |
| 33982-6-6   | 3/8 | 9/16x18                               | 3/8       | 1.86 | 47       | 0.91 | 23 |      | 11/16 | 0.95 | 24 |
| 33982-8-8   | 1/2 | 3/4x16                                | 1/2       | 2.16 | 55       | 1.14 | 29 | 5/8  | 7/8   | 1.28 | 32 |
| 33982-10-10 | 5/8 | 7/8x14                                | 5/8       | 2.76 | 70       | 1.26 | 32 | 3/4  | 1     | 1.31 | 33 |
| 33982-12-12 | 3/4 | 1-1/16x12                             | 3/4       | 3.27 | 83       | 1.89 | 48 | 7/8  | 1-1/4 | 1.82 | 46 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### 34182

#### Female JIC 37° - Swivel - 90° Elbow - Long Drop



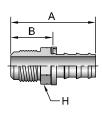
| #<br>Part |     | ///////<br>hread | Hose I.D. | A    | <b>\</b> | E    |    | $\bigcirc$ | W     | E    | 3  |
|-----------|-----|------------------|-----------|------|----------|------|----|------------|-------|------|----|
| Number    |     | inch             | inch      | inch | mm       | inch | mm | inch       | inch  | inch | mm |
| 34182-4-4 | 1/4 | 7/16x20          | 1/4       | 1.79 | 45       | 1.80 | 46 | 7/16       | 9/16  | 1.04 | 26 |
| 34182-6-6 | 3/8 | 9/16x18          | 3/8       | 1.97 | 50       | 2.18 | 55 | 1/2        | 11/16 | 1.07 | 27 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### view on web page

# 30482

#### Male SAE 45° - Rigid



view on web page

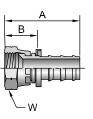
| #<br>Part  |      | ······································ | Hose I.D. | A    |    | H    | E    | 3  |
|------------|------|----------------------------------------|-----------|------|----|------|------|----|
| Number     |      | nch                                    | inch      | inch | mm | inch | inch | mm |
| 30482-4-4B | 1/4  | 7/16x20                                | 1/4       | 1.51 | 38 | 7/16 | 0.76 | 19 |
| 30482-5-4B | 5/16 | 1/2x20                                 | 1/4       | 1.61 | 41 | 9/16 | 0.86 | 22 |
| 30482-6-6B | 3/8  | 5/8x18                                 | 3/8       | 1.84 | 47 | 5/8  | 0.94 | 24 |
| 30482-8-8B | 1/2  | 3/4x16                                 | 1/2       | 2.15 | 55 | 3/4  | 1.10 | 28 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Notch in nut signifies 45° flare.

#### Female SAE 45° - Swivel

| #<br>Part   | _   | ·//·//    | Hose I.D. | Α    |    | $\bigcirc$ | E    | 3  | Additional<br>Material |
|-------------|-----|-----------|-----------|------|----|------------|------|----|------------------------|
| Number      |     | inch      | inch      | inch | mm | inch       | inch | mm | Brass (B)              |
| 30882-4-4   | 1/4 | 7/16x20   | 1/4       | 1.52 | 39 | 9/16       | 0.77 | 20 | •                      |
| 30882-6-6   | 3/8 | 5/8x18    | 3/8       | 1.81 | 46 | 3/4        | 0.91 | 23 | •                      |
| 30882-8-8   | 1/2 | 3/4x16    | 1/2       | 2.02 | 51 | 7/8        | 0.97 | 25 | •                      |
| 30882-10-10 | 5/8 | 7/8x14    | 5/8       | 2.54 | 65 | 1          | 1.09 | 28 | •                      |
| 30882-12-12 | 3/4 | 1-1/16x14 | 3/4       | 2.65 | 67 | 1-1/4      | 1.20 | 30 | •                      |



view on web page

В

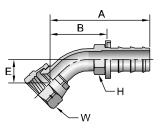
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 37782

#### Female SAE 45° - Swivel - 45° Elbow

| #<br>Part | _   | ////////hread | Hose I.D. | A    | <b>\</b> | E    |    | H    | W    | E    | <b>3</b> |
|-----------|-----|---------------|-----------|------|----------|------|----|------|------|------|----------|
| Number    |     | inch          | inch      | inch | mm       | inch | mm | inch | inch | inch | mm       |
| 37782-6-6 | 3/8 | 5/8x18        | 3/8       | 2.08 | 53       | 0.39 | 10 | 1/2  | 3/4  | 1.18 | 30       |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



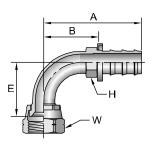
view on web page

# 37982

#### Female SAE 45° - Swivel - 90° Elbow

|       | #<br>art |     | ······································ | Hose I.D. | Δ    | <b>\</b> | E    |    | <u>H</u> | $\bigvee_{\mathbf{W}}$ | E    | 3  |
|-------|----------|-----|----------------------------------------|-----------|------|----------|------|----|----------|------------------------|------|----|
| Nur   | nber     |     | inch                                   | inch      | inch | mm       | inch | mm | inch     | inch                   | inch | mm |
| 37982 | 2-4-4    | 1/4 | 7/16x20                                | 1/4       | 1.60 | 41       | 0.83 | 21 | 7/16     | 9/16                   | 0.85 | 22 |
| 37982 | 2-6-6    | 3/8 | 5/8x18                                 | 3/8       | 1.98 | 50       | 0.85 | 22 | 1/2      | 3/4                    | 1.08 | 27 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

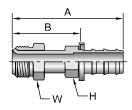


view on web page

Notch in nut signifies 45° flare.

# 32882

#### Male Inverted SAE 45°- Swivel



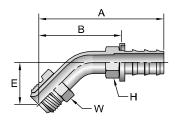
view on web page

| #<br>Part | _    | ··········· | Hose I.D. | ,    | 4  | H    | W    | ı    | 3  |
|-----------|------|-------------|-----------|------|----|------|------|------|----|
| Number    | i    | inch        | inch      | inch | mm | inch | inch | inch | mm |
| 32882-3-4 | 3/16 | 3/8x24      | 1/4       | 2.15 | 55 | 3/8  | 3/8  | 1.40 | 36 |
| 32882-4-4 | 1/4  | 7/16x24     | 1/4       | 2.15 | 55 | 7/16 | 7/16 | 1.40 | 36 |
| 32882-5-4 | 5/16 | 1/2x20      | 1/4       | 2.31 | 59 | 7/16 | 1/2  | 1.56 | 40 |
| 32882-6-6 | 3/8  | 5/8x18      | 3/8       | 2.58 | 66 | 1/2  | 5/8  | 1.68 | 43 |
| 32882-8-8 | 1/2  | 3/4x18      | 1/2       | 2.82 | 72 | 5/8  | 3/4  | 1.77 | 45 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 36782

#### Male Inverted SAE 45°- Swivel - 45° Elbow



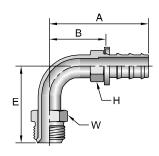
view on web page

| #<br>Part |     | ·//··/ | Hose I.D. | Α    | 1  | E    |    | Н    | $\bigcirc$ | Е    | 3  |
|-----------|-----|--------|-----------|------|----|------|----|------|------------|------|----|
| Number    |     | inch   | inch      | inch | mm | inch | mm | inch | inch       | inch | mm |
| 36782-6-6 | 3/8 | 5/8x18 | 3/8       | 2.64 | 67 | 0.94 | 24 | 1/2  | 5/8        | 1.74 | 44 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 36982

#### Male Inverted SAE 45° - Swivel - 90° Elbow



view on web page

| #<br>Part |     | ^///\/ | Hose I.D. | Α    | 1  | E    |    | (H   | $\bigcirc$ | Е    | 3  |
|-----------|-----|--------|-----------|------|----|------|----|------|------------|------|----|
| Number    |     | inch   | inch      | inch | mm | inch | mm | inch | inch       | inch | mm |
| 36982-6-6 | 3/8 | 5/8x18 | 3/8       | 2.30 | 58 | 1.69 | 43 | 1/2  | 5/8        | 1.40 | 36 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# Female Inverted SAE 45° - Rigid

| #<br>Part  |      | ······································ | Hose I.D. | A    |    | Н    | E    | 3  |
|------------|------|----------------------------------------|-----------|------|----|------|------|----|
| Number     | i    | nch                                    | inch      | inch | mm | inch | inch | mm |
| 32982-4-4B | 1/4  | 7/16x24                                | 1/4       | 1.19 | 30 | 1/2  | 0.44 | 11 |
| 32982-5-4B | 5/16 | 1/2x20                                 | 1/4       | 1.25 | 32 | 9/16 | 0.50 | 13 |
| 32982-6-6B | 3/8  | 5/8x18                                 | 3/8       | 1.44 | 37 | 3/4  | 0.54 | 14 |
| 32982-8-8B | 1/2  | 3/4x18                                 | 1/2       | 1.62 | 41 | 7/8  | 0.57 | 14 |

view on web page

В

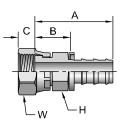
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 3JC82

#### Female Seal-Lok® - Swivel - Short

ISO 12151-1 - SWSA

| #           | _   | ······    |           |      |    |      |    |       |       |      |    |       | itional<br>terial |
|-------------|-----|-----------|-----------|------|----|------|----|-------|-------|------|----|-------|-------------------|
| Part        | -   | Thread    | Hose I.D. | Α    | 1  | C    |    | Н     | W     | E    | 3  | Brass | Stainless         |
| Number      |     | inch      | inch      | inch | mm | inch | mm | inch  | inch  | inch | mm | (B)   | Steel (C)         |
| 3JC82-4-4   | 1/4 | 9/16x18   | 1/4       | 1.40 | 36 | 0.32 | 8  | 9/16  | 11/16 | 0.65 | 17 |       | •                 |
| 3JC82-6-6   | 3/8 | 11/16x16  | 3/8       | 1.59 | 40 | 0.38 | 10 | 11/16 | 13/16 | 0.69 | 18 |       | •                 |
| 3JC82-8-6   | 1/2 | 13/16x16  | 3/8       | 1.65 | 42 | 0.38 | 10 | 13/16 | 15/16 | 0.76 | 19 |       |                   |
| 3JC82-8-8   | 1/2 | 13/16x16  | 1/2       | 1.80 | 46 | 0.43 | 11 | 13/16 | 15/16 | 0.75 | 19 |       | •                 |
| 3JC82-10-10 | 5/8 | 1x14      | 5/8       | 2.40 | 61 | 0.53 | 13 | 15/16 | 1-1/8 | 0.95 | 24 |       |                   |
| 3JC82-12-12 | 3/4 | 1-3/16x12 | 3/4       | 2.63 | 67 | 0.57 | 14 | 1-1/8 | 1-3/8 | 1.18 | 30 |       | •                 |



view on web page

When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

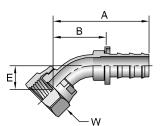
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings.

# **3J782**

#### Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45



| _    |    | _   |      |
|------|----|-----|------|
| view | on | web | page |

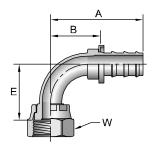
| #<br>Part |     |          | Hose I.D. | A    | <b>\</b> | E    |    | $\bigcirc$ | Е    | 3  |
|-----------|-----|----------|-----------|------|----------|------|----|------------|------|----|
| Number    |     | inch     | inch      | inch | mm       | inch | mm | inch       | inch | mm |
| 3J782-4-4 | 1/4 | 9/16x18  | 1/4       | 1.74 | 44       | 0.39 | 10 | 11/16      | 0.99 | 25 |
| 3J782-6-6 | 3/8 | 11/16x16 | 3/8       | 1.99 | 51       | 0.43 | 11 | 13/16      | 1.09 | 28 |
| 3J782-8-8 | 1/2 | 13/16x16 | 1/2       | 2.41 | 61       | 0.59 | 15 | 15/16      | 1.36 | 35 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **3J982**

# Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

ISO 12151-1 - SWES90



view on web page

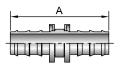
| #<br>Part   | Thread |          | Hose I.D. | A    | <b>\</b> | E    |    | $\bigcirc$ | E    | 3  |
|-------------|--------|----------|-----------|------|----------|------|----|------------|------|----|
| Number      |        | inch     | inch      | inch | mm       | inch | mm | inch       | inch | mm |
| 3J982-4-4   | 1/4    | 9/16x18  | 1/4       | 1.55 | 39       | 0.83 | 21 | 11/16      | 0.80 | 20 |
| 3J982-6-6   | 3/8    | 11/16x16 | 3/8       | 1.85 | 47       | 0.91 | 23 | 13/16      | 0.95 | 24 |
| 3J982-6-8   | 3/8    | 11/16x16 | 1/2       | 2.09 | 53       | 0.91 | 23 | 13/16      | 1.04 | 26 |
| 3J982-8-6   | 1/2    | 13/16x16 | 3/8       | 1.94 | 49       | 1.14 | 29 | 15/16      | 1.04 | 26 |
| 3J982-8-8   | 1/2    | 13/16x16 | 1/2       | 2.16 | 55       | 1.14 | 29 | 15/16      | 1.11 | 28 |
| 3J982-10-10 | 5/8    | 1x14     | 5/8       | 2.76 | 70       | 1.26 | 32 | 1-1/8      | 1.31 | 33 |
| 3J982-12-12 | 3/4    | 1-3/6x12 | 3/4       | 3.27 | 83       | 1.89 | 48 | 1-3/8      | 1.82 | 46 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See Accessories Section for O-Rings.

#### **Push-Lok Union**

| #<br>Part   | Hose I.D. | Ą    |    | Additional<br>Material |
|-------------|-----------|------|----|------------------------|
| Number      | inch      | inch | mm | Brass (B)              |
| 38282-8-8   | 1/2       | 2.51 | 64 | •                      |
| 38282-10-10 | 5/8       | 3.31 | 84 | •                      |
| 38282-12-12 | 3/4       | 3.31 | 84 | •                      |



view on web page

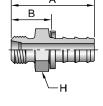
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**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 3D082

#### Male Metric L - Rigid - (24° Cone)

| #<br>Part  |    |         | Hose I.D. | A    |    | H  | E    | 3  |
|------------|----|---------|-----------|------|----|----|------|----|
| Number     |    | mm      | inch      | inch | mm | mm | inch | mm |
| 3D082-6-4  | 6  | M12x1,5 | 1/4       | 1.34 | 34 | 12 | 0.55 | 14 |
| 3D082-8-4  | 8  | M14x1,5 | 1/4       | 1.38 | 35 | 14 | 0.59 | 15 |
| 3D082-10-6 | 10 | M16x1,5 | 3/8       | 1.57 | 40 | 17 | 0.63 | 16 |
| 3D082-12-6 | 12 | M18x1,5 | 3/8       | 1.61 | 41 | 19 | 0.67 | 17 |



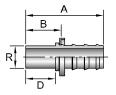
view on web page

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 31D82

#### Male Standpipe Metric L - Rigid

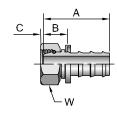
| #<br>Part   | R  | Hose I.D. | ,    | Α. | ı    | þ  |      | В  |
|-------------|----|-----------|------|----|------|----|------|----|
| Number      | mm | inch      | inch | mm | inch | mm | inch | mm |
| 31D82-6-4   | 6  | 1/4       | 1.73 | 44 | 0.87 | 22 | 0.98 | 25 |
| 31D82-8-4   | 8  | 1/4       | 1.73 | 44 | 0.87 | 22 | 0.98 | 25 |
| 31D82-10-6  | 10 | 3/8       | 1.93 | 49 | 0.91 | 23 | 1.02 | 26 |
| 31D82-12-6  | 12 | 3/8       | 1.93 | 49 | 0.91 | 23 | 1.06 | 27 |
| 31D82-18-10 | 18 | 5/8       | 2.64 | 67 | 1.02 | 26 | 1.10 | 28 |
| 31D82-22-12 | 22 | 3/4       | 2.72 | 69 | 1.10 | 28 | 1.22 | 31 |



view on web page

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### Female BSP Parallel Pipe - Swivel - (60° Cone)



view on web page

| #<br>Part   |        | Hose I.D. | A    | λ. | (    | ;  | $\bigcirc$ | В    |    | Additional<br>Material |
|-------------|--------|-----------|------|----|------|----|------------|------|----|------------------------|
| Number      | inch   | inch      | inch | mm | inch | mm | mm         | inch | mm | Brass (B)              |
| 39282-4-4   | 1/4x19 | 1/4       | 1.34 | 34 | 0.22 | 6  | 17         | 0.55 | 14 |                        |
| 39282-6-6   | 3/8x19 | 3/8       | 1.50 | 38 | 0.26 | 7  | 19         | 0.55 | 14 | •                      |
| 39282-8-8   | 1/2x14 | 1/2       | 1.77 | 45 | 0.28 | 7  | 27         | 1.06 | 27 |                        |
| 39282-12-12 | 3/4x14 | 3/4       | 2.13 | 54 | 0.35 | 9  | 36         | 1.42 | 36 |                        |

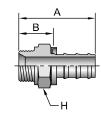
When measuring overall length to the end of the nut, B + C dimensions must be used to calculate cut-off



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 3D982

#### Male BSP Parallel Pipe - Rigid - (60° Cone)



view on web page

| #<br>Part   | Hose I.D. | Ą    |    | H  | E    | 3  |
|-------------|-----------|------|----|----|------|----|
| Number      | inch      | inch | mm | mm | inch | mm |
| 3D982-2-4   | 1/4       | 1.42 | 36 | 14 | 0.63 | 16 |
| 3D982-4-4   | 1/4       | 1.61 | 41 | 19 | 0.83 | 21 |
| 3D982-4-6   | 3/8       | 1.77 | 45 | 19 | 0.83 | 21 |
| 3D982-6-6   | 3/8       | 1.77 | 45 | 22 | 0.87 | 22 |
| 3D982-8-8   | 1/2       | 2.09 | 53 | 27 | 0.98 | 25 |
| 3D982-8-10  | 5/8       | 2.44 | 62 | 27 | 0.94 | 24 |
| 3D982-12-12 | 3/4       | 2.56 | 65 | 32 | 1.06 | 27 |

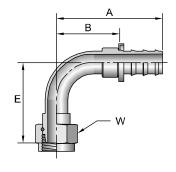
Bonded seal required if fitting is used directly in a port. See Accessories Section.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 3B282

#### Female BSP Parallel Pipe - Swivel - 90° Elbow - (60° Cone)



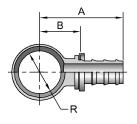
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| #<br>Part   |        | Hose I.D. | A    |    |      | E  | $\bigcirc$ | E    | 3  |
|-------------|--------|-----------|------|----|------|----|------------|------|----|
| Number      | inch   | inch      | inch | mm | inch | mm | mm         | inch | mm |
| 3B282-4-4   | 1/4x19 | 1/4       | 1.65 | 42 | 1.02 | 26 | 17         | 1.02 | 26 |
| 3B282-6-6   | 3/8x19 | 3/8       | 2.09 | 53 | 1.18 | 30 | 19         | 1.18 | 30 |
| 3B282-8-8   | 1/2x14 | 1/2       | 2.56 | 65 | 1.57 | 40 | 27         | 1.57 | 40 |
| 3B282-10-10 | 5/8x14 | 5/8       | 2.99 | 76 | 1.57 | 40 | 30         | 1.57 | 40 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 34982 DIN Metric Banjo

| #<br>Part  | Ø  | Hose I.D. | A    |    | E    | 3  |
|------------|----|-----------|------|----|------|----|
| Number     | mm | inch      | inch | mm | inch | mm |
| 34982-8-4  | 8  | 1/4       | 1.42 | 36 | 0.63 | 16 |
| 34982-10-4 | 10 | 1/4       | 1.50 | 38 | 0.71 | 18 |
| 34982-12-4 | 12 | 1/4       | 1.57 | 40 | 0.79 | 20 |
| 34982-12-6 | 12 | 3/8       | 1.73 | 44 | 0.79 | 20 |
| 34982-14-4 | 14 | 1/4       | 1.65 | 42 | 0.87 | 22 |
| 34982-14-6 | 14 | 3/8       | 1.85 | 47 | 0.91 | 23 |
| 34982-16-6 | 16 | 3/8       | 1.93 | 49 | 0.98 | 25 |
| 34982-18-8 | 18 | 1/2       | 2.17 | 55 | 1.06 | 27 |

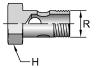


view on web page

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# AM Banjo Bolt with DIN Metric Thread

| # Part Number |    | R<br>Thread<br>mm | H<br>mm | Copper<br>Washer<br>(2) |
|---------------|----|-------------------|---------|-------------------------|
| AM-03         | 8  | M8x1              | 12      | 853009-8                |
| AM-04         | 10 | M10x1             | 14      | 853009-10               |
| AM-06         | 12 | M12x1.5           | 17      | 853009-12               |
| AM-08         | 14 | M14x1.5           | 19      | 853009-14               |
| AM-10         | 16 | M16x1.5           | 22      | 853009-16               |
| AM-13         | 18 | M18x1.5           | 24      | 853009-18               |
| AM-16         | 22 | M22x1.5           | 27      | 853009-22               |
| AM-20         | 26 | M26x1.5           | 32      | 853009-26               |
| AM-30         | 30 | M30x1.5           | 36      | 853009-30               |



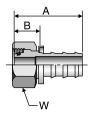
Two (2) copper washers per bolt must be ordered separately.

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 3CA82

# Female Metric L - Swivel - (24° Cone with O-Ring)

ISO 12151-2 - SWS



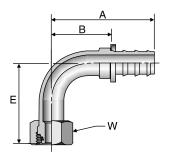
| view | on | web | page |
|------|----|-----|------|

| #<br>Part   | Thread |         | Hose I.D. | <b>A</b> |    | W  | E    | 3  |
|-------------|--------|---------|-----------|----------|----|----|------|----|
| Number      |        | mm      | inch      | inch     | mm | mm | inch | mm |
| 3CA82-8-4   | 8      | M14x1,5 | 1/4       | 1.42     | 36 | 17 | 0.67 | 17 |
| 3CA82-10-6  | 10     | M16x1,5 | 3/8       | 1.57     | 40 | 19 | 0.67 | 17 |
| 3CA82-12-6  | 12     | M18x1,5 | 3/8       | 1.57     | 40 | 22 | 0.67 | 17 |
| 3CA82-15-8  | 15     | M22x1,5 | 1/2       | 1.73     | 44 | 27 | 0.71 | 18 |
| 3CA82-22-12 | 22     | M30x2   | 3/4       | 2.28     | 58 | 36 | 0.83 | 21 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 3CF82

# Female Metric L - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE



| #<br>Part  | Thread mm |         | Hose I.D. | A    |    | E    |    | $\bigcirc$ | E    | 3  |
|------------|-----------|---------|-----------|------|----|------|----|------------|------|----|
| Number     |           | mm      | inch      | inch | mm | inch | mm | mm         | inch | mm |
| 3CF82-12-6 | 12        | M18x1,5 | 3/8       | 1.93 | 49 | 1.42 | 36 | 22         | 1.06 | 27 |

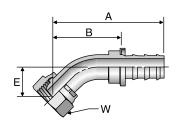
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### view on web page

# 3C482

#### Female Metric L - Swivel - 45° Elbow - (Ball Nose)

End Connection per ISO 8434-1-SWOE



view on web page

|            |   | Hose I.D.    | A                     |                            | E                                  | 1                                   | $\bigcirc$                           | E                                   | 3                                                |
|------------|---|--------------|-----------------------|----------------------------|------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------------------|
| mm         |   | inch         | inch                  | mm                         | inch                               | mm                                  | mm                                   | inch                                | mm                                               |
| 10 M16x1,5 |   | 3/8          | 2.28                  | 58                         | 0.71                               | 18                                  | 19                                   | 1.38                                | 35                                               |
|            | Т | Thread<br>mm | Thread Hose I.D. inch | Thread Hose I.D. inch inch | Thread mm Hose I.D. A inch inch mm | Thread Hose I.D. A E inch inch inch | Thread Hose I.D. A E inch mm inch mm | Thread Hose I.D. inch mm inch mm mm | Thread Hose I.D. A E W E mm inch mm inch mm inch |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

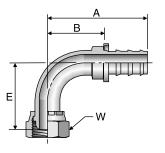
#### 3C582

#### Female Metric L - Swivel - 90° Elbow - (Ball Nose)

End Connection per ISO 8434-1-SWOE

|   | #<br>Part   |    | ······································ | Hose I.D. | A    | Ą  |      | Ę  |    | Е    | <b>3</b> |
|---|-------------|----|----------------------------------------|-----------|------|----|------|----|----|------|----------|
|   | Number      |    | mm                                     | inch      | inch | mm | inch | mm | mm | inch | mm       |
|   | 3C582-10-6B | 10 | M16x1,5                                | 3/8       | 1.93 | 49 | 1.30 | 33 | 19 | 1.06 | 27       |
| l | 3C582-15-8B | 15 | M22x1,5                                | 1/2       | 2.36 | 60 | 1.54 | 39 | 27 | 1.34 | 34       |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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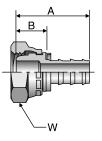
# 3C382

#### Female Metric L - Swivel - (Ball Nose)

End Connection per ISO 8434-1-SWOS

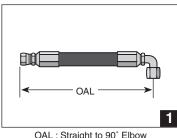
| #           | ۱ . | <u>~~~~~</u> |           |      | <b>.</b> | $\bigvee_{\mathbf{W}}$ |      | 3  |
|-------------|-----|--------------|-----------|------|----------|------------------------|------|----|
| Part        |     | Thread       | Hose I.D. |      | ì        | •••                    |      | ĺ  |
| Number      |     | mm           | inch      | inch | mm       | mm                     | inch | mm |
| 3C382-10-6B | 10  | M16x1,5      | 3/8       | 1.50 | 38       | 19                     | 0.59 | 15 |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

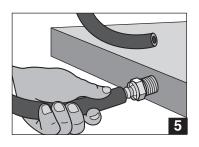


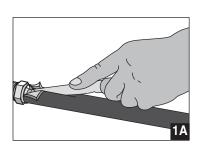
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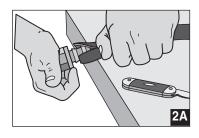












## 82 Series

#### **Assembly Instructions**

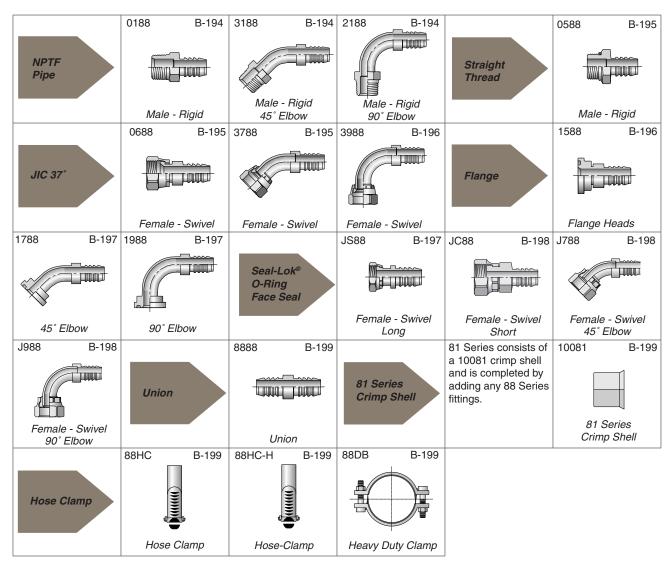
- 1. Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table.
- 2. Properly measure and mark hose. Cut hose squarely with a Parker Push-Lok cut-off tool or a sharp knife.
- 3. Lubricate the Push-Lok fitting, hose I.D., or both with light oil or soapy water only - DO NOT USE HEAVY OIL OR GREASE.
- 4. Insert fitting into hose until first barb is in the hose.
- 5. Place end fitting against a flat object such as a work bench or wall. Grip hose approximately one inch from end and push with a steady force until the end of the hose is covered by the yellow plastic cap.

#### **Disassembly Instructions**

- 1A. Leave fitting in place, and cut hose approximately one inch lengthwise from the yellow plastic cap. IMPORTANT: Be careful not to nick barbs when cutting hose.
- 2A. Grip hose firmly and give it a sharp downward tug away from the fitting for disassembly.

**Caution:** Insert the Push-Lok fitting all the way into the Push-Lok hose until the cut end is concealed by the yellow plastic cap.

**Caution:** Sealing integrity may be damaged by use of exterior clamps.



#### **Product Definition**

An 81 series fitting includes any 88 series body plus an 81 series crimp shell (0081). An 88 series fitting includes an 88 series body plus a hose clamp (88HC, 88HC-H or 88DB). To configure either an 81 or 88 series fitting, you will need to order the components separately.

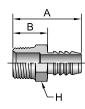








#### Male NPTF Pipe - Rigid



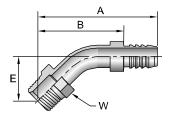
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| #<br>Part  |              | Hose I.D. | A    |    | H     | E    | 3  |
|------------|--------------|-----------|------|----|-------|------|----|
| Number     | inch         | inch      | inch | mm | inch  | inch | mm |
| 0188-12-12 | 3/4x14       | 3/4       | 2.25 | 57 | 1-1/8 | 1.13 | 29 |
| 0188-16-16 | 1x11-1/2     | 1         | 2.75 | 70 | 1-3/8 | 1.37 | 35 |
| 0188-20-20 | 1-1/4x11-1/2 | 1-1/4     | 3.05 | 77 | 1-3/4 | 1.47 | 37 |
| 0188-20-24 | 1-1/4x11-1/2 | 1-1/2     | 3.21 | 82 | 1-3/4 | 1.47 | 37 |
| 0188-24-24 | 1-1/2x11-1/2 | 1-1/2     | 3.24 | 82 | 2     | 1.50 | 38 |
| 0188-32-32 | 2x11-1/2     | 2         | 3.49 | 89 | 2-1/2 | 1.66 | 42 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### 3188

#### Male NPTF Pipe - Rigid - 45° Elbow



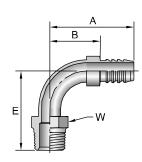
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| #<br>Part  |              | Hose I.D. | ı    | <b>\</b> | E    | <b>.</b> | $\bigcirc$ | E    | 3  |
|------------|--------------|-----------|------|----------|------|----------|------------|------|----|
| Number     | inch         | inch      | inch | mm       | inch | mm       | inch       | inch | mm |
| 3188-16-16 | 1x11-1/2     | 1         | 4.12 | 105      | 1.63 | 41       | 1-3/8      | 2.74 | 70 |
| 3188-20-20 | 1-1/4x11-1/2 | 1-1/4     | 4.54 | 115      | 1.77 | 45       | 1-3/4      | 2.96 | 75 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 2188

#### Male NPTF Pipe - Rigid - 90° Elbow



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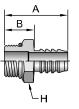
| #<br>Part  |              | Hose I.D. | ı    | 4   | E    | <b>.</b> | <b>⊘</b> | E    | 3  |
|------------|--------------|-----------|------|-----|------|----------|----------|------|----|
| Number     | inch         | inch      | inch | mm  | inch | mm       | inch     | inch | mm |
| 2188-16-16 | 1x11-1/2     | 1         | 3.35 | 85  | 3.18 | 81       | 1-3/8    | 1.97 | 50 |
| 2188-20-20 | 1-1/4x11-1/2 | 1-1/4     | 3.80 | 97  | 3.41 | 87       | 1-3/4    | 2.21 | 56 |
| 2188-24-24 | 1-1/2x11-1/2 | 1-1/2     | 4.20 | 107 | 3.61 | 92       | 2        | 2.46 | 62 |
| 2188-32-32 | 2x11-1/2     | 2         | 4.86 | 123 | 4.23 | 107      | 2-1/2    | 3.03 | 77 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See page B-199 for 81 Series crimp shells and clamps for 88 Series fittings. See Equipment Section for assembly and crimping instructions. See Accessories Section for O-Rings and Flange Kits.

#### Male SAE Straight Thread with O-Ring - Rigid

| #<br>Part  | //////// Thread | Hose I.D. | Ą    |    | A     |      | H  | E | 3 |
|------------|-----------------|-----------|------|----|-------|------|----|---|---|
| Number     | inch            | inch      | inch | mm | inch  | inch | mm |   |   |
| 0588-12-12 | 1-1/16x12       | 3/4       | 2.13 | 54 | 1-1/4 | 1    | 25 |   |   |
| 0588-16-16 | 1-5/16x12       | 1         | 2.38 | 60 | 1-1/2 | 1    | 25 |   |   |
| 0588-20-20 | 1-5/8x12        | 1-1/4     | 2.59 | 66 | 1-7/8 | 1    | 25 |   |   |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

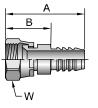
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В

## 0688

#### Female JIC 37° - Swivel

|   | #<br>Part  |       |           | Hose I.D. | I    | A   |       | E    | 3  |
|---|------------|-------|-----------|-----------|------|-----|-------|------|----|
|   | Number     | i     | nch       | inch      | inch | mm  | inch  | inch | mm |
| ( | 0688-12-12 | 3/4   | 1-1/16x12 | 3/4       | 2.66 | 68  | 1-1/4 | 1.53 | 39 |
| ( | 0688-16-12 | 1     | 1-5/16x12 | 3/4       | 1.86 | 47  | 1-1/2 | 1.38 | 35 |
| ( | 0688-16-16 | 1     | 1-5/16x12 | 1         | 2.72 | 69  | 1-1/2 | 1.34 | 34 |
| ( | 0688-20-20 | 1-1/4 | 1-5/8x12  | 1-1/4     | 3.34 | 85  | 2     | 1.75 | 44 |
| ( | 0688-24-24 | 1-1/2 | 1-7/8x12  | 1-1/2     | 3.67 | 93  | 2-1/4 | 1.93 | 49 |
| ( | 0688-32-32 | 2     | 2-1/2x12  | 2         | 4.14 | 105 | 2-7/8 | 2.31 | 59 |



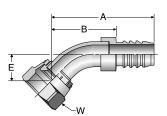
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**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 3788

#### Female JIC 37° - Swivel

| #<br>Part  | Thread |           | Hose I.D. | ı    | 4   | E    |    | $\bigcirc$ | E    | 3  |
|------------|--------|-----------|-----------|------|-----|------|----|------------|------|----|
| Number     |        | inch      | inch      | inch | mm  | inch | mm | inch       | inch | mm |
| 3788-16-16 | 1      | 1-5/16x12 | 1         | 3.51 | 89  | 0.90 | 23 | 1-1/2      | 2.13 | 54 |
| 3788-20-20 | 1-1/4  | 1-5/8x12  | 1-1/4     | 3.97 | 101 | 1.19 | 30 | 2          | 2.38 | 60 |

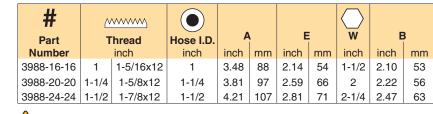


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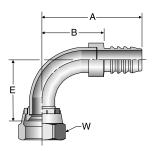
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

See page B-199 for 81 Series crimp shells and clamps for 88 Series fittings. See Equipment Section for assembly and crimping instructions. See Accessories Section for O-Rings and Flange Kits.

#### Female JIC 37° - Swivel



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

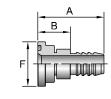


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# 1588

#### SAE Code 61 Flange Head

ISO 12151-3 - S - L



view on web page

| #<br>Part  | Flange | Hose I.D. |      | 4   | Ø<br>F  | E    | 3  |
|------------|--------|-----------|------|-----|---------|------|----|
| Number     | inch   | inch      | inch | mm  | inch    | inch | mm |
| 1588-16-16 | 1      | 1         | 2.57 | 65  | 1-3/4   | 1.19 | 30 |
| 1588-20-20 | 1-1/4  | 1-1/4     | 3.37 | 86  | 2       | 1.78 | 4  |
| 1588-24-24 | 1-1/2  | 1-1/2     | 3.78 | 96  | 2-3/8   | 2.04 | 52 |
| 1588-32-32 | 2      | 2         | 4.32 | 110 | 2-13/16 | 2.49 | 63 |
| 1588-48-40 | 3      | 2-1/2     | 4.62 | 117 | 4       | 2.79 | 71 |

See page B-199 for 81 Series crimp shells and clamps for 88 Series fittings. See Equipment Section for assembly and crimping instructions. See Accessories Section for O-Rings and Flange Kits.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



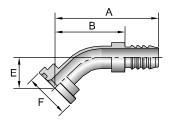
#### SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3 - E45S - L (1 Piece: ISO 12151-3 - E45M - L)

| #          |        | •         |          |          |      | _  | Ž       |      | _        |
|------------|--------|-----------|----------|----------|------|----|---------|------|----------|
| Part       | Flange | Hose I.D. | <i>,</i> | <b>1</b> | E    | -  | -       | E    | <b>3</b> |
| Number     | inch   | inch      | inch     | mm       | inch | mm | inch    | inch | mm       |
| 1788-16-16 | 1      | 1         | 3.55     | 90       | 1.06 | 27 | 1-3/4   | 2.17 | 55       |
| 1788-20-20 | 1-1/4  | 1-1/4     | 3.90     | 99       | 1.13 | 29 | 2       | 2.31 | 59       |
| 1788-24-24 | 1-1/2  | 1-1/2     | 4.15     | 105      | 1.11 | 28 | 2-3/8   | 2.41 | 61       |
| 1788-32-32 | 2      | 2         | 4.58     | 116      | 1.25 | 32 | 2-13/16 | 2.75 | 70       |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



В

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#### 1988

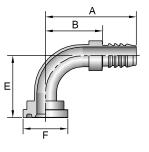
#### SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - L)

| #<br>Part  | Flange | Hose I.D. |      | Α   | E    |    | F       |      | В  |
|------------|--------|-----------|------|-----|------|----|---------|------|----|
| Number     | inch   | inch      | inch | mm  | inch | mm | inch    | inch | mm |
| 1988-16-16 | 1      | 1         | 3.35 | 85  | 2.37 | 60 | 1-3/4   | 1.97 | 50 |
| 1988-20-20 | 1-1/4  | 1-1/4     | 3.80 | 97  | 2.50 | 64 | 2       | 2.21 | 56 |
| 1988-24-24 | 1-1/2  | 1-1/2     | 4.20 | 107 | 2.74 | 70 | 2-3/8   | 2.46 | 62 |
| 1988-32-32 | 2      | 2         | 4.86 | 123 | 3.19 | 81 | 2-13/16 | 3.03 | 77 |
| 1988-40-40 | 2-1/2  | 2-1/2     | 5.52 | 140 | 3.75 | 95 | 3-5/16  | 3.69 | 94 |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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# **JS88**

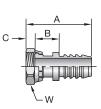
#### Female Seal-Lok® - Swivel - Long

ISO - 12151-1 - SWSB

|   | #<br>Part  |       | ······································ | Hose I.D. | A    | <b>1</b> | W     | Е    | <b>3</b> | (    |      |
|---|------------|-------|----------------------------------------|-----------|------|----------|-------|------|----------|------|------|
|   | Number     |       | inch                                   | inch      | inch | mm       | inch  | inch | mm       | inch | mm   |
| , | JS88-20-20 | 1-1/4 | 1-11/16x12                             | 1-1/4     | 3.21 | 82       | 1-7/8 | 1.62 | 41,1     | 0.59 | 15,0 |
|   | JS88-24-24 | 1-1/2 | 2x12                                   | 1-1/2     | 3.47 | 88       | 2-1/4 | 1.73 | 43,9     | 0.62 | 15,7 |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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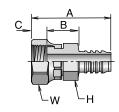
See page B-199 for 81 Series crimp shells and clamps for 88 Series fittings. See Equipment Section for assembly and crimping instructions. See Accessories Section for O-Rings and Flange Kits.

B-197

#### **JC88**

#### Female Seal-Lok - Swivel - Short

ISO 12151-1-SWSA



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| #<br>Part  | _     | ······································ | Hose I.D. | Į.   | ١  | С    | H     | W     | E    | 3  |
|------------|-------|----------------------------------------|-----------|------|----|------|-------|-------|------|----|
| Number     |       | inch                                   | inch      | inch | mm | inch | inch  | inch  | inch | mm |
| JC88-12-12 | 3/4   | 1-3/16x12                              | 3/4       | 2.80 | 71 | 0.57 | 1-1/8 | 1-3/8 | 1.70 | 43 |
| JC88-16-12 | 1     | 1-7/16x12                              | 3/4       | 2.82 | 72 | 0.58 | 1-3/8 | 1-5/8 | 1.69 | 43 |
| JC88-16-16 | 1     | 1-7/16x12                              | 1         | 3.07 | 78 | 0.59 | 1-3/8 | 1-5/8 | 1.69 | 43 |
| JC88-20-16 | 1-1/4 | 1-11/16x12                             | 1         | 3.08 | 78 | 0.59 | 1-7/8 | 1-5/8 | 1.70 | 43 |
| JC88-20-20 | 1-1/4 | 1-11/16x12                             | 1-1/4     | 3.29 | 84 | 0.59 | 1-7/8 | 1-7/8 | 1.70 | 43 |

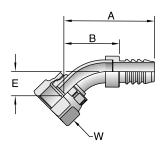
When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Use with hoses: 811, 811HT, 881

# **J788**

#### Female Seal-Lok - Swivel - 45° Elbow



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| #              | ۵     | ·····          |                | Δ    |    | F    |    | W     | E    | 3  |
|----------------|-------|----------------|----------------|------|----|------|----|-------|------|----|
| Part<br>Number |       | Thread<br>inch | Hose I.D. inch | inch | mm | inch | mm | inch  | inch | mm |
| J788-16-16     | 1     | 1-7/16x12      | 1              | 3.79 | 96 | 0.94 | 24 | 1-5/8 | 2.41 | 61 |
| J788-20-20     | 1-1/4 | 1-11/16x12     | 1-1/4          | 3.71 | 94 | 0.94 | 24 | 1-7/8 | 2.12 | 54 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **J988**

#### Female Seal-Lok - Swivel - 90° Elbow - Short Drop

| L    | Α |
|------|---|
|      | В |
|      |   |
| T    |   |
| E // |   |
| Īd   |   |
|      | W |
|      |   |

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| #<br>Part   |       | Thread     | Hose I.D. | Δ    | <b>\</b> | E    |    | w     | E    | 3  |
|-------------|-------|------------|-----------|------|----------|------|----|-------|------|----|
| Number      |       | inch       | inch      | inch | mm       | inch | mm | inch  | inch | mm |
| J988-12-12  | 3/4   | 1-3/16x12  | 3/4       | 2.85 | 72       | 1.83 | 46 | 1-3/8 | 1.72 | 44 |
| J988-16-16  | 1     | 1-7/16x12  | 1         | 3.74 | 95       | 2.19 | 56 | 1-5/8 | 2.36 | 60 |
| J988-16-16C | 1     | 1-7/16x12  | 1         | 3.75 | 95       | 2.22 | 56 | 1-5/8 | 2.37 | 60 |
| J988-20-20  | 1-1/4 | 1-11/16x12 | 1-1/4     | 4.26 | 108      | 2.51 | 64 | 1-7/8 | 2.67 | 68 |
| J988-24-24  | 1-1/2 | 2x12       | 1-1/2     | 5.27 | 134      | 2.68 | 68 | 2-1/4 | 3.53 | 90 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### 8888

#### **Union (Hose Splicer)**

| #<br>Part  | Hose I.D. | A    |    |  |
|------------|-----------|------|----|--|
| Number     | inch      | inch | mm |  |
| 8888-16-16 | 1         | 3.21 | 82 |  |
| 8888-20-20 | 1-1/4     | 3.61 | 92 |  |



#### view on web page

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **88HC**

#### **Hose Clamp (Worm Gear)**

| #       |           |
|---------|-----------|
| Part    | Hose I.D. |
| Number  | inch      |
| 88HC-12 | 3/4       |
| 88HC-16 | 1         |
| 88HC-20 | 1-1/4     |
| 88HC-24 | 1-1/2     |
| 88HC-32 | 2         |



view on web page

See page D-38 for more information.

# 10081

# **Crimp Shell**

| #        |           |
|----------|-----------|
| Part     | Hose I.D. |
| Number   | inch      |
| 10081-12 | 3/4       |
| 10081-16 | 1         |
| 10081-20 | 1-1/4     |
| 10081-24 | 1-1/2     |
| 10081-32 | 2         |



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81 Series consists of a 10081 crimp shell and is completed by adding any 88 Series Fittings. See Equipment Section for complete 81 Series Assembly and Crimping instructions.



MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **88HC-H**

#### **Hose Clamp** (High Torque Worm Gear)

| #        | •         |
|----------|-----------|
| Part     | Hose I.D. |
| Number   | inch      |
| 88HC-16H | 1         |
| 88HC-20H | 1-1/4     |
| 88HC-32H | 2         |
| 88HC-40H | 2-1/2     |
| 88HC-48H | 3         |

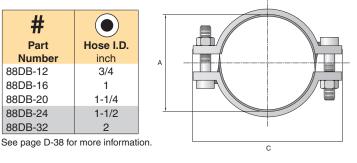


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# **88DB**

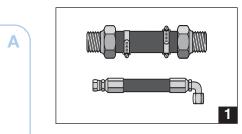
#### **Heavy Hose Clamp** (Double Bolt)

| #       |           |
|---------|-----------|
| Part    | Hose I.D. |
| Number  | inch      |
| 88DB-12 | 3/4       |
| 88DB-16 | 1         |
| 88DB-20 | 1-1/4     |
| 88DB-24 | 1-1/2     |
| 88DB-32 | 2         |

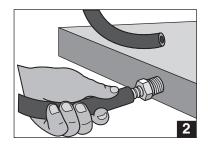


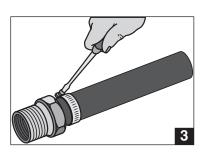
See page D-38 for more information.

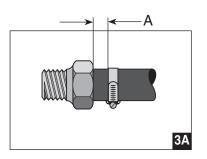
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



D







#### 88 Series

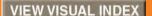
#### **Hose Assembly Instructions**

- 1. Identify Over All Length (OAL) of hose assembly and the Cut Off Allowance (COA) length of fitting(s) by use of the fitting data table. Properly measure and mark hose. Cut hose cleanly and squarely to length. Trim any exposed wire reinforcement to prevent injury in service.
- 2. Slide clamp(s) onto hose and lubricate hose. Push hose onto fitting until hose bottoms against stop ring or hex.
- Position hose clamp(s) as shown and secure with a screwdriver or wrench to tightening torque listed on page D-37.
   Maintain "A" dimensions as shown below for proper clamp positioning of both HC clamps and HC-H clamps.
- 3A. Evenly attach double bolt clamps for maximum grip.

| Hose I.D. | ,    |       |
|-----------|------|-------|
| inch      | inch | mm    |
| -12       | 1/4  | 6.35  |
| -16       | 3/8  | 9.53  |
| -20       | 3/8  | 9.53  |
| -24       | 1/2  | 12.70 |
| -32       | 1/2  | 12.70 |

**Note:** For permanent installation of 88 Series Fittings, an 81 Series Crimp Shell must be added. See Equipment Section for assembly and crimping instructions.





# Equipment

Parkrimp Crimpers Die Selection Charts Pumps Hose Assembly Equipment Catalog 4400 US Equipment

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C

D



# Notes

# Hose Assemblies Are Easy With the Parkrimp System.

Since its introduction in 1980, the Parkrimp family of crimping machines has led the industry in ease of use and rugged durability.

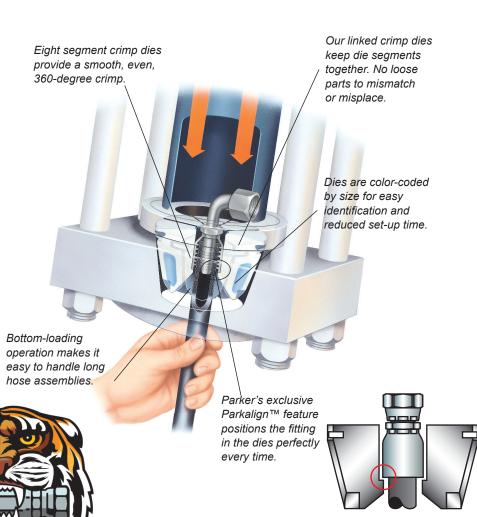
When it comes to hose assemblies, no one puts it all together like Parker. From high-volume productivity to portable on-site assembly, we offer a variety of crimping machines, No-Skive hoses, and No-Skive fittings to meet your needs.

B

With Parkrimp equipment, anyone can make factoryquality hose assemblies quickly, easily, and cost effectively. Parkrimp machines are simple to operate and they're built to provide years of dependable service. Seven Parkrimp models - an entire family of crimpers - are available to meet your benchmounted or portable needs, crimping straight or bent-stem fittings from 1/4" to 2" in diameter. Just use our No-Skive hoses and fittings to create leak-free hose assemblies whenever and wherever you need them.

The complete system from one source: No-Skive hose, No-Skive fittings, and crimping machines with worldwide availability and service.





# Selecting the right die.

Once the proper Parker Hose and Fitting is selected that meets your application requirements, you will need to select the proper die to assemble them together.

Based on the hose size and approved fitting, select the proper color coded die, as called out in the chart below.

#### Example:

| •                     |           |
|-----------------------|-----------|
| Hose                  | 387-4     |
| Fitting               | 43 Series |
| Die Body Color        | Silver    |
| Die Cavity Color (-4) | RED       |

Based on the Parkrimp machine being used to assemble the hose and fitting, individual die part numbers and tooling selection for your assembly can be found in Section C of this catalog.

For general hose assembly instructions for all Parkrimp machines, please turn to pages C-19 and C-20. (An instructional video is a standard part of each Parkrimp machine shipped from the manufacturer.)

Parker Hose Products
Division also offers a
full line of crimping
accessories, including
conversion kits,
cabinets, cut-off saws,
push-on tables, die
racks, and mandrel
tool kits.

B

| Hose<br>Dash<br>Size | Die<br>Cavity<br>Color | HY Series<br>Die Body<br>Color |
|----------------------|------------------------|--------------------------------|
| 0120                 | Code                   | Silver                         |
| -4                   | BROWN                  |                                |
| -5                   | BROWN                  |                                |
| -6                   | BROWN                  |                                |
| -8                   | BROWN                  |                                |
| -10                  | BROWN                  |                                |
| -12                  | BROWN                  |                                |
| -16                  | BROWN                  |                                |

| Hose<br>Dash<br>Size | Die<br>Cavity<br>Color | 43 & 26 Series<br>Die Body<br>Color   | 77<br>Series Die<br>Body Color | eries Die 79 Series Die |        | 25 Series<br>Die Body<br>Color | 81 Series<br>Die Body<br>Color |
|----------------------|------------------------|---------------------------------------|--------------------------------|-------------------------|--------|--------------------------------|--------------------------------|
| Oize                 | Code                   | Silver                                | Black                          | Olive Drab              | Silver | Silver                         | Silver                         |
| -4                   | RED                    |                                       | N/A                            | N/A                     | N/A    | N/A                            | N/A                            |
| -5                   | PURPLE                 |                                       | N/A                            | N/A                     | N/A    | N/A                            | N/A                            |
| -6                   | YELLOW                 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                                | N/A                     | N/A    |                                | N/A                            |
| -8                   | BLUE                   |                                       | P                              | N/A                     | N/A    |                                | N/A                            |
| -10                  | ORANGE                 |                                       |                                | N/A                     | N/A    | N/A                            | N/A                            |
| -12                  | GREEN                  |                                       | P                              | N/A                     |        | N/A                            |                                |
| -16                  | BLACK                  |                                       |                                | N/A                     | à 9    | N/A                            |                                |
| -20                  | WHITE                  |                                       |                                |                         | N/A    | N/A                            |                                |
| -24                  | RED                    |                                       |                                |                         | N/A    | N/A                            |                                |
| -32                  | GREEN                  |                                       |                                |                         | N/A    | N/A                            |                                |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Reference pages C-6 through C-14 for specific tool information regarding hose, fitting, and crimper combinations. Be sure to check **www.parker.com/crimpsource** for the most up to date information and crimp specifications.

# **KrimpNODE™**

# **Smarter Crimper. Smarter Choice.**

Do you know where your crimpers are? Parker's Hose Products Division can help you take the guess work out of determining their location. Are your crimpers being used? Our new KrimpNODE™ sensor can track crimper usage and deliver this data, allowing you to analyze both usage and location.

If you have an existing crimper, order our KrimpNODE™ Retrofit Kit or if you need a new crimper, order one of our Parkrimp crimpers that come standard with KrimpNODE™.

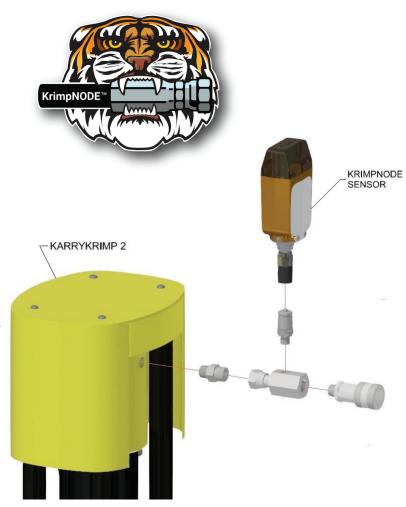
KrimpNODE™ sensors can be added to existing crimpers via our KrimpNODE™ Retrofit Kit through any Parker Distributor.

Karrykrimp 2, Parkrimp 1, Parkrimp 2, and Phastkrimp 2 come standard with KrimpNODE™ sensor.

Activate, track and increase sales with Parker Hose Products KrimpNODE $^{\text{TM}}$ .

For anyone having existing crimpers that want to order the sensor to attach:

Crimper Sensor Retrofit Kit:
Parkrimp 1 PT# PKT26189
Parkrimp 2 PT#PKT26189
Karrykrimp 2 PT#PK26190



#### Capability:

B

- · Records crimp activity
- · Real time connection to the cloud
- · GPS position
- · Unlimited capacity, all your crimpers can be monitored

#### Features:

- · Alerts/notifications via email or text
- Customizable dashboards

#### **Specifications:**

- Available on Parkrimp1, Parkrimp2, Karrykrimp2, and Phastkrimp 2
- · Retrofit kits available for installed units

#### Note

- For crimp instructions, see pages C-19 and C-20.
- Hose assemblies must be inspected for cleanliness and free of all foreign particles.
- Parker Hannifin will not accept responsibility for the operation of, or provide warranty coverage for, a crimper that is operated by a power unit other than equipment supplied by Parker Hannifin for the express purpose of operating the crimper.

C-6 Updated 1/2023

view on web page

# Karrykrimp

The Karrykrimp is now available in a modular design with all the familiar Parkrimp System advantages.

The same unit now offers portability and bench mountability.



- Up to 1-1/4" ID 2 wire braided hose
- Up to 5/8" ID 4 wire spiral hose
- · Only steel fittings

#### **Features**

- Now comes standard with KrimpNODE See page C-6 for more information on KrimpNODE™
- · Portable, compact rugged design
- · Numerous portable power unit options available
- · Pivoting pusher design for easy die change out
- · Increased height enables longer bent tube fittings to be crimped
- For use with 25, 26, 43, 81, and HY Series fittings

#### **Specifications**

- Dimensions: 15" wide, 12" deep, 30" high
- · Weight: 70 lbs (without power unit)
- 30 ton force @ 10,000 psi maximum
- Crimp Cycle Time: 30 seconds 82C-0EP power unit (1/2" 43 Series)
- Reference pages C-16 and C-17 for information on available power units

#### Standard Equipment

| Part Number |          | er      | Description               | Individual         |  |
|-------------|----------|---------|---------------------------|--------------------|--|
| 82C-CHD     | 82C-061L | 82C-KKB | Description               | <b>Part Number</b> |  |
| •           | •        | •       | Crimp Head                | 82C-CHD            |  |
|             |          | •       | Bench Power Unit Assembly | *85C-ZMS           |  |
| •           | •        | •       | Silver Die Ring           | 82C-R01            |  |
| •           | •        | •       | Black Die Ring            | 82C-R02            |  |
|             | •        |         | Hose Assembly             | 85C-00L            |  |
|             | •        |         | Stand Assembly            | 85C-STD            |  |
|             |          | •       | Hose Assembly             | 85C-03L            |  |

Karrykrimp Bench Mount



web page

B

Capability

- Up to 1-1/4" ID 2 wire braided hose
- Up to 5/8" ID 4 wire spiral hose
- · Only steel fittings

#### **Features**

- Faster cycle times on bench mounted units
- · Pivoting pusher design for easy die change out
- Compact bench mount design
- · Increased height enables longer bent tube fittings to be
- · For use with 25, 26, 43, 81, and HY Series fittings

#### **Specifications**

- Dimensions: 19" wide, 23" deep, 27-1/2" high
- · Weight: 220 lbs
- Rating: 30 ton force @ 10,000 psi maximum
- Crimp Cycle Time: 8 seconds (1/2" 43 Series straight fittings)
- Full Stroke Crimp Time: 15 seconds
- Hydraulic Fluid: Enerpac Oil
- This unit is designed to make about 200 crimps per day and is not designed to be a production crimper. Exceeding these suggested production amounts will significantly reduce the life expectancy of the crimper components.

\*Note: Power unit is factory wired to operate at 115 volt. A 20 amp dedicated circuit is required to operate at this voltage. Do not use extension cords to operate this machine.

> The electric motor is dual voltage, 50/60 HZ, suitable for 208-230/115 volt. The motor and control circuit can be rewired by a qualified electrician to operate at alternate voltage. See motor name plate and wiring diagrams.

#### **Optional Tooling**

• Die Kit 43K-KDA (Includes 43 Series dies in sizes 1/4", 3/8", 1/2", 3/4", 1" and 1-1/4" only)

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### Note:

- For crimp instructions, see pages C-19 and C-20.
- · Hose assemblies must be inspected for cleanliness and free of all foreign particles.
- · Parker Hannifin will not accept responsibility for the operation of, or provide warranty coverage for, a crimper that is operated by a power unit other than equipment supplied by Parker Hannifin for the express purpose of operating the crimper.

|                                       | Parker Hannifin Corporation Hose Products Division 30240 Lakeland Blvd. Wickliffe, Ohio 44092  Karrykrimp/Karrykrimp Bench Mount Hose Die Selection Chart                                                                                                                      |                                  |                                |                |                               |                |                |                |                |                |                                                                                                                                                                                                                                                                                                    |             |  |  |  |  |  |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------|----------------|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--|--|--|--|--|
| Fitting<br>Series                     |                                                                                                                                                                                                                                                                                | HOSE                             |                                |                | -5<br>PUR                     | -6<br>YEL      | -8<br>BLU      | -10<br>ORG     | -12<br>GRN     | -16<br>BLK     | -20<br>WHT                                                                                                                                                                                                                                                                                         | Die<br>Ring |  |  |  |  |  |
|                                       |                                                                                                                                                                                                                                                                                | Die Part Number                  |                                | 80C-A04        | 80C-A05                       | 80C-A06        | 80C-A08        | 80C-A10        | 80C-A12        | 80C-A16        | 80C-A20                                                                                                                                                                                                                                                                                            | Tillig      |  |  |  |  |  |
|                                       | GLOBALCORE 187/187ST/TC (-8 THRU -16)<br>387/387ST/TC (-4 THRU -16), 487/487ST/TC (-4 THRU -12)<br>787/787ST/TC (-4 & -6), 797/797ST/TC (-4 & -6)                                                                                                                              |                                  | 0.645<br>0.665                 | 0.710<br>0.730 | 0.825<br>0.845                |                |                | 1.245<br>1.265 | 1.590<br>1.610 | 1.970<br>1.990 | 0                                                                                                                                                                                                                                                                                                  |             |  |  |  |  |  |
| 43<br>Series                          | 351ST/TC 422<br>472LT, 482ST/                                                                                                                                                                                                                                                  |                                  | 51ST/TC 471ST/TC<br>(U -10)    |                |                               |                |                |                |                |                |                                                                                                                                                                                                                                                                                                    | SILVER      |  |  |  |  |  |
|                                       | GLOBALCOF<br>72                                                                                                                                                                                                                                                                | <b>RE</b><br>2/722ST/TC (-6 THRU | -10)                           | 0.685          | 0.750                         | 0.865          | 0.985          | 1.100          | 1.285          | 1.630          | 2.010                                                                                                                                                                                                                                                                                              | 0           |  |  |  |  |  |
|                                       | 302 4                                                                                                                                                                                                                                                                          | 21WC 722LT (-6 THF               | RU -10) 881                    | 0.705          | 0.770                         | 0.885          | 1.005          | 1.120          | 1.305          | 1.650          | 2.030                                                                                                                                                                                                                                                                                              | BLACK       |  |  |  |  |  |
| S                                     |                                                                                                                                                                                                                                                                                | Die Part Number                  |                                | 1              |                               | 80C-Y06        | 80C-Y08        |                |                |                |                                                                                                                                                                                                                                                                                                    |             |  |  |  |  |  |
| 25<br>Series                          |                                                                                                                                                                                                                                                                                | 271                              |                                |                | 0.680   0.825   0.700   0.845 |                |                |                | SILVER         |                |                                                                                                                                                                                                                                                                                                    |             |  |  |  |  |  |
|                                       |                                                                                                                                                                                                                                                                                | Die Part Number                  |                                | 80C-E04        | 80C-E05                       | 80C-E06        | 80C-E08        | 80C-E10        | 80C-E12        | 80C-E16        |                                                                                                                                                                                                                                                                                                    |             |  |  |  |  |  |
| 26<br>Series                          | 213                                                                                                                                                                                                                                                                            | 285 (-4, -6, -10)                | 293                            | 0.460<br>0.480 | 0.520<br>0.540                | 0.575<br>0.595 | 0.670<br>0.690 | 0.805<br>0.825 | 0.915<br>0.935 | 1.175<br>1.195 |                                                                                                                                                                                                                                                                                                    | SILVER      |  |  |  |  |  |
| Š                                     | 201<br>206<br>221FR                                                                                                                                                                                                                                                            | 225<br>226<br>244                | 266<br>SS25UL<br>285(-8 & -12) | 0.500<br>0.520 | 0.560<br>0.580                | 0.615<br>0.635 | 0.710<br>0.730 | 0.845<br>0.865 | 0.955<br>0.975 | 1.215<br>1.235 |                                                                                                                                                                                                                                                                                                    | BLACK       |  |  |  |  |  |
| တ္ဆ                                   |                                                                                                                                                                                                                                                                                | Die Part Number                  |                                |                |                               |                |                |                | 80C-V12        | 80C-V16        | 80C-V20                                                                                                                                                                                                                                                                                            |             |  |  |  |  |  |
| 81<br>Series                          | 811                                                                                                                                                                                                                                                                            | 811HT                            | 881                            |                |                               |                |                |                | 1.155<br>1.175 | 1.450<br>1.470 | 1.740<br>1.760                                                                                                                                                                                                                                                                                     | SILVER      |  |  |  |  |  |
|                                       |                                                                                                                                                                                                                                                                                | Die Part Number                  |                                | 80C-H595       |                               |                |                | 80C-H1015      | 80C-H1170      | 80C-H1365      |                                                                                                                                                                                                                                                                                                    |             |  |  |  |  |  |
| HY<br>Series                          | 801                                                                                                                                                                                                                                                                            | 836 611HT (                      | 4 THRU -12)                    | 0.575<br>0.595 |                               |                |                | 0.995<br>1.015 | 1.140<br>1.160 | 1.350<br>1.370 |                                                                                                                                                                                                                                                                                                    | SILVER      |  |  |  |  |  |
| Se H                                  |                                                                                                                                                                                                                                                                                | Die Part Number                  |                                |                |                               | 80C-H735       | 80C-H860       |                |                |                |                                                                                                                                                                                                                                                                                                    |             |  |  |  |  |  |
| 801 836 611HT 0.755 0.890 0.775 0.910 |                                                                                                                                                                                                                                                                                |                                  |                                |                |                               |                |                | BLACK          |                |                |                                                                                                                                                                                                                                                                                                    |             |  |  |  |  |  |
| not ope                               | Caution: Read the operations and technical manual before attempting to operate this machine. Do not operate this machine without guard in place. Keep hands clear of moving parts when operating machine.  Note: Do not use this machine to assemble stainless steel fittings. |                                  |                                |                |                               |                |                | semble         |                |                |                                                                                                                                                                                                                                                                                                    |             |  |  |  |  |  |
| specifi                               | cations, please                                                                                                                                                                                                                                                                | visit Crimpsource at v           | ,<br>www.parker.com/c          | rimpsourd      |                               |                | be             |                |                |                | Information on this decal is subject to change without notice. For the most current crimp specifications, please visit Crimpsource at www.parker.com/crimpsource. New decals can be ordered at Parker website https://parker.cp.imtco.com/Account/Login.  Decal Part Number: 82C-CRIMPDECAL REV. J |             |  |  |  |  |  |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# Karrykrimp 2

The Karrykrimp 2 is now available in a modular design with all the familiar Parkrimp System advantages.

The same unit now offers portability and bench mountability.



view on web page

#### Capability

- Up to 1-1/4" ID 2 wire braided hose
- Up to 1-1/4" ID 4 wire spiral hose
- Up to 1" ID 6 wire spiral hose

#### **Features**

- Now comes standard with KrimpNODE See page C-6 for more information on KrimpNODE™
- Portable, compact rugged design
- Numerous portable power unit options available
- · Pivoting pusher design for easy die change out
- For use with 25,26, 43, 70, 71, 77, 81 and HY Series fittings

#### **Specifications**

• Dimensions: 14" wide, 14" deep, 31-1/2" high Weight: 120 lbs (without power unit)

· Rating: 60 ton force @ 10,000 psi maximum • Cycle Time: 15 seconds with 85C-0EP power unit

(1/2" 43 series)

• Reference pages C-16 and C-17 for information on available power units

#### Standard Equipment

| Part Number |          | er      | Description               | Individual  |  |
|-------------|----------|---------|---------------------------|-------------|--|
| 85C-CHD     | 85C-061L | 85C-KKB | Description               | Part Number |  |
|             |          |         | Crimp Head                | 85C-CHD     |  |
|             |          |         | Bench Power Unit Assembly | *85C-ZMS    |  |
| •           |          |         | Silver Die Ring           | 85C-R01     |  |
| •           |          |         | Black Die Ring            | 85C-R02     |  |
|             | •        |         | Hose Assembly             | 85C-00L     |  |
|             |          |         | Stand Assembly            | 85C-STD     |  |
|             |          | •       | Hose Assembly             | 85C-03L     |  |

# **Karrykrimp 2 Bench Mount**



view on web page

B

#### Capability

- Up to 1-1/4" ID 2 wire braided hose
- Up to 1-1/4" ID 4 wire spiral hose
- Up to 1" ID 6 wire spiral hose

#### **Features**

- · Faster cycle times on bench mounted units
- · Pivoting pusher design for easy die change out
- Compact bench mount design
- For use with 25, 26, 43, 70, 71, 77, 81 and HY Series fittings

#### **Specifications**

- · Dimensions: 19" wide, 24" deep, 28" high
- · Weight: 265 lbs
- Rating: 60 ton force @ 10,000 psi maximum
- · Crimp Cycle Time: 15 seconds

(1/2" 43 series straight fitting)

- Full Stroke Cycle Time: 24 seconds
- · Hydraulic Fluid: Enerpac Oil
- This unit is designed to make about 200 crimps per day and is not designed to be a production crimper. Exceeding these suggested production amounts will significantly reduce the life expectancy of the crimper components.

\*Note: Power unit is factory wired to operate at 115 volt. A 20 amp dedicated circuit is required to operate at this voltage. Do not use extension cords to operate this machine.

> The electric motor is dual voltage, 50/60 HZ, suitable for 208-230/115 volt. The motor and control circuit can be rewired by a qualified electrician to operate at alternate voltage. See motor name plate and wiring diagrams.

#### **Optional Tooling**

• Die Kit KK2-KDA (Includes 43 Series dies in sizes 1/4", 3/8", 1/2", 3/4", 1" and 1-1/4" and 77 Series dies in sizes 1/2", 5/8", 3/4" and 1" only.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### Note:

- For crimp instructions, see pages C-19 and C-20.
- · Hose assemblies must be inspected for cleanliness and free of all foreign particles.
- Parker Hannifin will not accept responsibility for the operation of, or provide warranty coverage for, a crimper that is operated by a power unit other than equipment supplied by Parker Hannifin for the express purpose of operating the crimper.

В

|                      | Parker Hannifin Corporation Hose Products Division 30240 Lakeland Blvd. Wickliffe, Ohio 44092                                                               |                | _              | -              |                | rrykrir<br>ion Cl      | -                           | Bench                       | n Mou          | ınt         |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|------------------------|-----------------------------|-----------------------------|----------------|-------------|
| Fitting<br>Series    | HOSE                                                                                                                                                        | -4<br>RED      | -5<br>PUR      | -6<br>YEL      | -8<br>BLU      | -10<br>ORG             | -12<br>GRN                  | -16<br>BLK                  | -20<br>WHT     | Die<br>Ring |
|                      | Die Part Number                                                                                                                                             | 80C-A04        | 80C-A05        | 80C-A06        | 80C-A08        | 80C-A10                | 80C-A12                     | 80C-A16                     | 80C-A20        | 1 11119     |
|                      | GLOBALCORE 187/187ST/TC (-8 THRU -20)<br>387/387ST/TC (-4 THRU -16), 487/487ST/TC (-4 THRU -12)<br>787/787ST/TC (-4 & -6), 797/797ST/TC (-4 & -6)           | 0.645<br>0.665 | 0.710<br>0.730 | 0.825<br>0.845 | 0.945<br>0.965 | 1.060<br>1.080         | 1.245<br>1.265              | 1.590<br>1.610              | 1.970<br>1.990 | 9           |
| es<br>ies            | 351ST/TC 422 426 431 436<br>451ST/TC 471ST/TC 472TC/LT 482ST/TC                                                                                             |                |                |                |                |                        |                             |                             |                | SILVER      |
| 43<br>Series         | GLOBALCORE 387/387ST/TC (-20 ONLY) 487/487ST/TC (-16 ONLY) 722/722ST/TC (-6 THRU -16) 722LT (-6 THRU -20) 881                                               | 0.685<br>0.705 | 0.750<br>0.770 | 0.865<br>0.885 | 0.985<br>1.005 | 1.100<br>1.120         | 1.285<br>1.305              | 1.630<br>1.650              | 2.010<br>2.030 | O DI AOK    |
|                      | 722ST/TC (-20 ONLY)                                                                                                                                         | Oriena D       | :              |                | 700/7001       | T/OT/TO (              | ): 10 :-                    | 1 000/1                     | 000            | BLACK       |
|                      | NOTES                                                                                                                                                       |                |                |                |                | T/ST/TC S<br>T/ST/TC S |                             |                             |                |             |
|                      | Die Part Number                                                                                                                                             | J              |                | 83C-D06        | 83C-D08        | 83C-D10                | 83C-D12                     | 83C-D16                     | 83C-D20        |             |
| 71<br>Series         | 721/721ST/TC                                                                                                                                                |                |                | 0.950<br>0.970 | 1.100<br>1.120 | 1.220<br>1.240         | 1.355<br>1.375              | 1.695<br>1.715              | 2.025<br>2.045 | SILVER      |
| 0)                   | NOTES                                                                                                                                                       | 71 Serie       | s Size -2      | 0 Stainles     | ss Steel F     | ittings car            | n not be (                  | Crimped o                   |                |             |
|                      | Die Part Number                                                                                                                                             | 1              | 0 0.20 2       | <u> </u>       | 80C-CS08       |                        |                             |                             |                | 31          |
| 77<br>Series         | GLOBALCORE 787/787ST/TC<br>797/797ST/TC (-8 THRU -12)                                                                                                       |                |                |                | 0.930<br>0.950 | 1.057<br>1.077         | 1.245<br>1.265              | 1.541<br>1.571              |                | BLACK       |
|                      | NOTES                                                                                                                                                       | 77 Serie       | s Size -1      | 6 Stainles     | ss Steel F     | ittings car            | n not be C                  | Crimped o                   | n this Ma      | chine.      |
| SS                   | Die Part Number                                                                                                                                             |                |                | 80C-Y06        | 80C-Y08        |                        |                             |                             |                |             |
| 25<br>Series         | 271                                                                                                                                                         |                |                | 0.680<br>0.700 | 0.825<br>0.845 |                        |                             |                             |                | SILVER      |
|                      | Die Part Number                                                                                                                                             | 80C-E04        | 80C-E05        | 80C-E06        | 80C-E08        | 80C-E10                | 80C-E12                     | 80C-E16                     |                |             |
| 26<br>Series         | 213 285 293                                                                                                                                                 | 0.460<br>0.480 | 0.520<br>0.540 | 0.575<br>0.595 | 0.670<br>0.690 | 0.805<br>0.825         | 0.915<br>0.935              | 1.175<br>1.195              |                | SILVER      |
| o,                   | 201 225 266<br>206 226 SS25UL<br>221FR 244                                                                                                                  | 0.500<br>0.520 | 0.560<br>0.580 | 0.615<br>0.635 | 0.710<br>0.730 | 0.845<br>0.865         | 0.955<br>0.975              | 1.215<br>1.235              |                | BLACK       |
| y,                   | Die Part Number                                                                                                                                             |                |                |                |                |                        | 80C-V12                     | 80C-V16                     | 80C-V20        |             |
| 81<br>Series         | 811 811HT 881                                                                                                                                               |                |                |                |                |                        | 1.155<br>1.175              | 1.450<br>1.470              | 1.740<br>1.760 | SILVER      |
|                      | Die Part Number                                                                                                                                             | 80C-H595       |                |                |                |                        | 80C-H1170                   |                             |                |             |
| HY<br>Series         | 801 836 611HT (-4 THRU -12)                                                                                                                                 | 0.575<br>0.595 |                |                |                | 0.995<br>1.015         | 1.140<br>1.160              | 1.350<br>1.370              |                | SILVER      |
| Ser                  | Die Part Number                                                                                                                                             |                |                | 80C-H735       |                |                        |                             |                             |                |             |
|                      | 801 836 611HT                                                                                                                                               |                |                | 0.755<br>0.775 | 0.890<br>0.910 |                        |                             |                             |                | BLACK       |
|                      | : Read the operations and technical manual before attempting this machine without guard in place. Keep hands clear of mov                                   |                |                |                |                |                        | nless steel<br>ter than tab | crimp diam<br>ble listings. | eters can b    | pe up to    |
| Informa<br>visit Cri | tion on this decal is subject to change without notice. For the mpsource at www.parker.com/crimpsource. New decals can b parker.cp.imtco.com/Account/Login. | nost curre     | nt crimp sp    | ecification    |                |                        | Deca                        | I Part Nur<br>MPDECA        |                |             |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



#### **Features**

· Now comes standard with KrimpNODE See page C-6 for more information on KrimpNODE™

· Compact bench mount design

· Engineered for optimal reliability, consistency, and durability

• All in one crimper and power unit design

• For use with 25, 26, 43, 81, and HY Series fittings

# **Specifications**

· Dimensions: 26" wide, 20" deep, 25" high · Weight: 275 lbs (with power unit)

Rating: 30 ton force @ 3,000 psi maximum

• Full Cycle Time: 20 seconds · Hydraulic Fluid: AW32 oil

• Note: Includes a 115/230 volt, 1 phase, 60 hertz power unit wired for 115V. This unit comes with a 20 AMP male plug and must be run on a dedicated 20 AMP circuit.

# **Standard Equipment**

| Part Number<br>80C-061 | Description                                                                                | Individual<br>Part Number |
|------------------------|--------------------------------------------------------------------------------------------|---------------------------|
| •                      | Parkrimp 1 crimper<br>with 115/230 volt,<br>1 phase, 60 Hz<br>power unit wired for<br>115V | 80C-181                   |
| •                      | Silver die ring                                                                            | 80C-R01                   |
| •                      | Black die ring                                                                             | 80C-R02                   |

# Capability

For use with 25, 26, 43, 81, and HY fittings.

1 and 2 wire braided hose

5/8" 4 spiral hose

3/8" Compact Spiral Hose

No Stainless Steel Fittings

Crimp Cycle Time: 15-20 seconds, depending

on Pusher position. (1/2" 43 series straight fittings)

B

Note: Cycle times vary depending on hose, fitting

styles and sizes.

This machine may require the use of the Molykote GN grease for larger hose and fittings. For best performance and longevity of crimper components, use the Molykote GN grease for all crimping.

This machine is designed to make about 200 crimps per day and is not designed for production use. Exceeding the suggested production amounts will significantly reduce the life expectancy of the machine components.

#### 80C-061 Includes:

- Parkrimp 1 Crimper
- · Die ring Silver
- · Die ring Black
- No Dies Order Separately

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### Note:

- For crimp instructions, see pages C-19 and C-20.
- · Hose assemblies must be inspected for cleanliness and free of all foreign particles.
- · Parker Hannifin will not accept responsibility for the operation of, or provide warranty coverage for, a crimper that is operated by a power unit other than equipment supplied by Parker Hannifin for the express purpose of operating the crimper.

|                                                                                                                                                                                                                                                                                                    | Parker Hannifin Corporation Hose Products Division 30240 Lakeland Blvd. Wickliffe, Ohio 44092  Parkrimp 1 Hose Die Selection Chart |                                       |                                                         |                |                |                |                |                |                |                |                |        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------|
| Fitting<br>Series                                                                                                                                                                                                                                                                                  |                                                                                                                                    | HOSE                                  | -4<br>RED                                               | -5<br>PUR      | -6<br>YEL      | -8<br>BLU      | -10<br>ORG     | -12<br>GRN     | -16<br>BLK     | -20<br>WHT     | Die<br>Ring    |        |
|                                                                                                                                                                                                                                                                                                    |                                                                                                                                    | Die Part Number                       |                                                         | 80C-A04        | 80C-A05        | 80C-A06        | 80C-A08        | 80C-A10        | 80C-A12        | 80C-A16        |                | rung   |
| Ø                                                                                                                                                                                                                                                                                                  | GLOBALCOF<br>387/387ST/TC<br>787/787ST/TC                                                                                          | 487/487ST/7<br>(-4 & -6), 797/79      | TC (-8 THRU -16)<br>C (-4 THRU -12)<br>PST/TC (-4 & -6) | 0.645<br>0.665 | 0.710<br>0.730 | 0.825<br>0.845 | 0.945<br>0.965 | 1.060<br>1.080 | 1.245<br>1.265 | 1.590<br>1.610 |                | 0      |
| 43<br>Series                                                                                                                                                                                                                                                                                       |                                                                                                                                    | 426 431 436 45<br>482ST/TC 777/777ST/ |                                                         |                |                |                |                |                |                |                |                | SILVER |
|                                                                                                                                                                                                                                                                                                    |                                                                                                                                    | 2/722ST/TC (-6 THRU                   | <u> </u>                                                | 0.685<br>0.705 | 0.750<br>0.770 | 0.865<br>0.885 | 0.985<br>1.005 | 1.100<br>1.120 | 1.285<br>1.305 | 1.630<br>1.650 |                | 0      |
|                                                                                                                                                                                                                                                                                                    | 421WC 3                                                                                                                            | 302 722LT (-6 THR                     | J -10) 881                                              |                |                |                |                |                |                |                |                | BLACK  |
| S                                                                                                                                                                                                                                                                                                  |                                                                                                                                    | Die Part Number                       |                                                         |                |                | 80C-Y06        | 80C-Y08        |                |                |                |                |        |
| 25<br>Series                                                                                                                                                                                                                                                                                       |                                                                                                                                    |                                       | 0.680   0.825   0.700   0.845                           |                |                |                |                |                | SILVER         |                |                |        |
|                                                                                                                                                                                                                                                                                                    |                                                                                                                                    | Die Part Number                       |                                                         | 80C-E04        | 80C-E05        | 80C-E06        | 80C-E08        | 80C-E10        | 80C-E12        | 80C-E16        |                |        |
| 26<br>Series                                                                                                                                                                                                                                                                                       | 213                                                                                                                                | 285 (-4, -6, -10)                     | 293                                                     | 0.460<br>0.480 | 0.520<br>0.540 | 0.575<br>0.595 | 0.670<br>0.690 | 0.805<br>0.825 | 0.915<br>0.935 | 1.175<br>1.195 |                | SILVER |
| Se                                                                                                                                                                                                                                                                                                 | 201<br>206<br>221FR                                                                                                                | 225<br>226<br>244                     | 266<br>SS25UL<br>285 (-8 & -12)                         | 0.500<br>0.520 | 0.560<br>0.580 | 0.615<br>0.635 | 0.710<br>0.730 | 0.845<br>0.865 | 0.955<br>0.975 | 1.215<br>1.235 |                | BLACK  |
| Se                                                                                                                                                                                                                                                                                                 |                                                                                                                                    | Die Part Number                       |                                                         |                |                |                |                |                | 80C-V12        | 80C-V16        | 80C-V20        |        |
| 81<br>Series                                                                                                                                                                                                                                                                                       | 811                                                                                                                                | 811HT                                 | 881                                                     |                |                |                |                |                | 1.155<br>1.175 | 1.450<br>1.470 | 1.740<br>1.760 | SILVER |
|                                                                                                                                                                                                                                                                                                    |                                                                                                                                    | Die Part Number                       |                                                         | 80C-H595       |                | 80C-H735       | 80C-H860       | 80C-H1015      | 80C-H1170      |                |                |        |
| HY<br>Series                                                                                                                                                                                                                                                                                       | 801 836                                                                                                                            | 611HT (-4 THRU                        | -12)                                                    | 0.575<br>0.595 |                |                |                | 0.995<br>1.015 | 1.140<br>1.160 | 1.350<br>1.370 |                | SILVER |
| L &                                                                                                                                                                                                                                                                                                | Die Part Number                                                                                                                    |                                       |                                                         |                |                | 80C-H735       | 80C-H860       |                |                |                |                |        |
|                                                                                                                                                                                                                                                                                                    | 801 836                                                                                                                            | 611HT                                 |                                                         |                | 0.755<br>0.775 | 0.890<br>0.910 |                |                |                |                | BLACK          |        |
| Caution: Read the operations and technical manual before attempting to operate this machine. Do not operate this machine without guard in place. Keep hands clear of moving parts when operating machine.  Note: Do not use this machine to assembly stainless steel fittings.                     |                                                                                                                                    |                                       |                                                         |                |                |                |                | semble         |                |                |                |        |
| Information on this decal is subject to change without notice. For the most current crimp specifications, please visit Crimpsource at www.parker.com/crimpsource. New decals can be ordered at Parker website https://parker.cp.imtco.com/Account/Login.  Decal Part Number: 82C-CRIMPDECAL REV. K |                                                                                                                                    |                                       |                                                         |                |                |                |                |                |                |                |                |        |

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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Updated 1/2023

C-12

# Parkrimp 2



view on web page

# Capability

- Up to 2" ID 2 wire braided hose
- Up to 2" ID 4/6 wire spiral hose\*

#### **Features**

- Now comes standard with KrimpNODE
   See page C-6 for more information on KrimpNODE™
- Easy to use vertical design
- Crimps full range of Parker hoses from 1/4" through 2" I.D.\*
- Crimps both steel and stainless steel fittings\*
- For use with 25, 26, 43, 70, 71, 76, 77, 79, 81 and HY Series fittings

# **Specifications**

| <ul><li>Dimensions:</li></ul> | 31" wide, 24" deep, 77" high      |
|-------------------------------|-----------------------------------|
| <ul><li>Weight:</li></ul>     | 842 lbs (Head is 558 lbs and base |
|                               | is 284 lbs)                       |

Rating: 125 ton force @ 5,000 psi maximum
Full Stroke 30 seconds without adapter bowl

Full Stroke
 Cycle Time:
 20 seconds with adapter bowl

• Hydraulic oil: Enerpac oil

# Standard Equipment

| Part Number |         | Description                                                                                          | Individual  |
|-------------|---------|------------------------------------------------------------------------------------------------------|-------------|
| 83C-081     | 83C-082 | Description                                                                                          | Part Number |
|             |         | Parkrimp 2 Crimper Head Assembly                                                                     | 83C-080     |
| •           |         | Parkrimp 2 Stand Assembly with<br>230/460 volt, 3 phase, 50/60 Hz power<br>unit (wired for 230 volt) | 83C-S40     |
| •           |         | Parkrimp 2 Stand Assembly with 230 volt, 1 phase, 50/60 Hz power unit                                | 83C-S20     |
| •           | •       | Adapter Bowl                                                                                         | 83C-OCB     |
| •           | •       | Spacer Ring                                                                                          | 83C-R02     |
| •           | •       | Spacer Plate                                                                                         | 83C-R02H    |

<sup>\*</sup>Can crimp 77 Series stainless steel fittings up to 1-1/2"

#### **Optional Tooling**

- Die Kit PK2-KDA (Includes 43 Series dies in sizes 1/4", 3/8", 1/2", 3/4", 1", 1-1/4" and 77 Series dies in sizes 1/2", 5/8", 3/4", 1", 1-1/4", 1-1/2" and 2" only)
- Die Kit 77K-KDA (Includes 77 Series dies in sizes 1/2", 5/8", 3/4", 1", 1-1/4", 1-1/2" and 2" only)

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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|                   | Parker Hannifin Corporation Hose Products Division 30240 Lakeland Blvd. Wickliffe, Ohio 44092                                                                                                                                                              | Parkrimp 2 Hose Die Selection Chart |                          |                           |                         |                              |                             |                                       |                                       |                                                         |                |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|---------------------------|-------------------------|------------------------------|-----------------------------|---------------------------------------|---------------------------------------|---------------------------------------------------------|----------------|
| Fitting<br>Series | HOSE                                                                                                                                                                                                                                                       | -4<br>RED                           | -5<br>PUR                | -6<br>YEL                 | -8<br>BLU               | -10<br>ORG                   | -12<br>GRN                  | -16<br>BLK                            | -20<br>WHT                            | -24<br>RED                                              | -32<br>GRN     |
|                   | Die Part Number  GLOBALCORE  187/1875T/TC (-8 THRU -32) 387/3875T/TC (-4 THRU -16) 487/4875T/TC (-4 THRU -12) 787/7875T/TC (-4 AND -6) 797/7975T/TC (-4 AND -6) 351ST/TC 422 426 431 436 451ST/TC 471ST/TC, 472TC/LT, 482ST/TC, 777/7775T/TC (-6 THRU -16) | 0.645<br>0.665                      | 0.710<br>0.730           | 0.825<br>0.845            | 0.945<br>0.965          | 1.060<br>1.080               | 1.245<br>1.265              | 80C-A16<br>83C-A16H<br>1.590<br>1.610 | 80C-A20<br>83C-A20H<br>1.970<br>1.990 | 2.290<br>2.310                                          | 2.735<br>2.755 |
| 43<br>Series      | Tooling Required                                                                                                                                                                                                                                           |                                     |                          |                           | <b>4</b>                | 9                            |                             |                                       |                                       |                                                         |                |
| S                 | GLOBALCORE 387/387ST/TC (-20 ONLY) 487/487ST/TC (-16 ONLY) 722/722ST/TC (-6 THRU -16) 302 421WC 722ST/TC (-20 ONLY) 881 722ST/TC (-20 ONLY)                                                                                                                | 0.685<br>0.705                      | 0.750<br>0.770           | 0.865<br>0.885            | 0.985<br>1.005          | 1.100<br>1.120               | 1.285<br>1.305              | 1.630<br>1.650                        | 2.010<br>2.030                        | 2.330<br>2.350                                          | 2.775<br>2.795 |
|                   | Tooling Required                                                                                                                                                                                                                                           |                                     |                          |                           |                         |                              | 0                           |                                       |                                       |                                                         | $\Diamond$     |
|                   | NOTES                                                                                                                                                                                                                                                      |                                     |                          |                           |                         | Size -16 is<br>Size -20 is   |                             |                                       |                                       |                                                         |                |
| 71<br>Series      | Die Part Number<br>721/721ST/TC<br>722/722ST/TC/LT (-24 AND -32 ONLY)                                                                                                                                                                                      |                                     |                          | 0.950<br>0.970            | 1.100<br>1.120          | 1.220<br>1.240               | 1.355<br>1.375              | 83C-D16<br>83C-D16H<br>1.695<br>1.715 | 83C-D20<br>83C-D20H<br>2.025<br>2.045 | 2.290<br>2.310                                          | 2.775<br>2.795 |
| S                 | Tooling Required                                                                                                                                                                                                                                           |                                     |                          |                           | 7                       |                              |                             |                                       |                                       | 7                                                       |                |
| 77<br>Series      | Die Part Number           GLOBALCORE         387/387ST/TC (-20 THRU -32)         787/787ST/TC (-20 THRU -32)         787/797ST/TC (-20 THRU -32)         797/797ST/TC                                                                                      |                                     |                          |                           | 0.930<br>0.950          | 1.057<br>1.077               | 1.245<br>1.265              | 1.541<br>1.561                        | 1.970<br>1.990                        | 2.320<br>2.340                                          | 2.865<br>2.885 |
| Se                | Tooling Required                                                                                                                                                                                                                                           |                                     |                          |                           | 1                       |                              | 0                           | 46                                    | $\Diamond$                            |                                                         |                |
|                   | NOTES                                                                                                                                                                                                                                                      | Crimp Dia<br>77 SERIE               | meter rang<br>S SIZE -32 | e for 387/38<br>STAINLES  | 37ST/TC Si<br>S STEEL F | ize -32 is 2.8<br>FITTINGS C | 360/2.885.<br>AN NOT BI     | E CRIMPE                              | ONTHIS                                | MACHINE.                                                |                |
| 25<br>Series      | Die Part Number<br>271                                                                                                                                                                                                                                     |                                     |                          | 0.680<br>0.700            | 0.825<br>0.845          |                              |                             |                                       |                                       |                                                         |                |
| o)                | Tooling Required                                                                                                                                                                                                                                           |                                     |                          |                           |                         |                              |                             |                                       |                                       |                                                         |                |
|                   | Die Part Number           213         285 (-4, -6, -10)         293                                                                                                                                                                                        | 0.460<br>0.480                      | 0.520<br>0.540           | 80C-E06<br>0.575<br>0.595 | 0.670<br>0.690          | 0.805<br>0.825               | 0.915<br>0.935              | 80C-E16<br>1.175<br>1.195             | 83C-E20<br>1.420<br>1.440             | 1.670<br>1.690                                          | 2.160<br>2.180 |
| 26<br>Series      | Tooling Required                                                                                                                                                                                                                                           |                                     |                          |                           |                         | 9                            |                             |                                       |                                       |                                                         |                |
| Se                | 201 225 266<br>206 226 SS25UL<br>221FR 244 285 (-8 & -12)                                                                                                                                                                                                  | 0.500<br>0.520                      | 0.560<br>0.580           | 0.615<br>0.635            | 0.710<br>0.730          | 0.845<br>0.865               | 0.955<br>0.975              | 1.215<br>1.235                        | 1.460<br>1.480                        | 1.710<br>1.730                                          | 2.200<br>2.220 |
|                   | Tooling Required                                                                                                                                                                                                                                           |                                     |                          |                           |                         |                              | 0                           |                                       |                                       |                                                         | $\Diamond$     |
| 81<br>Series      | Die Part Number           811         811HT         881                                                                                                                                                                                                    |                                     |                          |                           |                         |                              | 1.155<br>1.175              | 1.450<br>1.470                        | 1.740<br>1.760                        | 2.010<br>2.030                                          | 2.430<br>2.450 |
| S                 | Tooling Required                                                                                                                                                                                                                                           |                                     |                          |                           |                         |                              |                             |                                       |                                       |                                                         |                |
|                   | Die Part Number<br>801 836 611HT (-4 THRU -12)                                                                                                                                                                                                             | 80C-H595<br>0.575<br>0.595          |                          |                           |                         | 0.995<br>1.015               | 80C-H1170<br>1.140<br>1.160 | 1.350<br>1.370                        |                                       |                                                         |                |
| ۲<br>ies          | Tooling Required                                                                                                                                                                                                                                           |                                     |                          |                           |                         |                              |                             |                                       |                                       |                                                         |                |
| HY<br>Series      | Die Part Number                                                                                                                                                                                                                                            |                                     |                          | 80C-H735                  | 80C-H860                |                              |                             |                                       |                                       |                                                         |                |
|                   | 801 836 611HT                                                                                                                                                                                                                                              |                                     |                          | 0.755<br>0.765            | 0.890<br>0.910          |                              |                             |                                       |                                       |                                                         |                |
|                   | Tooling Required                                                                                                                                                                                                                                           |                                     |                          |                           | ₹P                      | 9                            | 0                           |                                       |                                       |                                                         |                |
| Caution without   | : Read the operations and technical manual before attempting to o guard in place. Keep hands clear of moving parts when operating it 83C-R12 Split Die ring size used for all crimping dies and 83C-OCB adapter                                            | perate this ma<br>machine.          | 83<br>us                 | C-R02 Space               | er Ring<br>ter bowl     | table listings               | xx Large<br>used on         | np diameters<br>e lubricant to        | assemble sp<br>83C-R02I               | 0.010" greatiral hose and  H Spacer Platin called out a | I fittings.    |
|                   | operations bowl used on sizes 4 thru -20 attion on this decal is subject to change without notice. For the parker.com/crimpsource. New decals can be ordered at Parl                                                                                       |                                     | t crimp spec             | en called ou              | above<br>ease visit C   | rimpsource                   | -16 thru -32                |                                       | al Part Nun                           | nber:                                                   |                |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Updated 1/2023

# Phastkrimp 2

# Capability

- Up to 1-1/4" ID 1 and 2 wire hose
- Up to 1-1/4" ID 4 spiral hose
- · Up to 1" ID compact spiral hose

#### **Features**

- Now comes standard with KrimpNODE™.
   See page C-6 for more information
- · Designed to make approx. 200 crimps per day
- For use with 25, 26, 43, 77, 81, and HY fittings



# **Specifications**

• Dimensions: Length 32", width 22", height 38"

• Weight: 530 lbs. with oil

• Rating: 64 tons cylinder force @ 4,500 psi

• Crimp Cycle Time: 7-10 seconds, depending on Pusher position

(1/2" 43 series straight fittings).

Hydraulic oil: ISO Grade 46AW, 5 gallon reservoir capacity

• This unit is designed to make about 200 crimps per day and is not designed to be a production crimper. Exceeding these suggested production amounts will significantly reduce the life expectancy of the crimper components.

• This machine requires the use of the Molykote GN (TH18-100-59) Grease shipped with the 77 Series, -16 die (83C-CS16).

| Part No | umber   | Description                        | Individual  |  |  |
|---------|---------|------------------------------------|-------------|--|--|
| 89CR-61 | 89CR-62 | Description                        | Part Number |  |  |
| • Cri   |         | Crimp Head Assembly                | 89CR-CHD    |  |  |
| •       |         | Phastkrimp 2 230 V, 3 phase, 60 HZ | 89CR-HPS-3P |  |  |
| •       |         | Phastkrimp 2 230 V, 1 phase, 60 HZ | 89CR-HPS-1P |  |  |
| • •     |         | Silver die ring                    | 85C-R01     |  |  |
| • •     |         | Black die ring                     | 85C-R02     |  |  |

#### **Optional Tooling:**

Die Kit KK2-KDA (Includes 43 Series dies in sizes 1/4", 3/8", 1/2", 3/4", 1" and 1-1/4" and 77 Series dies in sizes 1/2", 5/8", 3/4" and 1" only.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

A

В

C





|                   | Parker Hannifin Corporation Hose Products Division 30240 Lakeland Blvd. Wickliffe, Ohio 44092  Phastkrimp 2 Hose Die Selection Chart                                                                                                                                                                |                                                                                 |                |                |                                |                |                       |                       |                |             |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------|----------------|--------------------------------|----------------|-----------------------|-----------------------|----------------|-------------|
| Fitting<br>Series | HOSE                                                                                                                                                                                                                                                                                                | -4<br>RED                                                                       | -5<br>PUR      | -6<br>YEL      | -8<br>BLU                      | -10<br>ORG     | -12<br>GRN            | -16<br>BLK            | -20<br>WHT     | Die<br>Ring |
|                   | Die Part Number                                                                                                                                                                                                                                                                                     | 80C-A04                                                                         | 80C-A05        | 80C-A06        | 80C-A08                        | 80C-A10        | 80C-A12               | 80C-A16               | 80C-A20        | 1 11119     |
| S                 | GLOBALCORE 387/387ST/TC (-4 THRU -16) 487/487ST/TC (-4 THRU -12) 787/787ST/TC (-4 & -6), 797/797ST/TC (-4 & -6)                                                                                                                                                                                     | 0.645<br>0.665                                                                  | 0.710<br>0.730 | 0.825<br>0.845 | 0.945<br>0.965                 | 1.060<br>1.080 | 1.245<br>1.265        | 1.590<br>1.610        | 1.970<br>1.990 | 9           |
| 43<br>Series      | 422 426 436 471ST/TC 472TC/LT<br>482ST/TC 777/777ST/TC (-6 THRU-16)                                                                                                                                                                                                                                 |                                                                                 |                |                |                                |                |                       |                       |                | SILVER      |
| 37                | GLOBALCORE 387/387ST/TC(-20 ONLY)<br>487/487ST/TC (-16 ONLY)<br>722/722ST/TC(-6 THRU -16)                                                                                                                                                                                                           | 0.685<br>0.705                                                                  | 0.750<br>0.770 | 0.865<br>0.885 | 0.985<br>1.005                 | 1.100<br>1.120 | 1.285<br>1.305        | 1.630<br>1.650        | 2.010<br>2.030 | GILVE!!     |
|                   | 722/722LT (-6 THRU -10)<br>302 722ST/TC (-20 ONLY) 881                                                                                                                                                                                                                                              | 0.700                                                                           | 0.770          | 0.000          | 1.000                          | 1.120          | 1.000                 | 1.000                 | 2.000          | BLACK       |
|                   | NOTES                                                                                                                                                                                                                                                                                               |                                                                                 |                |                | 2/722LT/ST/T(<br>2/722LT/ST/T( |                |                       |                       |                |             |
|                   | Die Part Number                                                                                                                                                                                                                                                                                     | <u> </u>                                                                        | mp Blamotor    | rango ioi 721  | 80C-CS08                       | 80C-CS10       | 80C-CS10              | 80C-CS10              |                |             |
| 77<br>Series      | GLOBALCORE 787/787ST/TC 797/797/ST/TC                                                                                                                                                                                                                                                               |                                                                                 |                |                | 0.930<br>0.950                 | 1.057<br>1.077 | 1.245<br>1.265        | 1.541<br>1.571        |                | BLACK       |
|                   | NOTES                                                                                                                                                                                                                                                                                               | 77 SERIES (SIZE-16) STAINLESS STEEL FITTINGS CAN NOT BE CRIMPED ON THIS MACHINE |                |                |                                |                |                       |                       |                | NE          |
| es                | Die Part Number                                                                                                                                                                                                                                                                                     |                                                                                 |                | 80C-Y06        | 80C-Y08                        |                |                       |                       |                |             |
| 25<br>Series      | 271                                                                                                                                                                                                                                                                                                 |                                                                                 |                | 0.680<br>0.700 | 0.825<br>0.845                 |                |                       |                       |                | SILVER      |
|                   | Die Part Number                                                                                                                                                                                                                                                                                     | 80C-E04                                                                         | 80C-E05        | 80C-E06        | 80C-E08                        | 80C-E10        | 80C-E12               | 80C-E16               |                |             |
| 26<br>Series      | 213 285 (-4, -6, -10) 293                                                                                                                                                                                                                                                                           | 0.460<br>0.480                                                                  | 0.520<br>0.540 | 0.575<br>0.595 | 0.670<br>0.690                 | 0.805<br>0.825 | 0.915<br>0.935        | 1.175<br>1.195        |                | SILVER      |
| ď                 | 201 221FR 266<br>206 244 SS25UL 285 (-8 & -12)                                                                                                                                                                                                                                                      | 0.500<br>0.520                                                                  | 0.560<br>0.580 | 0.615<br>0.635 | 0.710<br>0.730                 | 0.845<br>0.865 | 0.955<br>0.975        | 1.215<br>1.235        |                | BLACK       |
| S                 | Die Part Number                                                                                                                                                                                                                                                                                     |                                                                                 |                |                |                                |                | 80C-V12               | 80C-V16               | 80C-V20        |             |
| 81<br>Series      | 811 811HT 881                                                                                                                                                                                                                                                                                       |                                                                                 |                |                |                                |                | 1.155<br>1.175        | 1.450<br>1.470        | 1.740<br>1.760 | SILVER      |
|                   | Die Part Number                                                                                                                                                                                                                                                                                     | 80C-H595                                                                        |                |                |                                | 80C-H1015      | 80C-H1170             | 80C-H1365             |                |             |
| HY<br>Series      | 801 836<br>611HT (-4 THRU -12)                                                                                                                                                                                                                                                                      | 0.575<br>0.595                                                                  |                |                |                                | 0.995<br>1.015 | 1.140<br>1.160        | 1.350<br>1.370        |                | SILVER      |
| Ser               | Die Part Number                                                                                                                                                                                                                                                                                     |                                                                                 |                | 80C-H735       | 80C-H860                       |                |                       |                       |                |             |
|                   | 801 611HT 836                                                                                                                                                                                                                                                                                       |                                                                                 |                | 0.755<br>0.775 | 0.890<br>0.910                 |                |                       |                       |                | BLACK       |
|                   | n: Read the operations and technical manual before at<br>erate this machine without guard in place. Keep hands<br>ne.                                                                                                                                                                               |                                                                                 |                |                |                                | Note:          | Do not use<br>stainle | this machess steel fi |                | semble      |
| specific          | Information on this decal is subject to change without notice. For the most current crimp  specifications, please visit Crimpsource at www.parker.com/crimpsource. New decals can be ordered at Parker website https://parker.cp.imtco.com/Account/Login.  Decal Part Number: 89C-CRIMPDECAL REV. D |                                                                                 |                |                |                                |                |                       |                       |                |             |

В

D

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# TH8-380



view on web page

B

# Capability

- Up to 3" ID 2 wire braided hose
- Up to 3" ID 4/6 wire spiral hose
- Up to 4" (6")\* industrial hoses

Shown with optional QDS239S front die rack

#### **Features**

- · Electronic display preloaded with Parker part numbers and crimp specifications
- · Greaseless die design

# **Specifications**

· Weight without oil: 1653 lbs with oil: 1852 lbs 340 Ton · Crimp Force:

230-480 V / 50/60 Hz / 3PH / 5 HP Electrical Power\*:

165 mm · Crimp Range: 70 mm · Opening: · Opening without dies: 215 mm

• Full Cycle Time (mm/s):

Close: 23 (mm/s) Crimp Force: 1.3 (mm/s) Open: 33 (mm/s) Hydraulic Oil: ISO Grade AW46: 26.5 gal.

Prefiltered oil required

Noise Level: 62 dBA

Delivered without oil and connecting plug

# **Standard Equipment**

Description

| Production Crimper**        | TH8-380     |
|-----------------------------|-------------|
| Onimana A a a a a a a a a a |             |
| Crimper Accessories         |             |
| Adapter die                 | 237.239.2L2 |
| Automatic Depth Stop        | TAHM3xxCA   |
| Front Die Rack              | QDS239S     |
| Mobile Die Rack (Wheels)    | QDS239C     |
| Bench Top Die Rack          | QDS239R     |
| Foot Switch                 | PS.2 Double |
| Mirror                      | SHS 375/380 |
| Quick Change Tool           | QDC239.5    |
| Workplace Lamp              | LUS         |

**Part Number** 

| Available Die Sizes |                                                    |
|---------------------|----------------------------------------------------|
| PB239***            | 14, 17, 20, 24, 26, 28, 31, 34, 38, 40, 44, 50, 54 |
| PB237L              | 57, 62, 69, 74                                     |

<sup>\*</sup>Without Flange

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

<sup>\*\*</sup>TH8-380 includes QDC239.5 quick change tool

<sup>\*\*\*</sup>PB239 dies require adapter die 237.239.2L2

<sup>\*</sup>Machine is factory wired to operate at high voltage. Can be field converted to operate at low voltage.

# TH8-380

#### **Hose Die Selection Chart**

| Fitting   |    | Hose Size Range |    |    |     |     |     |     |     |     |     |  |  |
|-----------|----|-----------------|----|----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Series    | -4 | -5              | -6 | -8 | -10 | -12 | -16 | -20 | -24 | -32 | -40 |  |  |
| 43 Series | 17 | 17              | 20 | 24 | 26  | 31  | 40  | 50  | 57  | 69  | 78  |  |  |
| 70 Series |    |                 | 24 | 28 | 31  |     |     |     |     |     |     |  |  |
| 71 Series |    |                 | 24 | 28 | 31  | 34  | 40  | 50  | 57  | 69  |     |  |  |
| 77 Series |    |                 |    | 24 | 26  | 31  | 38  | 50  | 57  | 69  |     |  |  |
| 79 Series |    |                 |    |    |     | 34  | 44  | 54  | 62  |     |     |  |  |
| HY Series | 14 | 17              | 17 | 20 | 24  | 28  | 34  | 44  |     |     |     |  |  |

#### **Die Chart**

В

| 0:   | Dt           |
|------|--------------|
| Size | Part         |
| (mm) | Number       |
| 14   | PB239-50-14  |
| 17   | PB239-65-17  |
| 20   | PB239-65-20  |
| 24   | PB239-65-24  |
| 26   | PB239-65-26  |
| 28   | PB239-80-28  |
| 31   | PB239-80-31  |
| 34   | PB239-80-34  |
| 38   | PB239-80-38  |
| 40   | PB239-80-40  |
| 44   | PB239-80-44  |
| 50   | PB239-100-50 |
| 54   | PB239-100-54 |
| 57   | PB237L-57    |
| 62   | PB237L-62    |
| 69   | PB237L-69    |
| 74   | PB237L-74    |
| 78   | PB237L-78    |

All PB239-xx dies require the use of adapter die (Part number 237.239.2L2)

# 26 Series Die Chart

| Size   | Part<br>Number |
|--------|----------------|
| S26-04 | PB239-S26-04   |
| S26-05 | PB239-S26-05   |
| S26-06 | PB239-S26-06   |
| S26-08 | PB239-S26-08   |
| S26-10 | PB239-S26-10   |
| S26-12 | PB239-S26-12   |
| S26-16 | PB239-S26-16   |
| S26-20 | PB239-S26-20   |
| S26-24 | PB239-S26-24   |
| S26-32 | PB237L-S26-32  |

All PB239-xx dies require the use of adapter die (Part number 237.239.2L2)

# **81 Series Die Chart**

| Size   | Part<br>Number |
|--------|----------------|
| S81-12 | PB239-S81-12   |
| S81-16 | PB239-S81-16   |
| S81-20 | PB239-S81-20   |
| S81-24 | PB239-S81-24   |
| S81-32 | PB237L-S81-32  |

All PB239-xx dies require the use of adapter die (Part number 237.239.2L2)



**QDS239S** (optional item)



QDS239.5 (included with machine)



QDS239R (optional item)

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **Weatherhead Conversion Kit**

Part No. 8WC-001

For use with 43 Series dies only.

Convert Weatherhead T-400 crimper to utilize Parker Parkrimp No-Skive fittings.

# **Standard Equipment**

| Part Number<br>8WC-001 | Description                                 | Individual<br>Part Number |
|------------------------|---------------------------------------------|---------------------------|
| •                      | Bowl Assembly                               | 8PC-030                   |
| •                      | Pusher                                      | 8WC-00P                   |
| •                      | Silver Die Ring                             | 81C-R01                   |
| •                      | Black Die Ring                              | 81C-R02                   |
| •                      | 43 Series Dies in 1/4", 3/8", 1/2" and 3/4" | 80C-Axx                   |



Hand Pump\* Part No. 82C-0HP



view on web page

(for use with the Minikrimp, Karrykrimp and Karrykrimp 2) Ease of operation hand pump delivers 10,000 psi

23" Length: Width: Height: 5"

Port Size: 3/8" NPTF Weight: 9 lbs

Hydraulic Fluid: Enerpac oil

Hand Pump\* Part No. 85C-0HP



B

view on web page

(for use with the Minikrimp, Karrykrimp and Karrykrimp 2) Ease of operation hand pump delivers 10,000 psi

29" Length: Width: 13" Height: 11" Port Size:

3/8" NPTF Weight: 61 lbs Hydraulic Fluid: Enerpac oil

WARNING: "This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

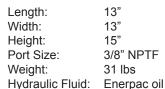
#### **Enerpac Warranty Statement**

Enerpac products are warranted to be free of defects in materials and workmanship. Any product that does not conform to specification will be repaired or replaced at Enerpac's expense, anywhere in the world; simple as that! This warranty does not cover ordinary wear and tear, abuse, misuse, alterations, or the use of improper fluids. Determination of the authenticity of a warranty claim will be made only by Enerpac or its Authorized Service Centers.

# **Electric Pump\***

Part No. 82C-0EP

(for use with the Minikrimp, Karrykrimp and Karrykrimp 2) Ease of operation electric pump delivers 10,000 psi



Power Source: 115 volt, 1 phase, 50/60 Hz, 9 amp



view on web page

**Electric Pump\*** Part No. 85C-0EP



view on web page

(for use with the Minikrimp, Karrykrimp and Karrykrimp 2) Heavy duty electric pump delivers 10,000 psi at a faster cycle time

Lenath: 19" Width: 11" Height: 17" 3/8" NPTF Port Size: Weight: 59 lbs Hydraulic Fluid: Enerpac oil

Power Source: 115 volt, 1 phase, 50/60 Hz, 20 amp

Air/Hydraulic Pump\*

Part No. 82C-0AP

B



view on web page

(for use with the Minikrimp, Karrykrimp and Karrykrimp 2) Lightweight pump operates with 80-110 psi shop air pressure and delivers 10,000 psi

15" Length: Width: 6" 6" Height:

Intake Port Size: 1/4" NPTF Output Port Size: 3/8" NPTF Weight: 14 lbs Hydraulic Fluid: Enerpac oil

WARNING: "This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### **Enerpac Warranty Statement**

Enerpac products are warranted to be free of defects in materials and workmanship. Any product that does not conform to specification will be repaired or replaced at Enerpac's expense, anywhere in the world, simple as that! This warranty does not cover ordinary wear and tear, abuse, misuse, alterations, or the use of improper fluids. Determination of the authenticity of a warranty claim will be made only by Enerpac or its Authorized Service Centers.

# www.parker.com/crimpsource

Crimpsource is the industry's most complete resource for crimper technical information. It contains all of the crimp specifications approved for Parker's rubber, industrial and thermoplastic hose:

- · Crimp specs
- PDFs of technical manuals for easy downloading
- · Parts lists
- · Troubleshooting advice
- · PDFs of crimper decals for immediate printing

Crimpsource provides easy access to all the specifications necessary to correctly fabricate a factory quality hose assembly.

A series of dropdown menus enables users to find what they need quickly and easily.

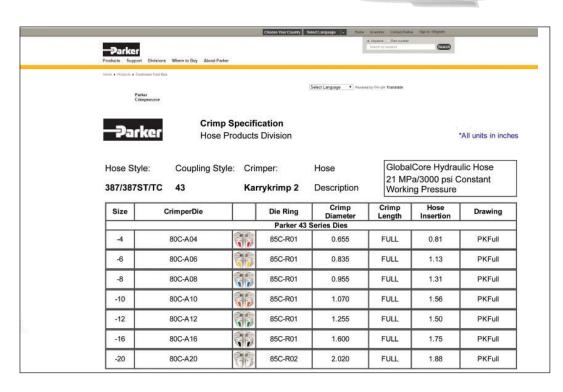
Choose your crimper, and then select the hose, fittings and current specifications needed to make hose assemblies.

You can also print a simple-to-follow data specification sheet or crimper decal.

B

# The state of the s

# **Crimpsource Home Page**



C-21

Parkrimp Fittings Series 25, 26, 43, 70, 71, 77, 81, HY

# Mark insertion depth and push on fitting



Mark the hose insertion depth and push hose into fitting until the mark on the hose is even with the end of the shell. Lubricate hose if necessary, however, **DO NOT lubricate if using spiral hose.** See Hose Insertion Depth table below.

# For 81 Series Shells with 88 Series Fittings

Place shell onto end of hose and make sure the end of the shell lines up with the Insertion Depth mark. Push hose onto the 88 Series fitting until the shell bottoms against the fitting's stop ring or hex. Lubricate hose if necessary.

# Insert unitized die train



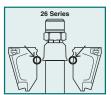
Pull pin at the top of pusher to swing it back. Place unitized die-train into base plate. See decal on crimper for proper die set.

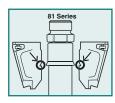
Important: Lubricate the crimper's die bowl using a premium quality lithiumbase grease.

# 3 Position the fitting

B







Position the hose and fitting in dies from below.

Rest bottom of coupling on die step using the PARKALIGN® feature.

# Place die ring and crimp



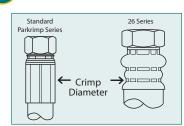
Place correct die ring on top of the dies. See decal on crimper for proper die ring.



Position pusher by replacing the pin and operate pump until the die ring bottoms out. Release pressure within the pump — remove finished assembly.

Note: Minikrimp, Karrykrimp & Karrykrimp 2 have several types of power sources, all of which are separate units from the crimping machine.

# 5 Measure crimp diameter



Measure crimp diameter on the flat surfaces of the crimped shell, referenced in the illustration to the left. Reference decal on crimper for crimp diameters. Never use hose assemblies with incorrect crimp diameters.

**Important:** Hose assemblies must be inspected for cleanliness and free of all foreign particles.

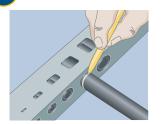
#### Hose insertion depths

|         |      | Fitting Series |      |    |      |    |      |    |      |    |      |      |      |    |      |    |      |    |
|---------|------|----------------|------|----|------|----|------|----|------|----|------|------|------|----|------|----|------|----|
| Fitting | 2    | 5              | 2    | 6  | 4    | 3  | 7    | 0  | 7    | 1  | 7    | 7    | 7    | 9  | 8    | 1  | н    | Υ  |
| Size    | inch | mm             | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm   | inch | mm | inch | mm | inch | mm |
| -4      | -    | -              | 0.81 | 21 | 0.81 | 21 | -    | -  | -    | -  | -    | -    | -    | -  | -    | -  | 1.38 | 35 |
| -5      | -    | -              | 0.81 | 21 | 0.94 | 24 | -    | -  | -    | -  | -    | -    | -    | -  | -    | -  | 1.41 | 36 |
| -6      | 0.88 | 22             | 0.81 | 21 | 1.13 | 29 | 1.06 | 27 | 1.06 | 27 | -    | -    | -    | -  | -    | -  | 1.35 | 34 |
| -8      | 0.88 | 22             | 0.81 | 21 | 1.31 | 33 | 1.31 | 33 | 1.25 | 32 | 1.36 | 34,6 | -    | -  | -    | -  | 1.44 | 37 |
| -10     | -    | -              | 0.88 | 22 | 1.56 | 40 | 1.38 | 35 | 1.31 | 33 | 1.53 | 38,9 | -    | -  | -    | -  | 1.46 | 37 |
| -12     | -    | -              | 0.88 | 22 | 1.50 | 38 | 1.50 | 38 | 1.44 | 37 | 1.78 | 45,2 | 2.18 | 56 | 1.12 | 29 | 1.55 | 39 |
| -16     | -    | -              | 1.00 | 25 | 1.75 | 44 | 1.81 | 46 | 1.75 | 44 | 2.13 | 54,1 | 2.31 | 59 | 1.25 | 32 | 1.69 | 43 |
| -20     | -    | -              | 1.00 | 25 | 1.88 | 48 | 1.75 | 44 | 1.81 | 46 | 2.51 | 63,8 | 2.81 | 71 | 1.31 | 33 | -    | -  |
| -24     | -    | -              | 1.06 | 27 | 1.44 | 37 | -    | -  | 2.31 | 59 | 2.67 | 67,7 | -    | -  | 1.31 | 33 | -    | -  |
| -32     | -    | -              | 1.25 | 32 | 1.81 | 46 | -    | -  | 2.44 | 62 | 3.05 | 77,5 | -    | -  | 1.69 | 43 | -    | -  |

For specific information on crimping, visit Crimpsource™ online at www.parker.com/crimpsource.

Parkrimp Fittings Series 25, 26, 43, 70, 71, 77, 81, HY

# Mark insertion depth and push on fitting



Mark the hose insertion depth and push hose into fitting until the mark on the hose is even with the end of the shell. Lubricate hose if necessary, however, **DO NOT lubricate if using spiral hose**. See Hose Insertion Depth table on previous page.

# For 81 Series Shells with 88 Series Fittings



Place 81 Series Shell onto end of hose and make sure the end of the shell lines up with the Insertion Depth



Push hose onto the 88 Series fitting until the shell bottoms against the fitting's stop ring or hex. Lubricate hose if necessary.

# 2a If using large two-piece dies

Insert the proper die set into the die bowl. (The die sets are in two halves of four dies each. Place one half in the back and one half in the front to accommodate bent tube fittings.) Reference decal on crimper for proper tool selection.



B

# 2b If using small unitized dies



With the pusher in the full up position, lift the back half of the split die ring. Lock it in the up position by pushing the slide pin in. (The slide pin is located inside the pusher at the back.)



Lubricate die bowl using a premium quality lithiumbase grease. Carefully insert the adapter bowl, 83C-OCB, into the base bowl. The adapter bowl must be tilted toward the back of the crimper during insertion.



Lubricate die bowl using a premium quality lithium-base grease. Place unitized dietrain into the adapter bowl. Select die and die ring by hose size and type. See decal on crimper for proper die set.

**Note:** Die sets have color-coded cavities indicating size and have the fitting series and dash size stamped on the top.

# 3 Place spacer ring



If required, place spacer ring on locating step of adapter bowl. Reference decal on crimper for tool selection.

# Position the split die ring



Lower the back half of the split die ring onto the dies by pulling the slide pin forward.

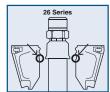
Crimp hose

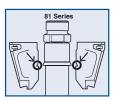


Insert the front half of the split die ring aligning the pins in the back half with the hole in the front half.

# 5 Position the fitting







Position the hose and fitting in dies from below.

Rest bottom of coupling on die step using the PARKALIGN® feature.

# Measure crimp diameter

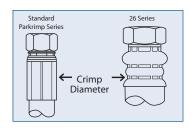
Turn on the pump by pressing the "ON" switch. Pull the valve handle forward to bring the pusher down for crimping. When the split die ring contacts the base plate, the crimp is complete. Push the valve handle back to lift the pusher, open the dies, and release the finished assembly.

**Note:** You do not have to remove any tooling to insert or remove straight fittings. The front half of the split die ring and the front die train must be removed to insert and remove bent tube fittings.



diameter on the flat surfaces of the crimped shell, referenced in the illustration to the right. Reference decal on crimper for crimp diameters. Never use hose assemblies with incorrect crimp diameters.

Measure crimp



**Important:** Hose assemblies must be inspected for cleanliness and free of all foreign particles.

C-23

www.mfcp.com

# **Assembling Twin Tough Rubber Hose**

# Required Equipment:

Twin Tough hose, fittings, knife, tape measure, heat shrink sleeve, scissors, grease pencil, heat gun, and calipers.



#### Set-up: Position the bonded rubber hose so that it lies flat on a work surface without

tendency to twist

or turn.

B

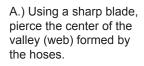
Measure hose tear back length: Measure and mark the length that the hoses are to be separated. A minimum of 12 inches is required for crimping the hose ends. A 24 inch tear back is recommended for use with hydraulic tools.



Note: If length of separation/tear back is specified from the threaded or swivel nut end of the coupling, then deduct the cut off allowance dimension for the specific style of coupling used. The cutoff allowance can be obtained from the hose fitting tables in the 4400 Catalog "B" dimension, or can be calculated by subtracting the insertion depth of the shell from the overall coupling length.

# Cut hose tear back to length:

Press the bonded hose assembly firmly and flat against the work surface with your free hand so that it does not move.





B.) To start the cut, place the blade in the center of that valley (web) drawing the knife with constant pressure.



C.) Once you have a 1 to 2 inch starter cut, firmly pull each hose end apart to your required separation length.



Note: It is important that the knife blade be perpendicular to the hose during this procedure so the blade cuts only the centerline of the valley (web). EXTREME CARE MUST BE TAKEN TO AVOID CUTTING THROUGH THE COVER OF THE HOSES AND THEREBY EXPOSING THE HOSE REINFORCEMENT. If this occurs, the hose assembly must be discarded.

Measure Separation: It is suggested that the separation length be at least 12 inches, so the crimping operation can be accomplished without risk of kinking the hoses.



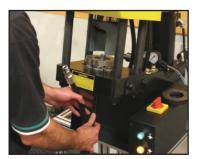
Stopping Separation: Parker recommends installing a heat shrink sleeve of at least 2 inches in length at the termination of the separated hose to provide protection against tearing of the valley (web) or hose covers. This heat shrink sleeve should be placed on the hose assembly prior to the crimping of the hose fittings. Once you have your heat shrink sleeve in place, use a heat gun to shrink the sleeve in place.



Note: EXTREME CARE MUST BE TAKEN TO AVOID EXPOSING THE HOSE ASSEMBLY TO THE DIRECT HIGH TEMPERATURES OF THE HEAT GUN WHILE INSTALLING THE HEAT SHRINK SLEEVE. LONG EXPOSURE FROM A HEAT GUN MAY ADVERSELY AFFECT THE HOSE INNER TUBE OR ITS COVER.

Crimping Fittings: All of your crimping information can be found on Crimpsource (www.parker.com/crimpsource).

First, place your fittings onto each hose end making sure that both have been installed to the correct hose insertion depth. Choose the correct die and die rings. Place half of your hose assembly through the bottom of your Parkrimp crimper. Rest the bottom of the fitting on the die step using the Parkalign system. While lightly holding the hose assembly, operate your crimper pump so that the pusher on the crimper comes down in contact with the die ring until it bottoms out on the crimper base. Then release the pressure within the pump and remove the first half of your finished assembly. Always measure your hose assemblies for the correct crimp diameter. Now, repeat the crimping process on the other fitting.



Note: EXTREME CARE MUST BE TAKEN TO AVOID KINKING THE HOSE THAT IS NOT BEING CRIMPED DURING THIS PROCESS.









# **Hose Cut-Off Machine**

Part No. 86C-220V

#### **Features**

- Engineered for workshop, retail, or production use
- · Cuts hoses with less friction, no heat, and less debris
- · Vacuum port eliminates any very small amount of smoke or debris created
- Comes standard with a Parker branded advanced scallop
- Cuts wire reinforced hoses including 6 heavy wire constructions up to 2" ID

# **Specifications**

B

• Dimensions: 27" wide X 16.5" long X 24" hig (when handle is at the highest point)

· Shipping Weight: 108 lbs

# Standard Equipment



| Part Number<br>86C-220V | Description                                                               | Individual<br>Part Number |
|-------------------------|---------------------------------------------------------------------------|---------------------------|
| •                       | Hose cut off machine with 220V single phase motor                         |                           |
| •                       | Parker branded advanced scallop blade- 10"<br>OD x .125 THK X 40 mm arbor | HYD10X125X40              |



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **Hose Cut-Off Machine**

Part No. 86C-220V3

#### **Features**

- · Engineered for workshop, retail, or production use
- Cuts hoses with less friction, no heat, and less debris
- Vacuum port eliminates any very small amount of smoke or debris created
- Comes standard with a Parker branded advanced scallop blade
- Cuts wire reinforced hoses including 6 heavy wire constructions up to 2" ID

#### **Specifications**

- Dimensions: 27" wide X 16.5" long X 24" high (when handle is at the highest point)
- Shipping Weight: 108 lbs

# Standard Equipment

view on web page

| Part Number<br>86C-220V3 | Description                                                               | Individual<br>Part Number |
|--------------------------|---------------------------------------------------------------------------|---------------------------|
| •                        |                                                                           |                           |
| •                        | Parker branded advanced scallop blade- 10"<br>OD x .125 THK X 40 mm arbor | HYD10X125X40              |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **Hose Cut-Off Machine**

Part No. TH3-EM3-110V

#### **Features**

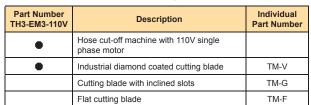
- · Engineered for workshop or production use
- Comes with a vacuum port to remove smoke and debris while cutting
- Comes standard with a diamond-coated cutting blade
- · Cuts wire reinforced hoses including 6 heavy spiral constructions up to 1 1/4" I.D.

#### **Specifications**

- · Dimensions: 17" wide, 21" long and 12" high
- · Shipping Weight: 95 lbs.

# Standard Equipment

#### view on web page





WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **Hose Cut-Off Machine**

Part No. 332T-115V

#### **Features**

- · For quick, easy cutting of spiral reinforced hose up to 1-1/4" I.D.
- · Moving parts shielded by guards

#### **Specifications**

- Dimensions: 13" wide x 26" long x 22" high
- Shipping Weight: 71 lbs.

# **Optional Equipment**

• Smooth Cutting Blade (580661)

# **Standard Equipment**



view on web page

| Part Number<br>332T-115V | Description                                                                     | Individual<br>Part Number |
|--------------------------|---------------------------------------------------------------------------------|---------------------------|
| •                        | Hose Cut-Off Machine with 1-1/2 HP, 3450 RPM, 115V single phase electric motor. |                           |
| •                        | Scallop Cutting Blade (8" with 5/8" arbor size)                                 | 24398                     |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **Hose Cut-Off Machine**

Part No. 239 and 339

#### **Features**

- Designed for heavy duty use
- · Cuts multi-braided wire reinforced hose including 6 spiral construction up to 2" I.D.

#### **Specifications**

- Dimensions: 22" wide x 42" long x 24" high
- Shipping Weight: 115 lbs.

# **Optional Equipment**

• Smooth Cutting Blade (15960)

# Standard Equipment



view on web page

| Part Number |                                                   | Description                                                  | Individual  |
|-------------|---------------------------------------------------|--------------------------------------------------------------|-------------|
| 239         | 339                                               | Description                                                  | Part Number |
| •           | Hose Cut-Off Machine with 230V single phase motor |                                                              |             |
|             | •                                                 | Hose Cut-Off Machine with 3 HP motor 230V, 3 phase, 60 cycle |             |
| •           | •                                                 | Scallop Cutting Blade (10" with 3/4" arbor size)             | 24248       |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

B



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web page

# **Premium Hose Cleaning Kit**



Part No. TH6-10-HL-10-2 (10 Nozzle Kit)

# **Economy Hose Cleaning Kit**



Part No. TH6-10-EL-8 (8 Nozzle Kit)

view on web page

#### **Features**

B

- Capable of cleaning 1/4" through 2" hose, tube or pipe
- The launcher is supplied with a Full-Flow Quick Release Coupling and unique 360° Rotary Plug for proper air flow and non-fatigue operator use
- Unique Safety Release Bar that locks the faceplate into a closed position for firing Ultra Clean projectiles

#### **Features**

- Capable of cleaning 1/4" through 1-1/4" hose, tube or pipe
- Has a quarter-turn locking ring for easy nozzle change and projectile loading
- The launcher is constructed of durable brass and aluminum internals, strong plastic handle, and anodized aluminum firing head and locking ring.
- Ideal for mobile and job site applications because of its size and portability

#### **Nozzles Included in Kits**

| End<br>Type | Size   | Nozzle<br>Part Number* | Projectile<br>Part Number† | Projectile<br>Quantity† |
|-------------|--------|------------------------|----------------------------|-------------------------|
| Hose        | 1/4"   | TH6-10-H06             | TH6-10-P10                 | 100                     |
| Hose        | 5/16"  | TH6-10-H08             | TH6-10-P12                 | 100                     |
| Hose        | 3/8"   | TH6-10-H10             | TH6-10-P14                 | 100                     |
| Hose        | 1/2"   | TH6-10-H13             | TH6-10-P18                 | 100                     |
| Hose        | 5/8"   | TH6-10-H16 TH6-10-P22  |                            | 50                      |
| Hose        | 3/4"   | TH6-10-H19             | TH6-10-P26                 | 50                      |
| Hose        | 1"     | TH6-10-H25             | TH6-10-P33                 | 40                      |
| Hose        | 1-1/4" | TH6-10-H32             | TH6-10-P40                 | 30                      |
| Hose        | 1-1/2" | TH6-10-H38             | TH6-10-P50                 | 20                      |
| Hose        | 2"     | TH6-10-H50             | TH6-10-P60                 | 15                      |

\*Nozzles are not available individually

†Projectiles sold separately





#### **Additional Available Nozzles**

| End<br>Type | Size   | Nozzle<br>Part Number | Projectile<br>Part Number† | Projectile<br>Quantity† |
|-------------|--------|-----------------------|----------------------------|-------------------------|
| JIC         | 1/4"   | TH6-10-J06            | TH6-10-P06                 | 100                     |
| JIC         | 3/8"   | TH6-10-J10            | TH6-10-P12                 | 100                     |
| JIC         | 1/2"   | TH6-10-J13            | TH6-10-P16                 | 100                     |
| JIC         | 5/8"   | TH6-10-J16            | TH6-10-P22                 | 50                      |
| JIC         | 3/4"   | TH6-10-J19            | TH6-10-P26                 | 50                      |
| JIC         | 1"     | TH6-10-J25            | TH6-10-P33                 | 40                      |
| JIC         | 1-1/4" | TH6-10-J32            | TH6-10-P40                 | 30                      |
| JIC         | 1-1/2" | TH6-10-J38            | TH6-10-P50                 | 20                      |
| JIC         | 2"     | -                     | TH6-10-P60                 | 15                      |

†Projectiles sold separately

#### Air Requirements

- 80 PSI (5.5 Bar) minimum to 110 PSI (7.5 Bar) maximum
- 1/2" I.D. air hose
- 5 micron filter and regulator with gauge are strongly suggested
- Requires a 1/2" I.D. air hose with 80 PSI (minimum) / 110 PSI (maximum), and it is strongly recommended that you use a 5 micron filter and regulator with a gauge.

# **Parker Clean Seal**

Parker's Clean Seal cap is a simple, easy and clean alternative to cap your hose and fitting assemblies. The Clean Seal cap enables a secure fit due to an easy to use heat shrink system. Reduce your cap complexity as one Clean Seal cap will seal multiple end configurations and sizes, eliminating many unique traditional caps.

The Clean Seal process utilizes heat shrink technology to cover the end of a hose assembly. The heat shrink technology eliminates problems due to re-contamination issues. When traditional caps and plugs are forced onto assemblies, plastic debris and particles shred off into your hose, ultimately causing re-contamination.

#### **Product Features:**

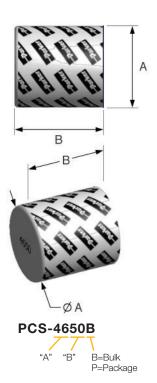
- For use on fittings up to -24 (1-1/2")
- · Fits straight and elbow fittings
- · Easy pull tab removal
- Reduced environmental impact compared to traditional caps
  - · Less plastic used
  - · More crushable
- · Multiple hoses can be capped at one time



#### view on web page

#### **Cap Part Numbers**

| Packa                   | ged                                         | Вι        | ılk              | Sizing                       |                                  |  |
|-------------------------|---------------------------------------------|-----------|------------------|------------------------------|----------------------------------|--|
| Parker P/N<br>(Package) | · annon · · · · · · · · · · · · · · · · · · |           | Bulk<br>Quantity | Hex Sizes<br>Covered (in mm) | Hex Sizes<br>Covered (in inches) |  |
| PCS-2023P               | 810                                         | PCS-2023B | 23,400           | 12mm to 18mm                 | .47" to .71"                     |  |
| PCS-2030P               | 810                                         | PCS-2030B | 23,400           | 12mm to 18mm                 | .47" to .71"                     |  |
| PCS-2224P               | 810                                         | PCS-2224B | 23,500           | 16mm to 21mm                 | .63" to .83"                     |  |
| PCS-2527P               | 800                                         | PCS-2527B | 17,600           | 18mm to 23mm                 | .71" to .91"                     |  |
| PCS-2540P               | 800                                         | PCS-2540B | 17,600           | 18mm to 23mm                 | .71" to .91"                     |  |
| PCS-2840P               | 720                                         | PCS-2840B | 15,200           | 22mm to 26mm                 | .87" to 1.02"                    |  |
| PCS-3133P               | 640                                         | PCS-3133B | 12,240           | 24mm to 29mm                 | .94" to 1.14"                    |  |
| PCS-3140P               | 640                                         | PCS-3140B | 12,240           | 24mm to 29mm                 | .94" to 1.14"                    |  |
| PCS-3440P               | 640                                         | PCS-3440B | 10,240           | 27mm to 32mm                 | 1.07" to 1.26"                   |  |
| PCS-3840P               | 560                                         | PCS-3840B | 7,800            | 30mm to 36mm                 | 1.09" to 1.42"                   |  |
| PCS-4345P               | 480                                         | PCS-4345B | 6,240            | 32mm to 41mm                 | 1.26" to 1.61"                   |  |
| PCS-4650P               | 480                                         | PCS-4650B | 5,760            | 34mm to 44mm                 | 1.34" to 1.73"                   |  |
| PCS-5260P               | 400                                         | PCS-5260B | 4,400            | 41mm to 50mm                 | 1.62" to 1.97"                   |  |
| PCS-5860P               | 400                                         | PCS-5860B | 3,600            | 49mm to 56mm                 | 1.93" to 2.20"                   |  |
| PCS-6760P               | 320                                         | PCS-6760B | 2,560            | 55mm to 65mm                 | 2.16" to 2.56"                   |  |



B

"A" and "B" dimensions in mm. Shorter length capsules recommended for elbow/bent fittings.

#### **Equipment Part Numbers**

| UC-CSS-230V                                     | UC-HL1910E                  | UC-HG-STAND                        | UC-1.5HD                                     |  |  |
|-------------------------------------------------|-----------------------------|------------------------------------|----------------------------------------------|--|--|
| Production Heat<br>Shrink machine<br>with timer | Electric heat gun with case | Flex vacuum pumpstand for heat gun | 95mm diffuser for 1-1/2" heat gun connection |  |  |

# **Hose Cut-Off Tool - Handykut**

Part No. 871522



#### **Features**

B

- · Portable tool for efficient cutting of hose
- · Can be positioned onto a flat surface by clamps or by locking it in a vise, properly align the hose in a radius and cut it with a hacksaw

# **Specifications**

- Dimensions: 6" wide x 18" long x 6" high
- · Shipping Weight: 10 lbs.

# **Push-Lok Cut-Off & Assembly** Tool

Part No. 881540



#### **Features**

 Combined hose cutter and toggle action press that cuts and assembles Parker Push-Lok in sizes 1/4" through 3/4" I.D.

# **Specifications**

- · Dimensions: 16" long
- · Shipping Weight: 4 lbs.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **Hose Insertion Depth Blocks**

Part No. TH9-1-XXX



# view on web page

#### **Features**

- · For quick easy marking of hose insertion depth
- Ensures accuracy and increased productivity

# **Available Blocks**

| Part Number | Description               |
|-------------|---------------------------|
| TH9-1-26A   | 26 Series -4 through -10  |
| TH9-1-26B   | 26 Series -12 through -32 |
| TH9-1-43A   | 43 Series -4 through -10  |
| TH9-1-43B   | 43 Series -12 through -32 |
| TH9-1-77    | 77 Series -8 through -32  |
| TH9-1-HY    | HY Series -4 through -16  |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **Hose Cut-Off Tool**

Part No. TH11-1



view on web page

# **Features**

- Designed for guick, easy cutting of textile reinforced hose.
- Squarely cuts Push-Lok hose in sizes 1/4" through 3/4" I.D.

# **Specifications**

- Dimensions: 8" long
- · Shipping Weight: 0.3 lbs.

Updated 11/2021

# Hozembler

Part No. 432-115V



view on web page

#### **Features**

- · Power machine to facilitate the attachment of field attachable fittings
- Handles all hose and fittings up to 4 spiral wire, in sizes 3/16" through 2" I.D., including bent tube elbows
- · Comes with vise, all adapters, foot switch and safety guard with 115V, 30 amp, universal AC motor

# **Specifications**

· Shipping Weight: 141 lbs.

#### **Optional Parts**

• Mounting stand (662451)

**MARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **Die Storage Racks**

Part No. 80C-0DR and 83C-0DR



#### **Features**

- Modular die rack designed to hold small and large Parkrimp
- · Can be bolted together to a work bench horizontally or vertically

# Standard Equipment

| Part N  | umber   | Description                         |
|---------|---------|-------------------------------------|
| 80C-0DR | 83C-0DR | Description                         |
| •       |         | Storage of three sets of small dies |
| •       |         | Storage of two sets of large dies   |

# Swivel Die Rack

Part No. 80C-SDR-XXXX



# **Features**

- · Holds up to 30 Parkrimp dies of any size
- Powder-coated, heavy-duty steel construction
- Consists of a base unit and up to five circular holders
- · Floor or bench mounted

# Standard Equipment

| Part Number  | Description                          |
|--------------|--------------------------------------|
| 80C-SDR-SM   | Swivel Die Rack and Small Die Holder |
| 80C-SDR-LG   | Swivel Die Rack and Large Die Holder |
| 80C-SDR-BASE | Swivel Die Rack Base                 |

**Fitting Push-On Stand** 

Part No. TH2-7



view on web page

#### **Features**

- · Quickly and easily pushes fittings onto hose
- · Boosts productivity and quality
- Eliminates the need of rubber mallets and oils to get fittings onto the end of the hose for crimping
- Standard with straight tooling required for sizes 1/4" through 2" for all crimped fittings, 82 Series Push-Lok and 88 Series field attachable fittings

# **Specifications**

- Requires a minimum of 80 psi
- · Shipping Weight: 200 lbs.

# **Optional Tooling**

- Elbow Pusher Set (TH2-7-ELS)
- -32 Monoblock Elbow Pusher Set (TH2-7-ELSH)

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.









# Mandrel Tool Kit - 22 Series

Part No. 652200



#### **Features**

B

#### view on web page

- For assembly of Parker 22 Series field attachable fittings
- · One of each part listed below is included in the kit

# **Standard Equipment**

| Hose<br>I.D. | Dash<br>Size | SAE (JIC) 37° | SAE 45° |
|--------------|--------------|---------------|---------|
| 3/16         | -4           | •             | •       |
| 1/4          | -5           | •             | •       |
| 5/16         | -6           | •             | •       |
| 13/32        | -8           | •             | •       |
| 1/2          | -10          | •             | •       |
| 5/8          | -12          | •             | •       |

WARNING: This product can expose you to chemicals including Lead, which WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# Mandrel Tool Kit - 23 Series

Part No. 2727 and 2726



#### **Features**

view on web page

- For assembly of Parker 23 Series field attachable fittings
- Part No. 2727 is for JIC 37° flared fittings
- Part No. 2726 is for SAE 45° and PTT 30° flared fittings

# **Standard Equipment**

| Hose<br>I.D. | Dash<br>Size | 2727 | 2726 |
|--------------|--------------|------|------|
| 3/16         | -4           | •    | •    |
| 1/4          | -5           | •    | •    |
| 5/16         | -6           | •    | •    |
| 13/32        | -8           | •    | •    |
| 1/2          | -10          | •    | •    |
| 5/8          | -12          | •    | •    |
| 7/8          | -16          | •    | •    |

is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# Mandrels - 25 Series

(For 271 Transportation Hose) Part No. TH2-7M25-6 and TH2-7M25-8



view on web page

Assembly Tools - 22/23 Series

Part No. 652201



view on web page

#### **Features**

- For assembly of Parker 22/23 Series field attachable fittings
- · One of each part listed below is included in the kit

#### Standard Equipment

| Hose I.D. | Dash<br>Size | SAE (JIC) 37° | SAE 45° |
|-----------|--------------|---------------|---------|
| 7/8       | -16          | •             | •       |
| 1-1/8     | -20          | •             | •       |
| 1-3/8     | -24          | •             | •       |
| 1-13/16   | -32          | •             |         |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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# **Hose Oil**

Part No. Hose Oil



#### **Features**

- Reduces torque and eliminates waste lubrication
- Use hose oil with the recommended hose assembly instructions

# **Accrolube**

Part No. Accrolube



#### **Features**

- High efficiency lubricant used for stainless steel field attachable fittings
- Contains PTFE to reduce the wear between metal surfaces, protects against corrosion and ultimately eliminates galling

# **Small Crimper Hood**

Part No. 82C-CVR

#### **Features**

- Water repellant
- UV protected
- Perfect for indoor and outdoor applications

#### **Fits**

 Karrykrimp, Parkrimp Karrykrimp2, Minikrimp



view on web page

# **Large Crimper Hood**

Part No. 83C-CVR

#### **Features**

- Water repellant
- UV protected
- Perfect for indoor and outdoor applications

#### **Fits**

 PHastkrimp, Superkrimp Parkrimp2



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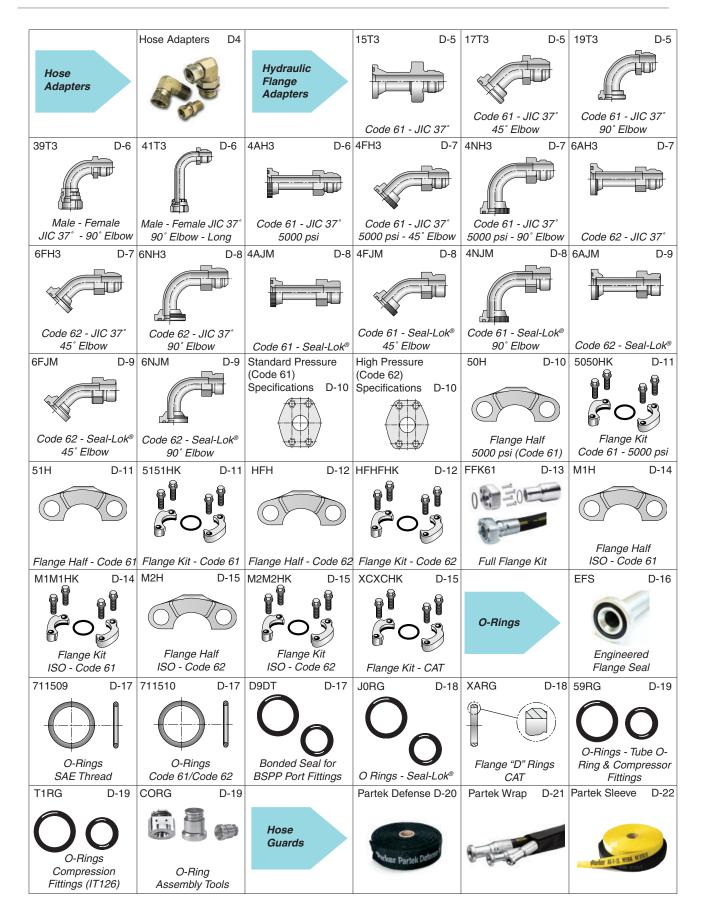


# Accessories

Hose Adapters Hydraulic Flange Adapters O-Rings Hose Guards Hose Assembly Workstations B

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D-2 Updated 11/2020



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# **SAE/NPT/Metric Hose Adapters**



O-Ring Face-Seal Seal-Lok™

Sizes: 6 mm – 38 mm Materials: Steel, Stainless Steel Pressures: Up to 9200 psi

B



O-Ring Face-Seal Metric Seal-Lok™

Sizes: 1/4" – 2" Materials: Steel, Stainless Steel Pressures: Up to 9200 psi



37° Flare Fittings Triple-Lok®

Sizes: 1/8" – 2" Materials: Steel, Stainless Steel, Brass Pressures: Up to 9000 psi



37° Flare Metric Triple-Lok<sup>®</sup>

Sizes: 6 mm – 38 mm Materials: Steel, Stainless Steel Pressures: Up to 7200 psi



Pipe Fittings and Port Adapters

Sizes: 1/8" – 2" Materials: Steel, Stainless Steel, Brass Pressures: Up to 7200 psi



Conversion Adapters

Sizes: 1/4" – 1-1/2" Materials: Steel, Stainless Steel Pressures: Up to 7700 psi



**Pipe Swivels** 

Sizes: 1/8" – 2" Materials: Steel, Stainless Steel Pressures: Up to 5000 psi



Hydraulic Flange and Flange Adapters

Sizes: 3/4" – 3" Materials: Steel, Stainless Steel Pressures: Up to 6000 psi



Japanese Industrial Standard JIS

Sizes: 1/4" – 1" Materials: Steel Pressures: Up to 5000 psi



30° Flare Komatsu Style

Sizes: M14 x 1.5 – M33 x 1.5 Materials: Steel Pressures: Up to 4000 psi



60° Cone BSPP K4

Sizes: 1/8" – 2" Materials: Steel Pressures: Up to 5000 psi

# **How to Order Parker Hose Adapters**

When ordering Parker Adapters, please state the Catalogued Number of each type of adapter desired. Be sure to double check tube and hose sizes of items required.

To select proper seal materials for specific applications, refer to Media Compatibility Chart in Tube Fitting Catalog 4300, or contact your Parker Tube Fitting Distributor.

If in doubt about which type or size of fitting to specify, consult your Parker Tube Fitting Distributor. In addition Parker Field Sales, Technical Services, the Tube Fitting Division and your local Parker Service Center will help you find answers to all your issues.

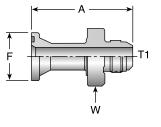
**Phone:** (614) 279-7070 **Fax:** (614) 279-7685

Web: http://www.parker.com/tfd

D-4 Updated 11/2020

# **15T3**SAE (Code 61) Flange – Male SAE (JIC) 37° Flare

| Part<br>Number | Flange | Thread |              | Maximum<br>Working<br>Pressure | -    | A inch mm |               | F inch  |
|----------------|--------|--------|--------------|--------------------------------|------|-----------|---------------|---------|
| 15T3-8-8       | 1/2    | 1/2    | T1<br>3/4x16 | psi<br>4000                    | 2.80 | 71        | inch<br>1-1/4 | 1-3/16  |
| 15T3-12-12     | 3/4    | 3/4    | 1-1/16x12    | 3100                           | 3.20 | 81        | 1-9/16        | 1-1/2   |
| 15T3-16-12     | 1      | 3/4    | 1-1/16x12    | 3100                           | 2.68 | 47        | 1-1/8         | 1-3/4   |
| 15T3-16-16     | 1      | 1      | 1-5/16x12    | 2400                           | 3.22 | 82        | 1-7/8         | 1-3/4   |
| 15T3-20-16     | 1-1/4  | 1      | 1-5/16x12    | 2400                           | 2.76 | 51        | 1-3/8         | 2       |
| 15T3-20-20     | 1-1/4  | 1-1/4  | 1-5/8x12     | 1800                           | 3.69 | 94        | 2-1/4         | 2       |
| 15T3-24-24     | 1-1/2  | 1-1/2  | 1-7/8x12     | 1300                           | 4.04 | 103       | 2-1/2         | 2-3/8   |
| 15T3-32-32     | 2      | 2      | 2-1/2x12     | 1150                           | 4.44 | 113       | 2-7/8         | 2-13/16 |

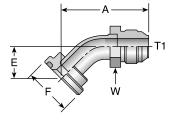


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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 17T3 SAE (Code 61) Flange – Male SAE (JIC) 37° Flare - 45° Elbow

| Part<br>Number | Flange |       |           | Working |      | nge Thread Worki |      | E  |         | <b>W</b> | Ø<br>F |
|----------------|--------|-------|-----------|---------|------|------------------|------|----|---------|----------|--------|
|                | inch   |       | T1        | psi     | inch | mm               | inch | mm | inch    | inch     |        |
| 17T3-8-8       | 1/2    | 1/2   | 3/4x16    | 4000    | 2.54 | 65               | 0.78 | 20 | 13/16   | 1-3/16   |        |
| 17T3-12-12     | 3/4    | 3/4   | 1-1/16x12 | 3100    | 2.76 | 70               | 1.00 | 25 | 1-9/16  | 1-1/2    |        |
| 17T3-16-12     | 1      | 3/4   | 1-1/16x12 | 3100    | 2.72 | 70               | 1.00 | 25 | 1-1/8   | 1-3/4    |        |
| 17T3-16-16     | 1      | 1     | 1-5/16x12 | 2400    | 2.99 | 76               | 1.06 | 27 | 1-3/8   | 1-3/4    |        |
| 17T3-20-16     | 1-1/4  | 1     | 1-5/16x12 | 2400    | 2.99 | 76               | 1.06 | 27 | 1-7/8   | 2        |        |
| 17T3-20-20     | 1-1/4  | 1-1/4 | 1-5/8x12  | 1800    | 3.22 | 82               | 1.12 | 28 | 1-11/16 | 2        |        |
| 17T3-24-20     | 1-1/2  | 1-1/4 | 1-5/8x12  | 1800    | 3.26 | 83               | 1.17 | 30 | 1-11/16 | 2-3/8    |        |
| 17T3-24-24     | 1-1/2  | 1-1/2 | 1-7/8x12  | 1300    | 3.43 | 87               | 1.12 | 28 | 2       | 2-3/8    |        |
| 17T3-32-32     | 2      | 2     | 2-1/2x12  | 1150    | 4.02 | 102              | 1.25 | 32 | 2-5/8   | 2-13/16  |        |



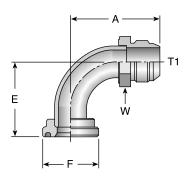
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**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **19T3**SAE (Code 61) Flange – Male SAE (JIC) 37° Flare - 90° Elbow

| Part<br>Number | Flange | (000000) |           | Maximum<br>Working<br>Pressure | Α    | <u>,</u> | E    |     | W       | F       |
|----------------|--------|----------|-----------|--------------------------------|------|----------|------|-----|---------|---------|
|                | inch   |          | T1        | psi                            | inch | mm       | inch | mm  | inch    | inch    |
| 19T3-8-8       | 1/2    | 1/2      | 3/4x16    | 4000                           | 1.92 | 49       | 1.62 | 41  | 13/16   | 1-13/16 |
| 19T3-12-12     | 3/4    | 3/4      | 1-1/16x12 | 3100                           | 2.46 | 62       | 2.12 | 54  | 1-1/8   | 1-1/2   |
| 19T3-16-12     | 1      | 3/4      | 1-1/16x12 | 3100                           | 2.46 | 62       | 2.12 | 54  | 1-3/8   | 1-3/4   |
| 19T3-20-12     | 1-1/4  | 3/4      | 1-1/16x12 | 3100                           | 2.46 | 62       | 2.12 | 54  | 1-3/8   | 2       |
| 19T3-16-16     | 1      | 1        | 1-5/16x12 | 2400                           | 2.79 | 71       | 2.37 | 60  | 1-3/8   | 1-3/4   |
| 19T3-20-16     | 1-1/4  | 1        | 1-5/16x12 | 2400                           | 2.79 | 71       | 2.37 | 60  | 1-3/8   | 2       |
| 19T3-24-16     | 1-1/2  | 1        | 1-5/16x12 | 2400                           | 2.79 | 71       | 2.44 | 62  | 1-11/16 | 2-3/8   |
| 19T3-20-20     | 1-1/4  | 1-1/4    | 1-5/8x12  | 1800                           | 3.12 | 79       | 2.50 | 64  | 1-11/16 | 2       |
| 19T3-24-20     | 1-1/2  | 1-1/4    | 1-5/8x12  | 1800                           | 3.12 | 79       | 2.56 | 65  | 1-11/16 | 2-3/8   |
| 19T3-20-24     | 1-1/4  | 1-1/2    | 1-7/8x12  | 1300                           | 3.48 | 88       | 2.69 | 68  | 2       | 2       |
| 19T3-24-24     | 1-1/2  | 1-1/2    | 1-7/8x12  | 1300                           | 3.48 | 88       | 2.75 | 70  | 2       | 2-3/8   |
| 19T3-32-24     | 2      | 1-1/2    | 1-7/8x12  | 1300                           | 3.48 | 88       | 2.75 | 70  | 2       | 2-13/16 |
| 19T3-32-32     | 2      | 2        | 2-1/2x12  | 1150                           | 5.61 | 142      | 4.50 | 114 | 2-5/8   | 2-13/16 |



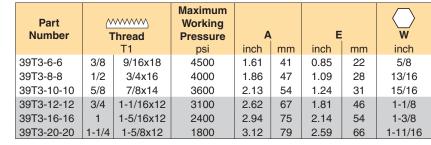
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**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Updated 11/2020

# 39T3

# Male - Female Swivel - SAE (JIC) 37° - 90° Elbow





WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



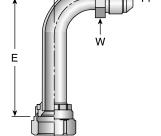
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# 41T3

# Male - Female Swivel - SAE (JIC) 37° - 90° Elbow - Long

| Part<br>Number |     | γγγγγγγ<br>F <b>hread</b><br>T1 | Maximum<br>Working<br>Pressure<br>psi | A    | mm | inch | ≣<br>  mm | w     |
|----------------|-----|---------------------------------|---------------------------------------|------|----|------|-----------|-------|
| 41T3-8-8       | 1/2 | 3/4x16                          | 4000                                  | 1.94 | 49 | 2.43 | 62        | 13/16 |
| 41T3-10-10     | 5/8 | 7/8x14                          | 3600                                  | 2.20 | 56 | 2.57 | 65        | 15/16 |
| 41T3-12-12     | 3/4 | 1-1/16x12                       | 3100                                  | 2.50 | 64 | 3.74 | 95        | 1-1/8 |
| 41T3-16-16     | 1   | 1-5/16x12                       | 2400                                  | 2.79 | 71 | 4.23 | 107       | 1-3/8 |

MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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# **4AH3**

# SAE Code 61 Flange - Male SAE (JIC) 37° Flare

| Part<br>Number | Flange | /////// Thread |           | Maximum<br>Working<br>Pressure | A    | ١   | W     | F     |
|----------------|--------|----------------|-----------|--------------------------------|------|-----|-------|-------|
|                | inch   |                | T1        | psi                            | inch | mm  | inch  | inch  |
| 4AH3-12-12     | 3/4    | 3/4            | 1-1/16x12 | 5000                           | 3.82 | 97  | 1-1/8 | 1-1/2 |
| 4AH3-16-16     | 1      | 1              | 1-5/16x12 | 4500                           | 4.09 | 104 | 1-3/8 | 1-3/4 |
| 4AH3-20-20     | 1-1/4  | 1-1/4          | 1-5/8x12  | 4400                           | 4.16 | 106 | 1-3/4 | 2     |
| 4AH3-24-24     | 1-1/2  | 1-1/2          | 1-7/8x12  | 4250                           | 4.97 | 126 | 2     | 2-3/8 |



MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

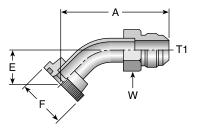
> D-6 Updated 11/2020

# 4FH3

# SAE Code 61 Flange - Male SAE (JIC) 37° Flare - 45° Elbow

| Part<br>Number | Flange |       | ······································ | Maximum<br>Working<br>Pressure | Δ    | ١   | E    |    | $\bigcirc$ | Ø<br>F |
|----------------|--------|-------|----------------------------------------|--------------------------------|------|-----|------|----|------------|--------|
|                | inch   |       | T1                                     | psi                            | inch | mm  | inch | mm | inch       | inch   |
| 4FH3-12-12     | 3/4    | 3/4   | 1-16x12                                | 5000                           | 3.39 | 86  | 1.06 | 27 | 1-1/8      | 1-1/2  |
| 4FH3-16-16     | 1      | 1     | 1-5/16x12                              | 4500                           | 3.85 | 98  | 1.27 | 32 | 1-3/8      | 1-3/4  |
| 4FH3-20-20     | 1-1/4  | 1-1/4 | 1-5/8x12                               | 4400                           | 4.22 | 107 | 1.36 | 35 | 1-3/4      | 2      |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



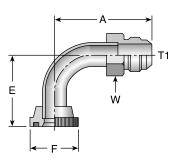
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# **4NH3**

# SAE Code 61 Flange - Male SAE (JIC) 37° Flare - 90° Elbow

| Part<br>Number | Flange | _     | ····································· | Maximum<br>Working<br>Pressure | A    |     |      |    | $\bigcirc$ | Ø<br>F  |
|----------------|--------|-------|---------------------------------------|--------------------------------|------|-----|------|----|------------|---------|
|                | inch   |       | T1                                    | psi                            | inch | mm  | inch | mm | inch       | inch    |
| 4NH3-8-8       | 1/2    | 1/2   | 3/4x16                                | 5000                           | 1.93 | 49  | 1.68 | 43 | 13/16      | 1-13/16 |
| 4NH3-12-12     | 3/4    | 3/4   | 1-1/16x12                             | 5000                           | 3.07 | 78  | 2.24 | 57 | 1-1/8      | 1-1/2   |
| 4NH3-16-16     | 1      | 1     | 1-5/16x12                             | 4500                           | 3.25 | 83  | 2.48 | 63 | 1-3/8      | 1-3/4   |
| 4NH3-20-20     | 1-1/4  | 1-1/4 | 1-5/8x12                              | 4400                           | 4.68 | 119 | 2.99 | 76 | 1-3/4      | 2       |
| 4NH3-24-24     | 1-1/2  | 1-1/2 | 1-7/8x12                              | 4250                           | 3.92 | 100 | 3.64 | 92 | 2          | 2-3/8   |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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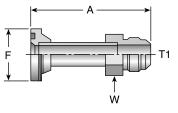
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# **6AH3**

# SAE Code 62 Flange - Male SAE (JIC) 37° Flare

| Part<br>Number | Flange inch | _     | //////<br>Thread | Maximum<br>Working<br>Pressure | inch | <b>\</b><br>  mm | W inch | F inch |
|----------------|-------------|-------|------------------|--------------------------------|------|------------------|--------|--------|
| 6AH3-12-12     | 3/4         | 3/4   | 1-1/16x12        | 5000                           | 3.82 | 97               | 1-1/8  | 1-5/8  |
| 6AH3-16-16     | 1           | 1     | 1-5/16x12        | 4500                           | 4.09 | 104              | 1-3/8  | 1-7/8  |
| 6AH3-20-20     | 1-1/4       | 1-1/4 | 1-5/8x12         | 4400                           | 4.16 | 106              | 1-3/4  | 2-1/8  |
| 6AH3-24-24     | 1-1/2       | 1-1/2 | 1-7/8x12         | 4250                           | 4.97 | 126              | 2      | 2-1/2  |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



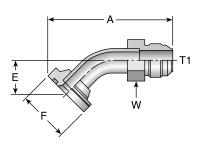
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# 6FH3

# SAE Code 62 Flange - Male SAE (JIC) 37° Flare - 45° Elbow

| Part<br>Number | Flange inch | _     | ·///·/· Thread T1 | Maximum<br>Working<br>Pressure<br>psi | A<br>inch | mm  | E<br>inch | mm | W inch | F inch |
|----------------|-------------|-------|-------------------|---------------------------------------|-----------|-----|-----------|----|--------|--------|
| 6FH3-12-12     | 3/4         | 3/4   | 1-1/16x12         | 5000                                  | 3.40      | 86  | 1.06      | 27 | 1-1/8  | 1-5/8  |
| 6FH3-16-16     | 1           | 1     | 1-5/16x12         | 4500                                  | 3.85      | 98  | 1.28      | 33 | 1-3/8  | 1-7/8  |
| 6FH3-20-20     | 1-1/4       | 1-1/4 | 1-5/8x12          | 4400                                  | 4.22      | 107 | 1.36      | 35 | 1-3/4  | 2-1/8  |
| 6FH3-24-24     | 1-1/2       | 1-1/2 | 1-7/8x12          | 4250                                  | 5.13      | 130 | 1.71      | 43 | 2      | 2-1/2  |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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Updated 11/2020

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Ε

inch mm

92

2.24 57

2.99 76

3.64

inch

1-1/8

1-3/8

1-3/4

inch

1-5/8

1-7/8

2-1/8

inch mm

4.68 119

3.07

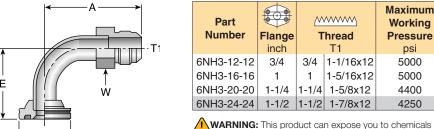
3.58 91 2.81 71

3.92 100

78

# **6NH3**

# SAE Code 62 Flange - Male SAE (JIC) 37° Flare - 90° Elbow



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# 4AJM

# Code 61 Flange - Male Seal-Lok

| Part<br>Number | Flange |           | Maximum<br>Working<br>Pressure | A    | A  |       | Ø<br>F |
|----------------|--------|-----------|--------------------------------|------|----|-------|--------|
|                | inch   | T1        | psi                            | inch | mm | inch  | inch   |
| 4AJM-12-12     | 3/4    | 1-3/16x12 | 5000                           | 3.65 | 93 | 1-1/4 | 1-1/2  |
| 4AJM-16-16     | 1      | 1-7/16x12 | 4500                           | 3.90 | 99 | 1-1/2 | 1-3/4  |

JM adapters do not include O-rings. Order separately.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# view on web page

|     | A - | <b>-</b> |
|-----|-----|----------|
| F + |     | T1       |

view on web page

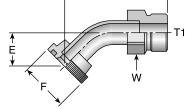
# 4FJM

# Code 61 Flange - Male Seal-Lok - 45° Elbow

| Part<br>Number | Flange inch | Thread    | Maximum<br>Working<br>Pressure<br>psi | inch | mm | E<br>inch | mm | W inch | F inch |
|----------------|-------------|-----------|---------------------------------------|------|----|-----------|----|--------|--------|
| 4FJM-16-16     | 1           | 1-7/16x12 | 4500                                  | 3.64 | 92 | 1.27      | 33 | 1-1/2  | 1-3/4  |

JM adapters do not include O-rings. Order separately.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

# 4NJM

# Code 61 Flange - Male Seal-Lok - 90° Elbow

| Part<br>Number | Flange | Thread     | Maximum<br>Working<br>Pressure | ,    | Δ.  | E    | <b>.</b> | $\bigcirc$ | F     |
|----------------|--------|------------|--------------------------------|------|-----|------|----------|------------|-------|
|                | inch   | T1         | psi                            | inch | mm  | inch | mm       | inch       | inch  |
| 4NJM-12-12     | 3/4    | 1-3/16x12  | 5000                           | 2.90 | 74  | 2.24 | 57       | 1-1/4      | 1-1/2 |
| 4NJM-16-16     | 1      | 1-7/16x12  | 4500                           | 3.38 | 86  | 2.81 | 71       | 1-1/2      | 1-3/4 |
| 4NJM-20-20     | 1-1/4  | 1-11/16x12 | 4000                           | 4.44 | 113 | 2.99 | 76       | 1-3/4      | 2     |

JM adapters do not include O-rings. Order separately.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

view on web page

Updated 11/2020 D-8

# 6AJM

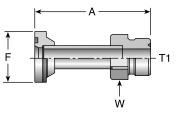
# Code 62 Flange - Male Seal-Lok

| Part<br>Number | Flange | Thread    | Maximum<br>Working<br>Pressure | А    | A  |       | F     |
|----------------|--------|-----------|--------------------------------|------|----|-------|-------|
|                | inch   | T1        | psi                            | inch | mm | inch  | inch  |
| 6AJM-12-12     | 3/4    | 1-3/16x12 | 5000                           | 3.65 | 93 | 1-1/4 | 1-5/8 |
| 6AJM-16-16     | 1      | 1-7/16x12 | 4500                           | 3.90 | 99 | 1-1/2 | 1-7/8 |

JM adapters do not include O-rings. Order separately.



**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

# 6FJM

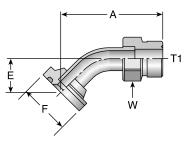
# Code 62 Flange - Male Seal-Lok - 45° Elbow

| Part<br>Number | Flange | Thread    | Maximum<br>Working<br>Pressure | A    | ١  | E    |    |       | F     |
|----------------|--------|-----------|--------------------------------|------|----|------|----|-------|-------|
|                | inch   | T1        | psi                            | inch | mm | inch | mm | inch  | inch  |
| 6FJM-12-12     | 3/4    | 1-3/16x12 | 5000                           | 3.22 | 82 | 1.06 | 27 | 1-1/4 | 1-5/8 |
| 6FJM-16-16     | 1      | 1-7/16x12 | 4500                           | 3.64 | 92 | 1.27 | 33 | 1-1/2 | 1-7/8 |

JM adapters do not include O-rings. Order separately.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



B

view on web page

# **6NJM**

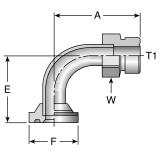
# Code 62 Flange - Male Seal-Lok - 90° Elbow

| Part<br>Number | Flange | Thread     | Maximum<br>Working<br>Pressure | A<br>in | mm  | E<br>in | mm | W inch | F inch |
|----------------|--------|------------|--------------------------------|---------|-----|---------|----|--------|--------|
| 6NJM-12-12     | 3/4    | 1-3/16x12  | 5000                           | 2.90    | 74  | 2.24    | 57 | 1-1/4  | 1-5/8  |
| 6NJM-16-16     | 1      | 1-7/16x12  | 5000                           | 3.38    | 86  | 2.81    | 71 | 1-1/2  | 1-7/8  |
| 6NJM-20-20     | 1-1/4  | 1-11/16x12 | 4000                           | 4.44    | 113 | 2.99    | 76 | 1-3/4  | 2-1/8  |

JM adapters do not include O-rings. Order separately.



WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

Updated 11/2020

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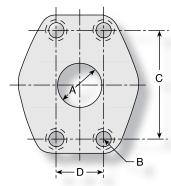
B

Accessories

There are two non-interchangeable SAE split flanges:

- a: Standard or Code 61 is for 3,000psi to 5,000psi maximum, depending on size.
- b. High Pressure or Code 62 is for 6,000psi maximum, regardless of size. The flange head is "V" notched for identification.

Consult these tables to determine flange halves and flange kits specifications.



# Standard Pressure (Code 61) view on web page

| Nominal<br>Flange | Flange<br>Dash<br>Size |      | la<br>ax | B<br>Thread | ±0.010 | ±0,25 | ±0.010 | ±0,25 | Wor   | mum<br>king<br>sure |
|-------------------|------------------------|------|----------|-------------|--------|-------|--------|-------|-------|---------------------|
|                   | 3126                   | inch | mm       | inch        | inch   | mm    | inch   | mm    | psi   | MPa                 |
| 1/2               | -8                     | 0.50 | 13       | 5/16x18     | 1.50   | 38,10 | 0.68   | 17,47 | 5000  | 34,5                |
| 3/4               | -12                    | 0.75 | 19       | 3/8x16      | 1.88   | 47,63 | 0.87   | 22,22 | 5000  | 34,5                |
| 1                 | -16                    | 1.00 | 25       | 3/8x16      | 2.06   | 52,37 | 1.03   | 26,18 | 5000  | 34,5                |
| 1 1/4             | -20                    | 1.25 | 32       | 7/16x14     | 2.31   | 58,72 | 1.18   | 30,17 | 4000* | 27,6                |
| 1 1/2             | -24                    | 1.50 | 38       | 1/2x13      | 2.75   | 69,85 | 1.40   | 35,71 | 3000* | 20,7                |
| 2                 | -32                    | 2.00 | 51       | 1/2x13      | 3.06   | 77,77 | 1.68   | 42,87 | 3000* | 20,7                |

Note: \*5000 psi with 4A, 4F and 4N Fittings and 50H Flange Halves.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# High Pressure (Code 62) view on web page

| Nominal<br>Flange | Flange<br>Dash<br>Slze | A<br>Dia<br>Max |    | B<br>Thread | C<br>±0.010 ±0,25 |       | D<br>±0.010 ±0,25 |       | Maximum<br>Working<br>Pressure |      |
|-------------------|------------------------|-----------------|----|-------------|-------------------|-------|-------------------|-------|--------------------------------|------|
|                   | Size                   | inch            | mm | inch        | inch              | mm    | inch              | mm    | psi                            | MPa  |
| 3/4               | -12                    | 0.75            | 19 | 3/8x16      | 2.00              | 47,75 | 0.88              | 22,35 | 6000                           | 41,4 |
| 1                 | -16                    | 1.00            | 25 | 7/16x14     | 2.25              | 57,15 | 1.09              | 27,76 | 6000                           | 41,4 |
| 1-1/4             | -20                    | 1.25            | 32 | 1/2x13      | 2.63              | 66,67 | 1.25              | 31,75 | 6000                           | 41,4 |
| 1-1/2             | -24                    | 1.50            | 38 | 5/8x11      | 3.13              | 79,37 | 1.43              | 36,49 | 6000                           | 41,4 |
| 2                 | -32                    | 2.00            | 51 | 3/4x10      | 3.81              | 96,82 | 1.75              | 44,45 | 6000                           | 41,4 |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

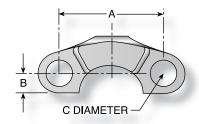
# 50H

# 5000 psi Flange Half (Code 61)

| Part<br>Number | SAE<br>Flange<br>Size | Α    | В    | С    | Maximum<br>Working<br>Pressure |  |
|----------------|-----------------------|------|------|------|--------------------------------|--|
|                | inch                  | inch | inch | inch | psi                            |  |
| 50H-20         | 1-1/4                 | 2.31 | 0.55 | 0.47 | 5000                           |  |
| 50H-24         | 1-1/2                 | 2.75 | 0.66 | 0.53 | 5000                           |  |
| 50H-32         | 2                     | 3.06 | 0.80 | 0.53 | 5000                           |  |

Note: For use with 4A, 4F and 4N Flanges.

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



view on web page

D-10 Updated 11/2020

# 5050HK

# 5000 psi Flange Kit (Code 61)

| Part      | SAE<br>Flange | Maximum<br>Working | (2)<br>Flange | O-Ring   | (4) Bolts<br>Grade 8 |        | (4)     |
|-----------|---------------|--------------------|---------------|----------|----------------------|--------|---------|
| Number    | Size          | Pressure           | Halves        | O-ming   | Thread               | Length | Washers |
|           | inch          | psi                | 110.1700      |          | inch                 | inch   |         |
| 5050HK-20 | 1-1/4         | 5000               | 50H-20        | 711510-3 | 7/16x14              | 1-1/2  | 7/16    |
| 5050HK-24 | 1-1/2         | 5000               | 50H-24        | 711510-2 | 1/2x13               | 1-1/2  | 1/2     |
| 5050HK-32 | 2             | 5000               | 50H-32        | 711510-1 | 1/2x13               | 1-1/2  | 1/2     |

Note: For use with 4A, 4F and 4N Flanges.

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



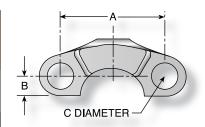
B

# **51H** SAE Flange Half (Code 61)

| Part<br>Number | SAE<br>Flange<br>Size | A    | В    | С    | Maximum<br>Working<br>Pressure |
|----------------|-----------------------|------|------|------|--------------------------------|
|                | inch                  | inch | inch | inch | psi                            |
| 51H-8          | 1/2                   | 1.50 | 0.31 | 0.35 | 5000                           |
| 51H-12         | 3/4                   | 1.88 | 0.40 | 0.42 | 5000                           |
| 51H-16         | 1                     | 2.06 | 0.48 | 0.42 | 5000                           |
| 51H-20         | 1-1/4                 | 2.31 | 0.56 | 0.42 | 4000                           |
| 51H-24         | 1-1/2                 | 2.75 | 0.67 | 0.53 | 3000                           |
| 51H-32         | 2                     | 3.06 | 0.81 | 0.53 | 3000                           |
| 51H-40         | 2-1/2                 | 3.50 | 0.96 | 0.53 | 2500                           |
| 51H-48         | 3                     | 4.19 | 1.18 | 0.66 | 2000                           |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

view on web page



view on web page

# 5151HK

# **SAE Flange Kit (Code 61)**

| Part      | SAE<br>Flange | Maximum<br>Working | (2)<br>Flange | O-Ring   | (4) Bolts<br>Grade 8 |        | (4)     |
|-----------|---------------|--------------------|---------------|----------|----------------------|--------|---------|
| Number    | Size          | Pressure           | Halves        | O ming   | Thread               | Length | Washers |
|           | inch          | psi                |               |          | inch                 | inch   |         |
| 5151HK-8  | 1/2           | 5000               | 51H-8         | 711510-6 | 5/16x18              | 1-1/4  | 5/16    |
| 5151HK-12 | 3/4           | 5000               | 51H-12        | 711510-5 | 3/8x16               | 1-1/4  | 3/8     |
| 5151HK-16 | 1             | 5000               | 51H-16        | 711510-4 | 3/8x16               | 1-1/4  | 3/8     |
| 5151HK-20 | 1-1/4         | 4000               | 51H-20        | 711510-3 | 7/16x14              | 1-1/2  | 7/16    |
| 5151HK-24 | 1-1/2         | 3000               | 51H-24        | 711510-2 | 1/2x13               | 1-1/2  | 1/2     |
| 5151HK-32 | 2             | 3000               | 51H-32        | 711510-1 | 1/2x13               | 1-1/2  | 1/2     |
| 5151HK-40 | 2-1/2         | 2500               | 51H-40        | 711510-7 | 1/2x13               | 1-3/4  | 1/2     |
| 5151HK-48 | 3             | 2000               | 51H-48        | 711510-8 | 5/8-11               | 1-3/4  | 5/8     |

Note: High pressure applications also require the use of Code 61 Flange End hose fittings.

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

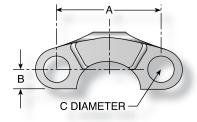


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**D-11** Updated 11/2020

# HFH

## **SAE Flange Half (Code 62)**



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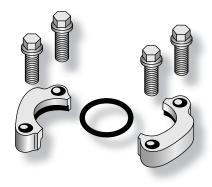
view on web page

| Part<br>Number | SAE<br>Flange<br>Size<br>inch | <b>A</b> inch | B    | C    | Maximum<br>Working<br>Pressure |
|----------------|-------------------------------|---------------|------|------|--------------------------------|
| HFH-12         | 3/4                           | 2.00          | 0.43 | 0.41 | 6000                           |
| HFH-16         | 1                             | 2.25          | 0.51 | 0.47 | 6000                           |
| HFH-20         | 1 1/4                         | 2.62          | 0.59 | 0.53 | 6000                           |
| HFH-24         | 1 1/2                         | 3.12          | 0.68 | 0.66 | 6000                           |
| HFH-32         | 2                             | 3.81          | 0.84 | 0.78 | 6000                           |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **HFHFHK**

# **SAE Flange Kit (Code 62)**



view on web page

| Part      | SAE<br>Flange | Maximum<br>Working  | (2)<br>Flange O-Ring |          | (4) E<br>Gra | (4)            |         |
|-----------|---------------|---------------------|----------------------|----------|--------------|----------------|---------|
| Number    | Size<br>inch  | <b>Pressure</b> psi | Halves               | O-rung   | Thread inch  | Length<br>inch | Washers |
| HFHFHK-12 | 3/4           | 6000                | HFH-12               | 711510-5 | 3/8x16       | 1-1/2          | 3/8     |
| HFHFHK-16 | 1             | 6000                | HFH-16               | 711510-4 | 7/16x14      | 1-3/4          | 7/16    |
| HFHFHK-20 | 1-1/4         | 6000                | HFH-20               | 711510-3 | 1/2x13       | 1-3/4          | 1/2     |
| HFHFHK-24 | 1-1/2         | 6000                | HFH-24               | 711510-2 | 5/8x11       | 2-1/4          | 5/8     |
| HFHFHK-32 | 2             | 6000                | HFH-32               | 711510-1 | 3/4x10       | 2-3/4          | 3/4     |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

D-12 Updated 11/2020

# **Full Flange System**

## SAE J518 Code 61 or Code 62

Parker's Hose Products Division introduces a one-piece flange option for Code 61 and Code 62 connections. The patent-pending design enables the flange to be attached to the hose after the hose fitting has been crimped to the hose. Once the fitting is crimped, an SAE J518 Code 61 or a Code 62 full flange can be attached using the high tensile stainless steel retaining ring. The versatile fitting design enables greater flexibility by reducing the number of potential hose fittings in your inventory.

#### **Product Features**

- · One-piece full flange connection
- The full flange system is designed to work with all Parkrimp crimpers
- Fittings are compatible for both Code 61 and Code 62 flanges
- All Code 61 sizes rated to 5000 psi





view on web page

# Flange Kits:

#### Code 61 Flange Kit - All sizes rated for 5000 psi

| Part     | SAE<br>Flange | Flange Working Flange |               | Seal   | Retaining | (4) Bolts<br>Grade 8 |        |
|----------|---------------|-----------------------|---------------|--------|-----------|----------------------|--------|
| Number   | Size          | Pressure              | riange        | Seal   | Ring      | Thread               | Length |
|          | inch          | psi                   |               |        |           | inch                 | inch   |
| FFK61-12 | 3/4           | 5000                  | R312-35-CFX   | XRG-12 | R12X      | UNC 3/8 - 16         | 1-1/2  |
| FFK61-16 | 1             | 5000                  | R316-CFX      | XRG-16 | R16X      | UNC 3/8 - 16         | 1-1/2  |
| FFK61-20 | 1 1/4         | 5000                  | R320-12.5-CFX | XRG-20 | R20X      | UNC 7/16 - 14        | 1-1/2  |
| FFK61-24 | 1 1/2         | 5000                  | R324-CFX      | XRG-24 | R24X      | UNC 1/2 - 13         | 1-3/4  |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### Code 62 Flange Kit

| 0000 02  | oud of hango in               |          |             |        |           |                      |        |        |  |  |  |
|----------|-------------------------------|----------|-------------|--------|-----------|----------------------|--------|--------|--|--|--|
|          | SAE Maximum<br>Flange Working |          | Flange      | Seal   | Retaining | (4) Bolts<br>Grade 8 |        |        |  |  |  |
| Number   | Size                          | Pressure | Flalige     | Seal   | Ring      |                      | Thread | Length |  |  |  |
|          | inch                          | psi      |             |        |           | inch                 | inch   |        |  |  |  |
| FFK62-12 | 3/4                           | 6000     | R612-35-CFX | XRG-12 | R12X      | UNC 3/8 - 16         | 1-1/2  |        |  |  |  |
| FFK62-16 | 1                             | 6000     | R616-CFX    | XRG-16 | R16X      | UNC 7/16 - 14        | 1-1/2  |        |  |  |  |
| FFK62-20 | 1 1/4                         | 6000     | R620-CFX    | XRG-20 | R20X      | UNC 1/2 - 13         | 1-3/4  |        |  |  |  |
| FFK62-24 | 1 1/2                         | 6000     | R624-CFX    | XRG-24 | R24X      | UNC 5/8 - 11         | 2-1/4  |        |  |  |  |
| FFK62-32 | 2                             | 6000     | R632-CFX    | XRG-32 | R32X      | UNC 3/4 - 10         | 2-3/4  |        |  |  |  |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

www.mfcp.com

| Kit<br>Part<br>Number | Retaining<br>Ring | O-ring |
|-----------------------|-------------------|--------|
| RK-12                 | R12X              | XRG-12 |
| RK-16                 | R16X              | XRG-16 |
| RK-20                 | R20X              | XRG-20 |
| RK-24                 | R24X              | XRG-24 |
| RK-32                 | R32X              | XRG-32 |

The stainless steel retaining rings and O-rings are recommended for one-time use. Order additional ring kits using the part numbers shown.

D-13 Updated 11/2020

B

C

D

B

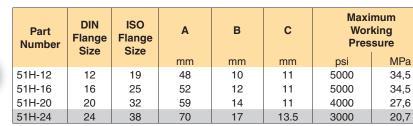
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# **DIN and ISO Metric Ports**

DIN (German) and ISO (International Organization for Standardization) flange heads are the same as SAE flange heads. By comparison, the ports have the same configuration except that the DIN and ISO Type I ports accept metric bolts. This requires special flange halves in most sizes.

| SAE J518 | DIN 20078 | ISO 6162<br>Type I   |
|----------|-----------|----------------------|
| Code 61  | Form R    | 3,5 to 35 MPa Series |
| Code 62  | Form S    | 35 to 40 MPa Series  |

# M1H **DIN (ISO) Flange Half**



Note: High pressure applications also require the use of Code 62 Flange End hose fittings.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

C DIAMETER

view on web page

# M1M1HK

DIN (ISO) Flange Kit (Code 61)



view on web page

| Part<br>Number | DIN<br>Flange<br>Size | ISO<br>Flange<br>Size |      |      | (2)<br>Flange | O-Ring   | (4) Bolts Thread Length |    | (4)<br>Washers |
|----------------|-----------------------|-----------------------|------|------|---------------|----------|-------------------------|----|----------------|
|                |                       |                       | psi  | MPa  | Ha            |          |                         |    |                |
| M1M1HK-8       | 8                     | 13                    | 5000 | 34,5 | -             | 711510-6 |                         | 30 | 10             |
| M1M1HK-12      | 12                    | 19                    | 5000 | 34,5 | 51H-12        | 711510-5 | M10x1.50                | 30 | 10             |
| M1M1HK-16      | 16                    | 25                    | 5000 | 34,5 | 51H-16        | 711510-4 | M10x1.50                | 30 | 10             |
| M1M1HK-20      | 20                    | 32                    | 4000 | 27,6 | 51H-20        | 711510-3 | M10x1.50                | 40 | 10             |
| M1M1HK-24      | 24                    | 38                    | 3000 | 20,7 | M1H-24        | 711510-2 | M12x1.75                | 40 | 12             |
| M1M1HK-32      | 32                    | 51                    | 3000 | 20,7 | M1H-32        | 711510-1 | M12x1.75                | 40 | 12             |

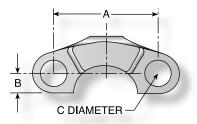
MARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

> D-14 Updated 11/2020

# M2H

## **DIN (ISO) Flange Half (Code 62)**

| Part<br>Number | DIN<br>Flange<br>Size | ISO<br>Flange<br>Size | A  | B      | C      | Maximum Working Pressure psi MPa |       |
|----------------|-----------------------|-----------------------|----|--------|--------|----------------------------------|-------|
|                |                       |                       | mm | 111111 | 111111 | psi                              | IVIFa |
| HFH-12         | 12                    | 19                    | 51 | 11     | 10,6   | 6000                             | 41,5  |
| M2H-16         | 16                    | 25                    | 57 | 13     | 13,5   | 6000                             | 41,5  |
| M2H-20         | 20                    | 32                    | 67 | 15     | 15,0   | 6000                             | 41,5  |
| HFH-24         | 24                    | 38                    | 79 | 17     | 16,7   | 6000                             | 41,5  |
| HFH-32         | 32                    | 51                    | 97 | 21     | 20,6   | 6000                             | 41,5  |



В

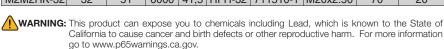
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**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### M2M2HK

## DIN (ISO) Flange Kit (Code 62)

| Part<br>Number | DIN<br>Flange<br>Size | ISO<br>Flange<br>Size | psi MPa |      | (2)<br>Flange<br>Halves | O-Ring   | (4) HHCS  Thread Length mm |    | (4)<br>Washers |
|----------------|-----------------------|-----------------------|---------|------|-------------------------|----------|----------------------------|----|----------------|
| M2M2HK-8       | 8                     | 13                    | 6000    | 41,5 | M2H-8                   | 711510-6 | M8x1.25                    | 30 | 8              |
| M2M2HK-12      | 12                    | 19                    | 6000    | 41,5 | HFH-12                  | 711510-5 | M10x1.50                   | 35 | 10             |
| M2M2HK-16      | 16                    | 25                    | 6000    | 41,5 | M2H-16                  | 711510-4 | M12x1.75                   | 45 | 12             |
| M2M2HK-20      | 20                    | 32                    | 6000    | 41,5 | M2H-20                  | 711510-3 | M12x1.75                   | 45 | 12             |
| M2M2HK-24      | 24                    | 38                    | 6000    | 41,5 | HFH-24                  | 711510-2 | M16x2.00                   | 55 | 16             |
| M2M2HK-32      | 32                    | 51                    | 6000    | 41,5 | HFH-32                  | 711510-1 | M20x2.50                   | 70 | 20             |





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# **XCXCHK**

## Caterpillar® Flange Kits

| Part<br>Number | C<br>Diameter | Maximum<br>Working<br>Pressure | O-Ring  | inch inch |      | (4)<br>Washers |
|----------------|---------------|--------------------------------|---------|-----------|------|----------------|
| XCXCHK-12      | 0.406         | 6000                           | XARG-12 | 3/8-16    | 1.75 | 3/8            |
| XCXCHK-16      | 0.469         | 6000                           | XARG-16 | 7/16-14   | 1.75 | 7/16           |
| XCXCHK-20      | 0.531         | 6000                           | XARG-20 | 1/2-13    | 2.00 | 1/2            |
| XCXCHK-24      | 0.656         | 6000                           | XARG-24 | 5/8-11    | 2.50 | 5/8            |
| XCXCHK-32      | 0.827         | 6000                           | XARG-32 | 3/4-10    | 2.75 | 3/4            |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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Updated 8/2021

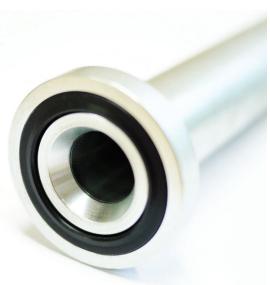
www.mfcp.com

# **Engineered Flange Seal**

# Engineered to seal. Designed to fit.

The Engineered Flange Seal (EFS) is designed to fit precisely into the seal groove of a Parker Code 61 or Code 62 Flange. Unlike standard O-rings that tend to pop out of the flange groove, the engineered shape of EFS fits precisely, providing consistently strong seal retention. O-rings pinching or falling out during assembly will no longer be an issue. O-rings with unsecured retention can cause dangerous, and time consuming hose assembly leaks. EFS reduces the possibility of the O-ring falling out, rework, replacement, and provides for quick assembly.

Your high pressure applications will benefit from its secure, engineered design. After installing Parker's EFS, you can expect reduced downtime and increased confidence from your guaranteed leak-free assembly.



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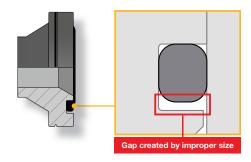
#### **Product Features:**

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- Secure seal retention before, during and after installation
- Engineered for high pressure applications
- · Quick assembly with no tooling or lubrication needed
- Reduced risk of seal damage and leakage
- · Ability to withstand working temperatures up to 247°F
- 90 durometer nitrite

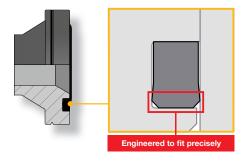
| Part<br>Number | Nominal<br>Size | Dash<br>Size |
|----------------|-----------------|--------------|
| EFS-8          | 1/2             | -8           |
| EFS-12         | 3/4             | -12          |
| EFS-16         | 1               | -16          |
| EFS-20         | 1-1/4           | -20          |
| EFS-24         | 1-1/2           | -24          |
| EFS-32         | 2               | -32          |

#### **Standard O-Ring**



Standard O-rings have an unnatural fit in Code 61 and Code 62 flanges because of their improper size and shape. This off-the-shelf solution creates a gap which can lead to difficult installation, hose assembly leakage and the potential for the O-ring to fall out.

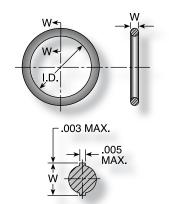
## **Engineered Flange Seal**



The EFS fits precisely in Code 61 and Code 62 flanges because its shape and size are engineered for the space and application. Its purpose-designed shape reduces the possibility of pop out, and the need to replace or reinstall the O-ring, eliminating costly leakage and time consuming pre-assembly handling.

D-16 Updated 11/2020

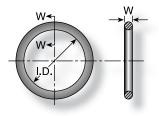
# **711509**O-Rings - SAE Thread (Compound N552-90)\*



| Part<br>Number                        | Tube<br>Dash | Tube<br>O.D. | SAE<br>Thread | ١     | N    | I.D.  |       |  |
|---------------------------------------|--------------|--------------|---------------|-------|------|-------|-------|--|
| · · · · · · · · · · · · · · · · · · · | Size         | inch         | inch          | inch  | mm   | inch  | mm    |  |
| 711509-1                              | -4           | 1/4          | 7/16x20       | 0.072 | 1,83 | 0.351 | 8,92  |  |
| 711509-2                              | -5           | 5/16         | 1/2x20        | 0.072 | 1,83 | 0.414 | 10,52 |  |
| 711509-3                              | -6           | 3/8          | 9/16x20       | 0.078 | 1,98 | 0.468 | 11,89 |  |
| 711509-4                              | -8           | 1/2          | 3/4x16        | 0.087 | 2,21 | 0.644 | 16,36 |  |
| 711509-5                              | -10          | 5/8          | 7/8x14        | 0.097 | 2,46 | 0.755 | 19,18 |  |
| 711509-6                              | -12          | 3/4          | 1-1/16x12     | 0.116 | 2,95 | 0.924 | 74,93 |  |
| 711509-7                              | -16          | 1            | 1-5/16x12     | 0.116 | 2,95 | 1.171 | 29,74 |  |
| 711509-8                              | -20          | 1-1/4        | 1-5/8x12      | 0.118 | 3,00 | 1.475 | 37,47 |  |
| 711509-9                              | -24          | 1-1/2        | 1-7/8x12      | 0.118 | 3,00 | 1.720 | 43,69 |  |
| 711509-10                             | -32          | 2            | 2-1/2x12      | 0.118 | 3,00 | 2.337 | 59,36 |  |

# **711510**O-Rings - Code 61 and Code 62 Flanges (Compound N552-90)\*

В



| Part<br>Number | Flange<br>Dash | Flange<br>Size | V    | V    | 1.1  | D.    |
|----------------|----------------|----------------|------|------|------|-------|
|                | Size           | inch           | inch | mm   | inch | mm    |
| 711510-6       | -8             | 1/2            | 0.14 | 3,53 | 0.73 | 18,64 |
| 711510-9*      | -10            | 5/8            | 0.14 | 3,53 | 0.79 | 20,20 |
| 711510-5       | -12            | 3/4            | 0.14 | 3,53 | 0.98 | 25,00 |
| 711510-4       | -16            | 1              | 0.14 | 3,53 | 1.29 | 32,92 |
| 711510-3       | -20            | 1-1/4          | 0.14 | 3,53 | 1.48 | 37,69 |
| 711510-2       | -24            | 1-1/2          | 0.14 | 3,53 | 1.85 | 47,22 |
| 711510-1       | -32            | 2              | 0.14 | 3,53 | 2.23 | 56,74 |
| 711510-7       | -40            | 2-1/2          | 0.14 | 3,53 | 2.73 | 69,44 |
| 711510-8       | -48            | 3              | 0.14 | 3,53 | 3.35 | 85,32 |

\*Note: For use with petroleum base fluids, other compounds available for Phosphate Ester fluids. Please contact The Parker Hannifin Seal Group/O-Ring Division (1-800-C-PARKER) for additional information.

# **D9DT**Bonded Seal for BSPP Port Fittings

| Part<br>Number | I.D. |      | 0.1  | <b>D.</b> |
|----------------|------|------|------|-----------|
|                | Inch | mm   | Inch | mm        |
| D9DT-4         | 0.54 | 13,7 | 0.81 | 20,6      |
| D9DT-6         | 0.68 | 17,3 | 0.94 | 23,9      |
| D9DT-8         | 0.85 | 21,6 | 1.13 | 28,7      |
| D9DT-10        | 0.93 | 23,6 | 1.25 | 31,8      |
| D9DT-12        | 1.06 | 27,0 | 1.38 | 35,1      |
| D9DT-16        | 1.33 | 33,8 | 1.68 | 42,7      |

\*Note: D9DT must be ordered from the Tube Fittings
Division. Please contact TFD for additional size
and product information.

D-17 Updated 11/2020

# **JORG**

B

D

#### O-Rings - Seal-Lok®

| Part<br>Number | Tube<br>Dash<br>Size | Tube<br>O.D. | SAE<br>Thread | I.I   | D.    | O.    | .D.  |
|----------------|----------------------|--------------|---------------|-------|-------|-------|------|
| J0RG-4         | -4                   | 1/4          | 9/16x18       | 0.301 | 7,65  | 0.070 | 1,78 |
| J0RG-6         | -6                   | 3/8          | 11/16x16      | 0.364 | 9,25  | 0.070 | 1,78 |
| J0RG-8         | -8                   | 1/2          | 13/16x16      | 0.489 | 12,42 | 0.070 | 1,78 |
| J0RG-10        | -10                  | 5/8          | 1x14          | 0.614 | 15,59 | 0.070 | 1,78 |
| J0RG-12        | -12                  | 3/4          | 1-3/16x12     | 0.739 | 18,77 | 0.070 | 1,78 |
| J0RG-16        | -16                  | 1            | 1-7/16x12     | 0.926 | 23,52 | 0.070 | 1,78 |
| J0RG-20        | -20                  | 1-1/4        | 1-11/16x12    | 1.176 | 29,87 | 0.070 | 1,78 |
| J0RG-24        | -24                  | 1-1/2        | 2x12          | 1.489 | 37,82 | 0.070 | 1,78 |

Note: O-Rings for use in Seal-Lok® connections are illustrated in actual size. Part numbers for O-Rings used in Seal-Lok® and in SAE port connections are also listed in the table. O-Rings are supplied in Nitrile NBR compound, 90 durometer hardness.



SAE 711509-4



Photo shows an actual comparison between an SAE port O-Ring (top) and a Seal-Lok® O-Ring (bottom). They differ in both diameter and cross section.

# **XARG**

## Flange "D" Rings Caterpillar® Style Flanges



D-18 Updated 11/2020

# **59RG**

# O-Rings for Tube O-Ring Fittings and Compressor Fittings

| Part<br>Number | Tube<br>O.D.<br>Inch | Tube<br>Dash<br>Size | Parker<br>Seal<br>Number |
|----------------|----------------------|----------------------|--------------------------|
| 59RG-6         | 3/8                  | -6                   | 2-011                    |
| 59RG-8         | 1/2                  | -8                   | 2-013                    |
| 59RG-10        | 5/8                  | -10                  | 2-015                    |
| 59RG-12        | 3/4                  | -12                  | 2-017                    |

# T1RG

# O-Rings for Compression Fittings (1T126)

| Part<br>Number | Tube<br>O.D.<br>Inch | Tube<br>Dash<br>Size | Parker<br>Seal<br>Number |
|----------------|----------------------|----------------------|--------------------------|
| T1RG-6         | 3/8                  | -6                   | 2-012                    |
| T1RG-8         | 1/2                  | -8                   | 2-014                    |
| T1RG-10        | 5/8                  | -10                  | 2-016                    |
| T1RG-12        | 3/4                  | -12                  | 2-018                    |

#### **R12**

| Part<br>Number | Thread  |
|----------------|---------|
| 940249         | 7/16x20 |

# **CORG**

#### **Captive O-Ring Assembly Tools**

Parker's new CORG Assembly Tools are designed to facilitate the installation of the O-Ring into the half-dovetail groove of the O-Ring face seal fitting.

| Fitting<br>Size | Hand Type<br>Part Number | Bench Type<br>Part Number |
|-----------------|--------------------------|---------------------------|
| -4              | CORG-4                   | CORG-AT04 Bench           |
| -6              | CORG-6                   | CORG-AT06 Bench           |
| -8              | CORG-8                   | CORG-AT08 Bench           |
| -10             | CORG-10                  | CORG-AT10 Bench           |
| -12             | CORG-12                  | CORG-AT12 Bench           |
| -16             | CORG-16                  | CORG-AT16 Bench           |
| -20             | CORG-20                  | CORG-AT20 Bench           |
| -24             | CORG-24                  | CORG-AT24 Bench           |
| -32             | CORG-32                  |                           |







В

Hand Type

Note: CORG Assembly Tools must be ordered from the Tube Fittings Division (614) 279-7070.

Note: O-Rings listed are for use with petroleum base fluids. Other compounds are available for Phosphate Ester fluids by special order. For Viton® or other O-Ring compounds, consult Parker Hannifin, Seal/O-Rings Products Division (1-800-C-PARKER.)

D-19 Updated 11/2020

www.mfcp.com

#### Partek Defense

# Reliable, long-lasting protection

Partek Defense is designed to provide protection to personnel and equipment in the event of a hose burst by containing the energy of the burst.

Partek Defense features a multi-layered construction that contains and then dissipates the energy and media within the hose assembly.

Partek Defense can be applied in any hose application but is most valuable in industries such as mining, construction and agriculture where operators are in close proximity to high-pressure hoses.



view on web page

#### **Product Features**

- Contains hose bursts up to 12.000 psi
- · MSHA rated

B

- Meets ISO 3457, ISO 4413, EN 414, MDG41
- · Multi-layer construction
- Sizes -4 to -16
- Made of high-performance materials and a proprietary weave pattern for reliable, long-lasting protection
- · Easy to assemble
- Packaged in 50-ft. reels
- Temperature range: -70°F to +302°F

#### **Installation Instructions**

- · For use with one hose per sleeve
- · Identify the size of the hose that needs to be protected
- Select the matching sleeve size from the chart
- Cut the sleeve length equal to the overall hose assembly length plus two inches
- · Cut with a heat blade or heat scissors to avoid fraying
- Slide sleeve over the hose assembly (hose should be inserted into yellow layer)
- Must secure end of sleeve to hose fitting shell using a metal band clamp and the FSC Clamp Tool

#### Partek Defense Hose Sleeve



| Part<br>Number | Hose Size<br>ID* | Sleeve F | lat ID "A" | Sleeve Ro | ound ID "B" |
|----------------|------------------|----------|------------|-----------|-------------|
| YS-B-17        | -4               | 1.92     | 49         | 1.22      | 31          |
| YS-B-19        | -6               | 2.12     | 54         | 1.35      | 34          |
| YS-B-22        | -8               | 2.24     | 57         | 1.45      | 36          |
| YS-B-27        | -10              | 2.55     | 65         | 1.63      | 41          |
| YS-B-33        | -12              | 2.85     | 72         | 1.81      | 46          |
| YS-B-37        | -16              | 3.73     | 95         | 2.38      | 60          |

<sup>\*</sup>Approved with 43, 70, 71, 77 and 79 Series fittings.

# **Partek Wrap**

The need for a protective hose sleeve is not always considered while designing for a hose's application. Many hose assembly installations would benefit from a sleeve, but it is not obvious until all the other hoses and components are in place. Parker's Partek Wrap enables the hose sleeve to be installed after the hose assemblies have been positioned and secured in place. The Partek Wrap can be used as extra abrasion protection or to wrap multiple hoses or cables together.

#### **Product Features**

- · Post assembly installation
- Light weight and highly flexible
- Urethane-coated 1050 Ballistic Nylon
- Ambient temperature range of -60°F to +200°F
- · Fast and easy installation
- MSHA Certified for use in underground mines
- Stays closed using hook & loop fastener





В

view on web page

# **Partek Wrap**

| Part<br>Number | Bundle<br>O.D. | Circumference | Open Width<br>(+/- 0.375) | Roll Length | Color |
|----------------|----------------|---------------|---------------------------|-------------|-------|
|                | inch           | inch          | inch                      | feet        |       |
| PS-BV-100      | 1              | 3.25          | 4.00                      | 50          | Black |
| PS-BV-200      | 2              | 6.00          | 7.75                      | 50          | Black |
| PS-BV-300      | 3              | 9.40          | 10.90                     | 50          | Black |
| PS-BV-400      | 4              | 12.50         | 14.00                     | 50          | Black |
| PS-BV-500      | 5              | 15.75         | 17.25                     | 50          | Black |
| PS-BV-700      | 7              | 22.00         | 23.50                     | 50          | Black |





D-21 Updated 11/2020

# **Protective Coils, Sleeves & Guards**

#### Partek Sleeve

B

Parker's Partek Nylon Protective Sleeving gives you tough hose abrasion protection two ways. First, per the ISO 6945 specification, Partek has a unique tubular weave nylon construction. Partek "AS" is strong enough to withstand greater than 200,000 abrasion cycles without wearing through the fabric at any location.

Partek "PS" can withstand greater than 50,000 abrasion cycles. In addition, this weave also gives an exceptionally smooth interior wall, allowing rubber hose to move freely inside the sleeve. This provides easy installation and prevents any internal abrasion problems. Partek sleeving is available in either black or yellow and in sizes to fit most hydraulic hose. Partek, the guick and easy solution to hose protection in high-abrasion areas.





#### view on web page

| Partek<br>Sleeve<br>(Black) | Partek<br>Sleeve<br>(Yellow) | Partek<br>PS<br>Sleeve | Ins<br>Di |      |
|-----------------------------|------------------------------|------------------------|-----------|------|
| ` Part ´                    | ` Part ´                     | (Black)<br>Part        | Α         | В    |
| Number                      | Number                       | Number                 | inch      | inch |
| AS-B-11                     | AS-Y-11                      |                        | 1.07      | 0.69 |
| AS-B-13                     | AS-Y-13                      | PS-B-13                | 1.34      | 0.86 |
| AS-B-15                     | AS-Y-15                      | PS-B-15                | 1.66      | 1.06 |
| AS-B-17                     | AS-Y-17                      | PS-B-17                | 1.92      | 1.22 |
| AS-B-19                     | AS-Y-19                      |                        | 2.12      | 1.35 |
| AS-B-22                     | AS-Y-22                      | PS-B-22                | 2.24      | 1.42 |
| AS-B-27                     | AS-Y-27                      |                        | 2.55      | 1.63 |
| AS-B-33                     | AS-Y-33                      | PS-B-33                | 2.85      | 1.81 |
| AS-B-35                     | AS-Y-35                      | PS-B-35                | 3.43      | 2.19 |
| AS-B-37                     | AS-Y-37                      | PS-B-37                | 3.73      | 2.38 |
|                             |                              | PS-B-39                | 4.12      | 2.63 |
|                             |                              | PS-B-45                | 4.53      | 2.88 |
| AS-B-47                     |                              | PS-B-47                | 4.90      | 3.13 |
| AS-B-58                     |                              |                        | 5.69      | 3.63 |
| AS-B-64                     |                              |                        | 6.81      | 4.00 |

#### **PolyGuard**

Parker's PolyGuard is a black, heavy-duty polyethylene shield that provides protection in rugged operating conditions. PolyGuard is used to prevent hose assemblies from abrasion and cuts while also minimizing kinking of the hose. PolyGuard can be used to bundle high-pressured hose lines.

PolyGuard can be installed without removing hose lines and without the use of clamps for easy installation. This shield resists water, oil, gasoline, hydraulic fluid and most

Use the formula below to determine the length of sleeve required.

Temperature Range: 0°F to +200°F (-17°C to +93°C)

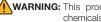
Caution: This material will support combustion.

Hose O.D.xLength to be Protected + Dimension B Dimension A



#### view on web page

| Part<br>Number | Inside Diameter "A" (inch) | Coil<br>Width<br>"B"<br>(inch) |
|----------------|----------------------------|--------------------------------|
| HG-075         | 0.75                       | 0.95                           |
| HG-100         | 1.00                       | 1.25                           |
| HG-125         | 1.25                       | 1.35                           |
| HG-150         | 1.50                       | 1.50                           |
| HG-200         | 2.00                       | 1.60                           |
| HG-350         | 3.50                       | 1.95                           |



WARNING: This product can expose you to chemicals including N-Hexane, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

#### **ParKoil**

Parker's ParKoil is a lower-cost protection shield for applications that call for a tighter bend radius and are less demanding. ParKoil is easy to install and is used to prevent hose assemblies from abrasion and cuts while also minimizing kinking of the hose. ParKoil is great for bundling highpressured hose lines.

Use the formula below to determine the length of sleeve required.

Temperature Range: 0°F to +200°F (-17°C to +93°C)

Caution: This material will support combustion.

Hose O.D.xLength to be Protected + Dimension B Dimension A



#### view on web page

| Part<br>Number | Inside Diameter "A" (inch) | Coil<br>Width<br>"B"<br>(inch) |
|----------------|----------------------------|--------------------------------|
| PG-038         | 0.38                       | 0.25                           |
| PG-050         | 0.50                       | 0.40                           |
| PG-062         | 0.62                       | 0.40                           |
| PG-075         | 0.75                       | 0.40                           |
| PG-088         | 0.88                       | 0.40                           |
| PG-100         | 1.00                       | 0.65                           |
| PG-119         | 1.19                       | 0.65                           |
| PG-138         | 1.38                       | 0.65                           |
| PG-188         | 1.88                       | 0.65                           |

See pages D-26 through D-32 for sleeve selection guide.

# **Protective Coils, Sleeves & Guards**

Accessories

## **Spring Guard**

Parker's Spring Guard prolongs the life of hose lines that are exposed to rugged operating conditions by distributing bending radii to avoid kinking in the hose lines and protects hose from abrasion and deep cuts. Guards are constructed of steel wire and plated to resist rust.

Spring Guard is packaged in 10 ft. pieces.

#### **Polyguard Strain Reliever**

The Polyguard Strain Reliever is designed to limit kinking of hose assemblies. These strain relievers are made from flexible PVC making them easy to install and use.

Temperature Range: -40°F to +225°F (-40°C to +107°C)



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| Spring Guard<br>Part<br>Number | Inside<br>Diameter |
|--------------------------------|--------------------|
| SG-060                         | 0.60               |
| SG-072                         | 0.72               |
| SG-084                         | 0.84               |
| SG-097                         | 0.97               |
| SG-113                         | 1.13               |
| SG-122                         | 1.22               |
| SG-131                         | 1.32               |
| SG-155                         | 1.55               |
| SG-182                         | 1.82               |
| SG-209                         | 2.09               |
| SG-232                         | 2.32               |
| SG-292                         | 2.92               |

| Part<br>Number | Length (inch) | Hose O.D. |
|----------------|---------------|-----------|
| 4PG            | 7             | 0.53      |
| 6PG            | 7             | 0.63      |
| 7PG            | 7             | 0.69      |

WARNING: This product can expose you to chemicals including DNP, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

See pages D-26 through D-32 for sleeve selection guide.











# Firesleeve (FS-F)

Parker Firesleeve is a flame resistant sheath that protects the hose from extreme temperature conditions. Firesleeve easily slides over hoses and readily expands over fitting. It can be assembled with Parker FSC or properly sized wormgear clamp.

Construction: Braided fiberglass sleeve and an orange, bonded and seamless silicone rubber cover.

Specifications: Conforms to SAE Aerospace Standard 1072E.

Temperature Range: -65°F to +500°F (-54°C to +260°C) continuous exposure, up to 2000°F (1093°C) for 15-20 minutes and up to 3000°F (1650°C) for 15-30 seconds.

Note: The Firesleeve inside dimension (I.D.) must exceed the outside diameter (O.D.) of the hose and offer an allowance for easy hose insertion. For example, 201-16 has a 1.23 in. O.D. FS-S-24, with an I.D. of 1.46 in., is the suggested Firesleeve.



Firesleeve (FS-F)

FSC Clamp (FSC) (One size fits all hoses up to 2 inch O.D.)



Firesleeve Tape (FSS-Tape-16)

view on web page

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#### **Certifications and Specifications**

• UL 1441 Certified

B

- VW1 Flame Test Certified
- MSHA Certified for use in underground mines
- SAE AS1072E
- DNV-GL Certified to 800°C/30 mins. (ISO15540 & ISO15541)
- BS EN 373 Molten Splash Tested
- BS EN 388 Abrasion Tested
- BS EN ISO 6940 Flame Resistance Tested
- BS EN ISO 6530 Oil Resistance Tested
- BS 2576 Tensile Strength Tested
- DIN 45545 Low Smoke Toxicity
- DIN 54837 / 5510-2 Rail Vehicle Certified for Resistance to Combustibility
- DIN 5659-2 /5510-2 Rail Vehicle Certified for Toxicity
- LNE French Rail Certification STM-S-001: Class F0
- DIN EN45545-2:2013-08 Rail Certification
- Oil and Fluid Resistance: Impervious to most liquids including those with a hydrocarbon base. Remains functional after immersion for 120 hours at 80°F in MIL-L-6082 and Skydrol 500.

#### **FS-F Sizes**

| Part<br>Number | Inside<br>Diameter |  |  |  |  |
|----------------|--------------------|--|--|--|--|
| FS-F-10        | 0.58               |  |  |  |  |
| FS-F-11        | 0.65               |  |  |  |  |
| FS-F-12        | 0.71               |  |  |  |  |
| FS-F-14        | 0.84               |  |  |  |  |
| FS-F-16        | 0.96               |  |  |  |  |
| FS-F-18        | 1.08               |  |  |  |  |
| FS-F-20        | 1.21               |  |  |  |  |
| FS-F-22        | 1.34               |  |  |  |  |
| FS-F-24        | 1.46               |  |  |  |  |
| FS-F-28        | 1.72               |  |  |  |  |
| FS-F-30        | 1.84               |  |  |  |  |
| FS-F-32        | 1.96               |  |  |  |  |
| FS-F-38        | 2.34               |  |  |  |  |
| FS-F-40        | 2.46               |  |  |  |  |
| FS-F-48        | 2.96               |  |  |  |  |
| FS-F-60        | 3.71               |  |  |  |  |

WARNING: This product can expose you to chemicals including respirable glass fibers, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

# **Firesleeve Assembly Instructions**

- 1. Cut Firesleeve to the same length as hose.
- 2. Crimp one end of hose. Slide Firesleeve over uncrimped end of hose.
- 3. Push Firesleeve back from uncrimped end of hose and crimp second fitting on hose. Align the Firesleeve so it covers the crimp shell on both ends.
- 4. Using FSS-Tape-16, tape Firesleeve to fittings making sure to cover all exposed ends of the Firesleeve fiber. Repeat on the other
- 5. Clamp Firesleeve in place using the FSC Clamp.

Note: If assembling with Firesleeve tape, please stretch tape during installation using at least a 50% overlap. For best results, use on clean, dry surfaces free from dirt and oil.

> Updated 11/2020 D-24

## **Protection Shields**

Prevent hose abrasion while extending your hose life. Parker Hose Protection Shields extend hose life by protecting the hose from abrasion that occurs when hose rubs against other hose, metal or concrete. Parker hose shields are resistant to oil, lubricants, gasoline, most solvents and can withstand ambient temperatures from -40° to +300° F. Easily installed and secured by cable ties without disconnecting any hose lines. Use with hose from 1/4" to 2" I.D.

#### **Assembly Instructions**

These flexible protectors simply clamp around the hose and are securely held in place by nylon cable ties which are included. The cable ties are recessed in molded grooves to protect them from abrasion. You don't need to disconnect a line to install a Parker Hose Protector Shield the way you do with a continuous tubular sleeve. Just wait until the installation is up and running to see exactly where contact needs to be prevented.

Parker Hose Protector Shields are available in bulk quantities and in convenient assortments in 4", 6" and 8" sizes. Cable ties are included with all protectors and are also available in bulk.

#### Retail Counter Display Part number: HP-B-13X18

| Kit Includes:                      |  |
|------------------------------------|--|
| 20 - 4" Hose Protectors (HP-B-13)  |  |
| 60 - Tie Wraps (HT-12) for HP-B-13 |  |
| 20 - 6" Hose Protectors (HP-B-15)  |  |
| 60 - Tie Wraps (HT-16) for HP-B-15 |  |
| 20 - 8" Hose Protectors (HP-B-18)  |  |
| 60 - Tie Wraps (HT-22) for HP-B-18 |  |

#### **Display Refills**

| Part Number      | Description                                                 |
|------------------|-------------------------------------------------------------|
| HP-B-13-RFL      | 10 - 4" Hose Protectors (HP-B-13)<br>30 - Tie Wraps (HT-12) |
| LID D 45 DEL     | 10 - 6" Hose Protectors (HP-B-15)                           |
| HP-B-15-RFL      | 30 - Tie Wraps (HT-16)                                      |
| HP-B-18-RFL      | 5 - 8" Hose Protectors (HP-B-18)                            |
| 111 10 10 111 12 | 15 - Tie Wraps (HT-22)                                      |
| HT-12-KIT        | 30 - Tie Wraps (HT-12) for HP-B-13 Hose Protector           |
| HT-16-KIT        | 30 - Tie Wraps (HT-16) for HP-B-15 Hose Protector           |
| HT-22-KIT        | 15 - Tie Wraps (HT-22) for HP-B-18 Hose Protector           |





B

**Retail Counter Display** 

view on web page

**Note:** Parker Hose Protector Shield products are intended to prevent damage. They are not suitable as patches or repairs for lines which are already damaged or worn beyond safe use standards.

D-25 Updated 11/2020

www.mfcp.com

В

# **Protective Coils, Sleeves & Guards Selection Guide**

Accessories

| Hose Part<br>Number | Hose OD<br>(in) | Partek<br>Defense | Partek<br>Sleeve:<br>Black | Partek<br>Sleeve:<br>Yellow | Partek PS<br>Sleeve<br>Black | PolyGuard | ParKoil | Spring<br>Guard | Firesleeve |
|---------------------|-----------------|-------------------|----------------------------|-----------------------------|------------------------------|-----------|---------|-----------------|------------|
| 187-8               | 0.810           | YS-B-22           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 187-10              | 0.93            | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 187-12              | 1.08            | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-20    |
| 187-16              | 1.41            | YS-B-37           | AS-B-27                    | AS-Y-27                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-24    |
| 187-20              | 1.75            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 187-24              | 2.04            | -                 | AS-B-37                    | AS-Y-37                     | PS-B-37                      | HG-350    | PG-188  | SG-209          | FS-F-38    |
| 187-32              | 2.54            | -                 | AS-B-47                    | -                           | PS-B-47                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 187-40              | 2.97            | -                 | AS-B-58                    | -                           | -                            | HG-350    | PG-188  | -               | -          |
| 187-48              | 3.44            | -                 | AS-B-64                    | -                           | -                            | HG-350    | PG-188  | -               | -          |
| 201-4               | 0.52            | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 201-5               | 0.582           | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-11    |
| 201-6               | 0.675           | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 201-8               | 0.766           | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 201-10              | 0.922           | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 201-12              | 1.078           | -                 | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-18    |
| 201-16              | 1.235           | -                 | AS-B-22                    | AS-Y-22                     | PS-B-22                      | HG-125    | PG-138  | SG-131          | FS-F-22    |
| 201-20              | 1.5             | -                 | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 201-24              | 1.75            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 201-32              | 2.22            | -                 | -                          | -                           | PS-B-39                      | HG-350    | PG-188  | SG-232          | FS-F-38    |
| 201-40              | 2.88            | -                 | AS-B-47                    | -                           | PS-B-47                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 201-48              | 3.56            | -                 | AS-B-64                    | -                           | -                            | HG-350    | PG-188  | -               | FS-F-60    |
| 206-4               | 0.52            | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 206-5               | 0.58            | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 206-6               | 0.68            | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 206-8               | 0.77            | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 206-10              | 0.92            | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 206-12              | 1.08            | -                 | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-18    |
| 206-16              | 1.23            | -                 | AS-B-22                    | AS-Y-22                     | PS-B-22                      | HG-125    | PG-138  | SG-131          | FS-F-22    |
| 206-20              | 1.5             | -                 | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 206-24              | 1.75            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 206-32              | 2.22            | -                 | -                          | -                           | PS-B-39                      | HG-350    | PG-188  | SG-232          | FS-F-38    |
| 206-40              | 2.88            | -                 | AS-B-47                    | -                           | PS-B-47                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 213-4               | 0.49            | -                 | AS-B-11                    | AS-Y-11                     | -                            | HG-075    | PG-050  | -               | FS-F-10    |
| 213-5               | 0.55            | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 213-6               | 0.62            | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | -               | FS-F-11    |
| 213-8               | 0.74            | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-075    | PG-075  | SG-084          | FS-F-14    |
| 213-10              | 0.83            | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 213-12              | 0.96            | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 213-16              | 1.21            | -                 | AS-B-22                    | AS-Y-22                     | PS-B-22                      | HG-125    | PG-138  | SG-122          | FS-F-20    |

NOTES: "X" indicates there is no recommended sleeve because the sleeve supports combustion.

Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications. Suggestions indicated are for standard, ToughCover, and SuperTough cover options.

D-26 Updated 8/2021

# **Protective Coils, Sleeves & Guards Selection Guide**

| Hose Part<br>Number | Hose OD<br>(in) | Partek<br>Defense | Partek<br>Sleeve:<br>Black | Partek<br>Sleeve:<br>Yellow | Partek PS<br>Sleeve<br>Black | PolyGuard | ParKoil | Spring<br>Guard | Firesleeve |
|---------------------|-----------------|-------------------|----------------------------|-----------------------------|------------------------------|-----------|---------|-----------------|------------|
| 213-20              | 1.49            | -                 | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 213-24              | 1.73            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 213-32              | 2.14            | -                 | AS-B-37                    | AS-Y-37                     | PS-B-37                      | HG-350    | PG-188  | -               | FS-F-38    |
| 213-40              | 2.88            | -                 | AS-B-47                    | -                           | PS-B-47                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 221FR-5             | 0.582           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-060          | FS-F-11    |
| 221FR-6             | 0.676           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-072          | FS-F-12    |
| 221FR-8             | 0.766           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-084          | FS-F-14    |
| 221FR-10            | 0.922           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-097          | FS-F-16    |
| 221FR-12            | 1.078           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-113          | FS-F-18    |
| 221FR-16            | 1.235           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-131          | FS-F-22    |
| 244-16              | 1.23            | -                 | AS-B-22                    | AS-Y-22                     | PS-B-22                      | HG-125    | PG-138  | SG-131          | FS-F-22    |
| 244-20              | 1.5             | -                 | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 244-24              | 1.75            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 266-4               | 0.52            | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 266-5               | 0.58            | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 266-6               | 0.68            | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 266-8               | 0.77            | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 266-10              | 0.92            | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 266-12              | 1.08            | -                 | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-18    |
| 266-16              | 1.24            | -                 | AS-B-22                    | AS-Y-22                     | PS-B-22                      | HG-125    | PG-138  | SG-131          | FS-F-22    |
| 266-20              | 1.5             | -                 | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 266-24              | 1.75            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 271-4               | 0.25            | -                 | AS-B-11                    | AS-Y-11                     | -                            | HG-075    | PG-038  | -               | FS-F-10    |
| 271-6               | 0.75            | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-075    | PG-075  | SG-084          | FS-F-14    |
| 271-8               | 0.88            | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-088  | SG-097          | FS-F-16    |
| 285-4               | 0.49            | -                 | AS-B-11                    | AS-Y-11                     | -                            | HG-075    | PG-050  | -               | FS-F-10    |
| 285-6               | 0.62            | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | -               | FS-F-11    |
| 285-8               | 0.68            | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 285-10              | 0.83            | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 285-12              | 0.96            | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 293-4               | 0.491           | -                 | AS-B-11                    | AS-Y-11                     | -                            | HG-075    | PG-050  | -               | FS-F-10    |
| 293-6               | 0.617           | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | -               | FS-F-11    |
| 293-8               | 0.737           | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-075    | PG-075  | SG-084          | FS-F-14    |
| 293-10              | 0.831           | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 293-12              | 0.956           | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 293-16              | 1.206           | -                 | AS-B-22                    | AS-Y-22                     | PS-B-22                      | HG-125    | PG-138  | SG-122          | FS-F-20    |
| 302-4               | 0.591           | YS-B-17           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-11    |
| 302-5               | 0.654           | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | -               | FS-F-12    |
| 302-6               | 0.748           | YS-B-19           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-075    | PG-075  | SG-084          | FS-F-14    |

NOTES: "X" indicates there is no recommended sleeve because the sleeve supports combustion.

Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications. Suggestions indicated are for standard, ToughCover, and SuperTough cover options.

Updated 8/2021

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# **Protective Coils, Sleeves & Guards Selection Guide**

| Hose Part<br>Number | Hose OD<br>(in) | Partek<br>Defense | Partek<br>Sleeve:<br>Black | Partek<br>Sleeve:<br>Yellow | Partek PS<br>Sleeve<br>Black | PolyGuard | ParKoil | Spring<br>Guard | Firesleeve |
|---------------------|-----------------|-------------------|----------------------------|-----------------------------|------------------------------|-----------|---------|-----------------|------------|
| 302-8               | 0.876           | YS-B-22           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-097          | FS-F-16    |
| 302-10              | 1.002           | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-119  | -               | FS-F-18    |
| 302-12              | 1.156           | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-122          | FS-F-20    |
| 302-16              | 1.5             | YS-B-37           | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 302-20              | 1.86            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-209          | FS-F-32    |
| 302-24              | 2.14            | -                 | AS-B-37                    | AS-Y-37                     | PS-B-37                      | HG-350    | PG-188  | -               | FS-F-38    |
| 302-32              | 2.64            | -                 | AS-B-47                    | -                           | PS-B-45                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 304-4               | 0.591           | YS-B-17           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-11    |
| 304-6               | 0.748           | YS-B-19           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-075    | PG-075  | SG-084          | FS-F-14    |
| 304-8               | 0.876           | YS-B-22           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-088  | SG-097          | FS-F-16    |
| 304-10              | 1.002           | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-119  | -               | FS-F-18    |
| 304-12              | 1.156           | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-122          | FS-F-20    |
| 304-16              | 1.5             | YS-B-37           | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 304-20              | 1.86            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-209          | FS-F-32    |
| 304-24              | 2.14            | -                 | AS-B-37                    | AS-Y-37                     | PS-B-37                      | HG-350    | PG-188  | -               | FS-F-38    |
| 304-32              | 2.64            | -                 | AS-B-47                    | -                           | PS-B-45                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 387-4               | 0.526           | YS-B-17           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 387-6               | 0.685           | YS-B-19           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 387-8               | 0.815           | YS-B-22           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 387-10              | 0.939           | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 387-12              | 1.093           | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-20    |
| 387-16              | 1.394           | YS-B-37           | AS-B-27                    | AS-Y-27                     | -                            | HG-150    | PG-188  | SG-155          | FS-F-24    |
| 387-20              | 1.82            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 387-24              | 2.08            | -                 | AS-B-37                    | AS-Y-37                     | PS-B-37                      | HG-350    | PG-188  | SG-209          | FS-F-38    |
| 387-32              | 2.61            | -                 | AS-B-47                    | -                           | PS-B-45                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 422-4               | 0.528           | YS-B-17           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 422-5               | 0.591           | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-11    |
| 422-6               | 0.685           | YS-B-19           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 422-8               | 0.81            | YS-B-22           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 422-10              | 0.939           | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 422-12              | 1.095           | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-20    |
| 422-16              | 1.41            | YS-B-37           | AS-B-27                    | AS-Y-27                     | -                            | HG-150    | PG-188  | SG-155          | FS-F-24    |
| 422-20              | 1.79            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 422-24              | 2               | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-209          | FS-F-38    |
| 422-32              | 2.54            | -                 | AS-B-47                    | -                           | PS-B-39                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 424-16              | 1.41            | YS-B-37           | AS-B-27                    | AS-Y-27                     | -                            | HG-150    | PG-188  | SG-155          | FS-F-24    |
| 424-20              | 1.73            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 424-24              | 2               | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-209          | FS-F-38    |
| 424-32              | 2.5             | -                 | AS-B-47                    | -                           | PS-B-39                      | HG-350    | PG-188  | SG-292          | FS-F-48    |

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Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications. Suggestions indicated are for standard, ToughCover, and SuperTough cover options.

**D-28** Updated 8/2021

# **Protective Coils, Sleeves & Guards Selection Guide**

Accessories

| Hose Part<br>Number | Hose OD<br>(in) | Partek<br>Defense | Partek<br>Sleeve:<br>Black | Partek<br>Sleeve:<br>Yellow | Partek PS<br>Sleeve<br>Black | PolyGuard | ParKoil | Spring<br>Guard | Firesleeve |
|---------------------|-----------------|-------------------|----------------------------|-----------------------------|------------------------------|-----------|---------|-----------------|------------|
| 426-4               | 0.528           | YS-B-17           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 426-6               | 0.68            | YS-B-19           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 426-8               | 0.81            | YS-B-22           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 426-10              | 0.94            | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 426-12              | 1.09            | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-20    |
| 426-16              | 1.4             | YS-B-37           | AS-B-27                    | AS-Y-27                     | -                            | HG-150    | PG-188  | SG-155          | FS-F-24    |
| 426-20              | 1.79            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 426-24              | 2               | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-209          | FS-F-38    |
| 426-32              | 2.54            | -                 | AS-B-47                    | -                           | PS-B-39                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 436-6               | 0.685           | YS-B-19           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 436-8               | 0.815           | YS-B-22           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 436-10              | 0.939           | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 436-12              | 1.095           | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-20    |
| 436-16              | 1.41            | YS-B-37           | AS-B-27                    | AS-Y-27                     | -                            | HG-150    | PG-188  | SG-155          | FS-F-24    |
| 471-4               | 0.516           | YS-B-17           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 471-6               | 0.678           | YS-B-19           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 471-8               | 0.804           | YS-B-22           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 471-10              | 0.939           | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 471-12              | 1.093           | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-20    |
| 471-16              | 1.394           | YS-B-37           | AS-B-27                    | AS-Y-27                     | -                            | HG-150    | PG-188  | SG-155          | FS-F-24    |
| 472-20              | 1.79            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 472-24              | 2.01            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-350    | PG-188  | SG-209          | FS-F-38    |
| 472-32              | 2.54            | -                 | AS-B-47                    | -                           | PS-B-39                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 472LT-4             | 0.516           | YS-B-17           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 472LT-6             | 0.678           | YS-B-19           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 472LT-8             | 0.804           | YS-B-22           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 472LT-10            | 0.939           | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 472LT-12            | 1.093           | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-20    |
| 472LT-16            | 1.394           | YS-B-37           | AS-B-27                    | AS-Y-27                     | -                            | HG-150    | PG-188  | SG-155          | FS-F-24    |
| 482-4               | 0.528           | YS-B-17           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 482-6               | 0.685           | YS-B-19           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 482-8               | 0.815           | YS-B-22           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 482-10              | 0.939           | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 482-12              | 1.095           | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-20    |
| 482-16              | 1.41            | YS-B-37           | AS-B-27                    | AS-Y-27                     | -                            | HG-150    | PG-188  | SG-155          | FS-F-24    |
| 487-4               | 0.516           | YS-B-17           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |
| 487-6               | 0.678           | YS-B-19           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | SG-072          | FS-F-12    |
| 487-8               | 0.804           | YS-B-22           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 487-10              | 0.939           | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |

**NOTES:** "X" indicates there is no recommended sleeve because the sleeve supports combustion. Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications. Suggestions indicated are for standard, ToughCover, and SuperTough cover options.

Updated 8/2021

В

В

# **Protective Coils, Sleeves & Guards Selection Guide**

| Hose Part<br>Number | Hose OD<br>(in) | Partek<br>Defense | Partek<br>Sleeve:<br>Black | Partek<br>Sleeve:<br>Yellow | Partek PS<br>Sleeve<br>Black | PolyGuard | ParKoil | Spring<br>Guard | Firesleeve |
|---------------------|-----------------|-------------------|----------------------------|-----------------------------|------------------------------|-----------|---------|-----------------|------------|
| 487-12              | 1.093           | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-119  | SG-113          | FS-F-20    |
| 487-16              | 1.49            | YS-B-37           | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 487-20              | 1.82            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 487-24              | 2.03            | -                 | AS-B-37                    | AS-Y-37                     | PS-B-37                      | HG-350    | PG-188  | SG-209          | FS-F-38    |
| 487-32              | 2.65            | -                 | AS-B-47                    | -                           | PS-B-45                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 611HT-4             | 0.5             | -                 | AS-B-11                    | AS-Y-11                     | -                            | HG-075    | PG-050  | -               | FS-F-10    |
| 611HT-6             | 0.625           | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | -               | FS-F-11    |
| 611HT-8             | 0.781           | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 611HT-10            | 0.907           | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 611HT-12            | 1.032           | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-119  | -               | FS-F-18    |
| 722-6               | 0.78            | YS-B-19           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 722-8               | 0.89            | YS-B-22           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 722-10              | 1.04            | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-119  | -               | FS-F-18    |
| 722-12              | 1.21            | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-138  | SG-122          | FS-F-20    |
| 722-16              | 1.5             | YS-B-37           | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 722-20              | 1.84            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-209          | FS-F-30    |
| 722-24              | 2.07            | -                 | AS-B-37                    | AS-Y-37                     | PS-B-37                      | HG-350    | PG-188  | SG-209          | FS-F-38    |
| 722-32              | 2.59            | -                 | AS-B-47                    | -                           | PS-B-39                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 722LT-6             | 0.782           | YS-B-19           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 722LT-8             | 0.892           | YS-B-22           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 722LT-10            | 1.04            | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-119  | -               | FS-F-18    |
| 722LT-12            | 1.207           | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-138  | SG-122          | FS-F-20    |
| 722LT-16            | 1.49            | YS-B-37           | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 722LT-20            | 1.82            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 722LT-24            | 2.06            | -                 | AS-B-37                    | AS-Y-37                     | PS-B-37                      | HG-350    | PG-188  | SG-209          | FS-F-38    |
| 774-12              | 1.207           | YS-B-33           | AS-B-19                    | AS-Y-19                     | -                            | HG-125    | PG-138  | SG-122          | FS-F-20    |
| 774-16              | 1.5             | YS-B-37           | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 774-20              | 1.84            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-209          | FS-F-30    |
| 774-24              | 2.07            | -                 | AS-B-37                    | AS-Y-37                     | PS-B-37                      | HG-350    | PG-188  | SG-209          | FS-F-38    |
| 774-32              | 2.59            | -                 | AS-B-47                    | -                           | PS-B-39                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 777-6               | 0.66            | YS-B-19           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | -               | FS-F-12    |
| 777-8               | 0.81            | YS-B-19           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-100    | PG-088  | SG-097          | FS-F-16    |
| 777-10              | 0.93            | YS-B-27           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-113          | FS-F-18    |
| 777-12              | 1.12            | YS-B-33           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-100    | PG-138  | SG-122          | FS-F-20    |
| 777TC-12            | 1.12            | YS-B-33           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-100    | PG-138  | SG-122          | FS-F-20    |
| 777ST-12            | 1.12            | YS-B-33           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-100    | PG-138  | SG-122          | FS-F-20    |
| 777-16              | 1.38            | YS-B-37           | AS-B-17                    | AS -Y-17                    | PS-B-17                      | HG-150    | PG -188 | SG-155          | FS-F-24    |
| 777TC-16            | 1.38            | YS-B-37           | AS-B-17                    | AS -Y-17                    | PS-B-17                      | HG-150    | PG -188 | SG-155          | FS-F-24    |
| 777ST-16            | 1.38            | YS-B-37           | AS-B-17                    | AS -Y-17                    | PS-B-17                      | HG-150    | PG -188 | SG-155          | FS-F-24    |
| 787-4               | 0.516           | YS-B-17           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-10    |

NOTES: "X" indicates there is no recommended sleeve because the sleeve supports combustion.

Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications. Suggestions indicated are for standard, ToughCover, and SuperTough cover options

D-30 Updated 6/2022

# **Protective Coils, Sleeves & Guards Selection Guide**

| Hose Part | Hose OD | Partek  | Partek           | Partek            | Partek PS       |           |         | Spring |            |
|-----------|---------|---------|------------------|-------------------|-----------------|-----------|---------|--------|------------|
| Number    | (in)    | Defense | Sleeve:<br>Black | Sleeve:<br>Yellow | Sleeve<br>Black | PolyGuard | ParKoil | Guard  | Firesleeve |
| 787-6     | 0.68    | YS-B-19 | AS-B-13          | AS-Y-13           | PS-B-13         | HG-075    | PG-075  | SG-072 | FS-F-12    |
| 787-8     | 0.83    | YS-B-22 | AS-B-15          | AS-Y-15           | PS-B-15         | HG-125    | PG-088  | SG-084 | FS-F-14    |
| 787-10    | 0.94    | YS-B-27 | AS-B-17          | AS-Y-17           | PS-B-17         | HG-125    | PG-100  | SG-097 | FS-F-16    |
| 787-12    | 1.1     | YS-B-33 | AS-B-19          | AS-Y-19           | -               | HG-125    | PG-119  | SG-113 | FS-F-20    |
| 787-16    | 1.4     | YS-B-37 | AS-B-27          | AS-Y-27           | -               | HG-150    | PG-188  | SG-155 | FS-F-24    |
| 787-20    | 1.77    | -       | AS-B-35          | AS-Y-35           | PS-B-35         | HG-200    | PG-188  | SG-182 | FS-F-30    |
| 787-24    | 2.08    | -       | AS-B-37          | AS-Y-37           | PS-B-37         | HG-350    | PG-188  | SG-209 | FS-F-38    |
| 787-32    | 2.66    | -       | AS-B-47          | -                 | PS-B-45         | HG-350    | PG-188  | SG-292 | FS-F-48    |
| 792LT-16  | 1.52    | YS-B-37 | AS-B-33          | AS-Y-33           | PS-B-33         | HG-200    | PG-188  | SG-155 | FS-F-28    |
| 792LT-20  | 1.97    | -       | AS-B-35          | AS-Y-35           | PS-B-35         | HG-200    | PG-188  | SG-209 | FS-F-38    |
| 792LT-24  | 2.22    | -       | -                | -                 | PS-B-39         | HG-350    | PG-188  | SG-232 | FS-F-38    |
| 797-4     | 0.516   | YS-B-17 | AS-B-13          | AS-Y-13           | PS-B-13         | HG-075    | PG-062  | SG-060 | FS-F-10    |
| 797-6     | 0.66    | YS-B-19 | AS-B-13          | AS-Y-13           | PS-B-13         | HG-075    | PG-075  | -      | FS-F-12    |
| 797-8     | 0.83    | YS-B-22 | AS-B-15          | AS-Y-15           | PS-B-15         | HG-125    | PG-088  | SG-084 | FS-F-14    |
| 797-10    | 0.94    | YS-B-27 | AS-B-17          | AS-Y-17           | PS-B-17         | HG-125    | PG-100  | SG-097 | FS-F-16    |
| 797-12    | 1.1     | YS-B-33 | AS-B-19          | AS-Y-19           | -               | HG-125    | PG-119  | SG-113 | FS-F-20    |
| 797-16    | 1.4     | YS-B-37 | AS-B-27          | AS-Y-27           | -               | HG-150    | PG-188  | SG-155 | FS-F-24    |
| 797-20    | 1.77    | -       | AS-B-35          | AS-Y-35           | PS-B-35         | HG-200    | PG-188  | SG-182 | FS-F-30    |
| 797-24    | 2.08    | -       | AS-B-37          | AS-Y-37           | PS-B-37         | HG-350    | PG-188  | SG-209 | FS-F-38    |
| 797-32    | 2.66    | -       | AS-B-47          | -                 | PS-B-45         | HG-350    | PG-188  | SG-292 | FS-F-48    |
| 801-4     | 0.5     | -       | AS-B-13          | AS-Y-13           | PS-B-13         | HG-075    | PG-050  | -      | FS-F-10    |
| 801-6     | 0.625   | -       | AS-B-13          | AS-Y-13           | PS-B-13         | HG-075    | PG-075  | -      | FS-F-11    |
| 801-8     | 0.781   | -       | AS-B-15          | AS-Y-15           | PS-B-15         | HG-125    | PG-088  | SG-084 | FS-F-14    |
| 801-10    | 0.907   | -       | AS-B-17          | AS-Y-17           | PS-B-17         | HG-125    | PG-100  | SG-097 | FS-F-16    |
| 801-12    | 1.032   | -       | AS-B-17          | AS-Y-17           | PS-B-17         | HG-125    | PG-119  | -      | FS-F-18    |
| 801-16    | 1.281   | -       | AS-B-27          | AS-Y-27           | -               | HG-150    | PG-138  | SG-131 | FS-F-22    |
| 804-4     | 0.5     | -       | AS-B-11          | AS-Y-11           | -               | HG-075    | PG-050  | -      | FS-F-10    |
| 804-6     | 0.625   | -       | AS-B-13          | AS-Y-13           | PS-B-13         | HG-075    | PG-075  | -      | FS-F-11    |
| 804-8     | 0.781   | -       | AS-B-15          | AS-Y-15           | PS-B-15         | HG-125    | PG-088  | SG-084 | FS-F-14    |
| 804-10    | 0.907   | -       | AS-B-17          | AS-Y-17           | PS-B-17         | HG-125    | PG-100  | SG-097 | FS-F-16    |
| 811-12    | 1.18    | -       | AS-B-27          | AS-Y-27           | -               | HG-125    | PG-119  | SG-122 | FS-F-20    |
| 811-16    | 1.5     | -       | AS-B-33          | AS-Y-33           | PS-B-33         | HG-150    | PG-188  | SG-155 | FS-F-28    |
| 811-20    | 1.77    | -       | AS-B-35          | AS-Y-35           | PS-B-35         | HG-200    | PG-188  | SG-182 | FS-F-30    |
| 811-24    | 2.05    | -       | AS-B-37          | AS-Y-37           | PS-B-37         | HG-350    | PG-188  | SG-209 | FS-F-38    |
| 811-32    | 2.5     | -       | AS-B-47          | -                 | PS-B-39         | HG-350    | PG-188  | SG-292 | FS-F-48    |
| 811-40    | 3       | -       | AS-B-58          | -                 | -               | HG-350    | PG-188  | -      | FS-F-60    |
| 811HT-12  | 1.18    | -       | AS-B-19          | AS-Y-19           | -               | HG-125    | PG-119  | SG-122 | FS-F-20    |
| 811HT-16  | 1.5     | -       | AS-B-33          | AS-Y-33           | PS-B-33         | HG-150    | PG-188  | SG-155 | FS-F-28    |
| 811HT-20  | 1.77    | -       | AS-B-35          | AS-Y-35           | PS-B-35         | HG-200    | PG-188  | SG-182 | FS-F-30    |
| 811HT-24  | 2.05    | -       | AS-B-37          | AS-Y-37           | PS-B-37         | HG-350    | PG-188  | SG-209 | FS-F-38    |

NOTES: "X" indicates there is no recommended sleeve because the sleeve supports combustion.

Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications. Suggestions indicated are for standard, ToughCover, and SuperTough cover options.

Updated 6/2022

В

В

# **Protective Coils, Sleeves & Guards Selection Guide**

| Hose Part<br>Number | Hose OD<br>(in) | Partek<br>Defense | Partek<br>Sleeve:<br>Black | Partek<br>Sleeve:<br>Yellow | Partek PS<br>Sleeve<br>Black | PolyGuard | ParKoil | Spring<br>Guard | Firesleeve |
|---------------------|-----------------|-------------------|----------------------------|-----------------------------|------------------------------|-----------|---------|-----------------|------------|
| 811HT-32            | 2.5             | -                 | AS-B-47                    | -                           | PS-B-39                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 811HT-40            | 3               | -                 | AS-B-58                    | -                           | -                            | HG-350    | PG-188  | -               | FS-F-60    |
| 821-4               | 0.5             | -                 | AS-B-11                    | AS-Y-11                     | -                            | HG-075    | PG-050  | -               | FS-F-10    |
| 821-6               | 0.625           | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | -               | FS-F-11    |
| 821-8               | 0.781           | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 821-10              | 0.907           | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 821-12              | 1.03            | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-119  | -               | FS-F-18    |
| 821FR-4             | 0.5             | Х                 | Х                          | Х                           | Х                            | Х         | Х       | -               | FS-F-10    |
| 821FR-6             | 0.625           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | -               | FS-F-11    |
| 821FR-8             | 0.781           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-084          | FS-F-14    |
| 821FR-12            | 1.032           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | -               | FS-F-18    |
| 836-4               | 0.5             | -                 | AS-B-11                    | AS-Y-11                     | -                            | HG-075    | PG-050  | -               | FS-F-10    |
| 836-6               | 0.625           | -                 | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-075  | -               | FS-F-11    |
| 836-8               | 0.781           | -                 | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-125    | PG-088  | SG-084          | FS-F-14    |
| 836-10              | 0.907           | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-16    |
| 836-12              | 1.032           | -                 | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-119  | -               | FS-F-18    |
| 881-12              | 1.2             | -                 | AS-B-27                    | AS-Y-27                     | -                            | HG-125    | PG-138  | SG-122          | FS-F-20    |
| 881-16              | 1.49            | -                 | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-150    | PG-188  | SG-155          | FS-F-28    |
| 881-20              | 1.78            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-182          | FS-F-30    |
| 881-24              | 2.06            | -                 | AS-B-37                    | AS-Y-37                     | PS-B-37                      | HG-350    | PG-188  | SG-209          | FS-F-38    |
| 881-32              | 2.48            | -                 | AS-B-47                    | -                           | PS-B-39                      | HG-350    | PG-188  | SG-292          | FS-F-48    |
| 881-40              | 3               | -                 | AS-B-58                    | -                           | -                            | HG-350    | PG-188  | -               | FS-F-60    |
| F42-8               | 0.969           | YS-B-22           | AS-B-17                    | AS-Y-17                     | PS-B-17                      | HG-125    | PG-100  | SG-097          | FS-F-18    |
| F42-12              | 1.264           | YS-B-33           | AS-B-27                    | AS-Y-27                     | -                            | HG-150    | PG-138  | SG-131          | FS-F-22    |
| F42-16              | 1.52            | YS-B-37           | AS-B-33                    | AS-Y-33                     | PS-B-33                      | HG-200    | PG-188  | SG-155          | FS-F-28    |
| F42-20              | 1.97            | -                 | AS-B-35                    | AS-Y-35                     | PS-B-35                      | HG-200    | PG-188  | SG-209          | FS-F-38    |
| JK-4                | 0.59            | YS-B-17           | AS-B-13                    | AS-Y-13                     | PS-B-13                      | HG-075    | PG-062  | SG-060          | FS-F-11    |
| JK-6                | 0.75            | YS-B-19           | AS-B-15                    | AS-Y-15                     | PS-B-15                      | HG-075    | PG-075  | SG-084          | FS-F-14    |
| SS23CG-6            | 0.676           | Х                 | X                          | Х                           | Х                            | X         | Х       | SG-072          | FS-F-12    |
| SS23CG-8            | 0.766           | Х                 | Х                          | X                           | X                            | X         | Х       | SG-084          | FS-F-14    |
| SS23CG-10           | 0.922           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-097          | FS-F-16    |
| SS23CG-12           | 1.078           | Х                 | Х                          | Х                           | Х                            | X         | Х       | SG-113          | FS-F-18    |
| SS25UL-4            | 0.52            | Х                 | Х                          | Х                           | Х                            | X         | X       | SG-060          | FS-F-10    |
| SS25UL-5            | 0.582           | Х                 | Х                          | Х                           | Х                            | Х         | X       | SG-060          | FS-F-11    |
| SS25UL-6            | 0.676           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-072          | FS-F-12    |
| SS25UL-8            | 0.766           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-084          | FS-F-14    |
| SS25UL-10           | 0.922           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-097          | FS-F-16    |
| SS25UL-12           | 1.078           | Х                 | Х                          | Х                           | Х                            | Х         | Х       | SG-113          | FS-F-18    |

NOTES: "X" indicates there is no recommended sleeve because the sleeve supports combustion.

Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications. Suggestions indicated are for standard, ToughCover, and SuperTough cover options.

D-32 Updated 6/2022

# **Hose Whip Restraint**

The Hose Whip Restraint System is designed to prevent whipping of a pressurized hose in the event of the hose separating from its fitting.

This system provides an additional level of safety and helps prevent damage to nearby equipment or injury to operators near the failed hose by limiting the whip or travel of the pressurized hose after it breaks free from its fitting.

Serious damage or injury can occur from whipping hoses, especially at higher pressures. The system is comprised of two parts – a hose collar and a cable assembly.

The hose collar (WRCxxxx) is selected based on the outside diameter of the hose, and the cable assembly is selected based on the type of hose connection.

Two types of cable assemblies are available – one for flange-type connections (WRFxxx), and the other for port adapters (WRAxxx).

The Hose Whip Restraint is not to be used in place of proper hose crimping procedures as outlined in Hose Products Division Catalog 4400. Exceeding the maximum operating pressure of the hose jeopardizes the proper operation of the Hose Whip Restraint System.







**Step 1:** Select a WRC part number based on the outside diameter of your hose.

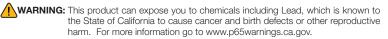
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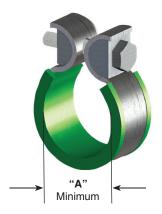
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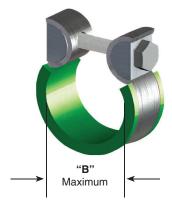
#### **Hose Collars**

| Part<br>Number |      | A    | В    | 1    | Hose Collar<br>Bolt Size* |  |  |  |
|----------------|------|------|------|------|---------------------------|--|--|--|
|                | inch | mm   | inch | mm   |                           |  |  |  |
| WRC1212        | 0.47 | 12,0 | 0.49 | 12,5 | M6                        |  |  |  |
| WRC1313        | 0.51 | 13,0 | 0.53 | 13,5 | M6                        |  |  |  |
| WRC1415        | 0.55 | 14,0 | 0.59 | 15,0 | M6                        |  |  |  |
| WRC1718        | 0.67 | 17,0 | 0.71 | 18,0 | M6                        |  |  |  |
| WRC1819        | 0.71 | 18,0 | 0.75 | 19,0 | M6                        |  |  |  |
| WRC2021        | 0.79 | 20,0 | 0.83 | 21,0 | M6                        |  |  |  |
| WRC2223        | 0.87 | 22,0 | 0.91 | 23,0 | M6                        |  |  |  |
| WRC2425        | 0.95 | 24,0 | 0.98 | 25,0 | M6                        |  |  |  |
| WRC2526        | 0.98 | 25,0 | 1.02 | 26,0 | M6                        |  |  |  |
| WRC2728        | 1.06 | 27,0 | 1.10 | 28,0 | M6                        |  |  |  |
| WRC2829        | 1.10 | 28,0 | 1.14 | 29,0 | M6                        |  |  |  |
| WRC3031        | 1.18 | 30,0 | 1.22 | 31,0 | M6                        |  |  |  |
| WRC3435        | 1.34 | 34,0 | 1.38 | 35,0 | M6                        |  |  |  |
| WRC3637        | 1.42 | 36,0 | 1.46 | 37,0 | M6                        |  |  |  |
| WRC3839        | 1.50 | 38,0 | 1.54 | 39,0 | M6                        |  |  |  |
| WRC4243        | 1.65 | 42,0 | 1.69 | 43,0 | M6                        |  |  |  |
| WRC4445        | 1.73 | 44,0 | 1.77 | 45,0 | M6                        |  |  |  |
| WRC4547        | 1.77 | 45,0 | 1.85 | 47,0 | M8                        |  |  |  |
| WRC4850        | 1.89 | 48,0 | 1.97 | 50,0 | M8                        |  |  |  |
| WRC5153        | 2.01 | 51,0 | 2.09 | 53,0 | M8                        |  |  |  |
| WRC5456        | 2.13 | 54,0 | 2.21 | 56,0 | M8                        |  |  |  |
| WRC6365        | 2.48 | 63,0 | 2.56 | 65,0 | M8                        |  |  |  |
| WRC6971        | 2.72 | 69,0 | 2.78 | 71,0 | M8                        |  |  |  |

<sup>\*</sup>Bolt size on collar must match the WRA or WRF bolt size.





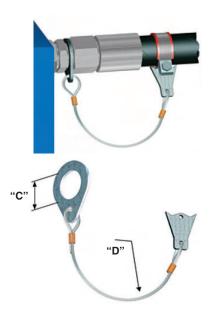


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Step 2: Select either a WRA or a WRF cable assembly based on your connection type.

#### Cable assembly for hose fittings or adapters

| Part<br>Number | Maximum<br>Working<br>Pressure |      | e I.D. | _     | Length<br>D | Grip Plate<br>Bolt Size* |
|----------------|--------------------------------|------|--------|-------|-------------|--------------------------|
|                | psi                            | inch | mm     | inch  | mm          |                          |
| WRA115         | 6525                           | 0.45 | 11,5   | 11.81 | 300         | M6                       |
| WRA132         | 6525                           | 0.52 | 13,2   | 11.81 | 300         | M6                       |
| WRA145         | 6525                           | 0.57 | 14,5   | 11.81 | 300         | M6                       |
| WRA148         | 6525                           | 0.58 | 14,8   | 11.81 | 300         | M6                       |
| WRA170         | 6453                           | 0.67 | 17,0   | 11.81 | 300         | M6                       |
| WRA185         | 6090                           | 0.73 | 18,5   | 11.81 | 300         | M6                       |
| WRA195         | 6090                           | 0.77 | 19,5   | 11.81 | 300         | M6                       |
| WRA205         | 6090                           | 0.81 | 20,5   | 11.81 | 300         | M6                       |
| WRA225         | 6090                           | 0.89 | 22,5   | 11.81 | 300         | M6                       |
| WRA228         | 6090                           | 0.90 | 22,8   | 11.81 | 300         | M6                       |
| WRA245         | 6090                           | 0.96 | 24,5   | 11.81 | 300         | M6                       |
| WRA265         | 6090                           | 1.04 | 26,5   | 11.81 | 300         | M6                       |
| WRA275         | 6090                           | 1.08 | 27,5   | 11.81 | 300         | M6                       |
| WRA305         | 6090                           | 1.20 | 30,5   | 11.81 | 300         | M6                       |
| WRA340S        | 6090                           | 1.34 | 34,0   | 17.72 | 450         | M6                       |
| WRA340JIC      | 6090                           | 1.34 | 34,0   | 17.72 | 450         | M8                       |
| WRA365         | 6090                           | 1.44 | 36,5   | 17.72 | 450         | M8                       |
| WRA415S        | 6090                           | 1.63 | 41,5   | 17.72 | 450         | M6                       |
| WRA415         | 6090                           | 1.63 | 41,5   | 17.72 | 450         | M8                       |
| WRA425         | 6090                           | 1.67 | 42,5   | 17.72 | 450         | M8                       |
| WRA455         | 6090                           | 1.79 | 45,5   | 17.72 | 450         | M8                       |
| WRA480S        | 6090                           | 1.89 | 48,0   | 17.72 | 450         | M6                       |
| WRA480         | 6090                           | 1.89 | 48,0   | 17.72 | 450         | M8                       |
| WRA490         | 6090                           | 1.93 | 49,0   | 17.72 | 450         | M8                       |
| WRA525         | 5583                           | 2.07 | 52,5   | 17.72 | 450         | M8                       |
| WRA600         | 5075                           | 2.36 | 60,0   | 17.72 | 450         | M8                       |
| WRA640         | 5075                           | 2.52 | 64,0   | 17.72 | 450         | M8                       |





B

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

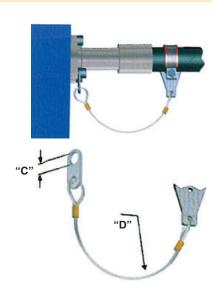
# Cable assembly for Code 61/Code 62 flanges

| Part<br>Number | Maximum<br>Working<br>Pressure | Hole<br>( | e I.D. | _     | Length<br>O | Grip Plate<br>Bolt Size* |
|----------------|--------------------------------|-----------|--------|-------|-------------|--------------------------|
|                | psi                            | inch      | mm     | inch  | mm          |                          |
| WRF085         | 6018                           | 0.33      | 8,5    | 11.81 | 300         | M6                       |
| WRF105         | 6090                           | 0.41      | 10,5   | 17.72 | 450         | M8                       |
| WRF125         | 6090                           | 0.49      | 12,5   | 17.72 | 450         | M8                       |
| WRF145         | 6090                           | 0.57      | 14,5   | 17.72 | 450         | M8                       |
| WRF165         | 6090                           | 0.65      | 16,5   | 17.72 | 450         | M8                       |
| WRF205         | 5075                           | 0.81      | 20,5   | 17.72 | 450         | M8                       |

\*Bolt size on collar must match the WTA or WRF bolt size.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

The Hose Whip Restraint System has been tested to the operating pressures of the hoses listed in Hose Products Division Catalog 4400. The Hose Whip Restraint is not designed to increase the hose rated pressure or to add incremental pressure rating to the hose / fitting combination. Your hose / fitting / whip restraint system is rated to the pressure of the lowest rated component of the system.



Updated 11/2020

# **Hose Whip Restraint Selection Guide Collar**

| Part<br>Number     | Ope  | in.<br>ning<br>A | Ope  | ax.<br>ning<br>3 | 201,<br>221FR,<br>206,<br>225,<br>244,<br>266 | 213,<br>285,<br>293 | 302,<br>304,<br>421WC | 187/TC/ST<br>422, 424, 436,<br>387/TC/ST<br>471TC/ST,<br>482TC/ST,<br>472TC/ST<br>487/TC/ST | 601 | 722/TC/ST,<br>774 | F42 | 801,<br>804,<br>821,<br>821FR,<br>836 | 811,<br>881,<br>811HT | 787/TC/ST<br>797/TC/ST |
|--------------------|------|------------------|------|------------------|-----------------------------------------------|---------------------|-----------------------|---------------------------------------------------------------------------------------------|-----|-------------------|-----|---------------------------------------|-----------------------|------------------------|
| WRC1212            | 0.47 | 12,0             | 0.49 | 12,5             |                                               | -4                  |                       |                                                                                             | -3  |                   |     | -4                                    |                       |                        |
| WRC1313            | 0.51 | 13,0             | 0.53 | 13,5             | -4                                            |                     | -3                    | -4                                                                                          |     |                   |     |                                       |                       | -4                     |
| WRC1415            | 0.55 | 14,0             | 0.59 | 15,0             | -5                                            | -5, -6              | -4                    | -5                                                                                          | -4  |                   |     | -5, -6                                |                       |                        |
| WRC1718            | 0.67 | 17,0             | 0.71 | 18,0             | -6                                            |                     |                       | -6                                                                                          | -5  |                   |     |                                       |                       | -6                     |
| WRC1819            | 0.71 | 18,0             | 0.75 | 19,0             | -8                                            | -8                  | -6                    |                                                                                             | -6  |                   |     | -8                                    |                       |                        |
| WRC2021            | 0.79 | 20,0             | 0.83 | 21,0             |                                               |                     |                       | -8                                                                                          |     | -6                |     |                                       |                       | -8                     |
| WRC2223            | 0.87 | 22,0             | 0.91 | 23,0             | -10                                           | -10                 | -8                    |                                                                                             | -8  | -8                | _   | -10                                   |                       | -10                    |
| WRC2425            | 0.95 | 24,0             | 0.98 | 25,0             |                                               | -12                 |                       | -10                                                                                         |     |                   | -8  |                                       |                       |                        |
| WRC2526            | 0.98 | 25,0             | 1.02 | 26,0             | 40                                            |                     | -10                   | 40                                                                                          | -10 | 40                |     | -12                                   |                       | 40                     |
| WRC2728            | 1.06 | 27,0             | 1.10 | 28,0             | -12                                           |                     | 40                    | -12                                                                                         |     | -10               |     |                                       |                       | -12                    |
| WRC2829            | 1.10 | 28,0             | 1.14 | 29,0             | 10                                            | 10                  | -12                   |                                                                                             | 10  | 10                | 40  | 10                                    | 10                    |                        |
| WRC3031<br>WRC3435 | 1.18 | 30,0             | 1.22 | 31,0             | -16                                           | -16                 |                       | -16                                                                                         | -12 | -12               | -12 | -16                                   | -12                   | -16                    |
| WRC3435<br>WRC3637 | 1.42 | 34,0<br>36,0     | 1.46 | 35,0<br>37,0     |                                               | -20                 |                       | -10                                                                                         | -16 | -16               |     |                                       | -16                   | -10                    |
| WRC3839            | 1.50 | 38,0             | 1.54 | 39,0             | -20                                           | -20                 | -16                   |                                                                                             | -10 | -10               | -16 |                                       | -10                   |                        |
| WRC4243            | 1.65 | 42.0             | 1.69 | 43.0             | -20                                           |                     | -10                   |                                                                                             |     |                   | -10 |                                       |                       |                        |
| WRC4445            | 1.73 | 44.0             | 1.77 | 45.0             | -24                                           | -24                 |                       |                                                                                             | -20 |                   |     |                                       | -20                   |                        |
| WRC4547            | 1.77 | 45.0             | 1.85 | 47.0             |                                               |                     | -20                   | -20                                                                                         | 0   | -20               |     |                                       |                       | -20                    |
| WRC4850            | 1.89 | 48.0             | 1.97 | 50.0             |                                               |                     |                       | -24                                                                                         |     |                   | -20 |                                       |                       |                        |
| WRC5153            | 2.01 | 51,0             | 2.09 | 53,0             |                                               |                     |                       |                                                                                             |     | -24               |     |                                       | -24                   | -24                    |
| WRC5456            | 2.13 | 54,0             | 2.21 | 56,0             | -32                                           | -32                 | -24                   |                                                                                             |     |                   |     |                                       |                       |                        |
| WRC6365            | 2.48 | 63,0             | 2.56 | 65,0             |                                               |                     |                       | -32                                                                                         |     | -32               |     |                                       | -32                   |                        |
| WRC6971            | 2.72 | 69,0             | 2.80 | 71,0             |                                               |                     |                       |                                                                                             |     |                   |     |                                       |                       | -32                    |

**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

A

В

C

D



# **Hose Whip Restraint Selection Guide Adapter**

| Part<br>Number   | inch         | M mm         | JIC 37° Fittings<br>103XX, 106XX, 137XX, 1L7XX,<br>139XX, 1L9XX, 141XX, 14VXX<br>Port End | Seal Lok (O-Ring Face Seal) 1JOXX, 1JBXX, 1JCXX, 1JSXX, 1J6XX, 1J7XX, 1J9XX, 1J5XX, 1J1XX Port End | NPTF / NPSM<br>101XX, 113XX, 11LXX,<br>102XX, 1S2XX<br>Port End | BSPP / BSP<br>1D9XX, 192XX, 1B1XX,<br>1B2XX, 1B4XX, 1B5XX,<br>1FUXX, 1UTXX, 1GUXX<br>Port End |
|------------------|--------------|--------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| WRA115           | 0.45         | 11,5         | -4                                                                                        |                                                                                                    |                                                                 |                                                                                               |
| WRA132           | 0.52         | 13,2         | -5                                                                                        |                                                                                                    |                                                                 |                                                                                               |
| WRA145           | 0.52         | 14,5         | -5                                                                                        | -4                                                                                                 | -4                                                              | -4                                                                                            |
| WRA148           |              | 14,8         | -6                                                                                        | -4                                                                                                 | -4                                                              | -4                                                                                            |
| WRA148<br>WRA170 | 0.58         | '            | -6                                                                                        |                                                                                                    |                                                                 | -6                                                                                            |
| WRA170<br>WRA185 | 0.67<br>0.73 | 17,0<br>18,5 |                                                                                           | -6                                                                                                 | -6                                                              | -0                                                                                            |
| WRA195           | 0.73         | 19,5         |                                                                                           | -0                                                                                                 | -0                                                              |                                                                                               |
| WRA205           | 0.77         | 20.5         | -8                                                                                        |                                                                                                    |                                                                 |                                                                                               |
| WRA225           | 0.89         | 22,5         |                                                                                           | -8                                                                                                 | -8                                                              | -8                                                                                            |
| WRA228           | 0.90         | 22,8         | -10                                                                                       |                                                                                                    |                                                                 |                                                                                               |
| WRA245           | 0.96         | 24,5         |                                                                                           |                                                                                                    |                                                                 | -10                                                                                           |
| WRA265           | 1.04         | 26,5         |                                                                                           | -10                                                                                                |                                                                 |                                                                                               |
| WRA275           | 1.08         | 27,5         | -12                                                                                       |                                                                                                    |                                                                 |                                                                                               |
| WRA305           | 1.20         | 30,5         | -14                                                                                       | -12                                                                                                | -12                                                             | -12                                                                                           |
| WRA340S          | 1.34         | 34,0         | -16                                                                                       |                                                                                                    | -16                                                             | -16                                                                                           |
| WRA340JIC        | 1.34         | 34,0         | -16                                                                                       |                                                                                                    |                                                                 |                                                                                               |
| WRA365           | 1.44         | 36,5         |                                                                                           | -16                                                                                                |                                                                 |                                                                                               |
| WRA415S          | 1.63         | 41,5         | -20                                                                                       |                                                                                                    |                                                                 |                                                                                               |
| WRA415           | 1.63         | 41,5         | -20                                                                                       |                                                                                                    |                                                                 |                                                                                               |
| WRA425           | 1.67         | 42,5         |                                                                                           |                                                                                                    | -20                                                             | -20                                                                                           |
| WRA455           | 1.79         | 45,5         |                                                                                           | -20                                                                                                |                                                                 |                                                                                               |
| WRA480S          | 1.89         | 48,0         | -24                                                                                       |                                                                                                    |                                                                 |                                                                                               |
| WRA480           | 1.89         | 48,0         | -24                                                                                       |                                                                                                    |                                                                 |                                                                                               |
| WRA490           | 1.93         | 49,0         |                                                                                           |                                                                                                    | -24                                                             | -24                                                                                           |
| WRA525           | 2.07         | 52,5         |                                                                                           | -24                                                                                                |                                                                 |                                                                                               |
| WRA600           | 2.36         | 60,0         |                                                                                           |                                                                                                    |                                                                 |                                                                                               |
| WRA640           | 2.52         | 64,0         | -32                                                                                       |                                                                                                    |                                                                 |                                                                                               |

Contact HPD for other style fittings.

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

# **Flange**

B

| Part<br>Number | inch | A mm | 5050HK   | 5151HK        | НЕНЕНК | 8FHFHK | M1M1HK            | M2M2HK   | FFK61    | FFK62 |
|----------------|------|------|----------|---------------|--------|--------|-------------------|----------|----------|-------|
| WRF085         | 0.33 | 8,5  |          | -8            |        |        |                   |          |          |       |
| WRF105         | 0.41 | 10,5 |          | -12, -16      | -12    | -12    | -8, -12, -16, -20 | -8, -12  | -12, -16 | -12   |
| WRF125         | 0.49 | 12,5 | -20      | -20           | -16    | -16    | -24, -32, -40     | -16, -20 | -20      | -16   |
| WRF145         | 0.57 | 14,5 | -24, -32 | -24, -32, -40 | -20    |        |                   |          | -24, -32 | -20   |
| WRF165         | 0.65 | 16,5 |          | -48           | -24    |        |                   | -24      |          | -24   |
| WRF205         | 0.81 | 20,5 |          |               | -32    |        |                   | -32      |          | -32   |

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

D-36 Updated 11/2020

# **CL Clamp**

Vinyl coated steel clamps provide hose support where long lengths are used. Provides neater installation of hose lines, minimizes hose chafing and prevents damage to hose.

Material: CR Steel with Zinc Plating

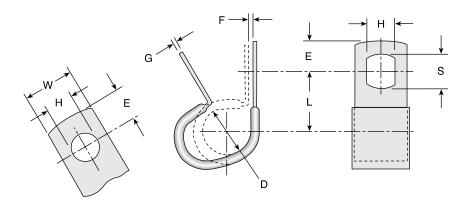
Coating: Black Vinyl Plastisol - 0,8 mm (0.03 inch) thick.

Temperature Range: -40°C to +107°C (-40°F to +225°F).



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В



| Dont   | [     | )      |       | Н      | ı     | L      | V     | V      |       | E      |      | F      | (    | G      | S     |        |
|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|------|--------|------|--------|-------|--------|
| Part   | ±0,8  | ±0.031 | ±0,1  | ±0.005 | ±0,8  | ±0.031 | ±0,25 | ±0.01  | ±0,4  | ±0.015 | ±0,8 | ±0.031 | ±0,1 | ±0.004 | ±0,5  | ±0.020 |
| Number | (mm)  | (inch) | (mm) | (inch) | (mm) | (inch) | (mm)  | (inch) |
| CL-6   | 7,90  | 0.312  | 10,30 | 0.406  | 17,45 | 0.687  | 19,05 | 0.750  | 11,10 | 0.437  | 0,80 | 0.031  | 0,80 | 0.032  | 12,70 | 0.500  |
| CL-7   | 9,50  | 0.375  | 10,30 | 0.406  | 18,25 | 0.718  | 19,05 | 0.750  | 11,10 | 0.437  | 1,55 | 0.062  | 0,80 | 0.032  | 12,70 | 0.500  |
| CL-9   | 12,70 | 0.500  | 10,30 | 0.406  | 19,85 | 0.781  | 19,05 | 0.750  | 11,10 | 0.437  | 1,55 | 0.062  | 1,20 | 0.048  | 12,70 | 0.500  |
| CL-10  | 14,25 | 0.562  | 10,30 | 0.406  | 20,60 | 0.812  | 19,05 | 0.750  | 11,10 | 0.437  | 1,55 | 0.062  | 1,20 | 0.048  | 12,70 | 0.500  |
| CL-11  | 15,90 | 0.625  | 10,30 | 0.406  | 21,40 | 0.843  | 19,05 | 0.750  | 11,10 | 0.437  | 1,55 | 0.062  | 1,20 | 0.048  | 12,70 | 0.500  |
| CL-12  | 17,45 | 0.687  | 10,30 | 0.406  | 22,20 | 0.875  | 19,05 | 0.750  | 11,10 | 0.437  | 1,55 | 0.062  | 1,20 | 0.048  | 12,70 | 0.500  |
| CL-13  | 19,05 | 0.750  | 10,30 | 0.406  | 23,00 | 0.906  | 19,05 | 0.750  | 11,10 | 0.437  | 1,55 | 0.062  | 1,20 | 0.048  | 12,70 | 0.500  |
| CL-14  | 20,60 | 0.812  | 10,30 | 0.406  | 23,80 | 0.937  | 19,05 | 0.750  | 11,10 | 0.437  | 1,55 | 0.062  | 1,20 | 0.048  | 12,70 | 0.500  |
| CL-16  | 23,80 | 0.937  | 10,30 | 0.406  | 25,40 | 1.000  | 19,05 | 0.750  | 11,10 | 0.437  | 1,55 | 0.062  | 1,20 | 0.048  | 12,70 | 0.500  |
| CL-17  | 25,40 | 1.000  | 10,30 | 0.406  | 26,20 | 1.031  | 19,05 | 0.750  | 11,10 | 0.437  | 1,55 | 0.062  | 1,20 | 0.048  | 12,70 | 0.500  |
| CL-18  | 26,95 | 1.062  | 10,30 | 0.406  | 26,95 | 1.062  | 19,05 | 0.750  | 11,10 | 0.437  | 1,55 | 0.062  | 1,20 | 0.048  | 12,70 | 0.500  |
| CL-19  | 28,60 | 1.125  | 10,30 | 0.406  | 27,75 | 1.093  | 19,05 | 0.750  | 11,10 | 0.437  | 1,55 | 0.062  | 1,20 | 0.048  | 12,70 | 0.500  |
| CL-20  | 30,20 | 1.188  | 13,50 | 0.531  | 31,75 | 1.250  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |
| CL-21  | 31,75 | 1.250  | 13,50 | 0.531  | 32,55 | 1.281  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |
| CL-23  | 34,90 | 1.375  | 13,50 | 0.531  | 34,10 | 1.343  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |
| CL-24  | 36,50 | 1.437  | 13,50 | 0.531  | 34,90 | 1.375  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |
| CL-25  | 38,10 | 1.500  | 13,50 | 0.531  | 35,70 | 1.406  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |
| CL-26  | 39,65 | 1.562  | 13,50 | 0.531  | 36,50 | 1.437  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |
| CL-29  | 44,45 | 1.750  | 13,50 | 0.531  | 38,90 | 1.531  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |
| CL-31  | 47,65 | 1.875  | 13,50 | 0.531  | 40,45 | 1.593  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |
| CL-33  | 50,80 | 2.000  | 13,50 | 0.531  | 42,85 | 1.687  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |
| CL-36  | 55,55 | 2.187  | 13,50 | 0.531  | 46,00 | 1.812  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |
| CL-37  | 57,15 | 2.250  | 13,50 | 0.531  | 46,00 | 1.812  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |
| CL-43  | 66,65 | 2.625  | 13,50 | 0.531  | 58,70 | 2.312  | 25,40 | 1.000  | 14,25 | 0.562  | 1,55 | 0.062  | 1,20 | 0.048  | 15,90 | 0.625  |

**WARNING:** This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

Updated 11/2020

D-37

# HC, 88HC-H and 88DB Clamp

The Parker HC Clamp is a stainless steel worm gear clamp designed for low pressure industrial hose applications.

# **HC Hose Clamp Table** SAE J1508 Type F

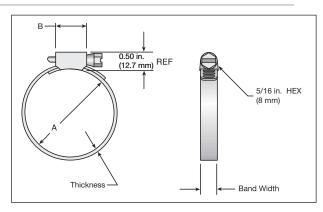
| Part<br>Number | Size<br>(SAE) | "A"<br>Minir | Clamp<br>num | 1  | ter<br>mum | "B"<br>Maximum |      |  |  |
|----------------|---------------|--------------|--------------|----|------------|----------------|------|--|--|
| Nullibel       | (SAE)         | mm           | inch         | mm | inch       | mm             | inch |  |  |
| HC-6           | -8            | 13           | 0.50         | 23 | 0.91       | 19,1           | 0.75 |  |  |
| HC-8           | -10           | 14           | 0.56         | 27 | 1.06       | 19,1           | 0.75 |  |  |
| HC-10          | -12           | 18           | 0.69         | 32 | 1.25       | 19,1           | 0.75 |  |  |
| 88HC-12        | -16           | 21           | 0.81         | 38 | 1.50       | 19,1           | 0.75 |  |  |
| 88HC-16        | -20           | 21           | 0.81         | 44 | 1.75       | 19,1           | 0.75 |  |  |
| 88HC-20        | -24           | 27           | 1.06         | 51 | 2.00       | 19,1           | 0.75 |  |  |
| 88HC-24        | -28           | 33           | 1.31         | 57 | 2.25       | 19,1           | 0.75 |  |  |
| 88HC-32        | -36           | 46           | 1.81         | 70 | 2.75       | 19,1           | 0.75 |  |  |

Suggested installation torque: 35 in-lbs (4 Nm)

Material: Band & Housing: 201 SS

Band Width: 0.562 in.

Band Thickness: 0.022 in (0.559 mm)



view on web page

Screw: 410 SS

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



B



## Series Hose Clamp (High Torque Wormgear) SAE J1508 Type HD

| Part<br>Number | Size<br>(SAE) |    | Clam <sub>l</sub><br>mum | "B"<br>Maximum |       |      |      |
|----------------|---------------|----|--------------------------|----------------|-------|------|------|
| Number         | (SAL)         | mm | inch                     | mm             | inch  | mm   | inch |
| 88HC-16H       | 175           | 25 | 1.00                     | 44             | 1.750 | 26,9 | 1.06 |
| 88HC-20H       | 212           | 32 | 1.25                     | 54             | 2.125 | 26,9 | 1.06 |
| 88HC-32H       | 262           | 44 | 1.75                     | 67             | 2.625 | 26,9 | 1.06 |
| 88HC-40H       | 312           | 57 | 2.25                     | 80             | 3.625 | 26,9 | 1.06 |
| 88HC-48H       | 362           | 70 | 2.75                     | 92             | 3.625 | 26,9 | 1.06 |

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Use for 88 Series Fittings

Suggested installation torque: 75 to 90 in-lbs (8.5 to 10 Nm)

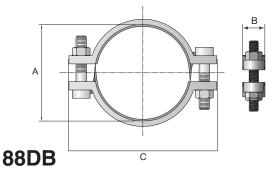
Note: See 88 Series Assembly Instructions for proper 88HC-H

clamp attachment. Material: Band & Housing: 304 SS

Screw: 410 SS

Band Width: 0.625 in. Use for 88 Series Fittings

Band Thickness: 0.028 in (0.711 mm) Material: Iron



## **Series Heavy Duty Hose Clamp** (Double Bolt Hose Clamp)

| Part<br>Number | "A" I.D. | "B" Width | "C" Width |
|----------------|----------|-----------|-----------|
| Number         | inch     | inch      | inch      |
| 88DB-12        | 1.25     | 0.88      | 1.75      |
| 88DB-16        | 1.40     | 0.75      | 2.00      |
| 88DB-20        | 1.75     | 0.96      | 2.35      |
| 88DB-24        | 2.00     | 1.00      | 2.66      |
| 88DB-32        | 2.40     | 1.03      | 3.12      |

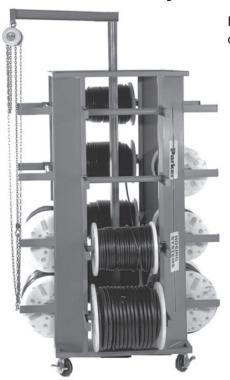
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WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

> D-38 Updated 10/2022

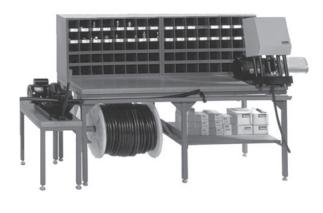
# **HPD Hose Assembly Workstations**



Hose Products Division has set up an agreement to enable our customers to purchase directly from our vendor, Safety Step.

Safety Step's contact information is:

Safety Step 540-362-9636 www.safetystep.net



#### The complete on-site complete hose assembly workstation design (above) includes:

- TH7-5-C-6' table with 1 hose reel and 1 bottom shelf
- TH7-6—16 hose reel system, with rotating base
- TH7-7—15" wide table set up for Parker 239 or 339 Cut-Off Saw

#### Specifications: HoseFab Table (heavy duty)

- · Laminated wood table top
- 1-1/2" square tubing structure
- · Gussetted corner braces
- 6-leg design
- All legs have adjustable feet
- · Hose reel/shelf combinations
- · 40B-Cabinet or 72B-Cabinet for fitting storage
- Optional: Hose trough for measurement of hose
  - Calibrated to line up to Saw Table
  - · Adjustable stop for standard length cuts
  - Built-in tape measure

- (2) 40B-Cabinet 40 openings 4·1/2" x 4·1/2" x 12" in size
- TH7-6-C—Optional overhead crane
- TH7-5-HT—Optional 6' measured hose trough with adjustable hose stop

#### Specifications: Rotary Reel Rack (TH7-6)

- 16 Hose reel capacity
- · Compact design
- Rotates for 1 man use
- Center post bolts to floor in 4 places
- Optional: Overhead crane

#### Specifications: Saw Table (TH7-7)

- · Calibrated to line up to Hose trough
- Adjustable feet
- · Mounts to 6-foot bench

#### Specifications: 3 or 4 Reel Rack

- Free standing 3 reel rack (TH7-8)
- Bolts to floor
- Optional: 4th reel capacity with wall mounts (TH7-8-F)



Pictured left is a complete on-site hose assembly workstation, the Parker Kart:

The **Parker Kart, TH7-4**, is a portable all-in-one unit designed to hold a Minikrimp, Karrykrimp, Karrykrimp 2, or Parkrimp 1; a 332T-115V Cut-off Saw; 4 reels of hose; and has a 40 bin cabinet with 3 drawers for tools. The TH7-4 can be customized to fit your specific hose assembly needs. Contact Parker HPD or your Parker Hose distributor for details.

Note: Part number TH7-4 does not include hose, fittings or equipment.

www.mfcp.com

See Safety Step contact information at the top of this page

Note: Part number and specifications of components for both workstations are listed on the following pages.

D-39 Updated 11/2020











## HoseFab Table

Heavy duty constructed table for mounting Minikrimp, Karrykrimp, Karrykrimp 2, or Parkrimp 1. HoseFab Table is available in 3 versions to meet your requirements. Options include two 40B-Cabinets or 72B-Cabinets for fitting storage.

Part Number Description

TH7-5-R 6' table with 2 hose reels
TH7-5-S 6' table with 2 bottom shelves

TH7-5-C 6' table with 1 hose reel and 1 bottom shelf

TH7-5-HT Optional 6' measured hose trough with adjustable hose stop

40B-Cabinet 40 openings - 4·1/2" x 4·1/2" x 12" in size 72B-Cabinet 72 openings - 4·1/2" x 4·1/2" x 12" in size

Table measurements:

Height - 31-3/4" Width - 29" Length - 72"

# **Rotary Reel Rack**

B

16 Hose reel capacity that fits in a compact area. Supplied with heavy duty casters which allow for ease of turning, even when fully loaded. Optional overhead crane available.

Part Number Description

TH7-6 16 hose reel system, with rotating base

TH7-6-C Optional overhead crane

Rack measurements:

Height - 104" (120" with optional overhead crane)

Width - 67" Length - 67"

view on web page

# **Saw Table**

The Saw Table, specially designed for Parker 239 or 339 Hose Cut-Off Saw, attaches directly to the HoseFab Table.

Part Number Description

TH7-7 15" wide table set up for Parker 239 or 339 Cut-Off Saw

Table measurements:

Height - 18" Width - 28" Length - 14"

# 3/4 Reel Rack

Compact in its design, the standard version will hold 3 reels of hose. Optional 4th reel capacity designed with wall anchor mounts.

Part Number Description

TH7-8 Upright 3 hose reel rack

TH7-8-F Optional extension with wall anchor for 4th reel

Rack measurements:

Height - 59" (82·1/2" with 4th reel option)

Width - 27·3/4" Length - 27·1/2"

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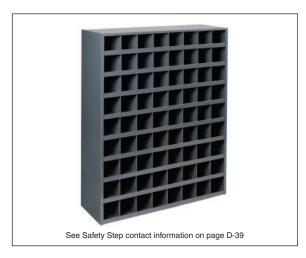




D-40 Updated 11/2020

Catalog 4400 US Accessories







# Parker Kart TH7-4

Parker Kart organizes and stores all your necessary Parker hoses, fittings, power and hand tools - everything you need to make fast hose assemblies on site. As a valued addition to any facility, Parker Kart will save on downtime and labor costs, as well as eliminate errors in cutting and fitting attachment. With Parker Kart, you'll always have the materials you need, right when and where you need them.

- Easy one-man movement
- · Eight-inch urethane casters with brakes
- Forklift carry tubes
- Electric receptacle with cord
- Fitting bins and drawers
- Large tool drawer
- Four hose reel holders
- Choice of Parker crimping equipment
- Optional accessories available

Parker Kart can be customized to fit specific hose assembly needs. Parker Kart does not include hose, fittings or equipment.

# Fitting Stock Bins 72B-Cabinet

36" wide, 43" high, 12" deep, with 72 openings each 4-1/2" x 4-1/2" x 12", heavy duty steel, all welded construction. Product bin labels are available.

#### view on web page

# Hose Stock Bins HR6-Hose-Bin

Rugged metal cabinet for stocking coils of Parker hose 36" wide, 28" high, 20" deep, with upright separators to provide 6 compartments varying in width from 4" to 8".

Provides suitable base on which to place the fittings stock bin (top measures 36" x 20", bottom of fittings bin measures 36" x 12".)

#### view on web page

4

В

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D-41 Updated 11/2020



















# Technical

Flow Temperature Pressure Installation Chemical Resistance Performance Standards & Specifications Fitting Identification Safety Guide

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E

B

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# Size

# Flow Capacities at Recommended Flow Velocities

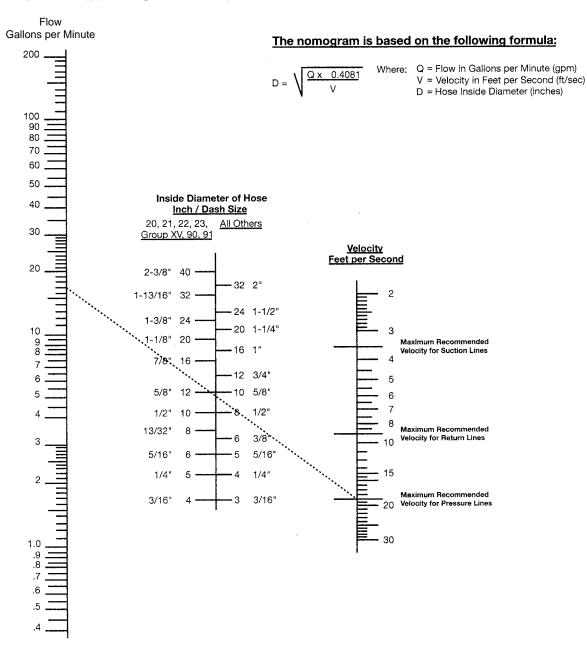
The nomogram below is provided as an aid in determining the correct hose size.

How to use the nomogram: Determine the proper flow rate your system requires, then connect a straight edge from the selected flow rate to the recommended velocity range. The required hose I.D. will appear at the intersection of the straight edge and the center column. If the straight edge passes through the scale between sizes listed, use the next larger I.D. hose.

Example: Locate 16 gallons per minute in the left-hand column and 20 feet per second (fps) in the right-hand column (the maximum

recommended velocity range for pressure lines). Lay a straight edge across these two points. The inside diameter required is shown in the center column at or above the straight edge. In this case, we need a hose I.D. of 0.625 (5/8") inch (or larger).

Use the same procedure for suction of return lines, except utilizing their respective maximum recommend velocities.





Catalog 4400 US Technical

# Size

В

# **Hose Flow Capacities Pressure Drop**

| Hose<br>Si         |      | -(    | 04    | -0    | 5    | -0   | )6   | -0    | 8     | -1   | 0    | -1   | 2    | -1   | 16   | -2   | :0   | -2   | <u>.</u> 4 | -3   | 32   | -40  | -48  |
|--------------------|------|-------|-------|-------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------------|------|------|------|------|
| Hose<br>(Inc       |      | 0.19  | 0.25  | 0.25  | 0.31 | 0.31 | 0.38 | 0.41  | 0.50  | 0.50 | 0.63 | 0.63 | 0.75 | 0.88 | 1.00 | 1.13 | 1.25 | 1.38 | 1.50       | 1.81 | 2.00 | 2.38 | 3.00 |
| _                  | 0.25 | 10.0  | 3.1   | 3.1   |      |      |      |       |       |      |      |      |      |      |      |      |      |      |            |      |      |      |      |
|                    | 0.5  | 19.0  | 6.0   | 6.0   | 2.7  | 2.7  |      |       |       |      |      |      |      |      |      |      |      |      |            |      |      |      |      |
|                    | 1    | 40.0  | 12.0  | 12.0  | 5.5  | 5.5  | 2.4  |       |       |      |      |      |      |      |      |      |      |      |            |      |      |      |      |
|                    | 2    | 95.0  | 24.0  | 24.0  | 10.0 | 10.0 | 4.8  | 3.5   |       |      |      |      |      |      |      |      |      |      |            |      |      |      |      |
|                    | 3    | 185.0 | 46.0  | 46.0  | 17.0 | 17.0 | 7.0  | 5.0   | 2.2   | 2.2  |      |      |      |      |      |      |      |      |            |      |      |      |      |
|                    | 4    |       | 78.0  | 78.0  | 29.0 | 29.0 | 12.0 | 8.0   | 3.0   | 3.0  | 1.2  | 1.2  |      |      |      |      |      |      |            |      |      |      |      |
|                    | 5    |       | 120.0 | 120.0 | 44.0 | 44.0 | 18.0 | 12.0  | 4.5   | 4.5  | 1.6  | 1.6  | 0.7  |      |      |      |      |      |            |      |      |      |      |
|                    | 8    |       | 120.0 | 120.0 | 95.0 | 95.0 | 39.0 | 26.0  | 10.0  | 10.0 | 3.6  | 3.6  | 1.4  | 0.6  |      |      |      |      |            |      |      |      |      |
|                    | 10   |       |       |       | 00.0 | 30.0 | 59.0 | 40.0  | 15.0  | 15.0 | 5.7  | 5.7  | 2.0  | 1.0  | 0.6  |      |      |      |            |      |      |      |      |
|                    | 12   |       |       |       |      |      | 80.0 | 52.0  | 20.0  | 20.0 | 7.2  | 7.2  | 2.6  | 1.5  | 0.8  | 0.4  |      |      |            |      |      |      |      |
|                    | 15   |       |       |       |      |      | 00.0 | 75.0  | 30.0  | 30.0 | 10.0 | 10.0 | 4.2  | 2.2  | 1.2  | 0.7  | 0.4  |      |            |      |      |      |      |
|                    | 18   |       |       |       |      |      |      | 107.0 | 40.0  | 40.0 | 15.0 | 15.0 | 6.3  | 3.0  | 1.5  | 0.7  | 0.4  | 0.4  |            |      |      |      |      |
| <b>a</b>           | 20   |       |       |       |      |      |      |       | 49.0  | 49.0 | 19.0 | 19.0 | 8.0  | 3.4  | 2.0  | 1.1  | 0.7  | 0.4  | 0.3        |      |      |      |      |
| linut              | 25   |       |       |       |      |      |      |       | 72.0  | 72.0 | 26.0 | 26.0 | 11.0 | 5.5  | 3.0  | 1.6  | 1.0  | 0.6  | 0.4        | 0.2  |      |      |      |
| er⊵                | 30   |       |       |       |      |      |      |       | . 2.0 | 72.0 | 34.0 | 34.0 | 14.0 | 7.0  | 3.6  | 2.2  | 1.3  | 0.8  | 0.5        | 0.2  | 0.1  |      |      |
| us p               | 35   |       |       |       |      |      |      |       |       |      | 47.0 | 47.0 | 19.0 | 9.5  | 5.0  | 2.8  | 1.7  | 1.1  | 0.7        | 0.3  | 0.2  |      |      |
| Gallons per Minute | 40   |       |       |       |      |      |      |       |       |      |      |      | 25.0 | 12.0 | 6.5  | 3.4  | 2.2  | 1.4  | 0.9        | 0.4  | 0.2  |      |      |
| U.S. G             | 50   |       |       |       |      |      |      |       |       |      |      |      | 36.0 | 17.0 | 9.0  | 5.3  | 3.3  | 2.0  | 1.3        | 0.5  | 0.4  | 0.2  |      |
|                    | 60   |       |       |       |      |      |      |       |       |      |      |      | 50.0 | 23.0 | 12.0 | 7.5  | 4.4  | 2.8  | 1.8        | 0.8  | 0.5  | 0.2  |      |
|                    | 70   |       |       |       |      |      |      |       |       |      |      |      |      | 31.0 | 17.0 | 9.3  | 6.0  | 3.8  | 2.4        | 1.0  | 0.7  | 0.3  |      |
|                    | 80   |       |       |       |      |      |      |       |       |      |      |      |      | 38.0 | 21.0 | 12.0 | 7.1  | 4.6  | 3.0        | 1.2  | 0.8  | 0.3  | 0.1  |
|                    | 90   |       |       |       |      |      |      |       |       |      |      |      |      | 49.0 | 27.0 | 15.0 | 9.0  | 5.9  | 3.8        | 1.5  | 1.0  | 0.5  | 0.1  |
|                    | 100  |       |       |       |      |      |      |       |       |      |      |      |      |      | 33.0 | 19.0 | 12.0 | 7.0  | 4.7        | 1.9  | 1.3  | 0.6  | 0.2  |
|                    | 150  |       |       |       |      |      |      |       |       |      |      |      |      |      | 60.0 | 36.0 | 22.0 | 13.0 | 8.5        | 3.4  | 2.2  | 1.0  | 0.3  |
|                    | 200  |       |       |       |      |      |      |       |       |      |      |      |      |      |      |      | 36.0 | 23.0 | 15.0       | 6.0  | 3.9  | 1.7  | 0.6  |
|                    | 250  |       |       |       |      |      |      |       |       |      |      |      |      |      |      |      | 54.0 | 33.0 | 22.0       | 8.5  | 5.3  | 2.5  | 0.8  |
|                    | 300  |       |       |       |      |      |      |       |       |      |      |      |      |      |      |      |      | 45.0 | 29.0       | 12.0 | 7.5  | 4.0  | 1.1  |
|                    | 400  |       |       |       |      |      |      |       |       |      |      |      |      |      |      |      |      |      | 51.0       | 21.0 | 14.0 | 6.5  | 2.2  |
|                    | 500  |       |       |       |      |      |      |       |       |      |      |      |      |      |      |      |      |      |            | 32.0 | 20.0 | 10.0 | 3.0  |
|                    | 800  |       |       |       |      |      |      |       |       |      |      |      |      |      |      |      |      |      |            |      |      | 18.0 | 5.0  |
| ▼                  | 1000 |       |       |       |      |      |      |       |       |      |      |      |      |      |      |      |      |      |            |      |      |      | 10.0 |

Pressure drop in psi (pounds per square inch) per 10 feet of hose (smooth bore) without fittings.

Fluid specification: Specific gravity = 0.85; Viscosity = v = 20 centistokes (C.S.), (20 C.S. = 97 S.S.U.)

Pressure drop values listed are typical of many petroleum based hydraulic oils at approximately +100°F (+38°C). Differences in fluids, fluid temperature and viscosity can increase or decrease actual pressure drop compared to the values listed.

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# **T**emperature

# Temperature / Pressure Chart - 201, 206, 213, and 266 Hose

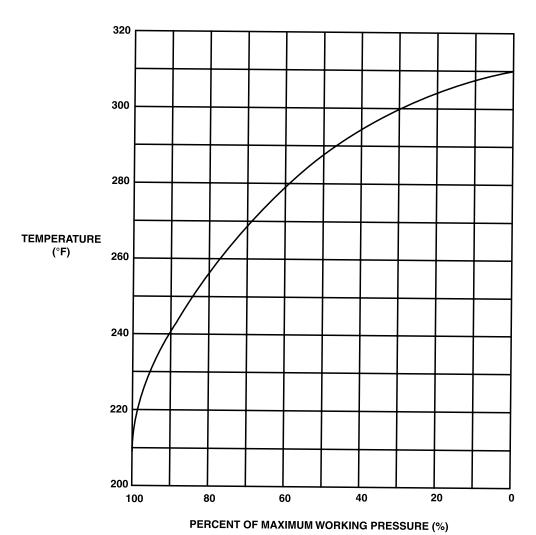
The Temperature / Pressure Chart identifies the effects temperature change has on the maximum working pressure of specific hoses.

#### How to use the chart:

- 1st Identify the Maximum Working Pressure of selected hose.
- 2nd Identify the maximum working temperature of the application.
- 3rd Locate point where temperature and Percent of Maximum Working Pressure intersect on the chart.
- 4th Based on percentage figure, calculate Maximum Working Pressure of the application.

Example: 201-8 hose to be used a 250°F (121°C)

| Maximum<br>Working Pressure<br>up to 212°F (100°C) | x | (Multiplier from chart) | = | Maximum<br>Working Pressure<br>at 250°F (121°C) |
|----------------------------------------------------|---|-------------------------|---|-------------------------------------------------|
| 2,000 psi                                          | х | (85%)                   | = | 1,700 psi                                       |



E-5

4

В

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# **T**emperature

# **Minimum/Maximum Temperature**

(Page 1 of 4)

| Hose<br>Family    | Cover<br>(ISO Rating) | Petroleum base hydraulic fluids and lubricating oils | Antifreeze solutions              | Diesel fuels                      | SAE J1942 Marine lube oil and diesel<br>fuel systems<br>(Application Code F)** |
|-------------------|-----------------------|------------------------------------------------------|-----------------------------------|-----------------------------------|--------------------------------------------------------------------------------|
|                   | Standard              | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | х                                 | х                                                                              |
|                   | TC (AC)               | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | х                                 | х                                                                              |
| GlobalCore<br>187 | TC (AS)               | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | х                                 | x                                                                              |
| 107               | ST (AC)               | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | х                                 | х                                                                              |
|                   | ST (AS)               | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | х                                 | х                                                                              |
|                   | Standard              | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | х                                 | x                                                                              |
| GlobalCore<br>387 | TC                    | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | х                                 | x                                                                              |
| 307               | ST                    | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | х                                 | x                                                                              |
|                   | Standard              | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | X                                 | x                                                                              |
| GlobalCore        | TC                    | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | X                                 | x                                                                              |
| 487               | ST                    | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | X                                 | x                                                                              |
|                   | Standard              | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | x                                 | x                                                                              |
| GlobalCore        | TC                    | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | x                                 | x                                                                              |
| 722               | ST                    | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | x                                 | x                                                                              |
|                   | Standard              | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | x                                 | x                                                                              |
|                   | TC (DC)               | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | x                                 | x                                                                              |
| GlobalCore        | TC (AC)               | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | x                                 | x                                                                              |
| 787               | ST (DC)               | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | x                                 | ×                                                                              |
|                   | ST (AC)               | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | x                                 | x                                                                              |
|                   | Standard              | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | x                                 | x                                                                              |
|                   | TC (CC, DC)           | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | x                                 | ×                                                                              |
| GlobalCore        | TC (AC)               | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | x                                 | ×                                                                              |
| 797               | ST (CC, DC)           | -40°C to +125°C (-40°F to +257°F)                    | -40°C to +125°C (-40°F to +257°F) | x                                 | x                                                                              |
|                   | ST (AC)               | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | х                                 | x                                                                              |
| 201*              |                       | -40°C to +150°C (-40°F to +302°F)                    | -40°C to +150°C (-40°F to +302°F) | -40°C to +150°C (-40°F to +302°F) | x                                                                              |
| 206*              |                       | -48°C to +150°C (-55°F to +302°F)                    | -48°C to +150°C (-55°F to +302°F) | -48°C to +150°C (-55°F to +302°F) | x                                                                              |
| 213*              |                       | -45°C to +150°C (-50°F to +302°F)                    | -45°C to +150°C (-50°F to +302°F) | -45°C to +150°C (-50°F to +302°F) | x                                                                              |
| 221FR             |                       | -20°C to +100°C (-4°F to +212°F)                     | х                                 | -20°C to +100°C (-4°F to +212°F)  | -20°C to +100°C (-4°F to +212°F)                                               |
| 266*              |                       | -48°C to +150°C (-55°F to +302°F)                    | -48°C to +150°C (-55°F to +302°F) | -48°C to +150°C (-55°F to +302°F) | ×                                                                              |
| 271               |                       | X                                                    | х                                 | х                                 | x                                                                              |
| 293               |                       | -50°C to +150°C (-58°F to +302°F)                    | -50°C to +150°C (-58°F to +302°F) | -50°C to +150°C (-58°F to +302°F) | ×                                                                              |
| 302               |                       | -40°C to +100°C (-40°F to +212°F)                    | x                                 | x                                 | -40°C to +100°C (-40°F to +212°F)                                              |
| 304               |                       | X                                                    | x                                 | x                                 | ×                                                                              |
| 422               |                       | -40°C to +100°C (-40°F to +212°F)                    | х                                 | х                                 | -40°C to +100°C (-40°F to +212°F)                                              |
| 424               |                       | X                                                    | х                                 | х                                 | х                                                                              |
| 426               |                       | -46°C to +150°C (-50°F to +302°F)                    | Х                                 | х                                 | -46°C to +150°C (-50°F to +302°F)                                              |
| 436               |                       | -48°C to +150°C (-55°F to +302°F)                    | Х                                 | x                                 | х                                                                              |
| 471TC/ST          |                       | -40°C to +100°C (-40°F to +212°F)                    | х                                 | х                                 | х                                                                              |
| 472LT             |                       | -57°C to +100°C (-70°F to +212°F)                    | х                                 | х                                 | х                                                                              |
| 472TC             |                       | -40°C to +100°C (-40°F to +212°F)                    | х                                 | х                                 | х                                                                              |
| 482TC/ST          |                       | -40°C to +100°C (-40°F to +212°F)                    | Х                                 | х                                 | х                                                                              |
| 611HT             |                       | -48°C to +150°C (-55°F to +302°F)                    | -45°C to +150°C (-55°F to +302°F) | -45°C to +150°C (-55°F to +302°F) | х                                                                              |

<sup>\*</sup> The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on E-5 for the

reduced maximum working pressures.

\*\* Maximum service pressure for lube oil and fuel systems applications (Code F) may be less than maximum service pressure for other systems applications, e.g., Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942-1 or HPD Approval Bulletin #APR-004.

# **T**emperature

# Minimum/Maximum Temperature

В

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| Hose       | Cover<br>(ISO Rating) | Air             | Water, water/oil emulsion | Water/glycol<br>hydraulic        | Water          | Phosphate ester fluids           | Polyol ester fluids |
|------------|-----------------------|-----------------|---------------------------|----------------------------------|----------------|----------------------------------|---------------------|
|            | Standard              | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | ×                   |
|            | TC (AC)               | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |
| GlobalCore | TC (AS)               | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | x                                | x                   |
| 187        | ST (AC)               | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | x                   |
|            | ST (AS)               | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | x                                | x                   |
|            | Standard              | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |
| GlobalCore | TC                    | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
| 387        | ST                    | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
|            | Standard              | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | x                                | x                   |
| GlobalCore | TC                    | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
| 487        | ST                    | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
|            | Standard              | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
| GlobalCore | TC                    | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
| 722        | ST                    | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
|            | Standard              | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
|            | TC (DC)               | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) |                                  | +65°C (+150°F)      |
| GlobalCore | . , ,                 | +70°C (+158°F)  | , ,                       | , ,                              | , ,            | X                                | . ,                 |
| 787        | TC (AC)               | ` ′             | +85°C (+185°F)            | +85°C (+185°F)<br>+85°C (+185°F) | +85°C (+185°F) | X                                | +65°C (+150°F)      |
|            | ST (DC)               | +70°C (+158°F)  | +85°C (+185°F)            | , ,                              | +85°C (+185°F) | X                                | +65°C (+150°F)      |
|            | ST (AC) Standard      | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
|            |                       | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
| GlobalCore | TC (CC, DC)           | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
| 797        | TC (AC)               | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
|            | ST (CC. DC)           | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
| 0044       | ST (AC)               | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
| 201*       |                       | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |
| 206*       |                       | +100°C (+212°F) | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |
| 213*       |                       | +93°C (+200°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |
| 221FR      |                       | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |
| 266*       |                       | +93°C (+200°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |
| 271        |                       | 100°C (212°F)   | X                         | X                                | X              | X                                | X                   |
| 293        |                       | +93°C (+200°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |
| 302        |                       | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |
| 304        |                       | +70°C (+158°F)  | X                         | +85°C (+185°F)                   | +85°C (+185°F) | -40°C to +80°C (-40°F to +176°F) | X                   |
| 422        |                       | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X 1000 + 0000 ( 1005 + 17005)    | X                   |
| 424        |                       | +70°C (+158°F)  | X                         | +85°C (+185°F)                   | +85°C (+185°F) | -40°C to +80°C (-40°F to +176°F) | X                   |
| 426        |                       | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | Х                   |
| 436        |                       | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |
| 471TC/ST   |                       | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |
| 472LT      |                       | +70°C (+157°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                |                     |
| 472TC      |                       | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
| 482TC/ST   |                       | +70°C (+158°F)  | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | +65°C (+150°F)      |
| 611HT      |                       | +100°C (+212°F) | +85°C (+185°F)            | +85°C (+185°F)                   | +85°C (+185°F) | X                                | X                   |

<sup>\*</sup> The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on E-5 for the

reduced maximum working pressures to these hoses are reduced at temperatures above +212.1 (+100 C). Consult the pressure temperature curve on 2-3 for the reduced maximum working pressure.

\*\* Maximum service pressure for lube oil and fuel systems applications (Code F) may be less than maximum service pressure for other systems applications, e.g., Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942/1 or HPD Approval Bulletin #APR-004.

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# **T**emperature

# Minimum/Maximum Temperature

(Page 3 of 4)

| Hose<br>Family | Cover<br>(ISO Rating) | Petroleum base hydraulic fluids and lubricating oils | Antifreeze solutions              | Diesel fuels | SAE J1942 Marine lube oil and diesel fuel systems (Application Code F)** |
|----------------|-----------------------|------------------------------------------------------|-----------------------------------|--------------|--------------------------------------------------------------------------|
| 722LT          |                       | -57°C to +100°C (-70°F to +212°F)                    | х                                 | х            | x                                                                        |
| 792LT          |                       | -57°C to +100°C (-70°F to +212°F)                    | х                                 | х            | x                                                                        |
| F42            |                       | х                                                    | х                                 | х            | x                                                                        |
| 774            |                       | x                                                    | х                                 | x            | x                                                                        |
| 781            |                       | -40°C to +125°C (-40°F to +257°F)                    | х                                 | х            | x                                                                        |
| 801            |                       | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | х            | x                                                                        |
| 804            |                       | х                                                    | х                                 | х            | x                                                                        |
| 811            |                       | -40°C to +100°C (-40°F to +212°F)                    | х                                 | х            | x                                                                        |
| 821            |                       | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | х            | x                                                                        |
| 821FR          |                       | -40°C to +100°C (-40°F to +212°F)                    | -40°C to +100°C (-40°F to +212°F) | х            | x                                                                        |
| 836            |                       | -48°C to +150°C (-55°F to +302°F)                    | -48°C to +150°C (-55°F to +302°F) | х            | x                                                                        |
| 881            |                       | -40°C to +125°C (-40°F to +257°F)                    | х                                 | х            | x                                                                        |
| JK             |                       | -40°C to +49°C (-40°F to +120°F)                     | х                                 | х            | x                                                                        |
| SS23CG         |                       | Х                                                    | х                                 | х            | х                                                                        |
| SS25UL         |                       | Х                                                    | х                                 | х            | x                                                                        |
| 811HT          |                       | -46°C to +125°C (-50°F to +257°F)                    | X                                 | х            | x                                                                        |

<sup>\*</sup> The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on E-5 for the

reduced maximum working pressure.

\*\* Maximum service pressure for lube oil and fuel systems applications (Code F) may be less than maximum service pressure for other systems applications, e.g., Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942/1 or HPD Approval Bulletin #APR-004.

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# **T**emperature

# Minimum/Maximum Temperature (Page 4 of 4)

| Hose   | Cover<br>(ISO Rating) | Air             | Water, water/oil<br>emulsion | Water/glycol<br>hydraulic | Water          | Phosphate ester fluids           | Polyol ester fluids |
|--------|-----------------------|-----------------|------------------------------|---------------------------|----------------|----------------------------------|---------------------|
| 722LT  |                       | х               | х                            | х                         | х              | х                                | х                   |
| 792LT  |                       | +70°C (+158°F)  | х                            | х                         | х              | х                                | х                   |
| F42    |                       | +70°C (+158°F)  | х                            | х                         | х              | х                                | х                   |
| 774    |                       | +70°C (+158°F)  | х                            | +85°C (+185°F)            | +85°C (+185°F) | -40°C to +80°C (-40°F to +176°F) | х                   |
| 781    |                       | +70°C (+158°F)  | +85°C (+185°F)               | +85°C (+185°F)            | +85°C (+185°F) | х                                | х                   |
| 801    |                       | +70°C (+158°F)  | +85°C (+185°F)               | +85°C (+185°F)            | +85°C (+185°F) | х                                | х                   |
| 804    |                       | +70°C (+158°F)  | х                            | +93°C (+200°F)            | +93°C (+200°F) | +80°C (+176°F)                   | х                   |
| 811    |                       | +70°C (+158°F)  | +85°C (+185°F)               | +85°C (+185°F)            | +85°C (+185°F) | х                                | х                   |
| 821    |                       | +70°C (+158°F)  | +85°C (+185°F)               | +85°C (+185°F)            | +85°C (+185°F) | х                                | х                   |
| 821FR  |                       | +100°C (+212°F) | +85°C (+185°F)               | +85°C (+185°F)            | +85°C (+185°F) | х                                | х                   |
| 836    |                       | +100°C (+212°F) | +85°C (+185°F)               | +85°C (+185°F)            | +85°C (+185°F) | х                                | х                   |
| 881    |                       | +70°C (+158°F)  | +85°C (+185°F)               | +85°C (+185°F)            | +85°C (+185°F) | х                                | х                   |
| JK     |                       | x               | х                            | x                         | х              | x                                | х                   |
| SS23CG |                       | х               | х                            | х                         | х              | х                                | х                   |
| SS25UL |                       | х               | х                            | х                         | х              | х                                | х                   |
| 811HT  |                       | +70°C (+158°F)  | +85°C (+185°F)               | +85°C (+185°F)            | +85°C (+185°F) | х                                | х                   |



В





<sup>\*</sup> The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on E-5 for the

reduced maximum working pressures for these floses are reduced at temperatures above +212 f (1.100 o). Consult the pressure states of the oil 2 o is and reduced maximum working pressure.

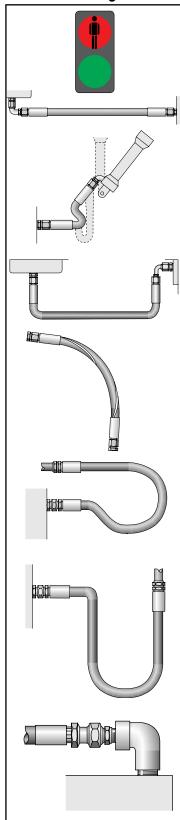
\*\* Maximum service pressure for lube oil and fuel systems applications (Code F) may be less than maximum service pressure for other systems applications, e.g., Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942/1 or HPD Approval Bulletin #APR-004.

### **A**pplication

B

## **Hose Installation Tips**

#### wrong



The routing of the hose assembly and the environment in which the hose assembly operates directly influence the service life of the hose assembly. The following diagrams indicate the correct routing of hose assemblies that will maximize its service life and assure a safe working functionality.

When hose installation is straight, there must be enough slack in the hose to allow for changes in length that occur when pressure is applied. When pressurized, hose that is too short may pull loose from its hose fittings or stress the hose fitting connections, causing premature metallic or seal failures.

The hose length must be determined so that the hose assembly has enough slack to allow the system components to move or vibrate without creating tension in the hose.

However, do not to allow too much slack and therefore introduce the risk of the hose snagging on other equipment or rubbing on other components.

Mechanical straining of the hoses needs to be avoided, so the hose must not be bent below its minimum bend radius or twisted during installation. The minimum bending radii for each hose is stated in the hose tables in the catalog.

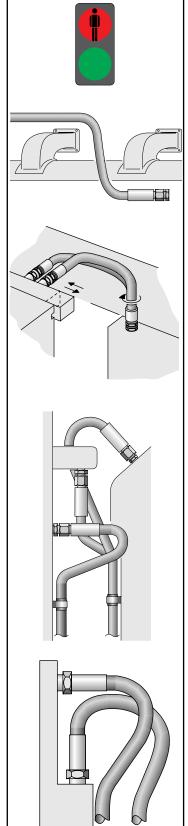
The plane of movement must also be considered and the hose routing selected accordingly.

Hose routing also plays an important role on the selection of the hose fittings, as the correct fittings can avoid straining the hoses, unnecessary hose length or multiple threaded joints.

#### right



#### wrong



Correct clamping (holding/supporting) of the hose should be exercised to securely route the hose or to avoid the hose contacting surfaces that will cause the hose damage. It is however, vital that the hose be allowed to keep its functionality as a "flexible-pipe" and not be restricted from changing in length when under pressure.

It should also be noted that hoses for high- and low-pressure lines shall not be crossed or clamped together, as the difference in changes in length could wear the hose covers.

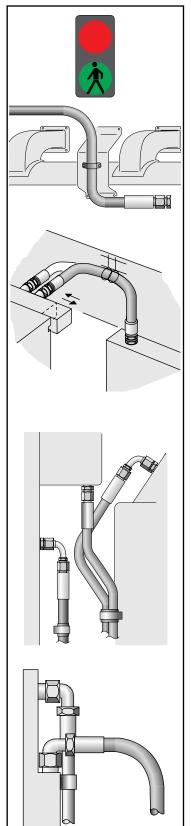
Hose should not be bent in more than one plane. If hose follows a compound bend, it shall be coupled into separate segments or clamped into segments that each flex in only one plane.

Hoses should be kept away from hot parts as high ambient temperatures shorten hose life. Protective insulation may need to be used in unusually high ambient temperature areas.

While the importance of the functionality is primary, the aesthetics and practicality of the installation should also be considered in the design.

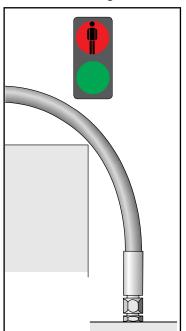
Maintenance might be necessary at some point in the future, so prohibitive design routings should be avoided.

#### right



B

#### wrong

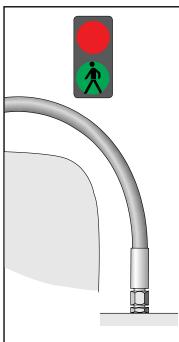


#### **Abrasive influences**

In general care should be taken so that the hose is not exposed to direct surface contact that will cause abrasive wearing of the outer cover (either hose to object or hose to hose contact). If however, the application is such that this cannot be avoided, either a hose with a higher abrasion resistant hose cover or a protective sleeve need to be used.

Parker **TOUGH COVER** (TC) or **SUPER TOUGH** (ST) covers offer 80 times or respectively 450 times the abrasion resistance of standard rubber covers.

### right



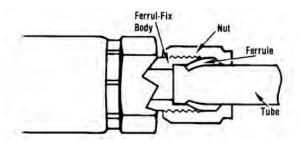


В





Application Ferrule-Fix



# Fast, on-the-job repair for ruptured bent tube hose assemblies and power steering lines.

The life of the combination tube-hose assembly is often limited to the service life of the hose alone. A replacement assembly may not be available, some equipment dealers are unable to stock all of the many odd tube configurations.

Parker FERRUL-FIX, a field attachable, reusable hose end fitting, now makes it possible to salvage the bent tube section of the original assembly for replacement. Most important, it gets you back into operation FAST!

- Gets you back in operation fast No costly delays while replacement assemblies are rushed from the factory.
- Lets you reuse expensive bent tube ends with Parker Hose fittings - You can replace the hose at a fraction of the cost of complete assembly.

• Eliminates the need for emergency brazing or welding in the field - Ferrul-Fix can be assembled without special tools or equipment when using Parker Reusable Hose fittings.

**3-Piece Design** - Body, nut and ferrule. Wedging action of fer rule, when drawn down by nut, forms seal between body and ferrule, while cutting edge of ferrule "bites" into tube wall forming another positive seal.

**Visible Bite -** Extent of bite at cutting edge of ferrule is completely visible when fitting is dis-assembled, an important safety feature. Self-centering action assures even bite around circumference of tube.

**Parkerized Finish -** Ferrul-Lok fittings have the Parkerized black finish, providing "built-in" lubrication which reduces wrench torque required.

#### **Ferrul-Fix Installation Instructions**











- 1. Cut the formed tube off squarely next to the permanent hose fitting. Lightly deburr the end of the tube internally and externally.
- 2. Disassemble the Ferrul-Fix fitting, and lubricate threads and both ends of the ferrule with Parker Ferulube.
- 3. Slide nut and ferrule onto tubing, with the long, straight end of the ferrule pointing toward the tube end.
- Insert tube end into the Ferrul-Fix body until it bottoms against the shoulder. Slide ferrule inside body, and screw nut down finger tight
- 5. Wrench nut down 1-3/4 turns to preset the ferrule.
- 6. Disconnect nut and inspect lead edge of ferrule to make certain that the biting edge has turned up a shoulder to a height of at least 50% of the ferrule and completely around the tube.
- Assemble Ferrul-Fix fitting to hose. Refer to assembly instructions listed in appropriate fittings section. Do not assemble to hose before steps 1-6.
- Reassemble tubing into Ferrul-Fix end and turn nut down easily until a sudden increase in force is evident. Turn bent tube to proper position if required. Using two wrenches, one on the fitting nipple hex and the other on the nut tighten nut an additional 1/6 turn (one wrench flat).

4

В

C

D

# **A**pplication

B

# **Performance Standards and Specifications**

|                        |                     |                                 | Meets or Exceeds | s:   |     |                               |    |
|------------------------|---------------------|---------------------------------|------------------|------|-----|-------------------------------|----|
| Hose                   | ISO                 | SAE                             | EN               | NFPA | EES | рот                           | UL |
| 187                    | ISO 18752           |                                 |                  |      |     |                               |    |
| 187TC                  | ISO 18752           |                                 |                  |      |     |                               |    |
| 187ST                  | ISO 18752           |                                 |                  |      |     |                               |    |
| 387                    | ISO 18752           |                                 |                  |      |     |                               |    |
| 387TC                  | ISO 18752           |                                 |                  |      |     |                               |    |
| 387ST                  | ISO 18752           |                                 |                  |      |     |                               |    |
| 487                    | ISO 18752           |                                 |                  |      |     |                               |    |
| 487TC                  | ISO 18752           |                                 |                  |      |     |                               |    |
| 487ST                  | ISO 18752           |                                 |                  |      |     |                               |    |
| 722 (-6 through -16)   | ISO 18752           |                                 |                  |      |     |                               |    |
| 722TC (-6 through -16) | ISO 18752           |                                 |                  |      |     |                               |    |
| 722ST (-6 through -16) | ISO 18752           |                                 |                  |      |     |                               |    |
| 787                    | ISO 18752           |                                 |                  |      |     |                               |    |
| 787TC                  | ISO 18752           |                                 |                  |      |     |                               |    |
| 787ST                  | ISO 18752           |                                 |                  |      |     |                               |    |
| 797                    | ISO 18752           |                                 |                  |      |     |                               |    |
| 797TC                  | ISO 18752           |                                 |                  |      |     |                               |    |
| 797ST                  | ISO 18752           |                                 |                  |      |     |                               |    |
| 201                    |                     | SAE J517 100R5 / SAE J1402 All  |                  |      |     | DOT FMVSS 106 AIR BRAKE - AII |    |
| 206                    |                     | SAE J517 100R5 / SAE J1402 All  |                  |      |     | DOT FMVSS 106 AIR BRAKE - AII |    |
| 213                    |                     | SAE J1402 AI                    |                  |      |     | DOT FMVSS 106 AIR BRAKE - AI  |    |
| 221FR                  | ISO 7840            | SAE J1527 A CLASS I / SAE J1942 |                  |      |     |                               |    |
| 244                    |                     | SAE J2064 B CLASS I             |                  |      |     |                               |    |
| 266                    |                     | SAE J1402 AII                   |                  |      |     | DOT FMVSS 106 AIR BRAKE - AII |    |
| 271                    |                     | SAE J1402 A                     |                  |      |     | DOT FMVSS 106 AIR BRAKE - A   |    |
| 285                    |                     | SAE J2064 C (w/ 26 series)      |                  |      |     |                               |    |
| 293                    |                     | SAE J1402 AI                    |                  |      |     | DOT FMVSS 106 AIR BRAKE - AI  |    |
| 302                    | ISO 1436-1 Type 2SN | SAE J517 100R2AT / SAE J1942    | EN 853 Type 2SN  |      |     |                               |    |
| 304                    |                     |                                 |                  |      |     |                               |    |
| 422                    | ISO 1436-1 Type 1SN | SAE J517 100R1AT / SAE J1942    | EN 853 Type 1SN  |      |     |                               |    |
| 424                    |                     |                                 |                  |      |     |                               |    |
| 426                    |                     | SAE J517 100R1AT / SAE J1942    |                  |      |     |                               |    |
| 436                    | ISO 11237 Type R16  | SAE J517 100R16                 |                  |      |     |                               |    |
| 471TC                  | ISO 11237 Type 2SC  | SAE J1942                       | EN 857 Type 2SC  |      |     |                               |    |
| 471TC Twin Tough       | ISO 11237 Type 2SC  | SAE J1942                       | EN 857 Type 2SC  |      |     |                               |    |
| 471ST                  | ISO 11237 Type 2SC  | SAE J1942                       | EN 857 Type 2SC  |      |     |                               |    |

#### KEY TO UNDERSTANDING AGENCY APPROVALS FOR BUILDING HOSE ASSEMBLIES

Approved assemblies can be manufactured at any location with Parker's permission. No restrictions. Approved assemblies can only be manufactured in a Parker approved location that demonstrates a quality system and management program is in place and must be audited by DNV. Each location must be granted a "license" issued by Parker HPD for building hose assemblies. Three exist today; Davenport lowa, Grimsby Canada, and Yangsan Korea.

BV Approved assemblies can only be produced in a BV approved location that demonstrates a quality system and management program is in place. Each location must have an initial audit performed by BV before the "license" can be issued. Additionally, ongoing audits setup by BV will be required at each approved location. Davenport lowa is our only approved assembler.

UL "Listed" Assemblies must be made at Davenport lowa

CSA/CGA Assemblies must be made at Davenport lowa

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### **Application**

# **Performance Standards and Specifications**

| Hees                   |     | Meets or Exceeds | s:     |     |     |      |    | Age  | ency | Appro | ovals: |    |     |     |      |    |
|------------------------|-----|------------------|--------|-----|-----|------|----|------|------|-------|--------|----|-----|-----|------|----|
| Hose                   | ECE | CSA              | AS/NZS | ABS | DNV | USCG | LR | MSHA | в۷   | CSA   | RDW    | UL | AGA | DOT | IMCI | NK |
| 187                    |     |                  |        |     |     |      |    |      |      |       |        |    |     |     |      |    |
| 187TC                  |     |                  |        | •   | •   | •    |    | •    |      |       |        |    |     |     |      |    |
| 187ST                  |     |                  |        | •   | •   | •    |    | •    |      |       |        |    |     |     |      |    |
| 387                    |     |                  |        |     |     |      |    |      |      |       |        |    |     |     |      |    |
| 387TC                  |     |                  |        | •   | •   | •    | •  | •    |      |       |        |    |     |     |      |    |
| 387ST                  |     |                  |        | •   | •   | •    | •  | •    |      |       |        |    |     |     |      |    |
| 487                    |     |                  |        |     |     |      |    |      |      |       |        |    |     |     |      |    |
| 487TC                  |     |                  |        | •   | •   | •    | •  | •    |      |       |        |    |     |     |      |    |
| 487ST                  |     |                  |        | •   | •   | •    | •  | •    |      |       |        |    |     |     |      |    |
| 722 (-6 through -16)   |     |                  |        |     |     | •    |    | •    |      |       |        |    |     |     |      |    |
| 722TC (-6 through -16) |     |                  |        | •   | •   | •    | •  | •    |      |       |        |    |     |     |      |    |
| 722ST (-6 through -16) |     |                  |        | •   | •   | •    | •  | •    |      |       |        |    |     |     |      |    |
| 787                    |     |                  |        |     |     |      |    | •    |      |       |        |    |     |     |      |    |
| 787TC                  |     |                  |        | •   | •   | •    | •  | •    |      |       |        |    |     |     |      |    |
| 787ST                  |     |                  |        | •   | •   | •    | •  | •    |      |       |        |    |     |     |      |    |
| 797                    |     |                  |        |     |     |      |    | •    |      |       |        |    |     |     |      |    |
| 797TC                  |     |                  |        | •   | •   | •    | •  | •    |      |       |        |    |     |     |      |    |
| 797ST                  |     |                  |        | •   | •   | •    | •  | •    |      |       |        |    |     |     |      |    |
| 201                    |     |                  |        |     |     |      |    |      |      |       |        |    |     | •   |      |    |
| 206                    |     |                  |        |     |     |      |    |      |      |       |        |    |     | •   |      |    |
| 213                    |     |                  |        |     |     |      |    |      |      |       |        |    |     | •   |      |    |
| 221FR                  |     |                  |        | •   | •   | •    | •  | •    |      |       |        |    |     |     | •    |    |
| 244                    |     |                  |        |     |     |      |    |      |      |       |        |    |     |     |      |    |
| 266                    |     |                  |        |     |     |      |    |      |      |       |        |    |     | •   |      |    |
| 271                    |     |                  |        |     |     |      |    |      |      |       |        |    |     | •   |      |    |
| 285                    |     |                  |        |     |     |      |    |      |      |       |        |    |     |     |      |    |
| 293                    |     |                  |        |     |     |      |    |      |      |       |        |    |     | •   |      |    |
| 302                    |     |                  |        | •   | •   | •    |    |      | •    |       |        |    |     |     |      | •  |
| 304                    |     |                  |        |     |     |      |    |      |      |       |        |    |     |     |      |    |
| 422                    |     |                  |        | •   | •   | •    |    |      |      |       |        |    |     |     |      |    |
| 424                    |     |                  |        |     |     |      |    |      |      |       |        |    |     |     |      |    |
| 426                    |     |                  |        | •   |     | •    |    | •    |      |       |        |    |     |     |      |    |
| 436                    |     |                  |        | •   |     | •    |    | •    |      |       |        |    |     |     |      |    |
| 471TC                  |     |                  |        | •   | •   | •    |    | •    | •    |       |        |    |     |     |      |    |
| 471TC Twin Tough       |     |                  |        | •   | •   | •    |    | •    | •    |       |        |    |     |     |      |    |
| 471ST                  |     |                  |        | •   | •   | •    |    | •    |      |       |        |    |     |     |      |    |

Notes:

(1) U.S.C.G./MTH (Marine Technical & Hazardous Materials Branch) hoses, hose assemblies and appropriate fittings meet 46CFR56.60-25(c) for use on commercial vessels. Hoses and hose assemblies meet the requirements of SAE J1942. Hose fittings meet the requirements of SAE J19475.

F = Fuel and lube systems.

H = Hydraulic Systems.

\*Some hoses are accepted for different pressures for F and H. Also, not all sizes are accepted for all applications. See HPD approval bulletin #APR-004 or consult the Parker Hose Products Division, Technical Services Department, for details. The Canadian Coast Guard accepts all hoses accepted by the U.S. Coast Guard. Coast Guard.

Continued on next page

(2) Det Norske Veritas (DnV) approvals are with permanent (crimp) type fittings only. See HPD Approval Bulletin #APR-006 or consult the Parker Hose Products Division, Technical Services Department, for details.

(3) Hose with MSHA (Mine Safety and Health Administration) approved flame

(3) Hose with MISHA (Mine Safety and Health Administration) approved flame resistant cover will be marked accordingly on the layline.
(4) 221FR is type accepted by Lloyd's Register. It meets the requirements of the American Boat and Yacht council. 221FR is certified to meet the EC Directive 94/25/EC in accordance with ISO 7840.
For questions on standards and specifications please contact the Hose Products' Technical Services Department at (440) 943-5700.

**Updated 2/2023** 

B

# **A**pplication

# **Performance Standards and Specifications**

Continued from previous page

|                             |                     |                              | Meets or Exceeds | ;:           |              |     |       |
|-----------------------------|---------------------|------------------------------|------------------|--------------|--------------|-----|-------|
| Hose                        | ISO                 | SAE                          | EN               | NFPA         | EES          | DOT | UL    |
| 472TC                       |                     | SAE J1942                    |                  |              |              |     |       |
| 472LT                       |                     |                              | EN 857 Type 2SC  |              |              |     |       |
| 482TC                       | ISO 1436-1 Type 1SN | SAE J517 100R1AT / SAE J1942 | EN 853 Type 1SN  |              |              |     |       |
| 482ST                       | ISO 1436-1 Type 1SN | SAE J517 100R1AT             | EN 853 Type 1SN  |              |              |     |       |
| 611HT                       |                     | SAE J517 100R6               | EN 854 Type R6   |              |              |     |       |
| 722TC (-20 through -32)     | ISO 3862-1 Type R12 | SAE J517 100R12 / SAE J1942  | EN 856 Type R12  |              |              |     |       |
| 722ST (-20 through -32)     | ISO 3862-1 Type R12 | SAE J517 100R12 / SAE J1942  | EN 856 Type R12  |              |              |     |       |
| 722LT                       | ISO 3862-1 Type R12 | SAE J517 100R12              | EN 856 Type R12  |              |              |     |       |
| 774                         |                     |                              |                  |              |              |     |       |
| 792LT                       | ISO 3862-1 Type R15 | SAE J517 100R15              | EN 856 Type R15  |              |              |     |       |
| 801                         |                     |                              |                  |              |              |     |       |
| 804                         |                     |                              |                  |              |              |     |       |
| 811                         |                     | SAE J517 100R4 / SAE J1942   |                  |              |              |     |       |
| 811HT                       |                     | SAE J517 100R4 / SAE J1942   |                  |              |              |     |       |
| 821                         |                     |                              |                  |              |              |     |       |
| 821FR                       |                     |                              |                  |              |              |     |       |
| 836                         |                     |                              |                  |              |              |     |       |
| 881                         |                     | SAE J517 100R4 / SAE J1942   |                  |              |              |     |       |
| F42                         |                     |                              |                  |              |              |     |       |
| JK                          | ISO 1436-1 Type 2SN | SAE J517 100R2AT             | EN 853 Type 2SN  | NFPA<br>1936 | EES<br>116-4 |     |       |
| SS23CG                      |                     |                              |                  | NFPA<br>58   |              |     | UL 21 |
| SS25UL<br>(-4 through -12)  |                     |                              |                  | NFPA<br>58   |              |     | UL 21 |
| SS25UL-AGA<br>(-4, -6, - 8) |                     |                              |                  |              |              |     |       |

B

#### KEY TO UNDERSTANDING AGENCY APPROVALS FOR BUILDING HOSE ASSEMBLIES

ABS Approved assemblies can be manufactured at any location with Parker's permission. No restrictions.

DNV Approved assemblies can only be manufactured in a Parker approved location that demonstrates a
quality system and management program is in place and must be audited by DNV. Each location must
be granted a "license" issued by Parker HPD for building hose assemblies. Three exist today; Davenport
lowa, Grimsby Canada, and Yangsan Korea.

BV Approved assemblies can only be produced in a BV approved location that demonstrates a quality system Approved assemblies can only be prooduced in a by approved location that demonstrates a quality sys-and management program is in place. Each location must have an initial audit performed by BV before the "license" can be issued. Additionally, ongoing audits setup by BV will be required at each approved location. Davenport lowa is our only approved assembler. UL "Listed" Assemblies must be made at Davenport lowa CSA/CGA Assemblies must be made at Davenport lowa

Technical Catalog 4400 US

### **Application**

# **Performance Standards and Specifications**

|                            |                       | Meets or Exceeds         | s:                          |     |     |      |    | Age  | ncy | Appro | ovals: |    |     |     |      |    |
|----------------------------|-----------------------|--------------------------|-----------------------------|-----|-----|------|----|------|-----|-------|--------|----|-----|-----|------|----|
| Hose                       | ECE                   | CSA                      | AS/NZS                      | ABS | DNV | USCG | LR | MSHA | в۷  | CSA   | RDW    | UL | AGA | DOT | IMCI | NK |
| 472TC                      |                       |                          |                             | •   | •   | •    |    | •    |     |       |        |    |     |     |      |    |
| 472LT                      |                       |                          |                             |     |     | •    |    | •    |     |       |        |    |     |     |      |    |
| 482TC                      |                       |                          |                             |     |     | •    |    | •    |     |       |        |    |     |     |      |    |
| 482ST                      |                       |                          |                             |     |     |      |    | •    |     |       |        |    |     |     |      |    |
| 611HT                      |                       |                          |                             |     |     |      |    | •    |     |       |        |    |     |     |      |    |
| 721                        |                       |                          |                             |     |     |      |    | •    |     |       |        |    |     |     |      |    |
| 722ST (-20 through -32)    |                       |                          |                             | •   | •   | •    | •  | •    |     |       |        |    |     |     |      |    |
| 722LT                      |                       |                          |                             |     |     |      |    | •    |     |       |        |    |     |     |      |    |
| 774                        |                       |                          |                             |     |     |      |    |      |     |       |        |    |     |     |      |    |
| 792LT                      |                       |                          |                             |     |     |      |    | •    |     |       |        |    |     |     |      |    |
| 801                        |                       |                          |                             |     |     |      |    | •    |     |       |        |    |     |     |      |    |
| 804                        |                       |                          |                             |     |     |      |    |      |     |       |        |    |     |     |      |    |
| 811                        |                       |                          |                             |     |     | •    |    |      |     |       |        |    |     |     |      |    |
| 811HT                      |                       |                          |                             | •   |     | •    |    | •    |     |       |        |    |     |     |      |    |
| 821                        |                       |                          |                             |     |     |      |    |      |     |       |        |    |     |     |      |    |
| 821FR                      |                       |                          |                             |     |     |      |    |      |     |       |        |    |     |     |      |    |
| 836                        |                       |                          |                             |     |     |      |    | •    |     |       |        |    |     |     |      |    |
| 881                        |                       |                          |                             | •   |     | •    |    | •    |     |       |        |    |     |     |      |    |
| F42                        |                       |                          |                             |     |     |      |    |      |     |       |        |    |     |     |      |    |
| JK                         |                       |                          |                             |     |     |      |    | •    |     |       |        |    |     |     |      |    |
| SS23CG                     | ECE R110 /<br>ECE R67 | CDA 8.1 2015<br>Type III |                             |     |     |      |    |      |     | •     | •      | •  |     |     |      |    |
| SS25UL (-4 through -12)    |                       |                          |                             |     |     |      |    |      |     |       |        | •  |     |     |      |    |
| SS25UL-AGA<br>(-4, -6, -8) |                       |                          | AS/NZS 1869-2012<br>Class D |     |     |      |    |      |     |       |        |    | •   |     |      |    |

(1) U.S.C.G./MTH (Marine Technical & Hazardous Materials Branch) hoses, hose assemblies and appropriate fittings meet 46CFR56.60-25(c) for use on commercial vessels. Hoses and hose assemblies meet the requirements of SAE J1942. Hose fittings meet the requirements of SAE J19475.

F = Fuel and lube systems.

F - rue and tube systems.

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For questions on standards and specifications please contact the Hose Products' Technical Services Department at (440) 943-5700.

B

# **A**pplication

# **Standards and Specifications**

#### JIS - Adapters

| JIS B8363<br>Code | Parker<br>Part<br>Number | Mates<br>with<br>End Configuration |
|-------------------|--------------------------|------------------------------------|
| A1                | F3T4                     | FU                                 |
| A2                | F3P4                     | GU                                 |
| A3                | F63P4                    | UT                                 |
| E1                | C3T4                     | FU                                 |
| E2                | C3P4                     | GU                                 |
| E3                | V3T4                     | FU                                 |
| E4                | V3P4                     | GU                                 |

Note: See website at www.Parker/tfd.com, Catalog 4300 or call (614) 279-7070 for additional information.

#### JIS - Hose Fittings

В

| JIS<br>B8363<br>Code | Parker<br>End Configeration<br>Code | Fitting<br>Series<br>43 | Fitting<br>Series<br>70 | Fitting<br>Series<br>71 | Fitting<br>Series<br>79 |
|----------------------|-------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| R                    | UT                                  | Χ                       |                         | X                       |                         |
| F                    | FU                                  | Χ                       |                         | X                       |                         |
| С                    | GU                                  | Χ                       | X                       | X                       |                         |
| MF                   | MU                                  | Χ                       |                         | X                       |                         |
| S                    | 15                                  | Χ                       | X                       | X                       |                         |
| 4S                   | 17                                  | Χ                       | X                       | X                       |                         |
| 9S                   | 19                                  | Χ                       | X                       | X                       |                         |
| Н                    | 6A                                  |                         | X                       | X                       | X                       |
| 4H                   | 6F                                  |                         |                         | X                       | X                       |
| 9H                   | 6N                                  |                         | X                       | Х                       | Х                       |

Note: Parker Hose Standards are listed on page E-14 thru E-17

## **A**pplication

# **Assembly Methods**

#### JIC 37° and SAE 45° Flare

Parker's recommended assembly method for JIC 37° flare and SAE 45° flare is the Flats From Wrench Resistance (FFWR) method. This includes steel as well as other materials.

The torque values assigned by size are for reference only, and are only applicable to Parker system components using the FFWR method with trivalent chromate passivation on zinc plating of carbon steel components without lubrication.

|           | Flats From                  | Swivel No           | ut Torque        |
|-----------|-----------------------------|---------------------|------------------|
| Dash Size | Wrench Resistance<br>(FFWR) | Newton Meters (Ref) | Pound Feet (Ref) |
| -4        | 2                           | 18                  | 13               |
| -5        | 2                           | 19                  | 14               |
| -6        | 1-1/2                       | 30                  | 22               |
| -8        | 1-1/2                       | 57                  | 42               |
| -10       | 1-1/2                       | 81                  | 60               |
| -12       | 1-1/4                       | 114                 | 84               |
| -16       | 1                           | 160                 | 118              |
| -20       | 1                           | 228                 | 168              |
| -24       | 1                           | 265                 | 195              |
| -32       | 1                           | 360                 | 265              |

#### Seal-Lok®

Parker's recommended assembly method for Seal-Lok® connections is the torque method.

| Dash | Swivel Nut To                | orque                  | Flats From                  |
|------|------------------------------|------------------------|-----------------------------|
| Size | Newton Meters<br>(+10% / -0) | Pound Feet (+10% / -0) | Wrench Resistance<br>(FFWR) |
| -4   | 25                           | 18                     | 1/2 - 3/4                   |
| -6   | 40                           | 30                     | 1/2 - 3/4                   |
| -8   | 55                           | 40                     | 1/2 - 3/4                   |
| -10  | 80                           | 60                     | 1/2 - 3/4                   |
| -12  | 115                          | 85                     | 1/3 - 1/2                   |
| -16  | 150                          | 110                    | 1/3 - 1/2                   |
| -20  | 205                          | 150                    | 1/3 - 1/2                   |
| -24  | 315                          | 230                    | 1/3 - 1/2                   |
| -32  | -                            | -                      | -                           |

Note: The assembly torques listed are higher than the test torques published in SAE J1453.

#### **Torque Conversion Equivalents**

| Torque Conversion Equivalents |                                        |              |  |  |  |
|-------------------------------|----------------------------------------|--------------|--|--|--|
| Pound Inch - Pound F          | Pound Inch - Pound Foot - Newton Meter |              |  |  |  |
| Pound Foot x 12               | =                                      | Pound Inch   |  |  |  |
| Pound Foot x 1.356            | =                                      | Newton Meter |  |  |  |
| Newton Meter x 8.850          | =                                      | Pound Inch   |  |  |  |
| Newton Meter x 0.737          | =                                      | Pound Foot   |  |  |  |
| Pound Inch x .083             | =                                      | Pound Foot   |  |  |  |
| Pound Inch x 0.113            | =                                      | Newton Meter |  |  |  |

The torque values for other materials are as follows:

- Brass fittings and adapters 65% of the torque value for steel.
- Stainless steel, and Monel Use 5% higher than listed for steel.
   Threads to be lubricated for these materials.
- Dissimilar metals use torque value designated for the lower of the two metals.
- · All fittings are dry except as noted above.

The Flats From Wrench Resistance (FFWR) and torque values listed above are consistent with the values recommended by Parker Tube Fittings Division (614) 279-7070 or www.parker.com/tfd).

4

В





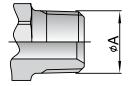


# **Identifying Fitting Types**

In general fittings can be identified by their visual appearance, their sealing surface/sealing type or by their thread type/form. Viewing the following pages, the visual identification will be self explanatory. The sealing mechanism and the method of thread identification, however, needs further explanation

#### **Thread Interface**

The sealing is assured by the flattening of the edges of the threads when the male is screwed into the female fitting. Typically the front of the male fittings is narrower than the back of the fittings – often referred to as tapered threads.



# Determining Sealing Mechanisms:

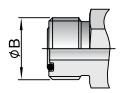
- Thread interface
- O-rina
- Matching angle or metal-to-metal joint
- Mated angle with O-ring

#### O-ring

B

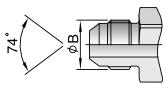
The O-ring on the male is compressed against the corresponding female and assures the seal. This type of sealing mechanism should be the preferred choice for high-pressure applications.

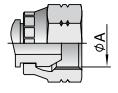


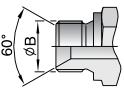


# Matching Angle or Metal-to-Metal Joint

Sealing takes place where the two angled faces of the male and corresponding female meet and are wedged into one another by the tightening of the threaded nut. The sealing surfaces can either be convex or concave (seat) on the male or in the head of the pipe of the female as shown.

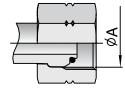


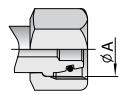




### **Matching Angle with O-ring**

These fittings combine the functionality of both the matching angle seal with the O-ring. The O-ring is in the angled sealing surface of the fitting so that when the threaded male and female are screwed together the sealing surfaces wedge together and at the same time deform the O-ring between them.





# **Determining the Thread Type**

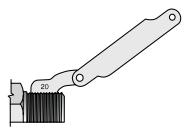
In general of the threads of various fittings look similar and hinder the easy identification of the thread. To assure the correct identification, the threads must be measured and compared to the tables listed in the following section.

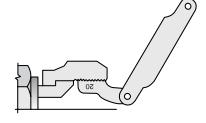
#### **Thread Gauge**

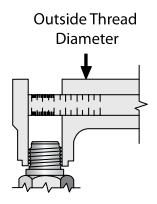
Using a thread gauge, the number of threads per inch can be determined. Holding the gauge and coupling threads in front of a lighted background helps to obtain an accurate measurement.

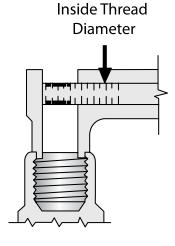
#### **Caliper Measure**

A vernier caliper should be used to measure the thread diameter of the largest point. (Outside diameter (O.D.) of male threads – Inside Diameter (I.D.) of female threads.)









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В

C

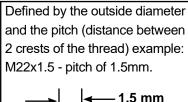
D

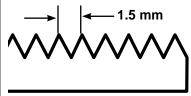
Often referred to as metric fittings, these fittings seal using the angled sealing surfaces (metal-to-metal) or the combination of metal-to-metal with O-rings.

They are available in very light (LL), light (L) or heavy series (S).

The sealing face angles are either 24° with or without O-rings, or 24°/60° universal cones.

Identification is made by measuring the thread size and also the tube outside diameter.





#### **DIN Very Light Series (LL)**

The male 60° cone will mate with the female 60° cone only.

The male has a 60° sealing angle (seat) and straight metric thread.

The female has a 60° seat and straight metric thread.

Standard

B

DIN 20078 Part 3 1)

Parker end configurations **C0** 

#### DIN Light (L) and Heavy Series (S) without O-ring

The male 24° cone will mate with the female universal 24° or 60° cone only.

The male has a 60° sealing angle (seat) and straight metric threads. The female has a 24° and 60° universal seat and straight metric threads.

Standard

DIN 20078 Part 2 1)

(previously known as DIN 20078 A, D & E)

Parker end configurations

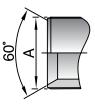
light series

C3, C4, C5, C6 (Often also referred to

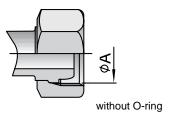
as "Ball nose cones")



Technical



| Tube O.D.<br>(DN) | Thread metric | ØA<br>(mm) | ØB<br>(mm) |
|-------------------|---------------|------------|------------|
| 20                | M30x1.5       | 30.00      | 28.50      |
| 25                | M38x1.5       | 38.00      | 36.50      |
| 32                | M45x1.5       | 45.00      | 43.50      |
| 40                | M52x1.5       | 52.00      | 50.50      |
| 50                | M65x2         | 65.00      | 63.00      |



<sup>1)</sup> obsolete standard, no exact replacement

### DIN 24° Light (L) and Heavy Series (S) with O-ring

The male has a 24° sealing angle cone seat with straight metric threads.

The female has a 24° convex cone with O-ring and a swivel straight metric threaded nut.

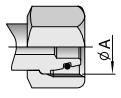
Standard

ISO 12151-2 / ISO 8434-1 & ISO 8434-4

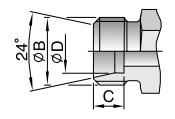
(Previously DIN 20 078 Part 4, 5, 8, 9) Parker end configurations light series

**CA, CE, CF, D0**Parker end configurations heavy series

C9, 0C, 1C, D2







| Tube O.D.<br>(mm) | Spec. | Thread metric | ØA<br>(mm) | ØB<br>(mm) | C<br>(mm) | ØD<br>(mm) |
|-------------------|-------|---------------|------------|------------|-----------|------------|
| 6.00              | 6L    | M12X1.5       | 10.50      | 12.00      | 7.00      | 6.20       |
| 6.00              | 6S    | M14X1.5       | 12.50      | 14.00      | 7.00      | 6.20       |
| 8.00              | 8L    | M14x1.5       | 12.50      | 14.00      | 7.00      | 8.20       |
| 8.00              | 8S    | M16x1.5       | 14.50      | 16.00      | 7.00      | 8.20       |
| 10.00             | 10L   | M16x1.5       | 14.50      | 16.00      | 7.00      | 10.20      |
| 10.00             | 10S   | M18x1.5       | 16.50      | 18.00      | 7.50      | 10.20      |
| 12.00             | 12L   | M18x1.5       | 16.50      | 18.00      | 7.00      | 12.20      |
| 12.00             | 12S   | M20x1.5       | 18.50      | 20.00      | 7.50      | 12.20      |
| 14.00             | 14S   | M22x1.5       | 20.50      | 22.00      | 8.00      | 14.20      |
| 15.00             | 15L   | M22x1.5       | 20.50      | 22.00      | 7.00      | 15.20      |
| 16.00             | 16S   | M24x1.5       | 22.50      | 24.00      | 8.50      | 16.20      |
| 18.00             | 18L   | M26x1.5       | 24.50      | 26.00      | 7.50      | 18.20      |
| 20.00             | 20S   | M30x2         | 27.90      | 30.00      | 10.50     | 20.20      |
| 22.00             | 22L   | M30x2         | 27.90      | 30.00      | 7.50      | 22.20      |
| 25.00             | 25S   | M36x2         | 33.90      | 36.00      | 12.00     | 25.20      |
| 28.00             | 28L   | M36x2         | 33.90      | 36.00      | 7.50      | 28.20      |
| 30.00             | 30S   | M42x2         | 39.90      | 42.00      | 13.50     | 30.20      |
| 35.00             | 35L   | M45x2         | 42.90      | 45.00      | 10.50     | 35.30      |
| 38.00             | 38S   | M52x2         | 49.90      | 52.00      | 16.00     | 38.30      |
| 42.00             | 42L   | M52x2         | 49.90      | 52.00      | 11.00     | 42.30      |









# **British Standard Pipe (BSP)**

Also referred to as Whitworth threads, the BSP thread type fittings seal use metal-to-metal angled surfaces or a combination of metal-to-metal and an O-ring.

The angle of the sealing surfaces is 60° for both forms.

There are two popular thread forms:

British Standard Pipe Parallel (BSPP) and

British Standard Pipe Tapered (BSPT).

# **BSPP**

#### **BS5200**

B

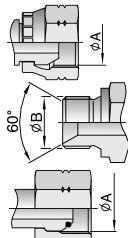
Parker end configurations 92, B1, B2, B4, D9

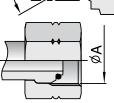
#### **BSPP**

metal-to-metal with O-ring Standard

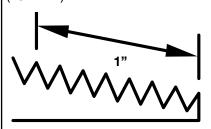
#### ISO 12151-6

Some Parker end configurations may be non-standard parts.





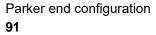
#### Identification is made by measuring the outside diameter of the thread and the number of threads per inch (25.4 mm)

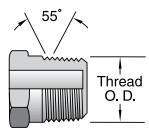


| Tube<br>I.D./O.D.<br>(mm) | Size | Thread<br>BSP | ØA<br>(mm) | ØB<br>(mm) |
|---------------------------|------|---------------|------------|------------|
| 6/10                      | -2   | 1/8x28        | 8.60       | 9.70       |
| 8/13                      | -4   | 1/4x19        | 11.50      | 13.20      |
| 12/17                     | -6   | 3/8x19        | 14.90      | 16.70      |
| 15/21                     | -8   | 1/2x14        | 18.60      | 20.90      |
| 18/23                     | -10  | 5/8x14        | 20.60      | 22.90      |
| 20/27                     | -12  | 3/4x14        | 24.10      | 26.40      |
| 26/34                     | -16  | 1x11          | 30.30      | 33.20      |
| 33/42                     | -20  | 1-1/4x11      | 38.90      | 41.90      |
| 40/49                     | -24  | 1-1/2x11      | 44.90      | 47.80      |
| 50/60                     | -32  | 2x11          | 56.70      | 59.60      |

#### **BSPT**

fittings seal through the thread interface mechanism. Care should be taken not to confuse the BSPT fitting with the NPTF male fitting. BSPT has a 55° thread angle. NPTF has 60° thread angle.

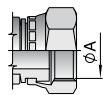




| Tube<br>I.D./O.D.<br>(mm) | Size | Thread<br>BSP | ØA<br>(mm) |
|---------------------------|------|---------------|------------|
| 5/10                      | -2   | 1/8x28        | 9.73       |
| 8/13                      | -4   | 1/4x19        | 13.16      |
| 12/17                     | -6   | 3/8x19        | 16.66      |
| 15/21                     | -8   | 1/2x14        | 20.96      |
| 20/27                     | -12  | 3/4x14        | 26.44      |
| 26/34                     | -16  | 1x11          | 33.25      |
| 33/42                     | -20  | 1-1/4x11      | 41.91      |
| 40/49                     | -24  | 1-1/2x11      | 47.80      |
| 50/60                     | -32  | 2x11          | 59.61      |

#### **BSP Flat Seal**

These fittings have BSP parallel threads but the sealing surface is flat. The seal is made when the composite seal is compressed against the female flat face. Some Parker end configurations may be non-standard parts.



| Tube<br>I.D./O.D.<br>(mm) | Size | Thread<br>BSP | ØA<br>(mm) |
|---------------------------|------|---------------|------------|
| 6/10                      | -2   | 1/8x28        | 8.6        |
| 8/13                      | -4   | 1/4x19        | 11.5       |
| 12/17                     | -6   | 3/8x19        | 14.9       |
| 15/21                     | -8   | 1/2x14        | 18.6       |
| 18/23                     | -10  | 5/8x14        | 20.6       |
| 20/27                     | -12  | 3/4x14        | 24.1       |
| 26/34                     | -16  | 1x11          | 30.3       |

# **French Gas Fittings**

Typical to the French market the French Gas fittings have a 24° sealing surfaces seat with metric straight threads. Although similar to German DIN fittings the threads differ in some sizes as the French Gas fittings have fine threads in all sizes whereas the German DIN fittings use standard threads in the larger sizes.

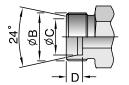
# French Metric 24° Cone Gas Fittings

The sealing mechanism is metal-to-metal.

The fittings are not specified in any international standard.

Some Parker end configurations may be non-standard parts.





| Tube O.D.<br>(mm) | Spec. | Thread metric | ØA<br>(mm) | ØB<br>(mm) | ØC<br>(mm) | D<br>(mm) |
|-------------------|-------|---------------|------------|------------|------------|-----------|
| 6.00              | 6N    | M12x1         | 11.00      | 12.00      | 6.20       | 9.00      |
| 8.00              | 8N    | M14x1.5       | 12.50      | 14.00      | 8.15       | 9.00      |
| 10.00             | 10N   | M16x1.5       | 14.50      | 16.00      | 10.20      | 9.00      |
| 12.00             | 12N   | M18x1.5       | 16.50      | 18.00      | 12.15      | 9.00      |
| 13.25             | 13G   | M20x1.5       | 18.50      | 20.00      | 13.50      | 9.00      |
| 14.00             | 14N   | M20x1.5       | 18.50      | 20.00      | 14.15      | 9.00      |
| 15.00             | 15N   | M22x1.5       | 20.50      | 22.00      | 15.15      | 9.00      |
| 16.00             | 16N   | M24x1.5       | 22.50      | 24.00      | 16.15      | 9.00      |
| 16.75             | 17G   | M24x1.5       | 22.50      | 24.00      | 17.00      | 9.00      |
| 18.00             | 18N   | M27x1.5       | 25.50      | 27.00      | 18.15      | 9.00      |
| 20.00             | 20N   | M27x1.5       | 25.50      | 27.00      | 20.15      | 9.00      |
| 21.25             | 21G   | M30x1.5       | 28.50      | 30.00      | 21.50      | 9.00      |
| 22.00             | 22N   | M30x1.5       | 28.50      | 30.00      | 22.15      | 9.00      |
| 25.00             | 25N   | M33x1.5       | 31.50      | 33.00      | 25.15      | 9.00      |
| 26.75             | 27G   | M36x1.5       | 34.50      | 36.00      | 27.00      | 9.00      |
| 28.00             | 28N   | M36x1.5       | 34.50      | 36.00      | 28.25      | 9.00      |
| 30.00             | 30N   | M39x1.5       | 37.50      | 39.00      | 30.25      | 9.00      |
| 32.00             | 32N   | M42x1.5       | 40.50      | 42.00      | 32.25      | 9.00      |
| 33.25             | 34G   | M45x1.5       | 43.50      | 45.00      | 33.80      | 9.00      |
| 35.00             | 35N   | M45x1.5       | 43.50      | 45.00      | 35.25      | 9.00      |
| 38.00             | 38N   | M48x1.5       | 46.50      | 48.00      | 38.25      | 9.00      |
| 40.00             | 40N   | M52x1.5       | 50.50      | 52.00      | 40.35      | 9.00      |
| 42.25             | 42G   | M52x1.5       | 50.50      | 52.00      | 42.55      | 9.00      |
| 48.25             | 49G   | M58x2         | 55.90      | 58.00      | 49.00      | 11.00     |









## **North American Thread Types**

This type of fitting uses the thread interface to seal and as such has a tapered thread that deforms and forms the seal.

They have 30° sealing angle surfaces, forming a 60° inverted (concave) seat.

The fittings are most frequently seen on machines of US origin.

# Dryseal American Standard Taper Pipe Thread (NPTF)

The NPTF male will mate with the NPTF, NPSF, or NPSM females. Care should be taken not to confuse the NPTF fitting with the BSPT male fitting. NPTF fittings have a 60° thread angle.

BSPT has a 55° thread angle. Standard

**SAE J516** 

Thread OD

| ØA dimension is measured on |
|-----------------------------|
| the 4th pitch of the thread |

| Size | Thread<br>NPTF | ØA<br>(mm) | ØB<br>(mm) |
|------|----------------|------------|------------|
| -2   | 1/8x27         | 10.24      | 8.73       |
| -4   | 1/4x18         | 13.61      | 11.90      |
| -6   | 3/8x18         | 17.05      | 15.90      |
| -8   | 1/2x14         | 21.22      | 19.05      |
| -12  | 3/4x14         | 26.56      | 24.60      |
| -16  | 1x11.5         | 33.22      | 30.95      |
| -20  | 1-1/4x11.5     | 41.98      | 39.69      |
| -24  | 1-1/2x11.5     | 48.05      | 45.24      |
| -32  | 2x11.5         | 60.09      | 57.15      |

Parker end configuration

01

B

#### SAE JIC 37°

Commonly referred to as JIC fittings, these metal-to-metal sealing type fittings have a 37° flare (sealing surface angle) and straight United National Fine Threads (UNF).

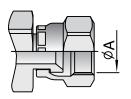
The original design specification for

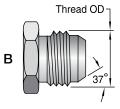
The original design specification for the fittings comes from the Society of Automotive Engineers (SAE) and these fittings are the most common American fitting types in Europe. Standard

ISO 12151-5, ISO8434-2 and SAE J516

Parker JIC hose fittings are fully compatible with Parker Triple-Lok Tube Fittings and adapters.

Parker end configurations **03**, **06/68**, **37/3V**, **39/3W**, **41/3Y**, **L9** 





| Tube O.D. (inch) | Tube O.D.<br>(mm) | Thread<br>UNF | Size | ØA<br>(mm) | ØB<br>(mm) |
|------------------|-------------------|---------------|------|------------|------------|
| 3/16             |                   | 3/8x24        | -3   | 8.60       | 9.50       |
| 1/4              | 6                 | 7/16x20       | -4   | 10.00      | 11.10      |
| 5/16             | 8                 | 1/2x20        | -5   | 11.60      | 12.70      |
| 3/8              | 10                | 9/16x18       | -6   | 13.00      | 14.30      |
| 1/2              | 12                | 3/4x16        | -8   | 17.60      | 19.10      |
| 5/8              | 14-15-16          | 7/8x14        | -10  | 20.50      | 22.20      |
| 3/4              | 18-20             | 1-1/16x12     | -12  | 24.60      | 27.00      |
| 7/8              | 22                | 1-3/16x12     | -14  | 28.30      | 30.10      |
| 1                | 25                | 1-5/16x12     | -16  | 31.30      | 33.30      |
| 1-1/4            | 30-32             | 1-5/8x12      | -20  | 39.20      | 41.30      |
| 1-1/2            | 38                | 1-7/8x12      | -24  | 45.60      | 47.60      |
| 2                |                   | 2-1/2x12      | x32  | 61.50      | 63.50      |

#### SAE 45° Flare

The angle of the flare is commonly used as a name when referring to these metalto-metal sealing fittings.

The female fittings have a 90° concave inverted seat, created by the 45° angle sealing surfaces.

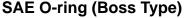
The SAE 45° flare male will mate with an SAE 45° flare female only or a dual seat JIC 37°/SAE45°.

Standard

**SAE J516** 

Parker end configurations

04, 08/68, 77/3V, 79/3W, 81/3Y



This male fitting has straight threads, a sealing face and an O-ring. It is compatible only with female boss type fittings generally found in the ports of machines. Sealing is achieved through the O-ring of the male and through the sealing face of the female. Parker end configuration 05

#### O-ring Face Seal (ORFS)

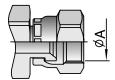
ORFS fittings are becoming the most popular international fitting type used on global OEM machines due to their high level of sealing and their good vibration resistance. The fittings use the O-ring compression mechanism to seal.

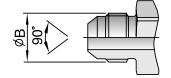
The female fittings have flat faces and straight threaded UNF swivel nuts. The male fittings have the O-ring in a groove in the flat face.

Seen as a major advantage, these fittings offer the possibility to build the hose assemblies into fixed distances/spaces, without having to move back other system components due the flat faces of the male and female fittings - the hose assembly can be slotted in.

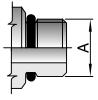
Standard

ISO 12151-1, ISO8434-3 and SAE J516 Parker end configurations JC, JM/J0, JS, JU, J1, J3, J5, J7, J9

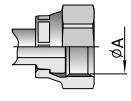


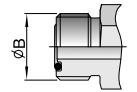


| Tube O.D. (inch) | Size | Thread<br>UNF | ØA<br>(mm) | ØB<br>(mm) |
|------------------|------|---------------|------------|------------|
| 1/4              | x4   | 7/16x20       | 9.90       | 11.10      |
| 5/16             | -5   | 1/2x20        | 11.50      | 12.70      |
| 3/8              | -6   | 5/8x18        | 14.30      | 15.90      |
| 1/2              | -8   | 3/4x16        | 17.50      | 19.10      |
| 5/8              | -10  | 7/8x14        | 20.60      | 22.20      |
| 3/4              | -12  | 1-1/16x14     | 25.00      | 27.00      |



| Thread<br>UNF | Size | ØA<br>(mm) |
|---------------|------|------------|
| 5/16x24       | -2   | 7.93       |
| 3/8x24        | -3   | 9.52       |
| 7/16x20       | -4   | 11.11      |
| 1/2x20        | -5   | 12.70      |
| 9/16x18       | -6   | 14.28      |
| 3/4x16        | -8   | 19.10      |
| 7/8x14        | -10  | 22.22      |
| 1-1/16x12     | -12  | 27.00      |
| 1-3/16x12     | -14  | 30.10      |
| 1-5/16x12     | -16  | 33.30      |
| 1-5/8x12      | -20  | 41.30      |
| 1-7/8x12      | -24  | 47.60      |
| 2-1/2x12      | -32  | 63.50      |





| Tube O.D.<br>(inch) | Tube O.D.<br>(mm) | Thread<br>UNF | Size | ØA<br>(mm) | ØB<br>(mm) |
|---------------------|-------------------|---------------|------|------------|------------|
| 1/4                 | 6                 | 9/16x18       | -4   | 13.00      | 14.20      |
| 3/8                 | 10                | 11/16x16      | -6   | 15.90      | 17.50      |
| 1/2                 | 12                | 13/16x16      | -8   | 19.10      | 20.60      |
| 5/8                 | 16                | 1x14          | -10  | 23.80      | 25.40      |
| 3/4                 | 20                | 1-3/16x12     | -12  | 28.20      | 30.10      |
| 1                   | 25                | 1-7/16x12     | -16  | 34.15      | 36.50      |
| 1-1/4               | 32                | 1-11/16x12    | -20  | 40.50      | 42.90      |
| 1-1/2               | 38                | 2x12          | -24  | 48.80      | 50.80      |







# Flange Fittings Code 61 and Code 62

The 4-bolt split flange (or full flange) fitting is used worldwide for connecting high-pressure hoses typically to pumps, motors and cylinders, where the hose assemblies are subjected to large pressure loadings. The sealing mechanism is through compression of the O-ring in the face of the flange head against the surface of the port/connection. The flange fittings are generally separated into two pressure classes referred to as 3000 psi (SFL) or 6000 psi (SFS). ISO 12151-3 refers to the flange fittings as code 61 for the 3000 psi and code 62 for the 6000 psi. In addition to these flanges, custom-

er-specific Komatsu® and CATER-PILLAR® flanges can also be found

in the market.

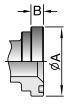
B

Parker end configurations
Code 61 (3000 psi)
15, 16, 17, 19, P5, P7, P9
5000 psi (Code 61 dimensions)
4A, 4F, 4N
Code 62 (6000 psi)
6A, 6F, 6N, PA, PF, PN, 89
Caterpillar flange
XA, XF, XG, XN

Although not in the SAE or the ISO standard the size -10 (5/8) flange head is gaining popularity.

This flange is often found on Komatsu equipment or hydrostatic drives in agricultural machines.

- Standard Code 61 for 3000 to 5000 psi max., depending on size
- High Pressure Code 62 for 6000 psi max. regardless of size



Technical

| Flange<br>(inch) | Size | Code 61<br>MPa / psi | Code 62<br>MPa / psi |
|------------------|------|----------------------|----------------------|
| 1/2              | -8   | 34.5 / 5000          | 41.3 / 6000          |
| 3/4              | -12  | 34.5 / 5000          | 41.3 / 6000          |
| 1                | -16  | 34.5 / 5000          | 41.3 / 6000          |
| 1-1/4            | -20  | 27.5 / 4000          | 41.3 / 6000          |
| 1-1/2            | -24  | 20.7 / 3000          | 41.3 / 6000          |
| 2                | -32  | 20.7 / 3000          | 41.3 / 6000          |

Note: 5000 psi in size -20/-24/-32 with 4A,4F and 4N fittings and 50H flange halves.

#### Code 61 - SAE - 3000 psi

| Flange<br>(inch) | Size | ØA<br>(mm) | B<br>(mm) | O-Ring     |
|------------------|------|------------|-----------|------------|
| 1/2              | -8   | 30.18      | 6.73      | 18.64x3.53 |
| 3/4              | -12  | 38.10      | 6.73      | 24.99x3.53 |
| 1                | -16  | 44.45      | 8.00      | 32.92x3.53 |
| 1-1/4            | -20  | 50.80      | 8.00      | 37.69x3.53 |
| 1-1/2            | -24  | 60.33      | 8.00      | 47.22x3.53 |
| 2                | -32  | 71.42      | 9.53      | 56.74x3.53 |
| 2-1/2            | -40  | 84.12      | 9.53      | 69.44x3.53 |
| 3                | -48  | 101.60     | 9.53      | 85.32x3.53 |

#### Code 62 - SAE - 6000 psi

| Flange<br>(inch) | Size | ØA<br>(mm) | B<br>(mm) | O-Ring     |
|------------------|------|------------|-----------|------------|
| 1/2              | -8   | 31.75      | 7.75      | 18.64x3.53 |
| 3/4              | -12  | 41.28      | 8.76      | 24.99x3.53 |
| 1                | -16  | 47.63      | 9.53      | 32.92x3.53 |
| 1-1/4            | -20  | 53.98      | 10.29     | 37.69x3.53 |
| 1-1/2            | -24  | 63.50      | 12.57     | 47.22x3.53 |
| 2                | -32  | 79.38      | 12.57     | 56.74x3.53 |

#### **CATERPILLAR®**

| Flange<br>(inch) | Size | ØA<br>(mm) | B<br>(mm) | O-Ring     |
|------------------|------|------------|-----------|------------|
| 3/4              | -12  | 41.28      | 14.22     | 25.40x5.00 |
| 1                | -16  | 47.63      | 14.22     | 31.90x5.00 |
| 1-1/4            | -20  | 53.98      | 14.22     | 38.20x5.00 |
| 1-1/2            | -24  | 63.50      | 14.22     | 44.70x5.00 |

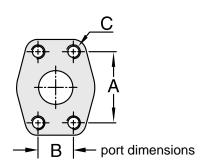
#### Komatsu®

| Flange<br>(inch) | Size | ØA<br>(mm) | B<br>(mm) | O-Ring   |
|------------------|------|------------|-----------|----------|
| 5/8              | -10  | 34.25      | 6.00      | 21.7x3.5 |

#### 4-Bolt Split Flange

A 4-bolt split flange is used to attach the flange fittings to their ports.

- Standard Code 61 for 3000 to 5000 psi max., depending on size
- High Pressure Code 62 for 6000 psi max., regardless of size



Code 61 - SAE - 3000 psi

| Flange | Size | Α    | В    |         | C         |
|--------|------|------|------|---------|-----------|
| (inch) | Size | (mm) | (mm) | (inch)  | (metr.)   |
| 1/2    | -8   | 38.1 | 17.5 | 5/16x18 | M8x1.25   |
| 3/4    | -12  | 47.6 | 22.3 | 3/8x16  | M10x1.5   |
| 1      | -16  | 52.4 | 26.2 | 3/8x16  | M10x1.5   |
| 1-1/4  | -20  | 58.7 | 30.2 | 7/16x14 | M10x1.5   |
| 1-1/2  | -24  | 69.9 | 35.7 | 1/2x13  | M12x1.75  |
| 2      | -32  | 77.8 | 42.8 | 1/2x13  | M12x1.75* |

Code 62 - SAE - 6000 psi

| Flange | C:   | Α    | В    | (       | 3         |
|--------|------|------|------|---------|-----------|
| (inch) | Size | (mm) | (mm) | (inch)  | (metr.)   |
| 1/2    | -8   | 40.5 | 18.2 | 5/16x18 | M8x1.25   |
| 3/4    | -12  | 50.8 | 23.8 | 3/8x16  | M10x1.5   |
| 1      | -16  | 57.2 | 27.8 | 7/16x14 | M12x1.75  |
| 1-1/4  | -20  | 66.7 | 31.8 | 1/2x13  | M12x1.75* |
| 1-1/2  | -24  | 79.4 | 36.5 | 5/8x11  | M16x2     |
| 2      | -32  | 96.8 | 44.4 | 3/4x10  | M20x2.5   |

<sup>\*</sup>M14x2 still used in the market but no longer in accordance with ISO 6162

# Replacing Caterpillar® 6000 PSI Flange Fittings with SAE Code 62 Flange Fittings and Parker "Caterpillar®" Style Flange Fittings

Caterpillar® has a proprietary 6000 PSI hydraulic flange fitting for use on their equipment. This fitting is similar to the SAE Code 62 hydraulic flange (SAE J518). Flange diameters and bolt hole spacing are the same. The Caterpillar® flange head is thicker (.560" in all sizes) and the configuration and location of the O-ring groove is different, requiring the use of a special O-ring.

The Caterpillar® 6000 PSI flange fitting can be replaced with a Parker "Caterpillar®" style flange fitting

such as the 1XA78 using the existing Caterpillar® flange halves and bolts. In this case the XARG O-ring would be used. The fitting could also be replaced with a standard Code 62 flange fitting such as the 16A78. In this case use HFH flange halves or the HFHFHK kit with the standard SAE O-ring (711510).

Do not use the Caterpillar® 6000 PSI split flange halves on SAE Code 62 flange fittings or SAE Code 62 flange halves on Caterpillar® 6000 PSI flange fittings.

|       | H     | H<br>+<br>-<br>-         |             |  |
|-------|-------|--------------------------|-------------|--|
| Size  |       | H (in)                   |             |  |
|       |       | Caterpillar <sup>®</sup> | SAE Code 62 |  |
| 3/4   | (-12) | .560                     | .345        |  |
| 1     | (-16) | .560                     | .375        |  |
| 1-1/4 | (-20) | .560                     | .405        |  |
| 1-1/2 | (-24) | .560                     | .495        |  |
|       | , , , |                          |             |  |

| Procedure                                                                                                   | P-ring P/N | Flange Half<br>P/N                   | Flange Kit<br>P/N                    |
|-------------------------------------------------------------------------------------------------------------|------------|--------------------------------------|--------------------------------------|
| When replacing<br>Caterpillar® 6000 PSI<br>Flange Fittings with<br>Parker "Caterpillar®<br>Style" Fittings: | XARG-Size  | Use existing flange halves and bolts | Use existing flange halves and bolts |
| When replacing Caterpillar® 6000 PSI Flange<br>Fittings with SAE Code<br>62 Flange Fittings:                | 711510*    | HFH-Size                             | HFHFHK-<br>Size                      |

B



# **Japanese Fittings**

The Japanese Industrial Standard (JIS) is seen on most Japanese equipment and uses a 30° sealing angle seat and either British Standard Pipe Parallel or metric threads.

Care must be taken not to confuse the JIS fittings with BSP or JIC fittings.

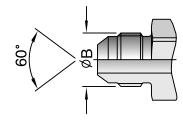
#### Japanese fittings - JIS

The sealing mechanism of the fittings is the 30° metal-to-metal angled surfaces

Parker end configurations MU, XU (Metric) FU (BSP)

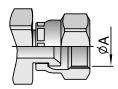
JIS 30° metric

| Symbol | Thread metric | ØA<br>(mm) | ØB<br>(mm) |
|--------|---------------|------------|------------|
| MU-6   | M14x1.5       | 12.50      | 14.00      |
| MU-9   | M18x1.5       | 16.50      | 18.00      |
| MU-12  | M22x1.5       | 20.50      | 22.00      |
| MU-15  | M27x2         | 25.00      | 27.00      |
| MU-19  | M27x2         | 25.00      | 27.00      |
| MU-25  | M33x2         | 31.00      | 33.00      |
| MU-32  | M42x2         | 40.00      | 42.00      |
| MU-38  | M50x2         | 48.00      | 50.00      |
| MU-50  | M60x2         | 58.00      | 60.00      |



#### JIS 30° BSP

| Symbol     | Thread<br>BSP | ØA<br>(mm) | ØB<br>(mm) |
|------------|---------------|------------|------------|
| GUI-3      | 1/8x28        | 8.60       | 9.70       |
| GUI-5/-6   | 1/4x19        | 11.50      | 13.20      |
| GUI-8/-9   | 3/8x19        | 14.90      | 16.70      |
| GUI-12     | 1/2x14        | 18.60      | 20.90      |
| GUI-15/-19 | 3/4x14        | 24.10      | 26.40      |
| GUI-25     | 1x11          | 30.30      | 33.20      |
| GUI-32     | 1-1/4x11      | 38.90      | 41.90      |
| GUI-38     | 1-1/2x11      | 44.90      | 47.80      |
| GUI-50     | 2x11          | 56.70      | 59.60      |



В

# Application Thread Guide

| size | NPTF Pipe<br>Thread Size | SAE (JIC) 37<br>Flare Thread<br>Size | SAE 45 Flare<br>Thread Size | O-Ring Style<br>Straight<br>Thread Size | SAE Inverted<br>Flare Thread<br>Size | PTT 30 Flare<br>Thread Size | SAE Flare-<br>less Thread<br>Size | Seal-Lok<br>Thread |
|------|--------------------------|--------------------------------------|-----------------------------|-----------------------------------------|--------------------------------------|-----------------------------|-----------------------------------|--------------------|
| 2    | 1/8 - 27                 | 5/16 - 24                            | 5/16 - 24                   | 5/16 - 24                               | -                                    | -                           | 5/16 - 24                         | -                  |
| 3    | -                        | 3/8 - 24                             | 3/8 - 24                    | 3/8 - 24                                | -                                    | -                           | 3/8 -24                           | -                  |
| 4    | 1/4 - 18                 | 7/16 - 20                            | 7/16 - 20                   | 7/16 - 20                               | 7/16 - 24                            | -                           | 7/16 - 20                         | 9/16 - 18          |
| 5    | -                        | 1/2 - 20                             | 1/2 - 20                    | 1/2 - 20                                | 1/2 - 20                             | -                           | 1/2 - 20                          | -                  |
| 6    | 3/8 - 18                 | 9/16 - 18                            | 5/8 - 18                    | 9/16 - 18                               | 5/8 - 18                             | -                           | 9/16 - 18                         | 11/16-16           |
| 8    | 1/2 - 14                 | 3/4 - 16                             | 3/4 - 16                    | 3/4 - 16                                | 3/4 - 18                             | -                           | 3/4 - 16                          | 13/16 - 16         |
| 10   | -                        | 7/8 - 14                             | 7/8 - 14                    | 7/8 - 14                                | 7/8 - 18                             | -                           | 7/8 - 14                          | 1 -14              |
| 12   | 3/4 - 14                 | 1 1/16 - 12                          | 1 1/16 - 14                 | 1 1/16 - 12                             | -                                    | -                           | 1 1/16 - 12                       | 1 3/16 - 12        |
| 14   | -                        | 1 3/16 - 12                          | -                           | 1 3/16 - 12                             | -                                    | -                           | 1 3/16 - 12                       | -                  |
| 16   | 1 - 11 1/2               | 1 5/16 - 12                          | -                           | 1 5/16 - 12                             | -                                    | 1 5/16 - 14                 | 1 5/16 - 12                       | 1 7/16 - 12        |
| 20   | 1 1/4 - 11 1/2           | 1 5/8 - 12                           | -                           | 1 5/8 - 12                              | -                                    | 1 5/8 - 14                  | 1 5/8 - 12                        | 1 11/16 - 12       |
| 24   | 1 1/2 - 11 1/2           | 1 7/8 - 12                           | -                           | 1 7/8 - 12                              | -                                    | 1 7/8 - 14                  | 1 7/8 - 12                        | 2-12               |
| 32   | 2 - 11 1/2               | 2 1/2 - 12                           | -                           | 2 1/2 - 12                              | -                                    | 2 1/2 - 12                  | 2 1/2 - 12                        | -                  |

| Fitting<br>Size | DIN "L"<br>Swivel<br>Female<br>Thread<br>Size | DIN "S"<br>Swivel<br>Female<br>Thread<br>Size | DIN "L"<br>Male Stud<br>Thread<br>Size | DIN "S"<br>Male Stud<br>Thread<br>Size | Male BSPP<br>Thread<br>Size | BSP<br>Swive<br>Female<br>Thread<br>Size | French<br>Swivel<br>Female Gaz<br>Series | French Swivel Female Metric Metric Series French Male Stud Metric Series |
|-----------------|-----------------------------------------------|-----------------------------------------------|----------------------------------------|----------------------------------------|-----------------------------|------------------------------------------|------------------------------------------|--------------------------------------------------------------------------|
| 4               | -                                             | -                                             | -                                      | -                                      | 1/4x19                      | 1/4x19                                   |                                          | <u>-</u>                                                                 |
| 6               | M12x1,5                                       | M14x1,5                                       | M12x1,5                                | M14x1,5                                | 3/8x19                      | 3/8x19                                   | -                                        | M12x1                                                                    |
| 8               | M14x1,5                                       | M16x1,5                                       | M14X1,5                                | M16x1,5                                | 1/2x14                      | 1/2x14                                   | -                                        | M14x1,5                                                                  |
| 10              | M16X1,5                                       | M18x1,5                                       | M16x1,5                                | M18x1,5                                | 5/8x14                      | 5/8x14                                   | -                                        | M16x1,5                                                                  |
| 12              | M18x1,5                                       | M20x1,5                                       | M18X1,5                                | M20x1,5                                | 3/4x14                      | 3/4x14                                   | -                                        | M18x1,5                                                                  |
| -               | -                                             | -                                             | -                                      | -                                      | -                           | -                                        | M20x1,5                                  | -                                                                        |
| 14              | -                                             | M22x1,5                                       | -                                      | M22x1,5                                | -                           | -                                        | -                                        | M20x1,5                                                                  |
| 15              | M22x1,5                                       | -                                             | M22x1,5                                | -                                      | -                           | -                                        | -                                        | M22x1,5                                                                  |
| 16              | -                                             | M24x1,5                                       | -                                      | M24x1,5                                | 1x11                        | 1x 11                                    | -                                        | M24X1,5                                                                  |
| -               | -                                             | -                                             | -                                      | -                                      | -                           | -                                        | M24x1,5                                  | -                                                                        |
| 18              | M26x1,5                                       | -                                             | M26x1,5                                | -                                      | -                           | -                                        | -                                        | M27x1,5                                                                  |
| 20              | -                                             | M30x2                                         | -                                      | M30x2                                  | 1 1/4x11                    | 1 1/4x11                                 | -                                        | M27x1,5                                                                  |
| -               | -                                             | -                                             | -                                      | -                                      | -                           | -                                        | M30x 1,5                                 | -                                                                        |
| 22              | M30x2                                         | -                                             | M30x2                                  | -                                      | -                           | -                                        | -                                        | M30x1,5                                                                  |
| 25              | -                                             | M36x2                                         | -                                      | M36x2                                  | 1 1/2x11                    | 1 1/2x11                                 | -                                        | M33x1,5                                                                  |
| -               | -                                             | -                                             | -                                      | -                                      | -                           | -                                        | M36x1,5                                  | -                                                                        |
| 28              | M36x2                                         | -                                             | M36x2                                  | -                                      | -                           | -                                        | -                                        | M36x1,5                                                                  |
| 30              | -                                             | M42x2                                         | -                                      | M42x2                                  | 2x11                        | 2x11                                     | -                                        | M39x1,5                                                                  |
| 33              | -                                             | -                                             | -                                      | -                                      | -                           | -                                        | M45x1,5                                  | -<br>-                                                                   |









# **A**pplication

B

#### Fnd Description Code Male NPTF Pipe - Rigid - Straight 01 Male NPTF Pipe - Swivel - Straight 13 Male NPTF Pipe - Swivel - 90° Elbow 1L Male API Pipe - Rigid - Straight ΑP Female NPTF Pipe - Rigid - Straight 02 Female NPSM Pipe - Swivel - Straight (60° Cone) 07 Female NPTF Pipe - Swivel - Straight S2 Female NPSM Pipe - Gasket Joint - Swivel - Straight 7G Female Grease Connection - SPL-PTF Taper Thread - Rigid GJ Straight - 1/2 x 27 Male NPTF Pipe - Rigid - 45° Elbow 31 Male NPTF Pipe - Rigid - 90° Elbow or Side Outlet 21 Male SAE Straight Thread with O-Ring - Rigid - Straight 05 Male SAE Straight Thread with O-Ring - Swivel - Straight 0G SAE Str. Male SAE Straight Thread with O-Ring - Adjustable - 45° Elbow 25 Male SAE Straight Thread with O-Ring - Swivel - 90° Elbow 0L Male SAE Straight Thread with O-Ring - Adjustable - 90° Elbow 35 Male JIC 37° - Rigid - Straight 03 Male JIC 37° - Bulkhead without Locknut - Straight LB Female JIC 37° - Swivel - Straight 06 Female JIC 37° - Swivel - 45° Elbow - Short Drop 37 Female JIC 37° - Swivel - 45° Elbow - Medium Drop L7 Female JIC 37° - Swivel - 90° Elbow - Short Drop 39 Female JIC 37° - Swivel - 90° Elbow - Medium Drop L9 Female JIC 37° - Swivel - 90° Elbow - Long Drop 41 Female JIC 37° - Swivel - Straight 48 Female JIC 37° - Swivel - 150° Elbow 4V Male SAE 45° - Rigid - Straight 04 Female SAE 45° - Swivel - Straight 08 Female SAE 45 / Swivel - 45° Elbow 77 Female SAE 45 / Swivel - 90° Elbow 79 Female SAE 45 / Swivel - 90° Elbow - Long Drop 81 Female JIC 37°/SAE 45° Dual Flare - Swivel - Straight 68 Male Inverted SAE 45° - Swivel - Straight 28 Male Inverted SAE 45° - Swivel - 45° Elbow 67 Male Inverted SAE 45° - Swivel - 90° Elbow 69 Inverted Male Inverted SAE 45° - Swivel - 90° Elbow - Long (In-Line) 71 Female Inverted SAE 45° - Rigid - Straight 29

# **Standard Fitting Connections** by Connection Type

|        | Description                                                                                 | End   |
|--------|---------------------------------------------------------------------------------------------|-------|
|        | ·                                                                                           | Code  |
|        | Male Tube-O - Swivel - Straight - Short Pilot                                               | S5    |
|        | Male Tube-O - Swivel - Straight - Long Pilot                                                | 45    |
|        | Male Tube-O - Swivel - Straight - Long Pilot with Low Pressure<br>Charge Port for R134a     | 45-PT |
|        | Female Tube-O - Swivel - 90° Elbow - Long Pilot                                             | 5L    |
|        | Female Tube-O - Swivel - 90° Elbow - Long Pilot with Low<br>Pressure Charge Port for R134a  | 5L-PT |
|        | Male Tube-O - Swivel - 90° Elbow - Long Pilot                                               | 5M    |
|        | Male Tube-O - Swivel - 90° Elbow - Long Pilot with Low<br>Pressure Charge Port for R134a    | 5M-PT |
|        | Male Tube-O - Swivel - 90° Elbow - Long Pilot with Low<br>Pressure Charge Port for R134a    | 5M-PV |
|        | Male Tube-O - Rigid - Straight - Internal Long Pilot (3-Step)                               | 5G    |
|        | Male Tube-O - Swivel - 45° Elbow - Short Pilot                                              | 5R    |
|        | Male Tube-O - Swivel - 45° Elbow - Long Pilot                                               | 5P    |
| C-eqn1 | Male Tube-O - Swivel - 45° Elbow - Long Pilot with Low Pressure Charge Port for R134a       | 5P-PT |
| 1      | Male Tube-O - Swivel - 90° Elbow - Short Pilot                                              | 5K    |
|        | Male Tube-O - Swivel - 90° Elbow - Short Pilot with High<br>Pressure Charge Port for R134a  | 5K-PB |
|        | Female Tube-O - Swivel - Straight - Short Pilot                                             | 5S    |
|        | Female Tube-O - Swivel - Straight - Long Pilot                                              | 59    |
|        | Female Tube-O - Swivel - Straight - Long Pilot with High<br>Pressure Charge Port for 134a   | 59-PB |
|        | Female Tube-O - Swivel - Straight - Long Pilot with Low Pressure Charge Port for R134a      | 59-PT |
|        | Female Tube-O - Swivel - 45° Elbow - Short Pilot                                            | 5H    |
|        | Female Tube-O - Swivel - 45° Elbow - Long Pilot                                             | 5N    |
|        | Female Tube-O - Swivel - 45° Elbow - Long Pilot with High<br>Pressure Charge Port for R134a | 5N-PB |
|        | Female Tube-O - Swivel - 45° Elbow - Long Pilot with Low Pressure Charge Port for R134a     | 5N-PT |
|        | Female Tube-O - Swivel - 90° Elbow - Short Pilot                                            | 5T    |
|        | Female Compressor - Swivel - 45° Elbow                                                      | 5V    |
| ō      | Female Compressor - Swivel - 90° Elbow                                                      | 5W    |
| ressor | Female Compressor - Swivel - 90° Elbow - Block Type                                         | 5Z    |
| Compr  | Female Compressor - Swivel - 135° Elbow                                                     | RV    |
| ၓ      | Female Compressor - Swivel - 180° Elbow - Block Type                                        | RZ    |
|        | Two Hole (2.25" X 0.44") Flange - Rigid - 90° Elbow                                         | 2H    |
| e      | SAE Code 61 Flange Head - Straight                                                          | 15    |
| Flange | SAE Code 61 Flange Head - Straight (5,000 psi)                                              | 4A    |
| Ĭ.     | SAE Code 61 Flange Head - 22½° Elbow -                                                      | 16    |

# **A**pplication

#### Continued from previous page

| 001        | minuca nom previous page                            |             |
|------------|-----------------------------------------------------|-------------|
|            | Description                                         | End<br>Code |
|            | SAE Code 61 Flange Head-30° Elbow                   | 26          |
|            | SAE Code 61 Flange Head-45° Elbow                   | 17          |
|            | SAE Code 61 Flange Head-45° Elbow (5,000 psi)       | 4F          |
|            | SAE Code 61 Flange Head-60° Elbow                   | 27          |
|            | SAE Code 61 Flange Head - 67½° Elbow                | 18          |
|            | SAE Code 61 Flange Head - 90° Elbow                 | 19          |
|            | SAE Code 61 Flange Head - 90° Elbow - (5,000 psi)   | 4N          |
|            | SAE Code 61 Flange Head - 90° Elbow - Long Drop     | 89          |
|            | SAE Code 61 Flange Head - 110° Elbow                | 2U          |
|            | SAE Code 62 Flange Head - Straight                  | 6A          |
| ge         | SAE Code 62 Flange Head - 22½° Elbow                | 6B          |
| Flange     | SAE Code 62 Flange Head - 30° Elbow                 | 6E          |
|            | SAE Code 62 Flange Head - 45° Elbow                 | 6F          |
|            | SAE Code 62 Flange Head - 60° Elbow                 | 6G          |
|            | SAE Code 62 Flange Head - 90° Elbow                 | 6N          |
|            | Caterpillar® Flange Head - Straight                 | XA          |
|            | Caterpillar® Flange Head - 22½° Elbow               | XB          |
|            | Caterpillar® Flange Head - 30° Elbow                | XE          |
|            | Caterpillar® Flange Head - 45° Elbow                | XF          |
|            | Caterpillar® Flange Head - 60° Elbow                | XG          |
|            | Caterpillar® Flange Head - 67½° Elbow               | XM          |
|            | Caterpillar® Flange Head - 90° Elbow                | XN          |
|            | Male Seal-Lok - Rigid - Straight (with O-Ring)      | J0          |
|            | Male Seal-Lok - Bulkhead without Locknut - Straight | JB          |
|            | (with O-Ring)                                       |             |
|            | Female Seal-Lok - Swivel - Straight - Long          | JS          |
| 후          | Female Seal-Lok - Swivel - Straight - Short         | JC          |
| Seal-Lok   | Female Seal-Lok - Swivel - 221/2° Elbow             | J6          |
| "          | Female Seal-Lok - Swivel - 45° Elbow                | J7          |
|            | Female Seal-Lok - Swivel - 90° Elbow - Short Drop   | J9          |
|            | Female Seal-Lok - Swivel - 90° Elbow - Medium Drop  | J5          |
|            | Female Seal-Lok - Swivel - 90° Elbow - Long Drop    | J1          |
|            | Female Metric Swivel - Straight (30° Flare)         | MU          |
|            | Female Metric - Swivel - Straight (30° Flare)       | XU          |
| <u>.</u> 2 | Male Metric L - Rigid - Straight (24° Cone)         | D0          |
| Metric     | Male Standpipe Metric L - Rigid - Straight          | 1D          |
|            | Female Metric - Swivel - Straight (Ball Nose)       | C0          |
|            | Female Metric L - Swivel - Straight (Ball Nose)     | C3          |
|            | Female Metric L - Swivel - 45° Elbow (Ball Nose)    | C4          |

# **Standard Fitting Connections** by Connection Type

|           | Description                                                           | End<br>Code |
|-----------|-----------------------------------------------------------------------|-------------|
|           | Female Metric L - Swivel - 90° Elbow (Ball Nose)                      | C5          |
|           | Female Metric L - Swivel - Straight (24° Cone with O-Ring)            | CA          |
|           | Female Metric L - Swivel - 45° Elbow (24° Cone with O-Ring)           | CE          |
|           | Female Metric L - Swivel - 90° Elbow (24° Cone with O-Ring)           | CF          |
|           | Male Metric S - Rigid - Straight (24° Cone)                           | D2          |
| Ë         | Male Standpipe Metric S - Rigid - Straight                            | 3D          |
| Metric    | Female Metric S - Swivel - Straight (Ball Nose)                       | C6          |
|           | Female Metric S - Swivel - 45° Elbow (Ball Nose)                      | C7          |
|           | Female Metric S - Swivel - 90° Elbow (Ball Nose)                      | C8          |
|           | Female Metric S - Swivel - Straight (24° Cone with O-Ring)            | C9          |
|           | Female Metric S - Swivel - 45° Elbow (24° Cone with O-Ring)           | 0C          |
|           | Female Metric S - Swivel - 90° Elbow (24° Cone with O-Ring)           | 1C          |
|           | Male BSP Taper Pipe - Rigid - Straight                                | 91          |
|           | Female BSP Parallel Pipe - Swivel - Straight (60° Cone)               | 92          |
|           | Male BSP Parallel Pipe - Rigid - Straight (60° Cone)                  | D9          |
|           | Female BSP Parallel Pipe - Swivel - 45° Elbow (60° Cone)              | B1          |
|           | Female BSP Parallel Pipe - Swivel - 90° Elbow (60° Cone)              | B2          |
|           | Female BSP Parallel Pipe - Swivel - 90° Elbow Block Type (60° Cone)   | B4          |
| BSP       | Female BSP Parallel Pipe - Swivel - Straight (Flat Seat)              | B5          |
| _         | Male BSP Taper Pipe - Rigid - 45° Elbow                               | BV          |
|           | Male BSP Taper Pipe - Rigid - 90° Elbow or Side Outlet                | BZ          |
|           | Female BSP Parallel Pipe - Swivel - Straight (30° Flare)              | FU          |
|           | Male BSP Taper Pipe - Rigid - Straight (60° Cone)                     | UT          |
|           | Female BSP Parallel Pipe - Swivel - Straight (60° Cone)               | GU          |
|           | Female BSP Parallel Pipe - Swivel - 45° Elbow (60° Cone)              | G1          |
|           | Female BSP Parallel Pipe - Swivel - 90° Elbow (60° Cone)              | G2          |
| Gaz       | Male French Gaz Series - Rigid - Straight (24° Cone)                  | FG          |
| Œ.        | Female French Gaz Series - Swivel - Straight (Ball Nose)              | F4          |
|           | DIN Metric Banjo - Straight                                           | 49          |
|           | 88 Series Heavy Duty Hose Clamp (Double Bolt Hose Clamp)              | 88DB        |
|           | 88 Series Hose Clamp-SAE 100R4 Two-Bolt Clamp                         | 88HC-H      |
|           | 88 Series Hose Clamp (Worm Gear)                                      | 88HC        |
|           | Push-Lok Union                                                        | 82          |
| >         | Hose Splicer                                                          | 88          |
| cialt     | Male Standpipe - Rigid - Straight (Inch Size Tube O.D.)               | 34          |
| Specialty | Male Ferulok Flareless-Rigid-Straight (24° Cone with Nut and Ferrule) | 11          |
|           | Female Ferulok Flareless - Swivel - Straight (24° Cone)               | 12          |
|           | Female Air Brake Jounce Line - Swivel - Straight                      | 7B          |
|           | Male Refrigerant Tube Mender - Straight (with Nut and Ferrule)        | T1          |
|           | Female PTT 30° - Swivel                                               | 32          |
|           | Male SAE Compression Seat (without Nut or Sleeve)                     | 61          |









Technical Catalog 4400 US

## **Application**

End Code Listed in Numerical Orde

Connection

B

#### Fnd Code Female Metric S - Swivel - 45° Elbow (24° Cone with O-Ring) 0C Male SAE Straight Thread with O-Ring - Swivel - Straight 0G Male SAE Straight Thread with O-Ring - Swivel - 90° Elbow 0L Male NPTF Pipe - Rigid - Straight 01 Female Metric S - Swivel - 90° Elbow (24° Cone with O-Ring) 1C Male Standpipe Metric L - Rigid - Straight 1D Male NPTF Pipe - Swivel - 90° Elbow 1L Female NPTF Pipe - Rigid - Straight 02 Two Hole (2.25" X 0.44") Flange - Rigid - 90° Elbow 2H SAE Code 61 Flange Head - 110° Elbow 2U Male JIC 37° - Rigid - Straight 03 Male Standpipe Metric S - Rigid - Straight 3D Male SAE 45° - Rigid - Straight 04 SAE Code 61 Flange Head - Straight (5,000 psi) 4A SAE Code 61 Flange Head-45° Elbow (5,000 psi) 4F SAE Code 61 Flange Head - 90° Elbow - (5,000 psi) Female JIC 37° - Swivel - 150° Elbow 4V Male SAE Straight Thread with O-Ring - Rigid - Straight Male Tube-O - Rigid - Straight - Internal Long Pilot (3-Step) 5G Female Tube-O - Swivel - 45° Elbow - Short Pilot 5H Male Tube-O - Swivel - 90° Elbow - Short Pilot 5K Male Tube-O - Swivel - 90° Elbow - Short Pilot with High 5K-PB Fitting Configurations by Pressure Charge Port for R134a Female Tube-O - Swivel - 90° Elbow - Long Pilot with Low 5L-PT Pressure Charge Port for R134a Male Tube-O - Swivel - 90° Elbow - Long Pilot 5M Male Tube-O - Swivel - 90° Elbow - Long Pilot with Low 5M-PT PressureCharge Port for R134a Male Tube-O - Swivel - 90° Elbow - Long Pilot with Low 5M-PV PressureCharge Port for R134a Female Tube-O - Swivel - 45° Elbow - Long Pilot 5N Female Tube-O - Swivel - 45° Elbow - Long Pilot with High 5N-PB Pressure Charge Port for R134a 5N-PT Female Tube-O - Swivel - 45° Elbow - Long Pilot with Low Pressure Charge Port for R134a Male Tube-O - Swivel - 45° Elbow - Long Pilot 5P Male Tube-O - Swivel - 45° Elbow - Long Pilot with Low 5P-PT Pressure Charge Port for R134a Male Tube-O - Swivel - 45° Elbow - Short Pilot 5R Female Tube-O - Swivel - Straight - Short Pilot 5S Female Tube-O - Swivel - 90° Elbow - Short Pilot

# **Standard Fitting Connections** by End Code

|                                                                                      | Description                                                                             | End<br>Code |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------|
|                                                                                      | Female Compressor - Swivel - 45° Elbow                                                  | 5V          |
|                                                                                      | Female Compressor - Swivel - 90° Elbow                                                  | 5W          |
|                                                                                      | Female Compressor - Swivel - 90° Elbow - Block Type                                     | 5Z          |
|                                                                                      | Female JIC 37° - Swivel - Straight                                                      | 06          |
|                                                                                      | SAE Code 62 Flange Head - Straight                                                      | 6A          |
|                                                                                      | SAE Code 62 Flange Head - 22½° Elbow                                                    | 6B          |
|                                                                                      | SAE Code 62 Flange Head - 30° Elbow                                                     | 6E          |
|                                                                                      | SAE Code 62 Flange Head - 45° Elbow                                                     | 6F          |
| <u>~</u>                                                                             | SAE Code 62 Flange Head - 60° Elbow                                                     | 6G          |
| Ord                                                                                  | SAE Code 62 Flange Head - 90° Elbow                                                     | 6N          |
| ical                                                                                 | Female NPSM Pipe - Swivel - Straight (60° Cone)                                         | 07          |
| mer                                                                                  | Female Air Brake Jounce Line - Swivel - Straight                                        | 7B          |
| N C                                                                                  | Female NPSM Pipe - Gasket Joint - Swivel - Straight                                     | 7G          |
| i pe                                                                                 | Female SAE 45° - Swivel - Straight                                                      | 08          |
| Standard Fitting Configurations by Connection and End Code Listed in Numerical Order | Male Ferulok Flareless-Rigid-Straight (24° Cone with Nut and Ferrule)                   | 11          |
| ပိ                                                                                   | Female Ferulok Flareless - Swivel - Straight (24° Cone)                                 | 12          |
| End                                                                                  | Male NPTF Pipe - Swivel - Straight                                                      | 13          |
| and                                                                                  | SAE Code 61 Flange Head - Straight                                                      | 15          |
| on 8                                                                                 | SAE Code 61 Flange Head - 22½° Elbow -                                                  | 16          |
| ecti                                                                                 | SAE Code 61 Flange Head-45° Elbow                                                       | 17          |
| Sonr                                                                                 | SAE Code 61 Flange Head - 67½° Elbow                                                    | 18          |
| þ                                                                                    | SAE Code 61 Flange Head - 90° Elbow                                                     | 19          |
| ons                                                                                  | Male NPTF Pipe - Rigid - 90° Elbow or Side Outlet                                       | 21          |
| ırati                                                                                | Male SAE Straight Thread with O-Ring - Adjustable - 45° Elbow                           | 25          |
| Jigr                                                                                 | SAE Code 61 Flange Head-30° Elbow                                                       | 26          |
| S                                                                                    | SAE Code 61 Flange Head-60° Elbow                                                       | 27          |
| ting                                                                                 | Male Inverted SAE 45° - Swivel - Straight                                               | 28          |
| Ξ                                                                                    | Female Inverted SAE 45° - Rigid - Straight                                              | 29          |
| ıdar                                                                                 | Male NPTF Pipe - Rigid - 45° Elbow                                                      | 31          |
| Star                                                                                 | Female PTT 30° - Swivel                                                                 | 32          |
|                                                                                      | Male Standpipe - Rigid - Straight (Inch Size Tube O.D.)                                 | 34          |
|                                                                                      | Male SAE Straight Thread with O-Ring - Adjustable - 90° Elbow                           | 35          |
|                                                                                      | Female JIC 37° - Swivel - 45° Elbow - Short Drop                                        | 37          |
|                                                                                      | Female JIC 37° - Swivel - 90° Elbow - Short Drop                                        | 39          |
|                                                                                      | Female JIC 37° - Swivel - 90° Elbow - Long Drop                                         | 41          |
|                                                                                      | Male Tube-O - Swivel - Straight - Long Pilot                                            | 45          |
|                                                                                      | Male Tube-O - Swivel - Straight - Long Pilot with Low Pressure<br>Charge Port for R134a | 45-PT       |
|                                                                                      | Female JIC 37° - Swivel - Straight                                                      | 48          |

Continued on next page

5T

# **A**pplication

#### Continued from previous page

| Co                                                                                | ntinued from previous page                                               |             |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------|
|                                                                                   | Description                                                              | End<br>Code |
|                                                                                   | DIN Metric Banjo - Straight                                              | 49          |
|                                                                                   | Female Tube-O - Swivel - Straight - Long Pilot                           | 59          |
|                                                                                   | Female Tube-O - Swivel - Straight - Long Pilot with Charge Port for 134a | 59-PB       |
|                                                                                   | Female Tube-O - Swivel - Straight - Long Pilot with Charge Port          | 59-PT       |
|                                                                                   | Male SAE Compression Seat (without Nut or Sleeve)                        | 61          |
|                                                                                   | Male Inverted SAE 45° - Swivel - 45° Elbow                               | 67          |
|                                                                                   | Female JIC 37°/SAE 45° Dual Flare - Swivel - Straight                    | 68          |
|                                                                                   | Male Inverted SAE 45° - Swivel - 90° Elbow                               | 69          |
|                                                                                   | Male Inverted SAE 45° - Swivel - 90° Elbow - Long (In-Line)              | 71          |
| _                                                                                 | Female SAE 45 / Swivel - 45° Elbow                                       | 77          |
| rde                                                                               | Female SAE 45 / Swivel - 90° Elbow                                       | 79          |
| alo                                                                               | Female SAE 45 / Swivel - 90° Elbow - Long Drop                           | 81          |
| eric                                                                              | Push-Lok Union                                                           | 82          |
| Nun                                                                               | Hose Splicer                                                             | 88          |
| Ë                                                                                 | 88 Series Heavy Duty Hose Clamp (Double Bolt Hose Clamp)                 | 88DB        |
| stec                                                                              | 88 Series Hose Clamp (Worm Gear)                                         | 88HC        |
| de Li                                                                             | 88 Series Hose Clamp-SAE 100R4 Two-Bolt Clamp                            | 88HC-H      |
| ပိ                                                                                | SAE Code 61 Flange Head - 90° Elbow - Long Drop                          | 89          |
| End                                                                               | Male BSP Taper Pipe - Rigid - Straight                                   | 91          |
| and                                                                               | Female BSP Parallel Pipe - Swivel - Straight (60° Cone)                  | 92          |
| on                                                                                | Male API Pipe - Rigid - Straight                                         | AP          |
| ecti                                                                              | Female BSP Parallel Pipe - Swivel - 45° Elbow (60° Cone)                 | B1          |
| Sonr                                                                              | Female BSP Parallel Pipe - Swivel - 90° Elbow (60° Cone)                 | B2          |
| ndard Fitting Configurations by Connection and End Code Listed in Numerical Order | Female BSP Parallel Pipe - Swivel - 90° Elbow Block Type (60° Cone)      | B4          |
| atior                                                                             | Female BSP Parallel Pipe - Swivel - Straight (Flat Seat)                 | B5          |
| gur                                                                               | Male BSP Taper Pipe - Rigid - 45° Elbow                                  | BV          |
| onfi                                                                              | Male BSP Taper Pipe - Rigid - 90° Elbow or Side Outlet                   | BZ          |
| o gc                                                                              | Female Metric - Swivel - Straight (Ball Nose)                            | C0          |
| Fitti                                                                             | Female Metric L - Swivel - Straight (Ball Nose)                          | C3          |
| ard                                                                               | Female Metric L - Swivel - 45° Elbow (Ball Nose)                         | C4          |
|                                                                                   | Female Metric L - Swivel - 90° Elbow (Ball Nose)                         | C5          |
| Sta                                                                               | Female Metric S - Swivel - Straight (Ball Nose)                          | C6          |
|                                                                                   | Female Metric S - Swivel - 45° Elbow (Ball Nose)                         | C7          |
|                                                                                   | Female Metric S - Swivel - 90° Elbow (Ball Nose)                         | C8          |
|                                                                                   | Female Metric S - Swivel - Straight (24° Cone with O-Ring)               | C9          |
|                                                                                   | Female Metric L - Swivel - Straight (24° Cone with O-Ring)               | CA          |
|                                                                                   | Female Metric L - Swivel - 45° Elbow (24° Cone with O-Ring) -            | CE          |
|                                                                                   | Female Metric L - Swivel - 90° Elbow (24° Cone with O-Ring) -            | CF          |
|                                                                                   | Male Metric L - Rigid - Straight (24° Cone)                              | D0          |
|                                                                                   | Male Metric S - Rigid - Straight (24° Cone)                              | D2          |
|                                                                                   | Male BSP Parallel Pipe - Rigid - Straight (60° Cone)                     | D9          |
|                                                                                   | Female French Gaz Series - Swivel - Straight (Ball Nose)                 | F4          |

# **Standard Fitting Connections** by End Code

|                                                   | Description                                                                           | End<br>Code |
|---------------------------------------------------|---------------------------------------------------------------------------------------|-------------|
|                                                   | Male French Gaz Series - Rigid - Straight (24° Cone)                                  | FG          |
|                                                   | Female BSP Parallel Pipe - Swivel - Straight (30° Flare)                              | FU          |
|                                                   | Female BSP Parallel Pipe - Swivel - 45° Elbow (60° Cone)                              | G1          |
|                                                   | Female BSP Parallel Pipe - Swivel - 90° Elbow (60° Cone)                              | G2          |
|                                                   | Female Grease Connection - SPL-PTF Taper Thread - Rigid Straight - $\frac{1}{2}$ x 27 | GJ          |
| L                                                 | Female BSP Parallel Pipe - Swivel - Straight (60° Cone)                               | GU          |
| rde                                               | Male Seal-Lok - Rigid - Straight (with O-Ring)                                        | J0          |
| Connection and End Code Listed in Numerical Order | Female Seal-Lok - Swivel - 90° Elbow - Long Drop                                      | J1          |
| eric                                              | Female Seal-Lok - Swivel - 90° Elbow - Medium Drop                                    | J5          |
| Nun                                               | Female Seal-Lok - Swivel - 221/2° Elbow                                               | J6          |
| l in                                              | Female Seal-Lok - Swivel - 45° Elbow                                                  | J7          |
| stec                                              | Female Seal-Lok - Swivel - 90° Elbow - Short Drop                                     | J9          |
| le L                                              | Male Seal-Lok - Bulkhead without Locknut - Straight                                   | JB          |
| Coc                                               | Female Seal-Lok - Swivel - Straight - Short                                           | JC          |
| End                                               | Female Seal-Lok - Swivel - Straight - Long                                            | JS          |
| pue                                               | Female JIC 37° - Swivel - 45° Elbow - Medium Drop                                     | L7          |
| on a                                              | Female JIC 37° - Swivel - 90° Elbow - Medium Drop                                     | L9          |
| ecti                                              | Male JIC 37° - Bulkhead without Locknut - Straight                                    | LB          |
| onr                                               | Female Metric Swivel - Straight (30° Flare)                                           | MU          |
| by C                                              | Female Compressor - Swivel - 135° Elbow                                               | RV          |
| suo                                               | Female Compressor - Swivel - 180° Elbow - Block Type                                  | RZ          |
| rati                                              | Female NPTF Pipe - Swivel - Straight                                                  | S2          |
| ıfigu                                             | Male Tube-O - Swivel - Straight - Short Pilot                                         | S5          |
| Standard Fitting Configurations by                | Male Tube-O - Swivel - Straight - Short Pilot with Charge Port for R12                | S5-PR       |
| Fitti                                             | Male Refrigerant Tube Mender - Straight (with Nut and Ferrule)                        | T1          |
| ard                                               | Male BSP Taper Pipe - Rigid - Straight (60° Cone)                                     | UT          |
| and                                               | Caterpillar® Flange Head - Straight                                                   | XA          |
| St                                                | Caterpillar® Flange Head - 22½° Elbow                                                 | XB          |
|                                                   | Caterpillar® Flange Head - 30° Elbow                                                  | XE          |
|                                                   | Caterpillar® Flange Head - 45° Elbow                                                  | XF          |
|                                                   | Caterpillar® Flange Head - 60° Elbow                                                  | XG          |
|                                                   | Caterpillar® Flange Head - 67½° Elbow                                                 | XM          |
|                                                   | Caterpillar® Flange Head - 90° Elbow (with O-Ring)                                    | XN          |
|                                                   | Female Metric - Swivel - Straight (30° Flare)                                         | XU          |
|                                                   |                                                                                       |             |











# **A**pplication

#### **Metric Conversion**

# METRIC to ENGLISH EQUIVALENTS ENGLISH to METRIC EQUIVALENTS

inches x 25.4 = millimeters (mm)

inches x 2.54 = centimeters (cm)

feet x .3048 = meters (m)

yard x .9144 = meters (m)

psi x .0689 = bar

psi x .0069 = Megapascals (MPa)

psi x .0703 = Kilogram force per square centimeter

(Kgf/cm<sup>2</sup>)

B

pound force x 4.448 = Newtons

pound  $\cdot$  inch x .113 = Newton  $\cdot$  meters (N  $\cdot$  m)

pound  $\cdot$  foot x 1.356 = Newton  $\cdot$  meters (N  $\cdot$  m)

millimeter x.0394 = inch (in)

centimeter x.3937 = inch (in)

meters x 3.281 = feet (ft)

meters x 1.0936 = yards (yd)

bar x 14.5 = psi

Megapascals x 145.0 = psi

Kilogram force per square centimeter x 14.22 = psi

Newtons x .2248 = pounds force (lbf)

Newton · meter x 8.850 = pound · inches (lb · in)

Newton  $\cdot$  meter x .737 = pound feet (lb  $\cdot$  ft)

# METRIC I.D. KIT INTERNATIONAL HOSE FITTING IDENTIFICATION KIT

The booklet, gauges and caliper contained in this fitting I.D. Kit, can be used to identify most types of hydraulic hose fittings and adapters including:

U.S. Standards

British Standard Pipe

German (DIN) Metric

French Metric and GAZ

Japanese Standards (JIS)

Contents of Kit:

Instruction Book with Tables

Screw Pitch Gauge for U.S. Threads

International Gauge for Metric and British Threads

Inch and Millimeter Caliper

Carry Case

|        | 7938         1/32         0.0312         7.1438         9/32         0.2812         13.4938         17/32         0.5312         19.8438         25/32         0.7812           1906         3/64         0.0468         7.5406         19/64         0.2968         13.8906         35/64         0.5468         20.2406         51/64         0.7968           5875         1/16         0.0625         7.9375         5/16         0.3125         14.2875         9/16         0.5625         20.2375         13/16         0.8125           9844         5/64         0.0781         8.3344         21/64         0.3281         14.6844         37/64         0.5781         21.0344         53/64         0.8281           3812         3/32         0.0937         8.7312         11/32         0.3437         15.0812         19/32         0.5937         21.4312         27/32         0.8437           7781         7/64         0.1093         9.1281         23/64         0.3593         15.4781         39/64         0.6093         21.8281         55/64         0.8593           1750         1/8         0.1250         9.5250         3/8         0.3750         15.8750         5/8         0.6250         22.2250< |         |         |          |         |         |          |         |         |          |         |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|----------|---------|---------|----------|---------|---------|----------|---------|
| ММ     | INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | HES     | ММ      | INCH     | IES     | ММ      | INC      | HES     | ММ      | INC      | IES     |
|        | FRACTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DECIMAL |         | FRACTION | DECIMAL |         | FRACTION | DECIMAL |         | FRACTION | DECIMAL |
| 0.3969 | 1/64                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.0156  | 6.7469  | 17/64    | 0.2656  | 13.0969 | 33/64    | 0.5156  | 19.4469 | 49/64    | 0.7656  |
| 0.7938 | 1/32                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.0312  | 7.1438  | 9/32     | 0.2812  | 13.4938 | 17/32    | 0.5312  | 19.8438 | 25/32    | 0.7812  |
| 1.1906 | 3/64                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.0468  | 7.5406  | 19/64    | 0.2968  | 13.8906 | 35/64    | 0.5468  | 20.2406 | 51/64    | 0.7968  |
| 1.5875 | 1/16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.0625  | 7.9375  | 5/16     | 0.3125  | 14.2875 | 9/16     | 0.5625  | 20.2375 | 13/16    | 0.8125  |
| 1.9844 | 5/64                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.0781  | 8.3344  | 21/64    | 0.3281  | 14.6844 | 37/64    | 0.5781  | 21.0344 | 53/64    | 0.8281  |
| 2.3812 | 3/32                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.0937  | 8.7312  | 11/32    | 0.3437  | 15.0812 | 19/32    | 0.5937  | 21.4312 | 27/32    | 0.8437  |
| 2.7781 | 7/64                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.1093  | 9.1281  | 23/64    | 0.3593  | 15.4781 | 39/64    | 0.6093  | 21.8281 | 55/64    | 0.8593  |
| 3.1750 | 1/8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.1250  | 9.5250  | 3/8      | 0.3750  | 15.8750 | 5/8      | 0.6250  | 22.2250 | 7/8      | 0.8750  |
| 3.5719 | 9/64                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.1406  | 9.9219  | 25/64    | 0.3906  | 16.2719 | 41/64    | 0.6406  | 22.6219 | 57/64    | 0.8906  |
| 3.9688 | 5/32                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.1562  | 10.3188 | 13/32    | 0.4062  | 16.6688 | 21/32    | 0.6562  | 23.0188 | 29/32    | 0.9062  |
| 4.3656 | 11/64                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.1718  | 10.7156 | 27/64    | 0.4218  | 17.0656 | 43/64    | 0.6718  | 23.4156 | 59/64    | 0.9218  |
| 4.7625 | 3/16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.1875  | 11.1125 | 7/16     | 0.4375  | 17.4625 | 11/16    | 0.6875  | 23.8125 | 15/16    | 0.9375  |
| 5.1594 | 13/64                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.2031  | 11.5094 | 29/64    | 0.4531  | 17.8594 | 45/64    | 0.7031  | 24.2094 | 61/64    | 0.9531  |
| 5.5562 | 7/32                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.2187  | 11.9062 | 15/32    | 0.4687  | 18.2562 | 23/32    | 0.7187  | 24.6062 | 31/32    | 0.9687  |
| 5.9531 | 15/64                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.2343  | 12.3031 | 31/64    | 0.4843  | 18.6531 | 47/64    | 0.7343  | 25.0031 | 63/64    | 0.9843  |
| 6.3500 | 1/4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.2500  | 12.7000 | 1/2      | 0.5000  | 19.0500 | 3/4      | 0.7500  | 25.4000 | 1        | 1.0000  |

### Media

# **Chemical Resistance Information**

▲ Warning: This chemical compatibility guide must not be used in conjunction with any other compatibility guides from previous or future catalog editions, bulletins or publications. Incorrect use of these charts could result in death, personal injury or property damage.

#### Hose Selection by Medium and Hose Type

This hose compatibility chart is a ready reference of Parker hose compatibility with various fluid media. It is intended as a guide to chemical compatibility with inner tube materials and assembly lubricant applied internally. The specific recommendations are based upon field experience, the advice of various polymer or fluid suppliers, and specific laboratory experiments. It must be stressed, however, that this information is offered only as a guide. Final hose selection depends also upon pressure, fluid temperature, ambient temperature, and special requirements or variations, which may not be known by Parker Hannifin. Legal and other regulations must be followed with particular care. Where an external compatibility problem may occur, or for fluids not listed, we encourage you to first contact the fluid manufacturer for a recommendation prior to contacting your Parker Hannifin Field Representative or the Technical Service Department, Hose Products Division, Wickliffe, Ohio.

#### Use the Chart as Follows:

- Locate medium to be carried using the Chemical Resistance Table on the following pages.
- Select suitability of hose and fitting material from the table based on the letter rating in the table. See resistance rating key below for explanation of compatibility ratings. See list of numerals below for an explanation when a numeral, or a numeral and a letter rating are present in the table.
- The Column headings on the Chemical Resistance Table, I, II, III, IV, V, refer to specific groups of hoses.
- Locate hose part number under Column I, II, III, IV, V from the list below.
- For fitting material availability refer to appropriate fitting section of catalog.
- Check hose specifications in this catalog. Contact Hose Division Technical Service Department on any items not cataloged.

#### **Resistance Rating Key**

- A = Preferred, good to excellent with little or no change in physical properties.
- F = Fair, marginal or conditional with noticeable affects on physical properties.
- X = Unsuitable, severe affects on physical properties.
- ~ = No rating, insufficient information.

Note: All data based on 70°F unless otherwise noted.

#### **Numerals**

- For air or gaseous applications above 250 PSI (1,7 MPa), the cover should be pin pricked. The service life for air or gaseous applications can be unpredictable, especially at higher pressures. Contact Technical Service Department for more information.
- Legal and insurance regulations must be considered. Contact Technical Service Department for more information.
- 3. Push-Lok hoses 801 and 836 are approved for diesel fuel applications only when coupled with HY series fittings.
- 4. Use 285, 235 or 244 hoses. The compatibility of the systems refrigeration oil with these hoses needs to be evaluated on a case by case basis. Contact HPD Technical Service Department for more information. Do not use mineral oil or Alkyl Benzene refrigeration oils with 244 hose. Chemical compatibility does not imply low permeation.
- 5. 150°F (65°C) maximum.
- Satisfactory at some concentrations and temperatures, unsatisfactory at others.
- For Phosphate Ester and Skydrol fluids, be aware a certain amount
  of permeation will occur. The rate and amount will depend on
  the fluid type, any blends or additives to the fluid, and the system
  operating parameters.
- . Acceptable for flushing hose assemblies.
- 9. 221FR hose recommended.
- For dry air applications, hoses with inner tubes from columns IV, and V are preferred. See hose specifications for maximum recommended temperatures with air.
- 11. Use SS23CG or SS25UL
- 12. Use SS23CG

#### **Hose Types**

Column I

201, 601, 881

Column II

SS25UL, 421WC, 471TC, 471ST, 472LT, 722LT, 792LT, 801, 811, 811HT Column III

JK, 187/TC/ST, 221FR, 302, 387/TC/ST, 422, 472TC, 482TC, 482ST, 487/TC/ST, 722/TC/ST, 787/TC/ST, 797/TC/ST, 821

Column IV

206, 213, 266, 293, 426, 611HT, 821FR, 836, 436

Column V

F42, 304, 424, 774, 804

#### ⚠ Caution:

The fluid manufacturer's recommended maximum operating temperature for any specific name-brand fluid should be closely observed by the user. Specific name brand fluids can vary greatly between manufacturers even though they are considered to be from the same family or type of fluids. Using fluids above the manufacturers maximum recommended temperature can cause the fluid to break down, creating by-products that can be harmful to elastomers or other materials used in the system. When selecting a hose type, both the fluid manufacturer and hose manufacturers maximum temperature limit must be taken into consideration, with the lower of the two taking precedence.











# Media

В

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| MEDIA                                       | 1      | Ш      | Ш      | IV     | V      | Steel | Brass | SS |
|---------------------------------------------|--------|--------|--------|--------|--------|-------|-------|----|
| 3M FC-75                                    | Α      | Α      | Α      | Α      | Α      | Α     | Α     | A  |
| Acetic Acid                                 | Χ      | Χ      | X      | Α      | 6      | Х     | Χ     | Α  |
| Acetone                                     | Χ      | Χ      | X      | Α      | Α      | Α     | Α     | Α  |
| Acetylene                                   | Х      | Х      | Х      | Х      | Х      | ~     | ~     | ~  |
| Aeroshell 31                                | F      | Α      | Α      | F      | ~      | Α     | Α     | Α  |
| AEROSHELL Turbine Oil 500                   | Х      | Х      | F      | Х      | Х      | Α     | Α     | A  |
| Air                                         | A,1,10 | A,1,10 | A,1,10 | A,1,10 | A,1,10 | Α     | Α     | A  |
| Air (dry)                                   | Χ      | Х      | Х      | A,1,10 | A,1,10 | Α     | Α     | Α  |
| Alcohol (Methanol-Ethanol)                  | F      | F      | F      | F      | F      | F     | Α     | Α  |
| Americas Choice AW ISO 46                   | ~      | F      | F      | ~      | ~      | ~     | ~     | ~  |
| Ammonia (Anhydrous)                         | Х      | Х      | X      | Х      | Х      | Х     | Х     | x  |
| Ammonium Chloride                           | Α      | Α      | Α      | Α      | Α      | Х     | X     | X  |
| Ammonium Hydroxide                          | F      | F      | F      | Α      | Α      | F     | Х     | A  |
| Ammonium Nitrate                            | Α      | Α      | Α      | F      | Α      | F     | X     | Α  |
| Ammonium Phosphate                          | Α      | Α      | Α      | Α      | Α      | Х     | Χ     | F  |
| Ammonium Sulfate                            | Α      | Α      | А      | Α      | Α      | F     | Х     | F  |
| Amoco 32 Rykon                              | Х      | Α      | Α      | F      | Х      | Α     | Α     | A  |
| Ampol PE 46                                 | Х      | Х      | X      | Х      | A,7    | Α     | Α     | Α  |
| AMSOIL Synthetic ATF                        | F      | Α      | Α      | Α      | Х      | Α     | Α     | A  |
| Amyl Alcohol                                | Χ      | Χ      | Х      | F      | F      | X     | Α     | Α  |
| Anderol 495,497,500,750                     | X      | Х      | Х      | F      | Χ      | Α     | Α     | Α  |
| Aniline                                     | Х      | Х      | X      | F      | A      | Α     | Х     | Α  |
| Animal Fats                                 | Х      | F      | F      | F      | F      | 6     | 6     | Α  |
| Aquacent Light, Heavy                       | Х      | Α      | Α      | Х      | Х      | Α     | Α     | Α  |
| Aries/Athena                                | F      | F      | F      | ~      | Х      | Α     | Α     | Α  |
| Aromatic 100,150                            | Χ      | F      | F      | ~      | Χ      | Α     | Α     | Α  |
| Arrow 602P                                  | Α      | Α      | Α      | Α      | Х      | Α     | Α     | Α  |
| Asphalt                                     | Х      | F      | F      | F      | Х      | F     | F     | Α  |
| ASTM #3 Oil                                 | F      | F      | F      | F      | Х      | Α     | Α     | Α  |
| Astrol 1044AW                               | Α      | Α      | Α      | ~      | Χ      | Α     | Α     | Α  |
| ATF-M                                       | F      | Α      | Α      | Α      | Х      | Α     | Α     | Α  |
| Automotive Brake Fluid                      | Χ      | Χ      | Χ      | Χ      | ~      | X     | X     | X  |
| AW 32,46,68                                 | F      | Α      | Α      | Α      | Χ      | Α     | Α     | Α  |
| BCF                                         | F      | F      | F      | F      | ~      | Α     | Α     | Α  |
| Benz Petraulic 32,46,68,100,150,220,320,460 | F      | Α      | Α      | Α      | X      | Α     | Α     | Α  |
| Benzene, Benzol                             | Χ      | Х      | Х      | F      | Х      | Α     | Α     | Α  |
| Benzgrind HP 15                             | ~      | Α      | Α      | Α      | Х      | Α     | Α     | Α  |
| Benzine                                     | X      | Χ      | Χ      | F      | Х      | Α     | Α     | Α  |
| Bio Diesel B20                              | ~      | Α      | A      | Α      | Х      | Α     | Α     | Α  |
| Bio-Soy, Agri Industries                    | X      | Α      | Α      | Х      | Х      | Α     | Α     | Α  |
| Biodegradable Hydraulic Fluid 112B          | X      | Α      | Α      | X      | ~      | Α     | Α     | Α  |
| Borax                                       | F      | F      | F      | F      | Α      | F     | Α     | Α  |
| Boric Acid                                  | Α      | Α      | Α      | Х      | Α      | Х     | 6     | Α  |
| Brayco 882                                  | X      | Α      | Α      | Α      | X      | Α     | Α     | A  |

# Media

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| MEDIA                                            | 1      | II  | III           | IV     | V   | Steel  | Brass  | SS  |
|--------------------------------------------------|--------|-----|---------------|--------|-----|--------|--------|-----|
| Brayco Micronic 745                              | ~      | A   | A             | F      | X   | A      | A      | A   |
| •                                                | ~<br>F | A   | A             | '<br>F | X   |        |        |     |
| Brayco Micronic 776RP Brayco Micronic 889        | r<br>X | F   | F             | ~      | X   | A<br>A | A<br>A | A   |
| Brine                                            | F      | F   | F             | A A    | A   | X      | F      | F   |
| Butane                                           | r      |     | numerals 2 an |        | A   | A      | A      | A   |
|                                                  | F      | F   | F             | F      | F   | F      | F      |     |
| Butyl Alcohol, Butanol Calcium Chloride          |        |     |               |        |     | F      | F      | A   |
|                                                  | A      | A   | A             | F      | A   |        |        | X   |
| Calcium Hydroxide                                | A      | A   | A             | A      | A   | A      | A      | A   |
| Calcium Hypochlorite                             | X      | X   | X             | A      | A   | X      | F      | X   |
| Calibrating Fluid                                | Α _    | Α _ | Α _           | Α _    | X   | Α .    | A      | Α . |
| Carbon Dioxide, gas                              | F      | F   | F             | F      | 6   | A      | A      | A   |
| Carbon Dioxide, liquid                           | X      | X   | X             | X      | X   | X      | X      | X   |
| Carbon Disulfide                                 | X      | X   | X             | F      | X   | A      | F      | A   |
| Carbon Monoxide (hot)                            | F      | F   | F             | F      | 6   | F      | 6      | Α   |
| Carbon Tetrachloride                             | X      | X   | X             | F      | Х   | 6      | 6      | 6   |
| Carbonic Acid                                    | F      | F   | F             | X      | F   | Х      | Χ      | F   |
| Castor Oil                                       | Α      | Α   | Α             | Α      | A   | Α      | Α      | Α   |
| Castrol 5000                                     | X      | F   | F             | Α      | Χ   | Α      | Α      | A   |
| Cellosolve Acetate                               | Χ      | Х   | Χ             | Χ      | Α   | X      | X      | Α   |
| Celluguard                                       | Α      | Α   | Α             | ~      | Α   | Α      | Α      | Α   |
| Cellulube 90, 150, 220 300, 550, 1000            | X      | X   | X             | ~      | Α   | Α      | A      | Α   |
| Chevron Clarity AW 32, 46, 68                    | Α      | Α   | Α             | A      | Χ   | Α      | Α      | Α   |
| Chevron FLO-COOL 180                             | F      | F   | F             | ~      | Χ   | Α      | Α      | Α   |
| Chevron FR-8, 10, 13, 20                         | Χ      | Χ   | X             | X      | A,7 | Α      | Α      | Α   |
| Chevron Hydraulic Oils AW MV 15, 32, 46, 68, 100 | Α      | Α   | Α             | Α      | Χ   | Α      | Α      | Α   |
| Chevron HyJet IV (9)                             | Χ      | Χ   | Χ             | Χ      | A,7 | Α      | Α      | Α   |
| Chevron Rykon MV                                 | F      | Α   | Α             | ~      | ~   | Α      | Α      | Α   |
| Cindol 3204 PBR                                  | ~      | Α   | Α             | Α      | Χ   | Α      | Α      | Α   |
| Citric Acid                                      | F      | Α   | Α             | X      | Α   | Χ      | Χ      | 6   |
| Commonwealth EDM 242, 244                        | Α      | Α   | Α             | ~      | Χ   | Α      | Α      | Α   |
| CompAir CN300                                    | Х      | Х   | X             | F      | Х   | Α      | Α      | Α   |
| CompAir CS100, 200, 300, 400                     | Χ      | Χ   | Χ             | F      | Χ   | Α      | Α      | Α   |
| Coolanol 15, 20, 25, 35, 45                      | Α      | Α   | Α             | Α      | Α   | Α      | Α      | Α   |
| Copper Chloride                                  | F      | А   | А             | Х      | Α   | Х      | Χ      | X   |
| Copper Sulfate                                   | Α      | Α   | Α             | Х      | Α   | X      | Χ      | F   |
| Cosmolubric HF-122, HF-130, HF-144               | X      | F   | Α             | Х      | Х   | А      | Α      | Α   |
| Cosmolubric HF-1530                              | Х      | F   | Α             | Х      | Х   | A      | Α      | A   |
| Cottonseed Oil                                   | F      | Α   | Α             | F      | X   | Α      | Α      | Α   |
| CPI CP-4000                                      | Х      | Х   | Х             | F      | Х   | Α      | Α      | Α   |
| Crude Petroleum Oil                              | F      | Α   | Α             | Α      | Х   | F      | F      | Α   |
| CSS 1001Dairy Hydraulic Fluid                    | F      | Α   | Α             | A      | X   | А      | A      | Α   |
| Daphne AW32                                      | Α      | Α   | Α             | A      | X   | Α      | Α      | Α   |
| Dasco FR 201-A                                   | A      | A   | A             | ~      | Х   | A      | A      | A   |
| Dasco FR150, 200, 310                            | F      | Α   | Α             | ~      | Α   | Α      | Α      | Α   |
| Dasco FR300, FR2550                              | X      | X   | X             | ~      | X   | A      | A      | A   |
|                                                  | - •    | - • | **            |        | **  | * *    | • •    | • • |









# Media

В

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| MEDIA                                       | I   | II  | Ш   | IV  | ٧ | Steel | Brass | SS |  |
|---------------------------------------------|-----|-----|-----|-----|---|-------|-------|----|--|
| Dasco FR355-3                               | Χ   | F   | Α   | Χ   | X | Α     | Α     | Α  |  |
| Deicer Fluid 419R                           | Α   | Α   | Α   | ~   | ~ | Α     | Α     | Α  |  |
| Deionized Water                             | Α   | Α   | Α   | Α   | Α | F     | F     | Α  |  |
| Dexron II ATF                               | F   | Α   | Α   | Α   | Χ | Α     | Α     | Α  |  |
| Dexron III ATF (to 170°F)                   | Α   | Α   | Α   | Α   | Χ | Α     | Α     | Α  |  |
| Dexron III ATF (to 212°F)                   | Χ   | F   | F   | Α   | X | Α     | Α     | Α  |  |
| Dexron III ATF (to 250°F)                   | Χ   | Х   | Χ   | F   | X | Α     | Α     | Α  |  |
| Dexron III ATF (to 300°F)                   | X   | Χ   | Χ   | Χ   | Х |       |       |    |  |
| Dexron VI ATF (to 170°F)                    | Α   | Α   | Α   | Α   | X | Α     | Α     | Α  |  |
| Dexron VI ATF (to 212°F)                    | X   | F   | F   | Α   | X | Α     | Α     | Α  |  |
| Dexron VI ATF (to 250°F)                    | X   | Х   | X   | Χ   | X | Α     | Α     | Α  |  |
| Dexron VI ATF (to 300°F)                    | X   | Х   | X   | Х   | X |       |       |    |  |
| DexronIIE/Mercon (at 212°F)                 | X   | Α   | Α   | Α   | Х | Α     | Α     | Α  |  |
| Diesel Fuel (Standard and Ultra Low Sulfur) | F,3 | A,3 | A,3 | A,3 | Х | Α     | Α     | Α  |  |
| Diester Fluids                              | Χ   | Χ   | Χ   | F   | Χ | Α     | Α     | Α  |  |
| Dow Corning 2-1802 Sullair (24KT)           | ~   | ~   | ~   | F   | ~ | Α     | Α     | Α  |  |
| Dow Corning DC 200, 510, 550, 560, FC126    | Α   | Α   | Α   | F   | ~ | Α     | Α     | Α  |  |
| Dow HD50-4                                  | F   | F   | F   | ~   | ~ | ~     | ~     | Α  |  |
| Dow Sullube 32                              | ~   | ~   | ~   | F   | ~ | Α     | Α     | Α  |  |
| Dowtherm A,E                                | Χ   | Χ   | Х   | F   | Χ | Α     | Α     | Α  |  |
| Dowtherm G                                  | Х   | X   | Х   | Х   | Х | Α     | Α     | Α  |  |
| Duro AW-16, 31                              | Α   | Α   | Α   | ~   | Χ | Α     | Α     | Α  |  |
| Duro FR-HD                                  | Α   | Α   | Α   | ~   | Х | Α     | Α     | Α  |  |
| EcoSafe FR-68                               | Α   | Α   | Α   | ~   | ~ | Α     | Α     | Α  |  |
| Envirologic 3032, 3046, 3068                | Α   | Α   | Α   | ~   | ~ | ~     | ~     | ~  |  |
| Ethanol                                     | F   | F   | F   | F   | F | F     | Α     | Α  |  |
| Ethers                                      | Х   | Х   | Х   | F   | Х | Α     | Α     | Α  |  |
| Ethyl Acetate                               | Χ   | Х   | X   | F   | F | F     | Α     | Α  |  |
| Ethyl Alcohol                               | F   | F   | F   | F   | F | F     | Α     | Α  |  |
| Ethyl Cellulose                             | F   | F   | F   | F   | F | Χ     | F     | F  |  |
| Ethyl Chloride                              | X   | X   | X   | Χ   | Α | F     | F     | F  |  |
| Ethylene Dichloride                         | X   | X   | X   | F   | Х | X     | Α     | Х  |  |
| Ethylene Glycol                             | F   | Α   | Α   | Α   | Α | Α     | F     | Α  |  |
| Exxon 2380 Turbo Oil                        | X   | F   | F   | Х   | Х | Α     | Α     | А  |  |
| Exxon 3110 FR                               | Α   | Α   | Α   | Α   | Х | Α     | Α     | А  |  |
| Exxon Esstic                                | Α   | Α   | Α   | Α   | Α | Α     | Α     | Α  |  |
| Exxon Mobil Rarus SHC 1026                  | ~   | ~   | ~   | Α   | ~ | Α     | Α     | Α  |  |
| Exxon Nuto H 46, 68                         | Α   | Α   | Α   | Α   | Х | Α     | Α     | Α  |  |
| Exxon Tellura Indusrial Process Oils        | Α   | A   | Α   | Α   | Х | Α     | Α     | Α  |  |
| Exxon Terresstic, EP                        | Α   | Α   | Α   | Α   | Α | Α     | Α     | Α  |  |
| Exxon Turbo Oil 2380                        | X   | F   | F   | F   | X | Α     | Α     | Α  |  |
| Exxon Univolt 60, N61                       | F   | Α   | Α   | Α   | X | Α     | Α     | Α  |  |
| FE 232 (Halon)                              | Х   | Χ   | Χ   | Χ   | F | Α     | Α     | Α  |  |

# Media

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| MEDIA                                         | 1 | II | III      | IV     | V      | Steel  | Brass | SS     |
|-----------------------------------------------|---|----|----------|--------|--------|--------|-------|--------|
| Fenso 150                                     | ~ | Α  | Α        | ~      | Х      | Α      | Α     | Α      |
| Formaldehyde                                  | X | Х  | Х        | Α      | Α      | X      | F     | Α      |
| Formic Acid                                   | X | Х  | Х        | X      | Α      | X      | 6     | Х      |
| Freons see refrigerants                       | ~ | ~  | ~        | ~      | ~      | ~      | ~     | ~      |
| Fuel Oil                                      | F | Α  | Α        | Α      | X      | Α      | Α     | Α      |
| Fyre-Safe 120C,126,155,1090E,1150,1220,1300E  | Х | Х  | Х        | Х      | A,7    | Α      | Α     | Α      |
| Fyre-Safe 200C, 225, 211                      | F | Α  | Α        | Α      | А      | А      | Α     | А      |
| Fyre-Safe W/O                                 | Α | Α  | Α        | Α      | X      | Α      | Α     | Α      |
| Fyrguard 150, 150-M, 200                      | Α | Α  | Α        | Α      | Α      | Α      | Α     | Α      |
| Fyrquel 60, 90, 150, 220, 300, 550, 1000      | Х | Х  | Х        | Х      | A,7    | А      | Α     | Α      |
| Fyrquel EHC, GT, LT, VPF                      | Х | X  | Х        | Х      | A,7    | Α      | Α     | Α      |
| Fyrtek MF, 215, 290, 295                      | Х | Х  | Х        | Х      | X      | Α      | Α     | Α      |
| Gardner-Denver GD5000, GD8000                 | Х | Х  | Х        | F      | Х      | Α      | Α     | А      |
| Gasoline                                      |   |    | See nume | ral 9  |        | Α      | Α     | Α      |
| Glue                                          | F | F  | F        | ~      | Χ      | Α      | F     | Α      |
| Glycerine, Glycerol                           | Α | Α  | Α        | Α      | Α      | Α      | F     | Α      |
| Grease                                        | А | А  | Α        | Α      | Х      | А      | А     | А      |
| Green Plus ES                                 | Х | А  | Α        | Х      | ~      | А      | А     | А      |
| Greens Care 32, 46                            | F | Α  | Α        | F      | ~      | Α      | Α     | A      |
| Gulf-FR Fluid P37, P40, P43, P45, P47         | Х | Х  | Х        | F      | Α      | Α      | Α     | Α      |
| H-515 (NATO)                                  | Α | Α  | Α        | ~      | Х      | Α      | Α     | Α      |
| Halon 1211, 1301                              | F | F  | F        | F      | ~      | Α      | А     | Α      |
| Helium Gas                                    | X | Х  | Х        | Х      | Х      | Α      | Α     | Α      |
| Heptane                                       | Х | F  | F        | Α      | Х      | Α      | Α     | Α      |
| Hexane                                        | Х | F  | F        | Α      | Х      | Α      | Α     | A      |
| HF-20, HF-28                                  | ~ | Α  | Α        | Α      | Α      | Α      | Α     | Α      |
| Houghto-Safe 1055, 1110, 1115, 1120, 1130 (9) | Х | Х  | X        | Х      | A,7    | Α      | Α     | Α      |
| Houghto-Safe 271 to 640                       | F | Α  | Α        | F      | Α      | Α      | Α     | Α      |
| Houghto-Safe 419 Hydraulic Fluid              | Α | Α  | Α        | ~      | Х      | Α      | Α     | Α      |
| Houghto-Safe 419R Deicer Fluid                | Α | Α  | Α        | ~      | ~      | Α      | Α     | Α      |
| Houghto-Safe 5046, 5046W, 5047-F              | A | Α  | Α        | Α      | Х      | Α      | Α     | A      |
| HP 100C (Jack hammer oil)                     | F | Α  | Α        | Α      | Х      | Α      | Α     | Α      |
| HPWG 46B                                      | F | Α  | Α        | F      | ~      | Α      | Α     | Α      |
| Hul-E-Mul                                     | A | Α  | Α        | ~      | Χ      | Α      | Α     | A      |
| Hychem C, EP1000, RDF                         | A | Α  | А        | Α      | Α      | Α      | Α     | А      |
| Hydra Safe E-190                              | A | Α  | Α        | F      | Х      | Α      | Α     | Α      |
| Hydra-Cut 481, 496                            | A | A  | A        | ~      | X      | A      | A     | A      |
| Hydrafluid 760                                | A | A  | A        | ~      | X      | A      | A     | A      |
| Hydrochloric Acid                             | X | X  | X        | X      | X      | X      | X     | X      |
| Hydrofluoric Acid                             | X | X  | X        | X      | X      | X      | 6     | X      |
| Hydrogen Gas                                  | X | X  | X        | X      | X      | A      | A     | A      |
| Hydrogen Peroxide                             | X | X  | X        | ^<br>F | X      | X      | X     | 6      |
|                                               | X | X  |          |        |        |        | X     |        |
| Hydrogen Sulfide<br>Hydrolube                 | A | A  | X<br>A   | X<br>F | A<br>A | X<br>A | A     | 6<br>A |









## Media

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| MEDIA                              | I | II  | III        | IV    | V    | Steel | Brass | SS |
|------------------------------------|---|-----|------------|-------|------|-------|-------|----|
| Hydrolubric 120-B, 141, 595        | F | Α   | А          | F     | А    | Α     | Α     | Α  |
| Hydrosafe Glycol 200               | Α | Α   | Α          | Α     | Α    | Α     | F     | Α  |
| HyJet IV                           | Χ | X   | Х          | Х     | A,7  | Α     | Α     | Α  |
| Hyspin SP 10                       | ~ | А   | Α          | Α     | ~    | Α     | А     | А  |
| Ideal Yellow 77                    | Α | А   | Α          | Α     | Х    | А     | Α     | Α  |
| Imol S150 to S550                  | Х | Х   | Х          | ~     | ~    | Α     | Α     | Α  |
| Ingersoll Rand SSR Coolant         | Х | Х   | Х          | F     | Х    | А     | Α     | А  |
| Isocyanates                        | F | F   | F          | F     | X    | Α     | ~     | Α  |
| Isooctane                          | X | F   | F          | Α     | X    | Α     | Α     | Α  |
| Isopar H                           | Х | Х   | Х          | Х     | Х    | А     | Α     | Α  |
| Isopropyl Alcohol                  | F | F   | F          | F     | F    | F     | Α     | Α  |
| Jayflex DIDP                       | X | Х   | Х          | Х     | А    | Α     | Α     | Α  |
| JP3 and JP4                        | Х | A,3 | A,3        | ~     | Х    | А     | Α     | Α  |
| JP5                                | X | A,3 | A,3        | F,3   | X    | Α     | Α     | Α  |
| JP9                                | X | X   | Х          | X     | X    | Α     | ~     | Α  |
| Kaeser 150P, 175P, 325R, 687R      | X | X   | Х          | F     | X    | Α     | Α     | Α  |
| Kerosene                           | X | А   | Α          | F     | X    | Α     | Α     | Α  |
| KSL-214, 219, 220, 222             | Х | Х   | Х          | F     | X    | А     | Α     | Α  |
| Lacquer                            | Х | Х   | Х          | F     | Х    | Х     | Α     | Α  |
| Lacquer Solvents                   | Χ | Х   | Х          | F     | Х    | X     | Α     | Α  |
| Lactic Acids                       | Х | Х   | Х          | Х     | Х    | Х     | Х     | Α  |
| Lindol HF                          | Х | X   | Х          | F     | А    | А     | Α     | А  |
| Linseed Oil                        | Α | Α   | Α          | Α     | А    | Α     | Α     | Α  |
| LP-Gas                             |   |     | See numera | al 11 |      | А     | Α     | Α  |
| Magnesium Chloride                 | Α | А   | Α          | Α     | А    | Х     | Х     | Х  |
| Magnesium Hydroxide                | F | F   | F          | Α     | Α    | F     | F     | F  |
| Magnesium Sulfate                  | Α | Α   | Α          | Α     | А    | Α     | F     | Α  |
| Mercaptans                         | X | Χ   | Х          | Х     | X    | ~     | ~     | ~  |
| Methane                            |   |     | See numera | al 12 |      | А     | Α     | Α  |
| Methanol                           | F | F   | F          | F     | F    | F     | Α     | Α  |
| Methyl Alcohol                     | F | F   | F          | F     | F    | F     | Α     | Α  |
| Methyl Chloride                    | X | Х   | Х          | F     | Х    | Α     | Α     | Α  |
| Methyl Ethyl Ketone (MEK)          | X | Х   | Х          | F     | Х    | F     | Α     | Α  |
| Methyl Isopropyl-Ketone            | Χ | Χ   | Х          | Χ     | Χ    | F     | А     | Α  |
| Metsafe FR303-M, FR303             | Х | Х   | Х          | Х     | Х    | Α     | Α     | Α  |
| Metsafe FR310, FR315, FR330, FR350 | X | Χ   | Х          | X     | F, 7 | Α     | Α     | Α  |
| Microzol-T46                       | Х | A   | Α          | ~     | X    | A     | Α     | Α  |
| MIL-B-46176A                       | X | X   | X          | X     | X    | Х     | Х     | Х  |
| MIL-H-46170                        | X | F   | F          | F     | X    | A     | Α     | Α  |
| MIL-H-5606                         | F | Α   | Α          | Α     | X    | А     | Α     | Α  |
| MIL-H-6083                         | F | A   | A          | A     | X    | A     | A     | A  |
| MIL-H-7083                         | F | A   | A          | A     | X    | A     | A     | A  |
|                                    |   |     |            |       | .,   |       |       | •  |
| MIL-H-83282                        | F | Α   | Α          | Α     | X    | Α     | Α     | Α  |

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| MEDIA                                      | 1   | II  | III           | IV  | V   | Steel | Brass | SS |
|--------------------------------------------|-----|-----|---------------|-----|-----|-------|-------|----|
| MIL-L-23699                                | Χ   | Χ   | Χ             | Χ   | Χ   | Α     | Α     | Α  |
| MIL-L-7808                                 | F   | Α   | Α             | ~   | Χ   | Α     | Α     | Α  |
| Mine Guard FR                              | Α   | Α   | Α             | ~   | Α   | Α     | Α     | Α  |
| Mineral Oil                                | Α   | Α   | Α             | F   | Χ   | А     | Α     | Α  |
| Mineral Spirits                            | 8   | 8   | 8             | 8   | Χ   | Α     | Α     | Α  |
| Mobil Aero HFE                             | F   | Α   | Α             | F   | Χ   | Α     | Α     | Α  |
| Mobil DTE 11M, 13M, 15M, 16M, 18M, 19M     | F   | A   | A             | A   | Х   | A     | Α     | Α  |
| Mobil DTE 22, 24, 25, 26                   | F   | Α   | Α             | Α   | Χ   | Α     | Α     | Α  |
| Mobil EAL 224H                             | X   | Α   | Α             | X   | ~   | Α     | Α     | Α  |
| Mobil EAL Artic 10, 15, 22,32, 46, 68, 100 | X   | Χ   | Х             | Х   | Χ   | А     | Α     | A  |
| Mobil EAL Evirosyn 46                      | Α   | Α   | Α             | Α   | X   | А     | Α     | A  |
| Mobil Glygoyle 11, 22, 30, 80              | A   | Α   | Α             | ~   | X   | А     | Α     | A  |
| Mobil HFA                                  | F   | A   | A             | A   | Х   | A     | A     | A  |
| Mobil Jet 2                                | Х   | F   | F             | Α   | X   | Α     | Α     | Α  |
| Mobil Nyvac 20, 30, 200, FR                | F   | Α   | Α             | F   | Α   | Α     | Α     | Α  |
| Mobil Rarus 824, 826, 827                  | Х   | X   | X             | F   | X   | А     | A     | Α  |
| Mobil SHC 500 Series                       | A   | Α   | Α             | A   | X   | Α     | A     | Α  |
| Mobil SHC 600 Series                       | F   | Α   | Α             | A   | X   | Α     | A     | Α  |
| Mobil SHC 800 Series                       | F   | A   | A             | A   | Х   | A     | A     | Α  |
| Mobil SHL 624                              | ~   | Α   | Α             | Α   | Χ   | Α     | Α     | Α  |
| Mobil Vactra Oil                           | Α   | Α   | Α             | F   | Χ   | Α     | Α     | Α  |
| Mobil XRL 1618B                            | Х   | Х   | Х             | Х   | A,7 | А     | A     | Α  |
| Mobilfluid 423                             | F   | Α   | Α             | Α   | X   | Α     | Α     | Α  |
| Mobilgear SHC 150, 220, 320, 460, 680      | F   | F   | F             | F   | Χ   | Α     | Α     | Α  |
| Mobilrama 525                              | A   | Α   | A             | F   | Х   | А     | A     | Α  |
| Molub-Alloy 890                            | Χ   | Χ   | Χ             | F   | Χ   | Α     | Α     | Α  |
| Moly Lube 'HF' 902                         | F   | F   | F             | F   | Χ   | Α     | Α     | Α  |
| Monolec 6120 Hydraulic Oil                 | Α   | А   | А             | Α   | Х   | А     | A     | А  |
| Morpholine (pure additive)                 | Χ   | Χ   | Х             | Х   | Х   | Х     | X     | А  |
| Naptha                                     | Χ   | F   | F             | Α   | Х   | Α     | Α     | А  |
| Napthalene                                 | Х   | Х   | Х             | F   | Х   | A     | Α     | Α  |
| Natural Gas                                |     | S   | ee numeral 12 | 2   |     | Α     | Α     | Α  |
| Nitric Acid                                | Χ   | Χ   | X             | Χ   | Χ   | Χ     | Χ     | F  |
| Nitrobenzene                               | Х   | Х   | X             | F   | X   | X     | Х     | Α  |
| Nitrogen, gas                              | F,1 | F,1 | F,1           | F,1 | F,1 | Α     | Α     | Α  |
| Nitrogen, liquid                           | Х   | Х   | Х             | Х   | Х   | Х     | Х     | Х  |
| NORPAR 12, 13, 15                          | 8   | 8   | 8             | 8   | Х   | А     | Α     | A  |
| Nuto H 46, 68                              | Α   | Α   | Α             | Α   | X   | Α     | Α     | Α  |
| Nyvac 20, 30, 200, FR                      | F   | Α   | Α             | F   | Α   | Α     | Α     | Α  |
| Nyvac Light                                | Х   | Х   | Х             | ~   | Α   | Α     | Α     | Α  |
| Oceanic HW                                 | F   | Α   | Α             | F   | X   | Α     | Α     | Α  |
| Oxygen                                     | Х   | Х   | Х             | Х   | X   | X     | Α     | Α  |
| Ozone                                      | F   | F   | F             | ~   | Α   | Α     | Α     | Α  |
| Pacer SLC 150, 300, 500, 700               | Х   | Х   | Χ             | F   | X   | Α     | Α     | Α  |









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| MEDIA                                        | I | II  | III        | IV    | ٧   | Steel | Brass | ss |
|----------------------------------------------|---|-----|------------|-------|-----|-------|-------|----|
| Pennzbell AWX                                | F | Α   | А          | F     | Х   | Α     | Α     | А  |
| Perchloroethylene                            | X | Χ   | Х          | Х     | Х   | F     | Χ     | Α  |
| Petroleum Ether                              | X | F   | F          | F     | Χ   | Α     | Α     | Α  |
| Petroleum Oils                               | А | Α   | А          | Α     | Х   | А     | Α     | А  |
| Phenol (Carbolic Acid)                       | Х | X   | Χ          | Α     | Х   | Х     | F     | А  |
| Phosphate Ester Blends                       | X | X   | Х          | Х     | Х   | Α     | А     | Α  |
| Phosphate Esters                             | Х | X   | X          | Х     | A,7 | Α     | Α     | Α  |
| Phosphoric Acid                              | X | X   | X          | Х     | Х   | X     | X     | F  |
| Plurasafe P 1000, 1200                       | F | Α   | Α          | Α     | F   | Α     | Α     | Α  |
| Polyalkylene Glycol                          | Α | А   | Α          | ~     | Х   | Α     | А     | Α  |
| Polyol Ester                                 | X | F   | Α          | Х     | Х   | Α     | Α     | Α  |
| Potassium Chloride                           | Α | Α   | Α          | Α     | Α   | X     | F     | F  |
| Potassium Hydroxide                          | Χ | X   | Χ          | F     | Α   | 6     | X     | Α  |
| Potassium Sulfate                            | Α | Α   | Α          | Α     | Α   | Α     | Α     | Α  |
| Propane                                      |   |     | See numera | al 11 |     | Α     | Α     | Α  |
| Propylene Glycol                             | F | Α   | Α          | Α     | Α   | F     | F     | F  |
| Pydraul 10-E, 29-E, 50-E, 65-E, 90-E, 115-E  | X | X   | X          | X     | A,7 | Α     | Α     | Α  |
| Pydraul 230-C, 312-C, 68-S                   | X | Χ   | X          | Х     | A,7 | Α     | Α     | Α  |
| Pydraul 60, 150, 625, F9                     | X | Х   | Χ          | Х     | A,7 | Α     | Α     | Α  |
| Pydraul 90, 135, 230, 312, 540, MC           | X | Х   | Χ          | Х     | Χ   | Α     | Α     | Α  |
| Pydraul A-200                                | X | Χ   | X          | F     | Х   | Α     | Α     | Α  |
| Pyro Gard 43, 230, 630                       | X | X   | X          | Х     | Х   | Α     | Α     | Α  |
| Pyro Gard C, D, R, 40S, 40W                  | F | Α   | Α          | F     | Х   | Α     | Α     | Α  |
| Pyro Guard 53, 55, 51, 42                    | X | X   | Χ          | Х     | A,7 | Α     | Α     | Α  |
| Quakerol 641, 720                            | X | F   | Α          | Х     | F   | Α     | Α     | Α  |
| Quintolubric 700                             | Α | Α   | Α          | Α     | Α   | Α     | F     | Α  |
| Quintolubric 807-SN                          | F | Α   | Α          | ~     | Х   | Α     | Α     | Α  |
| Quintolubric 822, 833                        | X | F,5 | A,5        | Х     | Χ   | Α     | Α     | Α  |
| Quintolubric 822-68EHC (71°C, 160°F maximum) | X | F,5 | A,5        | ~     | ~   | Α     | Α     | Α  |
| Quintolubric 888                             | Χ | F,5 | A,5        | Х     | Χ   | Α     | Α     | Α  |
| Quintolubric 957, 958                        | F | Α   | Α          | F     | Α   | Α     | Α     | Α  |
| Quintolubric N822-300                        | ~ | ~   | Α          | ~     | ~   | Α     | Α     | Α  |
| Rando                                        | Α | Α   | Α          | Α     | Х   | Α     | Α     | Α  |
| Rayco 782                                    | Х | F   | Α          | Х     | Χ   | Χ     | Х     | X  |
| Refrigerant 124                              |   |     | See numer  | al 4  |     | Α     | Α     | Α  |
| Refrigerant Freon 113, 114                   | Χ | Χ   | Χ          | Χ     | Χ   | Α     | Α     | Α  |
| Refrigerant Freon 12                         |   |     | See numera | al 4  |     | Α     | Α     | Α  |
| Refrigerant Freon 22                         |   |     | See numera | al 4  |     | Α     | Α     | Α  |
| Refrigerant Freon 502                        |   |     | See numer  | al 4  |     | Α     | Α     | A  |
| Refrigerant HFC134A                          |   |     | See numer  |       |     | Α     | А     | А  |
| Reolube Turbofluid 46                        | X | Х   | Х          | Х     | A,7 | Α     | Α     | А  |
| Rotella                                      | Α | Α   | Α          | Α     | Χ   | Α     | Α     | Α  |
| Royal Bio Guard 3032, 3046, 3068, 3100       | X | ~   | Α          | X     | Х   | Α     | Α     | Α  |
| Royco 2200, 2210, 2222, 2232, 2246, 2268     | X | X   | Χ          | X     | Χ   | Α     | Α     | Α  |
| Royco 4032, 4068, 4100, 4150                 | Χ | X   | X          | F     | X   | Α     | Α     | Α  |

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| MEDIA                                             | 1   | II  | III | IV  | ٧   | Steel | Brass | ss |
|---------------------------------------------------|-----|-----|-----|-----|-----|-------|-------|----|
| Royco 756, 783                                    | А   | Α   | Α   | Α   | Х   | А     | Α     | Α  |
| Royco 770                                         | X   | F   | F   | F   | Χ   | Α     | Α     | Α  |
| RTV Silicone Adhesive Sealants                    | Χ   | X   | Х   | Х   | Х   | Α     | Α     | Α  |
| Safco-Safe T10, T20                               | ~   | ~   | ~   | ~   | Α   | F     | F     | А  |
| Safety-Kleen ISO 32, 46, 68 hydraulic oil         | F   | Α   | Α   | ~   | Х   | Α     | Α     | Α  |
| Safety-Kleen Solvent                              | F,8 | F,8 | F,8 | F,8 | Χ   | Α     | Α     | Α  |
| Santoflex 13                                      | F   | F   | F   | ~   | F   | Α     | Α     | Α  |
| Santosafe 300                                     | Χ   | Χ   | X   | ~   | Χ   | Α     | Α     | Α  |
| Santosafe W/G 15 to 30                            | ~   | ~   | ~   | Α   | Α   | Α     | Α     | Α  |
| Schaeffer Oil #112 HTC @ 158°F max                | Α   | Α   | Α   | ~   | Χ   | Α     | Α     | A  |
| Schaeffer Oil #112 HTC @ 158°F to 212°F           | F   | F   | F   | ~   | Χ   | Α     | Α     | Α  |
| Schaeffer Oil #275 Dilex Supreme @ 158°F max      | Α   | Α   | Α   | ~   | Χ   | Α     | Α     | Α  |
| Schaeffer Oil #275 Dilex Supreme @ 158°F to 212°F | F   | F   | F   | ~   | Х   | Α     | Α     | A  |
| Sea Water                                         | F   | F   | F   | F   | Α   | X     | F     | Α  |
| Sewage                                            | F   | F   | F   | Α   | F   | X     | F     | Α  |
| Shell 140 Solvent                                 | 8   | 8   | 8   | 8   | Χ   | A     | A     | A  |
| Shell Clavus HFC 68                               | Х   | Х   | Х   | X   | Х   | Α     | Α     | Α  |
| Shell Comptella Oil                               | F   | F   | F   | Α   | Х   | Α     | Α     | Α  |
| Shell Comptella Oil S 46, 68                      | F   | F   | F   | Α   | Х   | Α     | Α     | A  |
| Shell Comptella Oil SM                            | F   | F   | F   | Α   | Х   | Α     | Α     | Α  |
| Shell Diala A, (R) Oil AX                         | F   | Α   | Α   | F   | Х   | Α     | Α     | Α  |
| Shell FRM                                         | ~   | ~   | ~   | ~   | Х   | Α     | Α     | Α  |
| Shell IRUS 902, 905                               | A   | Α   | Α   | ~   | Α   | Α     | Α     | A  |
| Shell Pella-A                                     | Α   | Α   | Α   | Α   | Х   | Α     | Α     | Α  |
| Shell Tellus                                      | F   | Α   | Α   | A   | Х   | Α     | Α     | A  |
| Shell Thermia Oil C                               | Α   | Α   | Α   | Α   | Х   | Α     | Α     | Α  |
| Shell Turbo R                                     | X   | F   | F   | Α   | Х   | Α     | Α     | Α  |
| SHF 220, 300, 450                                 | Χ   | Χ   | Α   | Х   | Х   | Α     | Α     | Α  |
| Silicate Esters                                   | A   | F   | F   | Α   | Х   | Α     | Α     | A  |
| Silicone Oils                                     | Α   | Α   | Α   | ~   | ~   | Α     | Α     | A  |
| Silicone Sealants                                 | Х   | Х   | Х   | Х   | Х   | Α     | Α     | Α  |
| Skydrol 500B-4, LD-4                              | X   | X   | X   | Х   | A,7 | Α     | Α     | Α  |
| Soap Solutions                                    | X   | F   | F   | F   | Α   | Α     | Α     | Α  |
| Soda Ash, Sodium Carbonate                        | Α   | Α   | Α   | Α   | Α   | Α     | F     | A  |
| Sodium Bisulfate                                  | F   | F   | F   | Α   | Α   | F     | Α     | F  |
| Sodium Chloride                                   | F   | F   | F   | Α   | Α   | Х     | F     | A  |
| Sodium Hydroxide                                  | Х   | Х   | Х   | A   | Α   | A     | Х     | A  |
| Sodium Hypochlorite                               | F   | F   | F   | X   | F   | Х     | X     | Χ  |
| Sodium Nitrate                                    | F   | F   | F   | Α   | Α   | Α     | F     | Α  |
| Sodium Peroxide                                   | Х   | X   | Х   | X   | Α   | Х     | Х     | A  |
| Sodium Silicate                                   | Α   | Α   | Α   | Α   | Α   | Α     | Α     | Α  |
| Sodium Sulfate                                    | Α   | Α   | Α   | Α   | Α   | Α     | Α     | Α  |
| Soybean Oil                                       | F   | Α   | Α   | A   | Α   | Α     | A     | A  |
| SSR Coolant                                       | Х   | X   | X   | F   | Х   | Α     | Α     | Α  |
| Steam                                             | X   | X   | X   | Х   | X   | F     | Α     | Α  |







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| MEDIA                             | 1      | II      | III      | IV | V      | Steel | Brass  | SS |
|-----------------------------------|--------|---------|----------|----|--------|-------|--------|----|
| Stoddard Solvent                  | 8      | 8       | 8        | 8  | X      | A     | A      | A  |
| Sulfur Chloride                   | X      | X       | X        | F  | X      | X     | X      | X  |
| Sulfur Dioxide                    | X      | X       | X        | X  | ^<br>F | X     | ^<br>F | F  |
| Sulfur Trioxide                   | X      | X       | X        | F  | F      | X     | X      | X  |
| Sulfuric Acid 0%-30% Room Temp    | F,6    | F,6     | F,6      | X  | F,6    | 6     | X      | 6  |
| Summa-20, Rotor, Recip            | Χ      | X       | Υ,0<br>Χ | F  | Χ      | A     | A      | A  |
| Summit DSL-32,68,100,125          | X      | X       | X        | F  | X      | A     | A      | A  |
| Sun Minesafe, Sun Safe            | X      | ^<br>F  | ^<br>F   | F  | X      | A     | A      | A  |
| Sundex 8125                       | X      | F       | F        | ~  | A      |       |        | A  |
|                                   |        |         |          |    |        | A     | A      |    |
| Suniso 3GS                        | A      | A       | A        | Α  | X      | A     | A      | A  |
| Sun-Vis 722                       | X      | F       | F        | ~  | X      | A     | A      | A  |
| Super Hydraulic Oil 100, 150, 220 | A      | A       | A        | A  | X      | A     | A      | A  |
| SUVA MP 39, 52, 66                | X      | X       | X        | X  | X      | A     | A      | A  |
| SYNCON Oil                        | X      | X       | X        | X  | X      | Α .   | A      | A  |
| Syndale 2820                      | X      | F       | F        | ~  | ~      | A     | A      | A  |
| Synesstic 32,68,100               | X      | X       | X        | X  | X      | A     | A      | A  |
| Syn-Flo 70,90                     | Х      | Х       | Х        | F  | X      | Α     | Α      | Α  |
| SYN-O-AD 8478                     | X      | X       | X        | Χ  | A,7    | Α     | A      | Α  |
| Tannic Acid                       | F      | Α       | Α        | F  | Α      | X     | F      | X  |
| Tar                               | F      | F       | F        | F  | X      | X     | F      | Α  |
| Tellus (Shell)                    | F      | Α       | Α        | A  | X      | Α     | Α      | A  |
| Texaco 760 Hydrafluid             | ~      | ~       | ~        | ~  | X      | Α     | Α      | A  |
| Texaco 766, 763 (200 - 300)       | ~      | ~       | ~        | ~  | Α      | F     | F      | A  |
| Texaco A-Z Oil                    | A      | Α       | Α        | F  | Χ      | Α     | Α      | A  |
| Texaco Spindura Oil 22            | F      | F       | F        | F  | X      | Α     | Α      | A  |
| Texaco Way Lubricant 68           | Α      | Α       | Α        | Α  | X      | Α     | Α      | Α  |
| Thanol-R-650-X                    | X      | F       | F        | ~  | Χ      | Α     | Α      | Α  |
| Thermanol 60                      | X      | Χ       | Χ        | X  | Χ      | Α     | Α      | A  |
| Toluene, Toluol                   | X      | X       | Χ        | X  | X      | Α     | Α      | Α  |
| Transmission Oil                  | Α      | Α       | Α        | Α  | Χ      | Α     | Α      | Α  |
| Tribol 1440                       | Х      | F       | F        | Х  | Х      | Α     | A      | A  |
| Trichloroethylene                 | X      | Χ       | Χ        | F  | Χ      | Χ     | Α      | Α  |
| Trim-Sol                          | F      | Α       | Α        | F  | X      | Α     | Α      | Α  |
| Turbinol 50, 1122, 1223           | Х      | Χ       | Χ        | Χ  | A,7    | Α     | Α      | Α  |
| Turpentine                        | x      | Χ       | Х        | F  | X      | Α     | A      | Α  |
| Ucon Hydrolubes                   | F      | Α       | Α        | F  | A      | A     | A      | A  |
| UltraChem 215,230,501,751         | X      | X       | X        | F  | X      | A     | A      | A  |
| Univis J26                        | A      | A       | A        | A  | X      | A     | A      | A  |
| Unleaded Gasoline                 |        | See nun |          |    | ~      | A     | A      | A  |
| Unocal 66/3 Mineral Spirits       | 8      | 8       | 8        | 8  | Χ      | A     | A      | A  |
| Urea                              | F      | F       | F        | A  | F      | F     | ~      | F  |
| Urethane Formulations             | Α      | A       | Α        | A  | ~      | A     | A      | Α  |
| Van Straaten 902                  | A      | A       | A        | A  | X      | A     | A      | A  |
| Varnish                           | X      | X       | X        | F  | X      | F     | F      | A  |
| Varsol                            | 8      | F       | F        | 8  | X      | A     | A      | A  |
| Versilube F44, F55                | ~      | A       | A        | A  | ~      | A     | A      | A  |
| Vinegar                           | X      | X       | X        | F  | A      | F     | X      | A  |
| Vital 29, 4300, 5230, 5310        | X      | X       | X        | X  | X      | A     | A      | A  |
| Volt Esso 35                      | A      | A       | A        | A  | X      | A     | A      | A  |
| Voit Esso 35 Water                | F      |         |          |    |        | F     | A      | A  |
|                                   | F<br>A | A       | A        | A  | A      |       | A<br>F |    |
| Water / Glycols                   |        | A       | A        | A  | A      | A     |        | Α  |
| Xylene, Xylol                     | X      | X       | X        | X  | X      | A     | A      | A  |
| Zerol 150                         | A      | A       | A        | A  | X      | A     | A      | A  |
| Zinc Chloride                     | A      | A       | A        | X  | A      | X     | X      | F  |
| Zinc Sulfate                      | Α      | Α       | Α        | X  | Α      | X     | Α      | Α  |

### **P**ressure

### **Pressure Rating of Hose End Connections**

#### **PRESSURE RATINGS HOSE ASSEMBLIES - PSI**

THE MAXIMUM DYNAMIC WORKING PRESSURE OF THE HOSE ASSEMBLY IS THE LESSER OF THE RATED WORKING PRESSURE OF THE HOSE AND THE END CONNECTIONS USED.

| Hose End<br>Connection         | Part<br>Number                     | Inch Size Fittings<br>(psi) |        |       |        |        |       |       |       |       |       |       |       |       |
|--------------------------------|------------------------------------|-----------------------------|--------|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| Description                    | Codes                              | -2                          | -4     | -5    | -6     | -8     | -10   | -12   | -16   | -20   | -24   | -32   | -40   | -48   |
| Male Pipe (NPTF)               | 01                                 | 12,000                      | 12,000 |       | 10,000 | 10,000 |       | 7,500 | 6,500 | 5,000 | 3,000 | 2,500 |       |       |
| Female Pipe<br>(NPTF, NPSM)    | 02 & 07                            | 7,500                       | 7,000  |       | 6,000  | 5,000  |       | 4,000 | 3,000 | 2,500 | 2,000 | 2,000 |       |       |
| Male Pipe (BSP)                | 91 & D9                            | 5,000                       | 9,000  |       | 8,000  | 6,250  |       | 5,000 | 4,000 | 3,500 | 3,000 | 3,000 |       |       |
| Female Pipe (BSP)              | 92, B1, B2 & B4                    | 5,000                       | 9,000  |       | 8,000  | 6,250  | 5,500 | 5,000 | 4,000 | 3,500 | 3,000 | 3,000 |       |       |
| JIS                            | FU, GU, MU & UT                    |                             | 5,000  |       | 5,000  | 5,000  |       | 4,000 | 3,000 | 2,500 | 1,500 | 1,500 |       |       |
| O-Ring Swivel and 45° Flare*   | 13, 1L, S2, 0G, 0L,48, 08, 77 & 79 |                             | 3,000  | 3,000 | 3,000  | 3,000  | 2,750 | 2,250 | 2,000 | 1,625 | 1,250 | 1,125 |       |       |
| 37° Flare and Straight Thread* | 03, 05, 06**, 37, 39**,41, L7 & L9 |                             | 6,000  | 6,000 | 5,000  | 5,000  | 5,000 | 5,000 | 4,000 | 3,000 | 2,500 | 2,500 |       |       |
| SAE Flareless                  | 11 & 12                            |                             | 6,000  | 6,000 | 5,600  | 5,600  | 4,200 | 4,200 | 3,500 | 3,500 | 3,000 | 3,000 |       |       |
| SAE Inverted Flare             | 28, 67 & 69                        |                             | 2,750  | 2,500 | 2,250  | 2,000  |       |       |       |       |       |       |       |       |
| Seal-Lok®* (O-ring Face Seal)  | JM, JC, JS, J0, J1,<br>J5, J7 & J9 |                             | 9,200  |       | 9,200  | 9,200  | 6,000 | 6,000 | 6,000 | 4,000 | 4,000 | 3,000 |       |       |
| SAE Flanges Code 61            | 15, 16, 17, 18, 19,<br>26, 27 & 89 |                             |        |       |        | 5,000  |       | 5,000 | 5,000 | 4,000 | 4,000 | 3,000 | 2,500 | 2,000 |
| SAE Flanges Code 61 Special    | 4A, 4B, 4F, 4G & 4N                |                             |        |       |        |        |       |       |       | 5,000 | 5,000 | 5,000 |       |       |
| SAE Flanges Code 62            | 6A, 6E, 6F, 6G, 6N,XA, XF, XG & XN |                             |        |       |        |        |       | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |       |       |

For adapter pressure ratings, see Tube Fittings Division catalog 4300.

\*NOTE: For pressure rating of 01, 06 and 39 end configurations in 73, 77, 78, and 79 series, see each description in Section B.

| Hose End<br>Connection          | Part<br>Number  |       | Metric Fittings (psi) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------------|-----------------|-------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Description                     | Codes           | -6    | -8                    | -10   | -12   | -14   | -15   | -16   | -18   | -20   | -22   | -25   | -28   | -30   | -35   | -38   | -42   |
| DIN Light "L"<br>without O-Ring | C3, C4, C5 & 1D | 3,500 | 3,500                 | 3,500 | 3,500 |       | 3,500 |       | 2,250 |       | 2,250 |       | 1,400 |       | 1,400 |       | 1,400 |
| DIN Light "L"<br>with O-Ring    | D0, CA, CE & CF | 4,500 | 4,500                 | 4,500 | 4,500 |       | 4,500 |       | 2,250 |       | 2,250 |       | 2,250 |       | 2,250 |       | 2,250 |
| DIN Heavy "S"<br>without O-Ring | C6, C7, C8 & 3D |       | 9,000                 | 9,000 | 9,000 | 9,000 |       | 5,750 |       | 5,750 |       | 5,750 |       | 3,500 |       | 3,500 |       |
| DIN Heavy "S"<br>with O-Ring    | C9, 0C, 1C & D2 |       | 9,000                 | 9,000 | 9,000 | 9,000 |       | 6,000 |       | 6,000 |       | 6,000 |       | 6,000 |       | 4,500 |       |
| DIN 20078<br>Form C             | CO              |       |                       |       |       |       |       |       |       |       | 900   |       | 900   |       | 900   |       | 900   |
| Banjo                           | 49              | 3,000 | 3,000                 | 3,000 | 3,000 |       | 3,000 |       |       | 3,000 | 3,000 | 3,000 |       |       |       |       |       |
| French Metric                   | F9 & FA         |       |                       | 3,000 | 3,500 | 2,000 |       |       | 2,250 | 2,000 | 1,900 |       |       | 1,750 |       |       |       |

| Hose End<br>Connection | Part<br>Number  |       |       | French Gaz Fittings<br>(psi) |       |       |
|------------------------|-----------------|-------|-------|------------------------------|-------|-------|
| Description            | Codes           | -13   | -17   | -21                          | -27   | -33   |
| French Gaz             | F4, FG, GJ & GE | 5,250 | 3,900 | 3,700                        | 3,000 | 2,500 |

The Maximum working pressure of hoses are listed with each hose description in Section A.

Updated 3/2023

A

B

## **P**ressure

В

## **Metric Pressure Conversions**

|                           |                           |              |                                                                    | PRESSURE                        | CONVERSION                         | ONS                       |                           |              |                                                                   |
|---------------------------|---------------------------|--------------|--------------------------------------------------------------------|---------------------------------|------------------------------------|---------------------------|---------------------------|--------------|-------------------------------------------------------------------|
| Kilo-<br>Pascals<br>(kPa) | Mega-<br>Pascals<br>(MPa) | Bar<br>(bar) | Kilograms<br>per<br>Square<br>Centimeter<br>(Kgf/cm <sup>2</sup> ) | lbs per<br>Square Inch<br>(psi) | lbs per<br>Square<br>Inch<br>(psi) | Kilo-<br>Pascals<br>(kPa) | Mega-<br>Pascals<br>(MPa) | Bar<br>(bar) | Kilograms<br>per<br>Square<br>Centimete<br>(Kgf/cm <sup>2</sup> ) |
| 100                       | 0,1                       | 1,00         | 1.0                                                                | 14.50                           | 10                                 | 68.9                      | 0,07                      | 0,7          | 0.70                                                              |
| 200                       | 0,2                       | 2,00         | 2.0                                                                | 29.00                           | 20                                 | 137.9                     | 0,14                      | 1,4          | 1.41                                                              |
| 300                       | 0,3                       | 3,00         | 3.1                                                                | 43.50                           | 30                                 | 206.8                     | 0,21                      | 2,1          | 2.11                                                              |
| 400                       | 0,4                       | 4,00         | 4.1                                                                | 58.00                           | 40                                 | 275.8                     | 0,28                      | 2,8          | 2.81                                                              |
| 500                       | 0,5                       | 5,00         | 5.1                                                                | 72.50                           | 50                                 | 344.7                     | 0,34                      | 3,4          | 3.52                                                              |
| 600                       | 0,6                       | 6,00         | 6.1                                                                | 87.00                           | 60                                 | 413.7                     | 0,41                      | 4,1          | 4.22                                                              |
| 700                       | 0,7                       | 7,00         | 7.1                                                                | 101.50                          | 70                                 | 482.6                     | 0,48                      | 4,8          | 4.92                                                              |
| 800                       | 0,8                       | 8,00         | 8.2                                                                | 116.00                          | 80                                 | 551.6                     | 0,55                      | 5,5          | 5.63                                                              |
| 900                       | 0,9                       | 9,00         | 9.2                                                                | 130.50                          | 90                                 | 620.5                     | 0,62                      | 6,2          | 6.33                                                              |
| 1000                      | 1,0                       | 10,00        | 10.2                                                               | 145.00                          | 100                                | 689.0                     | 0,70                      | 6,9          | 7.00                                                              |
| 2000                      | 2,0                       | 20,00        | 20.4                                                               | 290.10                          | 200                                | 1379.0                    | 1,40                      | 13,8         | 14.10                                                             |
| 3000                      | 3,0                       | 30,00        | 30.6                                                               | 435.10                          | 300                                | 2068.0                    | 2,10                      | 20,7         | 21.10                                                             |
| 4000                      | 4,0                       | 40,00        | 40.8                                                               | 580.20                          | 400                                | 2758.0                    | 2,80                      | 27,6         | 28.10                                                             |
| 5000                      | 5,0                       | 50,00        | 51.0                                                               | 725.20                          | 500                                | 3447.0                    | 3,40                      | 34,5         | 35.20                                                             |
| 6000                      | 6,0                       | 60,00        | 61.2                                                               | 870.20                          | 600                                | 4137.0                    | 4,10                      | 41,4         | 42.20                                                             |
| 7000                      | 7,0                       | 70,00        | 71.4                                                               | 1015.30                         | 700                                | 4826.0                    | 4,80                      | 48,3         | 49.20                                                             |
| 8000                      | 8,0                       | 80,00        | 81.6                                                               | 1160.30                         | 800                                | 5516.0                    | 5,50                      | 55,2         | 56.30                                                             |
| 9000                      | 9,0                       | 90,00        | 91.8                                                               | 1305.30                         | 900                                | 6205.0                    | 6,20                      | 62,1         | 63.30                                                             |
| 10000                     | 10,0                      | 100,00       | 102.0                                                              | 1450.00                         | 1000                               | 6895.0                    | 6,90                      | 68,9         | 70.30                                                             |
| 20000                     | 20,0                      | 200,00       | 204.0                                                              | 2901.00                         | 2000                               | 13790.0                   | 13,80                     | 137,9        | 140.70                                                            |
| 30000                     | 30,0                      | 300,00       | 306.0                                                              | 4351.00                         | 3000                               | 20684.0                   | 20,70                     | 206,8        | 211.00                                                            |
| 40000                     | 40,0                      | 400,00       | 408.0                                                              | 5802.00                         | 4000                               | 27579.0                   | 27,60                     | 275,8        | 281.30                                                            |
| 50000                     | 50,0                      | 500,00       | 510.0                                                              | 7252.00                         | 5000                               | 34474.0                   | 34,50                     | 344,7        | 351.60                                                            |
| 60000                     | 60,0                      | 600,00       | 612.0                                                              | 8702.00                         | 6000                               | 41369.0                   | 41,40                     | 413,7        | 421.90                                                            |
| 70000                     | 70,0                      | 700,00       | 714.0                                                              | 10153.00                        | 7000                               | 48263.0                   | 48,30                     | 482,6        | 492.30                                                            |
| 80000                     | 80,0                      | 800,00       | 816.0                                                              | 11603.00                        | 8000                               | 55158.0                   | 55,20                     | 551,6        | 562.60                                                            |
| 90000                     | 90,0                      | 900,00       | 918.0                                                              | 13053.00                        | 9000                               | 62053.0                   | 62,10                     | 620,5        | 632.90                                                            |
| 100000                    | 100,0                     | 1000.00      | 1020.0                                                             | 14504.00                        | 10000                              | 68948.0                   | 68,90                     | 689,0        | 703.00                                                            |
| 200000                    | 200,0                     | 2000.00      | 2040.0                                                             | 29008.00                        | 20000                              | 137895.0                  | 137,90                    | 1379,0       | 1406.00                                                           |
| 300000                    | 300,0                     | 3000.00      | 3060.0                                                             | 43511.00                        | 30000                              | 206843.0                  | 206,80                    | 2068,0       | 2110.00                                                           |
|                           |                           |              |                                                                    |                                 | 40000                              | 275790.0                  | 275,80                    | 2758,0       | 2813.00                                                           |
|                           |                           | 1            |                                                                    |                                 |                                    |                           |                           | 1            | 1                                                                 |

### Conversions

### PSI and MPa or N/mm<sup>2</sup> Conversions

Pounds per Square Inch (abbrev. PSI) - A basic unit of pressure or tension measurement in the Imperial or English System of Weights and Measures.

1 psi = .006895 MPa, 1000 psi = 1 ksi

MegaPascal (abbrev. MPa) - A basic unit of pressure or tension measurement in the International System of Weights and Measures.

1 MPa = 145 psi, 1 MPa = 1 N/mm<sup>2</sup>. For oil field applications, units of measurement smaller than 1 psi usually have little meaning. Units of MPa may often appear with a decimal.

Example: 1000 psi = 6.895 MPa.

1 MegaPascal (MPa) = 1 Newton per Square Millimeter (N/mm²) = 145 Pounds per Square Inch (psi).

Psi, Ksi, MPa, and N/mm² all express force measurement, either pressure (as fluid pressure) or load (as tension). All of these terms may appear as pressure ratings or test pressures, and tensile or yield requirements or test results.

## API Spec 6A specifies equipment pressure ratings in both PSI, and MPa as:

| 2,000 psi  | =    | 13.8 MPa        | =     | 138 bar     |
|------------|------|-----------------|-------|-------------|
| 3,000 psi  | =    | 20.7 MPa        | =     | 207 bar     |
| 5,000 psi  | =    | 34.5 MPa        | =     | 345 bar     |
| 10,000 psi | =    | 69.0 MPa        | =     | 690 bar     |
| 15,000 psi | =    | 103.5 MPa       | =     | 1,035 bar   |
| 20,000 psi | =    | 138.0 MPa       | =     | 1,380 bar   |
| Bar press  | sure | provided for in | forma | ition only. |

To express PSI pressures in bars, convert PSI to MPa and move the decimal in the MPa value 1 space to the right, e.g. 5000 PSI = 34.5 MPa = 345 bar.

## API Spec 6A specifies material property requirements\* as:

| Material    | Yi     | eld | Tensile |     |  |  |
|-------------|--------|-----|---------|-----|--|--|
| Designation | PSI    | MPa | PSI     | MPa |  |  |
| 36 K        | 36,000 | 248 | 70,000  | 483 |  |  |
| 45 K        | 45,000 | 310 | 70,000  | 483 |  |  |
| 60 K        | 60,000 | 414 | 85,000  | 586 |  |  |
| 75 K        | 75,000 | 517 | 95,000  | 655 |  |  |

\*For Elongation and Reduction of Area, see API Spec 6A. The values specified for these requirements do not require conversion.

B

C

D

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| 017M           | B-6            | 8888           | B-199          | 11943          | B-43           |
| 187            | A-13           | 10081          | B-199          | 11970          | B-67           |
| 201            | A-45           | 10125          | B-6            | 11971          | B-82           |
| 206            | A-46           | 10126          | B-11           | 11977          | B-103          |
| 213            | A-43           | 10143          | B-30           | 12643          | B-42           |
| 239            | C-27           | 10170          | B-66           | 12671          | B-80           |
| 244            | A-53           | 10171          | B-76           | 12677          | B-99           |
| 266            | A-44           | 10177          | B-92           | 12743          | B-43           |
| 271            | A-48           | 10243          | B-32           | 12771          | B-81           |
| 285            | A-52           | 10277          | B-92           | 12777          | B-101          |
| 293            | A-42           | 10326          | B-11           | 12826          | B-14           |
| 302            | A-23           | 10343          | B-34           | 12843          | B-40           |
| 304            | A-38           | 10370          | B-66           | 13726          | B-12           |
| 339            | C-27           | 10371          | B-76           | 13743          | B-36           |
| 387            | A-14           | 10377          | B-93           | 13771          | B-77           |
| 422            | A-20           | 10426          | B-13           | 13777          | B-95           |
| 424            | A-37           | 10443          | B-38           | 13926          | B-12           |
| 426            | A-22           | 10543          | B-33           | 13943          | B-37           |
| 436            | A-24           | 10571          | B-76           | 13970          | B-66           |
| 487            | A-15           | 10577          | B-96           | 13971          | B-78           |
| 0143           | B-30           | 10626          | B-12           | 13977          | B-95           |
| 0588           | B-195          | 10643          | B-35           | 14126          | B-13           |
| 0688           | B-195          | 10670          | B-66           | 14143          | B-38           |
| 627            | A-36           | 10671          | B-77           | 14171          | B-78           |
| 722            | A-16           | 10677          | B-94           | 14177          | B-96           |
| 774            | A-37           | 10743          | B-32           | 14943          | B-62           |
| 777            | A-29           | 10825          | B-6            | 16743          | B-40           |
| 787            | A-17           | 10826          | B-13           | 16826          | B-14           |
| 797            | A-18           | 10843          | B-38           | 16926          | B-15           |
| 801            | A-32           | 11143          | B-39           | 16943          | B-41           |
| 804            | A-34           | 11243          | B-40           | 17726          | B-13           |
| 811            | A-31           | 11343          | B-31           | 17743          | B-39           |
| 821            | A-35           | 11543          | B-41           | 17926          | B-14           |
| 836            | A-34           | 11571          | B-79           | 17943          | B-39           |
| 881            | A-31           | 11577          | B-98           | 18971          | B-83           |
| 1543           | B-42           | 11643          | B-42           | 18977          | B-104          |
| 1588           | B-196          | 11671          | B-79           | 19243          | B-60           |
| 1788           | B-197          | 11677          | B-99           | 19270          | B-71           |
| 1988           | B-197          | 11743          | B-42           | 19277          | B-121          |
| 2188           | B-194          | 11770          | B-67           | 20120          | B-146          |
| 2726           | C-32           | 11771          | B-80           | 20121          | B-156          |
| 2727           | C-32           | 11777          | B-100          | 20122          | B-164          |
| 3188           | B-194          | 11843          | B-43           | 20130          | B-168          |
| 3788           | B-195          | 11871          | B-81           | 20142          | B-174          |

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D

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| 20621          | B-156          | 31382          | B-179          | 137HY          | B-136          |
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| 20630          | B-169          | 32982          | B-185          | 13D43          | B-57           |
| 20642          | B-175          | 33782          | B-181          | 13DHY          | B-143          |
| 20820          | B-149          | 33982          | B-182          | 141HY          | B-137          |
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| 20842          | B-176          | 36782          | B-184          | 14B77          | B-99           |
| 21120          | B-150          | 36982          | B-184          | 14E77          | B-100          |
| 21330          | B-168          | 37782          | B-183          | 14F77          | B-101          |
| 21342          | B-174          | 37982          | B-183          | 14G77          | B-102          |
| 21520          | B-151          | 38282          | B-187          | 14GZ           | B-24           |
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| 21920          | B-152          | 580661         | C-27           | 14N77          | B-104          |
| 22820          | B-150          | 652200         | C-32           | 15926-PB       | B-19           |
| 22821          | B-158          | 652201         | C-32           | 15926-PT       | B-19           |
| 23220          | B-151          | 662451         | C-31           | 15G26          | B-18           |
| 23221          | B-158          | 711509         | D-17           | 15H26          | B-19           |
| 23720          | B-147          | 711510         | D-17           | 15K26          | B-17           |
| 23721          | B-156          | 871522         | C-30           | 15K26-PB       | B-17           |
| 23730          | B-170          | 881540         | C-30           | 15L26          | B-20           |
| 23742          | B-175          | 101HY          | B-131          | 15L26-PB       | B-20           |
| 23920          | B-148          | 102HY          | B-132          | 15L26-PT       | B-21           |
| 23921          | B-157          | 103HY          | B-134          | 15M26-PT       | B-18           |
| 23930          | B-170          | 105HY          | B-133          | 15N26-PB       | B-20           |
| 23942          | B-175          | 106HY          | B-135          | 15N26-PT       | B-20           |
| 24120          | B-148          | 107HY          | B-132          | 15P26-PT       | B-21           |
| 24248          | C-24           | 108HY          | B-137          | 15R26          | B-17           |
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| 26721          | B-159          | 10G43          | B-33           | 15V26          | B-22           |
| 26920          | B-151          | 10GHY          | B-133          | 15W26          | B-22           |
| 26921          | B-159          | 10L43          | B-34           | 15Z26          | B-22           |
| 27720          | B-149          | 10LHY          | B-134          | 167HY          | B-139          |
| 27721          | B-157          | 111HY          | B-138          | 169HY          | B-140          |
| 27920          | B-149          | 113HY          | B-131          | 16A43          | B-44           |
| 27921          | B-158          | 11C43          | B-59           | 16A70          | B-67           |
| 28120          | B-150          | 11C70          | B-71           | 16A71          | B-83           |
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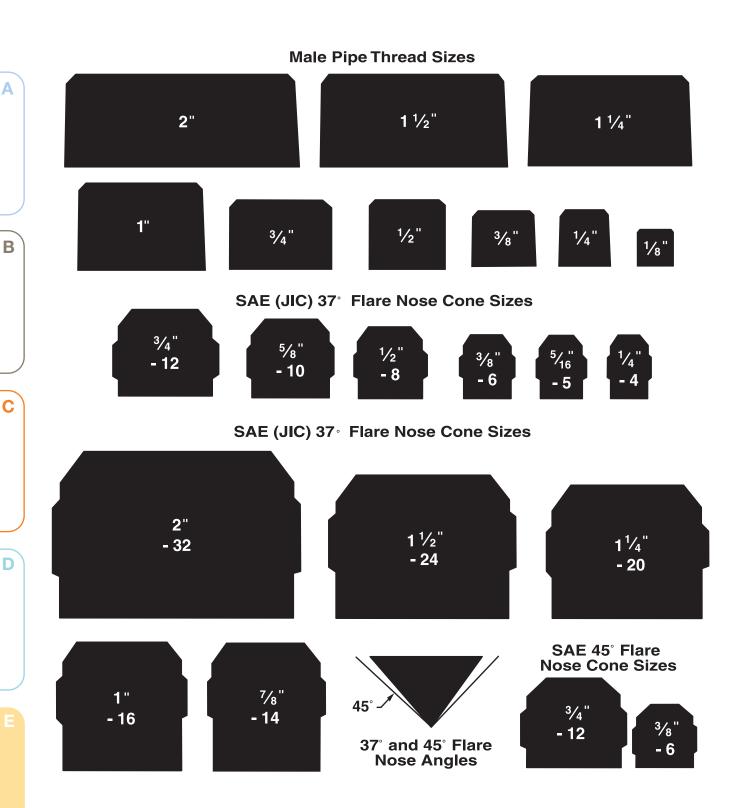
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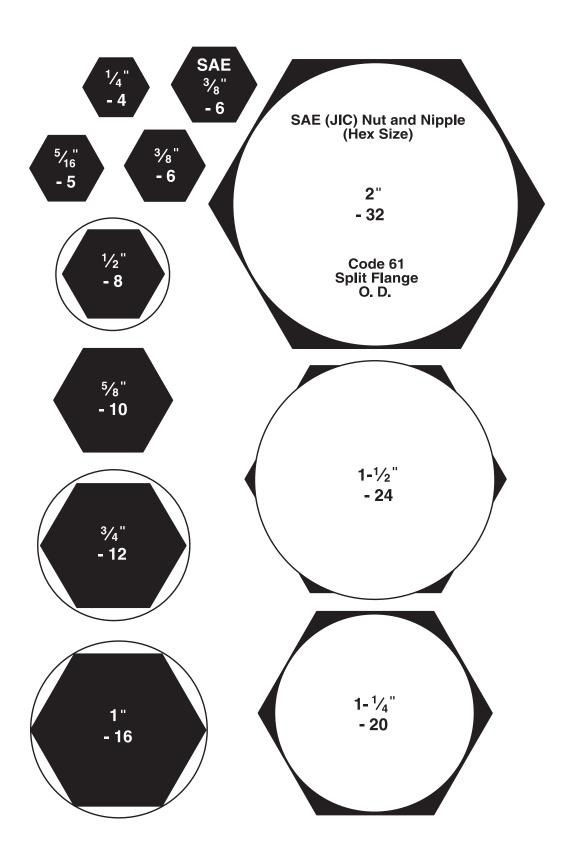
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## Parker Safety Guide for Selecting and Using Hose, Tubing, Fittings, Connectors, Conductors, Valves and Related Accessories

Parker Publication No. 4400-B.1

WARNING: Failure or improper selection or improper use of hose, tubing, fittings, assemblies, valves, connectors, conductors or related accessories ("Products") can cause death, personal injury and property damage. Possible consequences of failure or improper selection or improper use of these Products include but are not limited to:

- Fittings thrown off at high speed.
- · High velocity fluid discharge.
- · Explosion or burning of the conveyed fluid.
- Electrocution from high voltage electric powerlines.
- Contact with suddenly moving or falling objects that are controlled by the conveyed fluid.
- · Injections by high-pressure fluid discharge.
- Dangerously whipping Hose.

- Tube or pipe burst.
- · Weld joint fracture.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- Sparking or explosion caused by static electricity buildup or other sources of electricity.
- Sparking or explosion while spraying paint or flammable liquids.
- Injuries resulting from inhalation, ingestion or exposure to fluids.

Before selecting or using any of these Products, it is important that you read and follow the instructions below. No product from any division in Parker Fluid Connectors Group is approved for in-flight aerospace applications. For hoses and fittings used in in-flight aerospace applications, please contact Parker Aerospace Group.

#### 1.0 GENERAL INSTRUCTIONS

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- 1.1 Scope: This safety guide provides instructions for selecting and using (including assembling, installing, and maintaining) these Products. For convenience, all rubber and/or thermoplastic products commonly called "hose" or "tubing" are called "Hose" in this safety guide. Metallic tube or pipe are called "tube". All assemblies made with Hose are called "Hose Assemblies". All products commonly called "fittings", "couplings" or "adapters" are called "Fittings". Valves are fluid system components that control the passage of fluid. Related accessories are ancillary devices that enhance or monitor performance including crimping, flaring, flanging, presetting, bending, cutting, deburring, swaging machines, sensors, tags, lockout handles, spring guards and associated tooling. This safety guide is a supplement to and is to be used with the specific Parker publications for the specific Hose, Fittings and Related Accessories that are being considered for use. Parker publications are available at www.parker.com. SAE J1273 (www.sae.org) and ISO 17165-2 (www.ansi.org) also provide recommended practices for hydraulic Hose Assemblies, and should be followed.
- 1.2 Fail-Safe: Hose, Hose Assemblies, Tube, Tube Assemblies and Fittings can and do fail without warning for many reasons. Design all systems and equipment in a fail-safe mode, so that failure of the Hose, Hose Assembly, Tube, Tube Assembly or Fitting will not endanger persons or property.
- 1.3 Distribution: Provide a copy of this safety guide to each person responsible for selecting or using Hose, Tube and Fitting products. Do not select or use Parker Hose, Tube or Fittings without thoroughly reading and understanding this safety guide as well as the specific Parker publications for the Products.
- 1.4 User Responsibility: Due to the wide variety of operating conditions and applications for Hose, Tube and Fittings. Parker does not represent or warrant that any particular Hose, Tube or Fitting is suitable for any specific end use system. This safety guide does not analyze all technical parameters that must be considered in selecting a product. The user, through its own analysis and testing, is solely responsible for:
  - Making the final selection of the Products.
  - Assuring that the user's requirements are met and that the application presents no health or safety hazards.
  - Following the safety guide for Related Accessories and being trained to operate Related Accessories.
  - Providing all appropriate health and safety warnings on the equipment on which the Products are used.
  - Assuring compliance with all applicable government and industry standards.
- 1.5 Additional Questions: Call the appropriate Parker technical service department if you have any questions or require any additional information. See the Parker publication for the Products being considered or used, or call 1-800-CPARKER, or go to www.parker.com, for telephone numbers of the appropriate technical service department.

#### 2.0 HOSE, TUBE AND FITTINGS SELECTION INSTRUCTIONS

2.1 Electrical Conductivity: Certain applications require that the Hose be nonconductive to prevent electrical current flow. Other applications require the Hose and the Fittings and the Hose/Fitting interface to be sufficiently conductive to drain off static electricity. Extreme care must be exercised when selecting Hose, Tube and Fittings for these or any other applications in which electrical conductivity or nonconductivity is a factor.

The electrical conductivity or nonconductivity of Hose, Tube and Fittings is dependent upon many factors and may be susceptible to change. These factors include but are not limited to the various materials used to make the Hose and the Fittings, Fitting finish (some Fitting finishes are electrically conductive while others are nonconductive), manufacturing methods (including moisture control), how the Fittings contact the Hose, age and amount of deterioration or damage or other changes, moisture content of the Hose at any particular time, and other factors.

The following are considerations for electrically nonconductive and conductive Hose. For other applications consult the individual catalog pages and the appropriate industry or regulatory standards for proper selection.

- 2.1.1 Electrically Nonconductive Hose: Certain applications require that the Hose be nonconductive to prevent electrical current flow or to maintain electrical isolation. For applications that require Hose to be electrically nonconductive, including but not limited to applications near high voltage electric lines, only special nonconductive Hose can be used. The manufacturer of the equipment in which the nonconductive Hose is to be used must be consulted to be certain that the Hose, Tube and Fittings that are selected are proper for the application. Do not use any Parker Hose or Fittings for any such application requiring nonconductive Hose, including but not limited to applications near high voltage electric lines or dense magnetic fields, unless (i) the application is expressly approved in the Parker technical publication for the product, (ii) the Hose is marked "nonconductive", and (iii) the manufacturer of the equipment on which the Hose is to be used specifically approves the particular Parker Hose, Tube and Fittings for such use.
- 2.1.2 Electrically Conductive Hose: Parker manufactures special Hose for certain applications that require electrically conductive Hose. Parker manufactures special Hose for conveying paint in airless paint spraying applications. This Hose is labeled "Electrically Conductive Airless Paint Spray Hose" on its lay-line and packaging. This Hose must be properly connected to the appropriate Parker Fittings and properly grounded in order to dissipate dangerous static charge buildup, which occurs in all airless paint spraying applications. Do not use any other Hose for airless paint spraying, even if electrically conductive. Use of any other Hose or failure to properly connect the Hose can cause a fire or an explosion resulting in death, personal injury, and property damage. All hoses that convey fuels must be grounded.

Parker manufactures a special Hose for certain compressed natural gas ("CNG") applications where static electricity buildup may occur. Parker CNG Hose assemblies comply with the requirements of ANSI/IAS NGV 4.2; CSA 12.52, "Hoses for Natural Gas Vehicles and Dispensing Systems" (www.ansi.org). This Hose is labeled "Electrically Conductive for CNG Use" on its layline and packaging. This Hose must be properly connected to the appropriate Parker Fittings and properly grounded in order to dissipate dangerous static charge buildup, which occurs in, for example, high velocity CNG dispensing or transfer. Do not use any other Hose for CNG applications where static charge buildup may occur, even if electrically conductive. Use of other Hoses in CNG applications or failure to properly connect or ground this Hose can cause a fire or an explosion resulting in death, personal injury, and property damage. Care must also be taken to protect against CNG permeation through the Hose wall. See section 2.6, Permeation, for more information. Parker CNG Hose is intended for dispenser and vehicle use within the specified temperature range. Parker CNG Hose should not be used in confined spaces or unventilated areas or areas exceeding the specified temperature range. Final assemblies must be tested for leaks. CNG Hose Assemblies should be tested on a monthly basis for conductivity per ANSI/IAS NGV 4.2; CSA 12.52.

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Parker manufactures special Hose for aerospace in-flight applications. Aerospace in-flight applications employing Hose to transmit fuel, lubricating fluids and hydraulic fluids require a special Hose with a conductive inner tube. This Hose for in-flight applications is available only from Parker's Stratoflex Products Division. Do not use any other Parker Hose for in-flight applications, even if electrically conductive. Use of other Hoses for in-flight applications or failure to properly connect or ground this Hose can cause a fire or an explosion resulting in death, personal injury and property damage. These Hose assemblies for in-flight applications must meet all applicable aerospace industry, aircraft engine and aircraft requirements.

- 2.2 Pressure: Hose, Tube and Fitting selection must be made so that the published maximum working pressure of the Hose, Tube and Fittings are equal to or greater than the maximum system pressure. The maximum working pressure of a Hose, or Tube Assembly is the lower of the respective published maximum working pressures of the Hose, Tube and the Fittings used. Surge pressures or peak transient pressures in the system must be below the published maximum working pressure for the Hose, Tube and Fitting. Surge pressures and peak pressures can usually only be determined by sensitive electrical instrumentation that measures and indicates pressures at millisecond intervals. Mechanical pressure gauges indicate only average pressures and cannot be used to determine surge pressures or peak transient pressures. Published burst pressure ratings for Hose is for manufacturing test purposes only and is no indication that the Product can be used in applications at the burst pressure or otherwise above the published maximum recommended working pressure.
- 2.3 Suction: Hoses used for suction applications must be selected to insure that the Hose will withstand the vacuum and pressure of the system. Improperly selected Hose may collapse in suction application.
- 2.4 Temperature: Be certain that fluid and ambient temperatures, both steady and transient, do not exceed the limitations of the Hose, Tube, Fitting and Seals. Temperatures below and above the recommended limit can degrade Hose, Tube, Fittings and Seals to a point where a failure may occur and release fluid. Tube and Fittings performances are normally degraded at elevated temperature. Material compatibility can also change at temperatures outside of the rated range. Properly insulate and protect the Hose Assembly when routing near hot objects (e.g. manifolds). Do not use any Hose in any application where failure of the Hose could result in the conveyed fluids (or vapors or mist from the conveyed fluids) contacting any open flame, molten metal, or other potential fire ignition source that could cause burning or explosion of the conveyed fluids or vapors.
- 2.5 Fluid Compatibility: Hose, and Tube Assembly selection must assure compatibility of the Hose tube, cover, reinforcement, Tube, Plating and Seals with the fluid media used. See the fluid compatibility chart in the Parker publication for the product being considered or used. This information is offered only as a guide. Actual service life can only be determined by the end user by testing under all extreme conditions and other analysis.
  - Hose, and Tube that is chemically compatible with a particular fluid must be assembled using Fittings and adapters containing likewise compatible seals. Flange or flare processes can change Tube material properties that may not be compatible with certain requirements such as NACE
- 2.6 Permeation: Permeation (that is, seepage through the Hose or Seal) will occur from inside the Hose or Fitting to outside when Hose or Fitting is used with gases, liquid and gas fuels, and refrigerants (including but not limited to such materials as helium, diesel fuel, gasoline, natural gas, or LPG). This permeation may result in high concentrations of vapors which are potentially flammable, explosive, or toxic, and in loss of fluid. Dangerous explosions, fires, and other hazards can result when using the wrong Hose for such applications. The system designer must take into account the fact that this permeation will take place and must not use Hose or Fitting if this permeation could be hazardous. The system designer must take into account all legal, government, insurance, or any other special regulations which govern the use of fuels and refrigerants. Never use a Hose or Fitting even though the fluid compatibility is acceptable without considering the potential hazardous effects that can result from permeation through the Hose or Tube Assembly.
  - Permeation of moisture from outside the Hose or Fitting to inside the Hose or Fitting will also occur in Hose or Tube assemblies, regardless of internal pressure. If this moisture permeation would have detrimental effects (particularly, but not limited to refrigeration and air conditioning systems), incorporation of sufficient drying capacity in the system or other appropriate system safeguards should be selected and used. The sudden pressure release of highly pressurized gas could also result in Explosive Decompression failure of permeated Seals and Hoses.
- 2.7 Size: Transmission of power by means of pressurized fluid varies with pressure and rate of flow. The size of the components must be adequate to keep pressure losses to a minimum and avoid damage due to heat generation or excessive fluid velocity.

- 2.8 Routing: Attention must be given to optimum routing to minimize inherent problems (kinking or flow restriction due to Hose collapse, twisting of the Hose, proximity to hot objects or heat sources). For additional routing recommendations see SAE J1273 and ISO 17165-2. Hose Assemblies have a finite life and should be installed in a manner that allows for ease of inspection and future replacement. Hose because of its relative short life, should not be used in residential and commercial buildings inside of inaccessible walls or floors, unless specifically allowed in the product literature. Always review all product literature for proper installation and routing instructions.
- 2.9 Environment: Care must be taken to insure that the Hose, Tube and Fittings are either compatible with or protected from the environment (that is, surrounding conditions) to which they are exposed. Environmental conditions including but not limited to ultraviolet radiation, sunlight, heat, ozone, moisture, water, salt water, chemicals and air pollutants can cause degradation and premature failure.
- 2.10 Mechanical Loads: External forces can significantly reduce Hose, Tube and Fitting life or cause failure. Mechanical loads which must be considered include excessive flexing, twist, kinking, tensile or side loads, bend radius, and vibration. Use of swivel type Fittings or adapters may be required to insure no twist is put into the Hose. Use of proper Hose or Tube clamps may also be required to reduce external mechanical loads. Unusual applications may require special testing prior to Hose selection.
- 2.11 Physical Damage: Care must be taken to protect Hose from wear, snagging, kinking, bending smaller that minimum bend radius and cutting, any of which can cause premature Hose failure. Any Hose that has been kinked or bent to a radius smaller than the minimum bend radius, and any Hose that has been cut or is cracked or is otherwise damaged should be removed and discarded. Fittings with damages such as scratches on sealing surfaces and deformation should be replaced.
- 2.12 Proper End Fitting: See instructions 3.2 through 3.5. These recommendations may be substantiated by testing to industry standards such as SAE J517 for hydraulic applications, or MIL-A-5070, AS1339, or AS3517 for Hoses from Parker's Stratoflex Products Division for aerospace applications.
- 2.13 Length: When determining the proper Hose or Tube length of an assembly, be aware of Hose length change due to pressure, Tube length change due to thermal expansion or contraction, and Hose or Tube and machine tolerances and movement must be considered. When routing short hose assemblies, it is recommended that the minimum free hose length is always used. Consult the hose manufacturer for their minimum free hose length recommendations. Hose assemblies should be installed in such a way that any motion or flexing occurs within the same plane.
- 2.14 Specifications and Standards: When selecting Hose, Tube and Fittings, government, industry, and Parker specifications and recommendations must be reviewed and followed as applicable.
- 2.15 Hose Cleanliness: Hose and Tube components may vary in cleanliness levels. Care must be taken to insure that the Hose and Tube Assembly selected has an adequate level of cleanliness for the application.
- 2.16 Fire Resistant Fluids: Some fire resistant fluids that are to be conveyed by Hose or Tube require use of the same type of Hose or Tube as used with petroleum base fluids. Some such fluids require a special Hose, Tube, Fitting and Seal, while a few fluids will not work with any Hose at all. See instructions 2.5 and 1.5. The wrong Hose, Tube, Fitting or Seal may fail after a very short service. In addition, all liquids but pure water may burn fiercely under certain conditions, and even pure water leakage may be hazardous.
- 2.17 Radiant Heat: Hose and Seals can be heated to destruction without contact by such nearby items as hot manifolds or molten metal. The same heat source may then initiate a fire. This can occur despite the presence of cool air around the Hose or Seal. Performance of Tube and Fitting subjected to the heat could be degraded.
- 2.18 Welding or Brazing: When using a torch or arc welder in close proximity to hydraulic lines, the hydraulic lines should be removed or shielded with appropriate fire resistant materials. Flame or weld spatter could burn through the Hose or Seal and possibly ignite escaping fluid resulting in a catastrophic failure. Heating of plated parts, including Hose Fittings and adapters, above 450°F (232°C) such as during welding, brazing or soldering may emit deadly gases. Any elastomer seal on fittings shall be removed prior to welding or brazing, any metallic surfaces shall be protected after brazing or welding when necessary. Welding and brazing filler material shall be compatible with the Tube and Fitting that are joined.
- 2.19 Atomic Radiation: Atomic radiation affects all materials used in Hose and Tube assemblies. Since the long-term effects may be unknown, do not expose Hose or Tube assemblies to atomic radiation. Nuclear applications may require special Tube and Fittings.
- 2.20 Aerospace Applications: The only Hose, Tube and Fittings that may be used for in-flight aerospace applications are those available from Parker's Stratoflex Products Division. Do not use any other Hose or Fittings for

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#### Parker Safety Guide, Parker Publication No. 4400-B.1 (continued)

in-flight applications. Do not use any Hose or Fittings from Parker's Stratoflex Products Division with any other Hose or Fittings, unless expressly approved in writing by the engineering manager or chief engineer of Stratoflex Products Division and verified by the user's own testing and inspection to aerospace industry standards.

2.21 Unlocking Couplings: Ball locking couplings or other Fittings with quick disconnect ability can unintentionally disconnect if they are dragged over obstructions, or if the sleeve or other disconnect member, is bumped or moved enough to cause disconnect. Threaded Fittings should be considered where there is a potential for accidental uncoupling.

#### 3.0 HOSE AND FITTINGS ASSEMBLY AND INSTALLATION INSTRUCTIONS

- 3.1 Component Inspection: Prior to assembly, a careful examination of the Hose and Fittings must be performed. All components must be checked for correct style, size, catalog number, and length. The Hose must be examined for cleanliness, obstructions, blisters, cover looseness, kinks, cracks, cuts or any other visible defects. Inspect the Fitting and sealing surfaces for burrs, nicks, corrosion or other imperfections. Do NOT use any component that displays any signs of nonconformance.
- 3.2 Hose and Fitting Assembly: Do not assemble a Parker Fitting on a Parker Hose that is not specifically listed by Parker for that Fitting, unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division. Do not assemble a Parker Fitting on another manufacturer's Hose or a Parker Hose on another manufacturer's Fitting unless (i) the engineering manager or chief engineer of the appropriate Parker division approves the Assembly in writing or that combination is expressly approved in the appropriate Parker literature for the specific Parker product, and (ii) the user verifies the Assembly and the application through analysis and testing. For Parker Hose that does not specify a Parker Fitting, the user is solely responsible for the selection of the proper Fitting and Hose Assembly procedures. See instruction 1.4.

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To prevent the possibility of problems such as leakage at the Fitting or system contamination, it is important to completely remove all debris from the cutting operation before installation of the Fittings. The Parker published instructions must be followed for assembling the Fittings on the Hose. These instructions are provided in the Parker Fitting catalog for the specific Parker Fitting being used, or by calling 1-800-CPARKER, or at www.parker.com.

- 3.3 Related Accessories: Do not crimp or swage any Parker Hose or Fitting with anything but the listed swage or crimp machine and dies in accordance with Parker published instructions. Do not crimp or swage another manufacturer's Fitting with a Parker crimp or swage die unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division.
- 3.4 Parts: Do not use any Parker Fitting part (including but not limited to socket, shell, nipple, or insert) except with the correct Parker mating parts, in accordance with Parker published instructions, unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division.
- 3.5 Field Attachable/Permanent: Do not reuse any field attachable Hose Fitting that has blown or pulled off a Hose. Do not reuse a Parker permanent Hose Fitting (crimped or swaged) or any part thereof. Complete Hose Assemblies may only be reused after proper inspection under section 4.0. Do not assemble Fittings to any previously used hydraulic Hose that was in service, for use in a fluid power application.
- 3.6 Pre-Installation Inspection: Prior to installation, a careful examination of the Hose Assembly must be performed. Inspect the Hose Assembly for any damage or defects. DO NOT use any Hose Assembly that displays any signs of nonconformance.
- 3.7 Minimum Bend Radius: Installation of a Hose at less than the minimum listed bend radius may significantly reduce the Hose life. Particular attention must be given to preclude sharp bending at the Hose to Fitting juncture. Any bending during installation at less than the minimum bend radius must be avoided. If any Hose is kinked during installation, the Hose must be discarded.
- 3.8 Twist Angle and Orientation: Hose Assembly installation must be such that relative motion of machine components does not produce twisting.
- 3.9 Securement: In many applications, it may be necessary to restrain, protect, or guide the Hose to protect it from damage by unnecessary flexing, pressure surges, and contact with other mechanical components. Care must be taken to insure such restraints do not introduce additional stress or wear points.
- 3.10 Proper Connection of Ports: Proper physical installation of the Hose Assembly requires a correctly installed port connection insuring that no twist or torque is transferred to the Hose when the Fittings are being tightened or otherwise during use.
- 3.11 External Damage: Proper installation is not complete without insuring that tensile loads, side loads, kinking, flattening, potential abrasion, thread damage or damage to sealing surfaces are corrected or eliminated. See instruction 2.10.

- 3.12 System Checkout: All air entrapment must be eliminated and the system pressurized to the maximum system pressure (at or below the Hose maximum working pressure) and checked for proper function and freedom from leaks. Personnel must stay out of potential hazardous areas while testing and using.
- 3.13 Routing: The Hose Assembly should be routed in such a manner so if a failure does occur, the escaping media will not cause personal injury or property damage. In addition, if fluid media comes in contact with hot surfaces, open flame or sparks, a fire or explosion may occur. See section 2.4.
- 3.14 Ground Fault Equipment Protection Devices (GFEPDs): WARNING! Fire and Shock Hazard. To minimize the danger of fire if the heating cable of a Multitube bundle is damaged or improperly installed, use a Ground Fault Equipment Protection Device. Electrical fault currents may be insufficient to trip a conventional circuit breaker.

For ground fault protection, the IEEE 515: (www.ansi.org) standard for heating cables recommends the use of GFEPDs with a nominal 30 milliampere trip level for "piping systems in classified areas, those areas requiring a high degree of maintenance, or which may be exposed to physical abuse or corrosive atmospheres".

#### 4.0 TUBE AND FITTINGS ASSEMBLY AND INSTALLATION INSTRUCTIONS

- 4.1 Component Inspection: Prior to assembly, a careful examination of the Tube and Fittings must be performed. All components must be checked for correct style, size, material, seal, and length. Inspect the Fitting and sealing surfaces for burrs, nicks, corrosion, missing seal or other imperfections. Do NOT use any component that displays any signs of nonconformance.
- 4.2 Tube and Fitting Assembly: Do not assemble a Parker Fitting with a Tube that is not specifically listed by Parker for that Fitting, unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division. The Tube must meet the requirements specified to the Fitting.

The Parker published instructions must be followed for assembling the Fittings to a Tube. These instructions are provided in the Parker Fitting catalog for the specific Parker Fitting being used, or by calling 1-800-CPARKER, or at www.parker.com.

- 4.3 Related Accessories: Do not preset or flange Parker Fitting components using another manufacturer's equipment or procedures unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division. Tube, Fitting component and tooling must be check for correct style, size and material. Operation and maintenance of Related Accessories must be in accordance with the operation manual for the designated Accessory.
- 4.4 Securement: In many applications, it may be necessary to restrain, protect, or guide the Tube to protect it from damage by unnecessary flexing, pressure surges, vibration, and contact with other mechanical components. Care must be taken to insure such restraints do not introduce additional stress or wear points.
- 4.5 Proper Connection of Ports: Proper physical installation of the Tube Assembly requires a correctly installed port connection insuring that no torque is transferred to the Tube when the Fittings are being tightened or otherwise during use.
- 4.6 External Damage: Proper installation is not complete without insuring that tensile loads, side loads, flattening, potential abrasion, thread damage or damage to sealing surfaces are corrected or eliminated. See instruction 2.10.
- 4.7 System Checkout: All air entrapment must be eliminated and the system pressurized to the maximum system pressure (at or below the Tube Assembly maximum working pressure) and checked for proper function and freedom from leaks. Personnel must stay out of potential hazardous areas while testing and using.
- 4.8 Routing: The Tube Assembly should be routed in such a manner so if a failure does occur, the escaping media will not cause personal injury or property damage. In addition, if fluid media comes in contact with hot surfaces, open flame or sparks, a fire or explosion may occur. See section 2.4.

#### 5.0 HOSE AND FITTING MAINTENANCE AND REPLACEMENT INSTRUCTIONS

Even with proper selection and installation, Hose life may be significantly reduced without a continuing maintenance program. The severity of the application, risk potential from a possible Hose failure, and experience with any Hose failures in the application or in similar applications should determine the frequency of the inspection and the replacement for the Products so that Products are replaced before any failure occurs. Certain products require maintenance and inspection per industry requirements. Failure to adhere to these requirements may lead to premature failure. A maintenance program must be established and followed by the user and, at minimum, must include instructions 5.2 through 5.7

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- 5.2 Visual Inspection Hose/Fitting: Any of the following conditions require immediate shut down and replacement of the Hose Assembly:
  - Fitting slippage on Hose;
  - Damaged, cracked, cut or abraded cover (any reinforcement exposed);
  - Hard, stiff, heat cracked, or charred Hose;
  - · Cracked, damaged, or badly corroded Fittings;
  - · Leaks at Fitting or in Hose;
  - Kinked, crushed, flattened or twisted Hose; and
  - Blistered, soft, degraded, or loose cover.
- 5.3 Visual Inspection All Other: The following items must be tightened, repaired, corrected or replaced as required:
  - Leaking port conditions;
  - Excess dirt buildup;/
  - Worn clamps, guards or shields; and
  - System fluid level, fluid type, and any air entrapment.
- 5.4 Functional Test: Operate the system at maximum operating pressure and check for possible malfunctions and leaks. Personnel must avoid potential hazardous areas while testing and using the system. See section 2.2.
- 5.5 Replacement Intervals: Hose assemblies and elastomeric seals used on Hose Fittings and adapters will eventually age, harden, wear and deteriorate under thermal cycling and compression set. Hose Assemblies and elastomeric seals should be inspected and replaced at specific replacement intervals, based on previous service life, government or industry recommendations, or when failures could result in unacceptable downtime, damage, or injury risk. See section 1.2. Hose and Fittings may be subjected to internal mechanical and/or chemical wear from the conveying fluid and may fail without warning. The user must determine the product life under such circumstances by testing. Also see section 2.5.
- Hose Inspection and Failure: Hydraulic power is accomplished by utilizing high pressure fluids to transfer energy and do work. Hoses, Fittings and Hose Assemblies all contribute to this by transmitting fluids at high pressures. Fluids under pressure can be dangerous and potentially lethal and, therefore, extreme caution must be exercised when working with fluids under pressure and handling the Hoses transporting the fluids. From time to time, Hose Assemblies will fail if they are not replaced at proper time intervals. Usually these failures are the result of some form of misapplication, abuse, wear or failure to perform proper maintenance. When Hoses fail, generally the high pressure fluids inside escape in a stream which may or may not be visible to the user. Under no circumstances should the user attempt to locate the leak by "feeling" with their hands or any other part of their body. High pressure fluids can and will penetrate the skin and cause severe tissue damage and possibly loss of limb. Even seemingly minor hydraulic fluid injection injuries must be treated immediately by a physician with knowledge of the tissue damaging properties of hydraulic fluid.

If a Hose failure occurs, immediately shut down the equipment and leave the area until pressure has been completely released from the Hose Assembly. Simply shutting down the hydraulic pump may or may not eliminate the pressure in the Hose Assembly. Many times check valves, etc., are employed in a system and can cause pressure to remain in a Hose Assembly even when pumps or equipment are not operating. Tiny holes in the Hose, commonly known as pinholes, can eject small, dangerously powerful but hard to see streams of hydraulic fluid. It may take several minutes or even hours for the pressure to be relieved so that the Hose Assembly may be examined safely.

Once the pressure has been reduced to zero, the Hose Assembly may be taken off the equipment and examined. It must always be replaced if a failure has occurred. Never attempt to patch or repair a Hose Assembly that has failed. Consult the nearest Parker distributor or the appropriate Parker division for Hose Assembly replacement information.

Never touch or examine a failed Hose Assembly unless it is obvious that the Hose no longer contains fluid under pressure. The high pressure fluid is extremely dangerous and can cause serious and potentially fatal injury.

- 5.7 Elastomeric seals: Elastomeric seals will eventually age, harden, wear and deteriorate under thermal cycling and compression set. Elastomeric seals should be inspected and replaced.
- 5.8 Refrigerant gases: Special care should be taken when working with refrigeration systems. Sudden escape of refrigerant gases can cause blindness if the escaping gases contact the eye and can cause freezing or other severe injuries if it contacts any other portion of the body.
- 5.9 Compressed natural gas (CNG): Parker CNG Hose Assemblies should be tested after installation and before use, and at least on a monthly basis per instructions provided on the Hose Assembly tag. The recommended procedure is to pressurize the Hose and check for leaks and to visually inspect the Hose for damage and to perform an electrical resistance test.

**Caution:** Matches, candles, open flame or other sources of ignition shall not be used for Hose inspection. Leak check solutions should be rinsed off after use.

#### 6.0 HOSE STORAGE

- **6.1 Age Control:** Hose and Hose Assemblies must be stored in a manner that facilitates age control and first-in and first-out usage based on manufacturing date of the Hose and Hose Assemblies. Unless otherwise specified by the manufacturer or defined by local laws and regulations:
- 6.1.1 The shelf life of rubber hose in bulk form or hose made from two or more materials is 28 quarters (7 years) from the date of manufacture, with an extension of 12 quarters (3 years), if stored in accordance with ISO 2230;
- **6.1.2** The shelf life of thermoplastic and polytetrafluoroethylene hose is considered to be unlimited;
- **6.1.3** Hose assemblies that pass visual inspection and proof test shall not be stored for longer than 2 years.
- 6.1.4 Storage: Stored Hose and Hose Assemblies must not be subjected to damage that could reduce their expected service life and must be placed in a cool, dark and dry area with the ends capped. Stored Hose and Hose Assemblies must not be exposed to temperature extremes, ozone, oils, corrosive liquids or furnes, solvents, high humidity, rodents, insects, ultraviolet light, electromagnetic fields or radioactive materials.

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| Issue Date  | ECO Number: | Revision Letter: | Revision Date: | Specification   |
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| 24-SEP-2015 | XXXXXX      | А                | 30-OCT-2015    | FC-Safety Guide |

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1. **Definitions.** As used herein, the following terms have the meanings indicated. means any customer receiving a Quote for Products from

Goods:

Quote:

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means any tangible part, system or component to be supplied by the Seller.

Products: means the Goods, Services and/or Software as described in a Quote provided by the Seller.

means the offer or proposal made by Seller to Buyer for the

supply of Products. Seller: means Parker-Hannifin Corporation, including all divisions

and businesses thereof.

Services: means any services to be supplied by the Seller.

means any software related to the Products, whether Software:

embedded or separately downloaded.

means the terms and conditions of this Offer of Sale or any Terms: newer version of the same as published by Seller electronically

at www.parker.com/saleterms.

- 2. Terms. All sales of Products by Seller are contingent upon, and will be governed by, these Terms and, these Terms are incorporated into any Quote provided by Seller to any Buyer. Buyer's order for any Products whether communicated to Seller verbally, in writing, by electronic date interface or other electronic commerce, shall constitute acceptance of these Terms. Seller objects to any contrary or additional terms or conditions of Buyer. Reference in Seller's order acknowledgement to Buyer's purchase order or purchase order number shall in no way constitute an acceptance of any of Buyer's terms of purchase. No modification to these Terms will be binding on Seller unless agreed to in writing and signed by an authorized representative of Seller.
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- 4. Shipment; Delivery; Title and Risk of Loss. All delivery dates are approximate. Seller is not responsible for damages resulting from any delay. Regardless of the manner of shipment, delivery occurs and title and risk of loss or damage pass to Buyer, upon placement of the Products with the shipment carrier at Seller's facility. Unless otherwise agreed, Seller may exercise its judgment in choosing the carrier and means of delivery. No deferment of shipment at Buyers' request beyond the respective indicated shipping date will be made except on terms that will indemnify, defend and hold Seller harmless against all loss and additional expense. Buyer shall be responsible for any additional shipping charges incurred by Seller due to Buyer's acts or
- 5. Warranty. The warranty related to the Products is as follows: (i) Goods are warranted against defects in material or workmanship for a period of twelve (12) months from the date of delivery or 2,000 hours of use, whichever occurs first; (ii) Services shall be performed in accordance with generally accepted practices and using the degree of care and skill that is ordinarily exercised and customary in the field to which the Services pertain and are warranted for a period of six (6) months from the completion of the Services by Seller; and (iii) Software is only warranted to perform in accordance with applicable specifications provided by Seller to Buyer for ninety (90) days from the date of delivery or, when downloaded by a Buyer or end-user, from the date of the initial download. All prices are based upon the exclusive limited warranty stated above, and upon the following disclaimer:

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- 7. LIMITATION OF LIABILITY. IN THE EVENT OF A BREACH OF WARRANTY, SELLER WILL, AT ITS OPTION, REPAIR OR REPLACE THE NON-CONFORMING PRODUCT, RE-PERFORM THE SERVICES, OR REFUND THE PURCHASE PRICE PAID WITHIN A REASONABLE PERIOD OF TIME. IN NO EVENT IS SELLER LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR AS THE RESULT OF, THE SALE, DELIVERY, NON-DELIVERY, SERVICING, NON-COMPLETION OF SERVICES, USE, LOSS OF USE OF, OR INABILITY TO USE THE PRODUCTS OR ANY PART THEREOF, LOSS OF DATA, IDENTITY, PRIVACY, OR CONFIDENTIALITY, OR FOR ANY CHARGES OR EXPENSES OF ANY NATURE INCURRED WITHOUT SELLER'S WRITTEN CONSENT, WHETHER BASED IN CONTRACT, TORT OR OTHER LEGAL THEORY. IN NO EVENT SHALL SELLER'S LIABILITY UNDER ANY CLAIM MADE BY BUYER EXCEED THE PURCHASE PRICE PAID FOR THE PRODUCTS.
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- 14. <u>Limitation on Assignment.</u> Buyer may not assign its rights or obligations without the prior written consent of Seller.
- 15. Force Majeure. Seller does not assume the risk and is not liable for delay or failure to perform any of Seller's obligations by reason of events or circumstances beyond its reasonable control ("Events of Force Majeure"). Events of Force Majeure shall include without limitation: accidents, strikes or labor disputes, acts of any government or government agency, acts of nature, delays or failures in delivery from carriers or suppliers, shortages of materials, or any other cause beyond Seller's reasonable control.
- 16. Waiver and Severability. Failure to enforce any provision of these Terms will not invalidate that provision; nor will any such failure prejudice Seller's right to enforce that provision in the future. Invalidation of any provision of these Terms by legislation or other rule of law shall not invalidate any other provision herein and, the remaining provisions will remain in full force and effect.
- 17. Termination. Seller may terminate any agreement governed by or arising from these Terms for any reason and at any time by giving Buyer thirty (30) days prior written notice. Seller may immediately terminate, in writing, if Buyer: (a) breaches any provision of these Terms (b) appoints a trustee, receiver or custodian for all or any part of Buyer's property (c) files a petition for relief in bankruptcy on its own behalf, or one if filed by a third party (d) makes an assignment for the benefit of creditors; or (e) dissolves its business or liquidates all or a majority of its assets.
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- 21. Entire Agreement. These Terms, along with the terms set forth in the main body of any Quote, forms the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of sale. In the event of a conflict between any term set forth in the main body of a

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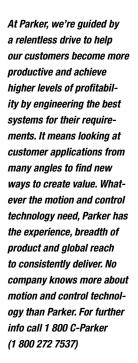








## Parker's Motion & Control Technologies





#### **Aerospace**

Aftermarket services Commercial transports General & business aviation Heliconters Launch vehicles Military aircraft Missiles Power generation Regional transports Unmanned aerial vehicles

#### **Key Products**

Control systems & actuation products & components Fluid conveyance systems & components Fluid metering, delivery & atomization devices Fuel systems & components Fuel tank inerting systems & components Thermal management Wheels & brakes



#### Climate Control

#### Key Markets

Agriculture Air conditioning Construction Machinery Food & beverage Industrial machinery Life sciences Oil & gas Precision cooling Refrigeration Transportation

#### **Key Products**

Accumulators Advanced actuators CO, controls Electronic controllers Filter driers Hand shut-off valves Heat exchangers Hose & fittings Pressure regulating valves Refrigerant distributors Safety relief valves Smart pumps Solenoid valves Thermostatic expansion valves



#### Electromechanical

#### **Key Markets**

Aerospace Factory automation Life science & medical Machine tools Packaging machinery Paper machinery Plastics machinery & converting Primary metals Semiconductor & electronics Textile Wire & cable

#### **Key Products**

AC/DC drives & systems Electric actuators, gantry robots & slides Electrohydrostatic actuation systems Electromechanical actuation systems Human machine interface Linear motors Stepper motors, servo motors, drives & controls Structural extrusions



#### **Filtration**

#### Key Markets

Aerospace Food & beverage Industrial plant & equipment Life sciences Marine Mobile equipment Oil & gas Power generation & renewable energy Process Transportation Water Purification

#### **Key Products**

Analytical gas generators Compressed air filters & dryers Engine air, coolant, fuel & oil filtration systems Fluid condition monitoring systems Hydraulic & lubrication filters Hydrogen, nitrogen & zero air generators Instrumentation filters Membrane & fiber filters Microfiltration Sterile air filtration Water desalination & purification filters &



#### Fluid & Gas Handling

#### **Key Markets**

Aerial lift Agriculture Bulk chemical handling Construction machinery Food & beverage Fuel & gas delivery Industrial machinery Life sciences Marine Mining Oil & gas Renewable energy Transportation

#### **Key Products**

Check valves Connectors for low pressure Deep sea umbilicals Diagnostic equipment Hose couplings Industrial hose Mooring systems & nower cables PTFE hose & tubing Quick couplings Rubber & thermonlastic hose Tube fittings & adapters Tubing & plastic fittings



#### **Hydraulics**

## Key Markets Aerial lift

Agriculture Alternative energy Construction machinery Forestry Industrial machinery Machine tools Marine Material handling Mining Oil & gas Power generation Refuse vehicles Renewable energy Truck hydraulics Turf equipment

**Key Products** Accumulators Cartridge valves Electrohydraulic actuators Human machine interfaces Hybrid drives Hydraulic cylinders Hydraulic motors & pumps Hydraulic systems Hydraulic valves & controls Hydrostatic steering Integrated hydraulic circuits Power take-offs Power units Rotary actuators Sensors



#### **Pneumatics**

#### Key Markets

Aerospace Conveyor & material handling Factory automation Life science & medical Machine tools Packaging machinery Transportation & automotive

#### **Kev Products**

Air preparation Brass fittings & valves Manifolds Pneumatic accessories Pneumatic actuators & grippers Pneumatic valves & controls Quick disconnects Rotary actuators Rubber & thermoplastic hose Structural extrusions Thermoplastic tubing & fittings Vacuum generators, cups & sensors



#### **Process Control**

#### Key Markets

Alternative fuels Biopharmaceuticals Chemical & refining Marine & shipbuilding Medical & dental Nuclear Power Offshore oil exploration Oil & gas Pharmaceuticals Power generation Pulp & paper Water/wastewate

#### **Key Products** Analytical Instruments

Analytical sample conditioning products & systems Chemical injection fittings Fluoropolymer chemical delivery fittings, valves & pumps High purity gas delivery fittings, valves, regulators & digital flow controllers Industrial mass flow meters/ controllers Permanent no-weld tube fittings Precision industrial regulators & flow controllers
Process control double block & bleeds Process control fittings, valves, regulators & manifold valves



#### Sealing & Shielding

#### Key Markets

Aerospace Chemical processing Consumer Fluid power General industrial Information technology Life sciences Microelectronics Military Oil & gas Power generation Renewable energy Telecommunications Transportation

#### **Key Products**

Dynamic seals Elastomeric o-rings Electro-medical instrument design & assembly EMI shielding Extruded & precision-cut, fabricated elastomeric seals High temperature metal seals Homogeneous & inserted elastomeric shapes Medical device fabrication & assembly Metal & plastic retained composite seals Shielded optical windows Silicone tubing & extrusions Thermal management Vibration dampening

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#### **Parflex Division**

Ravenna, OH phone 330 296 2871 fax 330 296 8433

#### **Quick Coupling Division**

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#### Canada Milton, ONT

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