

### **CATRAC Cable & Hose Carrier Products**

**Ordering Guide & Technical Information** 







CATRAC® is used on various types of machinery as a means of safely and efficiently conveying power, electrical, air, or fluid (or a combination of these) to equipment in motion. CATRAC is designed to be maintenance free and to protect cables and hoses from abrasion, wear and twisting. A wide variety of options are available.

The center pivot design allows for smoother cycling and minimal hose movement. The CATRAC design offers "No Pinch Points" to insure operator safety. Standard side links are high tensile steel for maximum strength. Steel CATRACs are zinc plated with a yellow dichromate dip for superior corrosion resistance. Optional materials, such as aluminum and stainless steel are available.

We also offer a line of Mill Duty CATRACs that are used in rugged applications and environments such as steel mills. These CATRACs offer a box beam type carrier for maximum strength and stability. Spring loaded rods offer the customer easy access to cables and hoses. They also eliminate the concern of fitting sizes that must pass through the (fixed) compartment opening on a box beam style carrier. Hardened shoulder bolts and locknuts (referred to as bolted construction) are recommended for use in rugged environments. The CATRAC is manufactured so that pieces or sections can be removed or replaced in the field.

Our CATRAC product offers: a variety of sizes from 2.00" to 14.00" high links, carrier options from welded carriers,

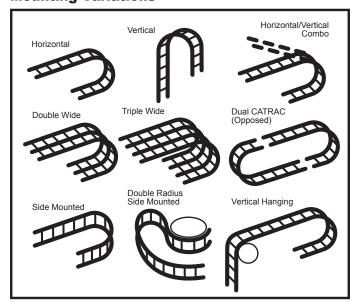
split aluminum bar carriers, rod carriers, removable pipe, spring loaded rods, vertical pins, double deck, custom radius "M" dimension (including double radius), custom and special widths, including single widths, double widths, triple widths, etc.. We offer various support systems from a single stationary roller support to a complete CATRAC carriage support system.

We can provide you with the optimum system to suit your needs either with our standard carriers and options or by means of a custom designed system to meet your specific requirements. In addition to our standard systems used in a standard linear motion, we can also provide you with double radius side mounted systems. Contact our applications engineers for additional information or to discuss your needs in detail.

Get on the right track with CATRAC cable & hose carriers.



### **Mounting Variations**



### **CATRAC®** Features

- No pinch points
- Center pivot design for minimal cable and hose wear
- Wide variety of standard carrier designs
- Available in any radius or width
- Custom designs available to optimize your system
- Superior finish and corrosion resistance
- JIT programs
- Short lead times
- Designed and manufactured in the USA

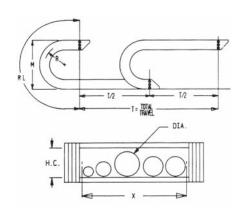


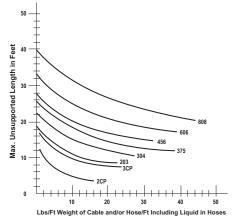
## **CATRAC Selection Guide**

### Which CATRAC is right?

- Determine the outside diameter of the largest cable or hose to be carried.
- Determine total machine travel. Unsupported length of CATRAC® on horizontal applications is total travel ÷ 2 when no supports are used and the stationary mounting foot is placed at the center line of travel.
- 3. Determine total weight to be carried per foot.
- Use the charts to select the proper CATRAC style for your application. Please note that hose area varies with type of carriers used.
- 5. Determine the rolling radius of the CATRAC by: A) Minimum bend radius of cable or hose recommended by the manufacturer. If this is not available, we recommend a minimum of 6 times the O.D. of the largest cable or hose.
  - B) Space limitations. The "M" dimension of the CATRAC must be less than the available space where track will be installed. The rolling radii shown in the dimension pages are standard. Special radii and "M" dimensions are available to suit your application at no additional cost.
- 6. Determine CATRAC "X" or inside width. Add the O.D. of all cables and hoses. Allow a minimum of 0.12" between each hose or cable and on both sides of the CATRAC. If vertical separators or hose straps are used, additional clearance is required.
- 7. Determine the length of the CATRAC. If the mounting foot is placed on the center line of travel as shown on the dimension pages, CATRAC Length = "RL" (radial length) + 1/2 of total travel (T/2). If the mounting foot is placed on either side of center line, the distance from the center line to the mounting foot (Y) must be added.
- 8. Determine mounting feet requirements and positioning on the CATRAC assembly.

If you need assistance or have any questions on special applications, feel free to contact our application engineers.





		Max. Hose or Cable Clearance		
Style	RP/RC, SL	WC, AB		
203	1.10	1.25		
304	1.93	2.00		
375	2.67	2.75		
456	3.14	3.50		
606	4.37	4.50		
808	6.00	6.50		
2CP	1.18, 1.20	1.25		
3CP	1.90	2.00		
Consult manufacturer for special carrier designs.				

The charts below give conservative estimates of cable and hose O.D. and weight and should be used for quick reference only. Diameters and weights will vary and should be verified with manufacturer.

General Purpose Hose					
Hose Size I.D x O.D.	Braid	Max. PSI	Hose Weight Lbs/Ft	Liquid Weight Lbs/Ft	
1/4 x 18/32	2	300	.18	.03	
3/8 x 22/32	2	250	.23	.05	
1/2 x 22/32	2	250	.29	.09	
3/4 x 1 7/32	2	225	.46	.16	
1 x 1 1/2	2	225	.64	.34	
1 1/4 x 1 25/32	2	225	.70	.53	
1 1/2 x 2 1/32	2	225	.80	.77	

		Small	Cable		
	16 AWG			14 AWG	
No. Cond.	Dia. in in/mm	Weight lb/ft kg/m	No. Cond.	Dia. in in/mm	Weight lb/fl kg/m
2	0.41/10.4	.091/0.14	2	0.53/13.5	.151/0.22
3	0.43/10.9	.112/0.17	3	0.56/14.2	.186/0.26
4	0.49/12.5	.150/0.22	4	0.61/15.5	.221/0.33
5	0.53/13.5	.168/0.25	5	0.62/15.8	.288/0.43
6	0.57/14.5	.195/0.29	6	0.74/18.8	.332/0.49
7	0.61/15.5	.222/0.33	7	0.80/20.3	.362/0.54
8	0.65/16.5	.243/0.36	8	0.85/21.6	.407/0.61
10	0.72/18.3	.306/0.46	10	0.90/22.9	.477/0.71
12	0.74/18.8	.343/0.50	12	0.93/33.6	.529/0.79
16	0.83/21.1	.425/0.63	16	1.08/27.4	.723/1.08
20	0.90/22.9	.512/0.76	20	1.18/30.0	.865/1.29
24	1.02/25.9	.630/0.94	24	1.29/32.8	1.01/1.50
30	1.07/27.2	.745/1.11	30	1.40/35.6	1.25/1.86
36	1.16/29.5	.888/1.32	36	1.51/38.4	1.47/2.19
	12 AWG			10 AWG	
No. Cond.	Dia. in in/mm	Weight lb/ft kg/m	No. Cond.	Dia. in in/mm	Weight lb/fl kg/m
2	0.61/16.5	.207/0.31	2	0.65/16.5	.243/0.36
3	0.64/16.3	.253/0.38	3	0.70/17.8	.311/0.46
4	0.67/17.0	.297/0.44	4	0.75/19.1	.385/0.57
5	0.73/18.5	.351/0.52	5	0.82/20.8	.461/0.69
6	0.80/20.3	.409/0.61	6	0.88/22.4	.532/0.79
7	0.86/21.8	.472/0.70	7	0.98/24.9	.649/0.97
8	0.92/23.4	.519/0.77	8	1.05/26.7	.717/1.07
10	1.02/25.9	.635/0.95	10	1.13/28.7	.838/1.25
12	1.05/26.7	.706/1.05	12	1.16/29.5	.938/1.40
16	1.16/29.5	.921/1.37	16	1.29/32.8	1.23/1.83
20	1.29/32.8	1.10/1.64	20	1.46/37.1	1.55/2.31
24	1.45/36.8	1.35/2.01	24	1.60/40.6	1.81/2.69
30	1.53/38.9	1.60/2.38			



# **CATRAC Carrier Designs**

#### **RC Rod Carriers**

Available on 2CP, 3CP, 203, 375, 304 style tracks, this tubing is used to hold the entire CATRAC® together. They are fastened to links with a self tapping screw that can be removed from top or bottom rod to make installation of hose or cable easier.



### **WC Welded Carriers**

The carrier is widely used in very rugged applications. It can withstand severe hydraulic shock and has no loose parts which can be lost during installation of the hose cable. The welded carrier bars alternate position top to bottom on styles 203, 375 and 304. Styles 456, 606 and 808 use a box beam construction with top and bottom beams across from each other for added strength.



### **RP Removable Pipe (Standard)**

This assembly provides easy installation of cable and hose. The pipe can be removed by knocking out a roll pin and pulling it out the side of the CATRAC.



### **SL Spring Loaded Removable Pipe**

This design provides the quickest way to install or change cable and hose in the field. Simply compress the plunger and pull the pipe out. No screws or pins need to be removed and no side space limitations need to be considered.





## CATRAC Carrier Designs

### **AB Split Bar Carriers**

1/2" wide aluminum or 3/4" wide wood split bar carriers can be provided. This carrier is custom machined to your specifications. Note: Holes must be at least 1/8" larger than cable hose diameter.



#### **VP Vertical Pins**

Vertical pins, also referred to as separators or dividers, can be welded into RP, SL and WC style carriers to separate cables or hoses to prevent twisting or overlap.



### **Extra Heavy Duty (Mill-Duty) Construction**

For steel mills and other heavy duty service, the double welded carrier (MD option) is used as well as bolted construction (BC option). This structure has the ultimate strength for a carrier. Box beam construction is standard in the 456, 606, and 808 styles and can withstand severe hydraulic shock loads.



### **Optional & Special Carrier Designs**

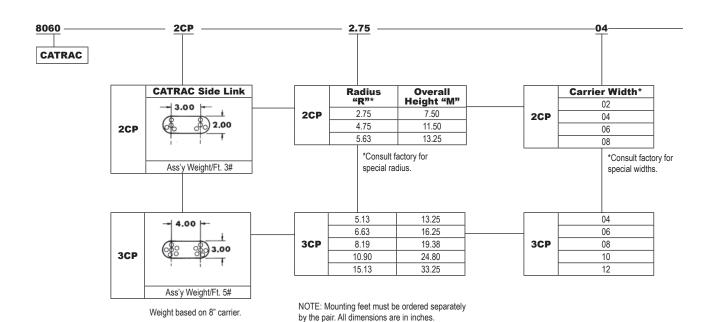
Special perforated carriers can be supplied which provide openings for hose straps. The hose straps, if used, should be very loose and used as a hose and cable separator rather than a tie down.

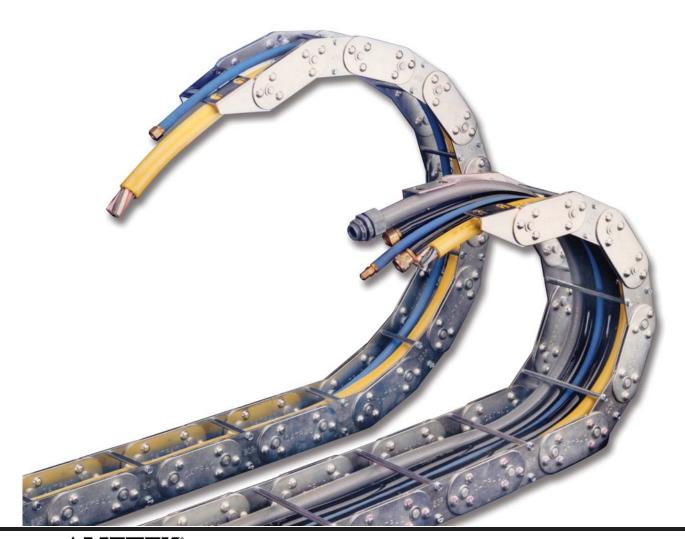
Many carriers and stiffeners are designed in cooperation with our customers. We welcome ideas to fit your specific application needs.





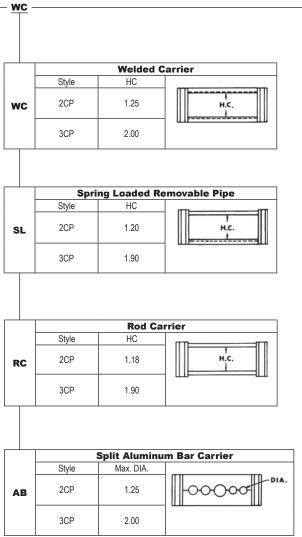
# **2CP and 3CP CATRAC® Part Number System**







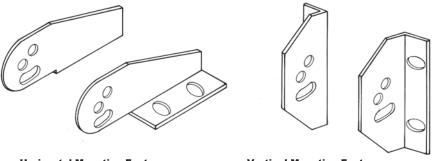
# **2CP and 3CP CATRAC® Part Number System**



_ <b>P</b>		<u>Length</u>
P	Pin & Retaining Ring	Construction
		NOTE: CATRAC Length must be divisible by pin centers for that style.

Standard Mounting Feet				
CATRAC Style	Horiz. Mount Feet P/N	Vert. Mount Feet P/N	Req'd per CATRAC	
2CP	PC-0126000-B	PC-0127900-B	2 Pair	
3CP	PC-0128000-B	PC-0128100-B	2 Pair	

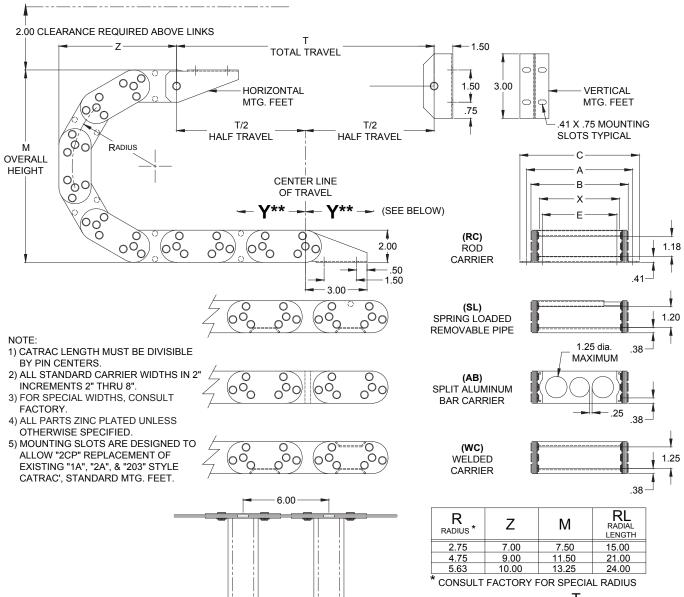
Normally one (1) pair of mounting feet are used at each end of the CATRAC. Unless specified, flanges are mounted inward on standard CATRAC.



Horizontal Mounting Feet Vertical Mounting Feet



## CATRAC® 2CP Dimensions



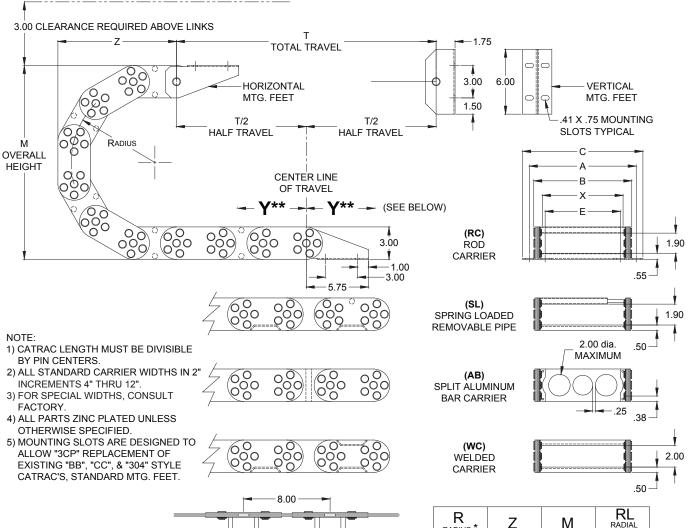
\*\* IF THE STATIONARY FOOT IS MOUNTED ON EITHER SIDE OF THE CENTER LINE OF TRAVEL, THE DISTANCE (Y) BETWEEN CENTER LINE AND STATIONARY FOOT MUST BE ADDED TO CATRAC LENGTH.

3.00 -

CATRAC LENGTH = $\frac{1}{2}$ + RL + Y**					
STYLE	X CARRIER WIDTH	С	A OUTSIDE MTG.	<b>B</b> OVERALL	E INSIDE MTG.
2CP	4.00 X	7.32 X + 3.32	6.07 X + 2.07	5.50 X + 1.50	3.54 X48



## CATRAC® 3CP Dimensions



	8.	00 —		
			<del></del>	
		_		
	- 11	li.	H	
l i	il	li	il	
	Ш		П	
	- 1			
1		- 11		
	- !		- !	
	- !	l i	il.	
		بالحب		
	<del></del>			
4.00				

\*\* IF THE STATIONARY FOOT IS MOUNTED ON EITHER SIDE OF THE CENTER LINE OF TRAVEL, THE DISTANCE (Y) BETWEEN CENTER LINE AND STATIONARY FOOT MUST BE ADDED TO CATRAC LENGTH.

R RADIUS *	Z	М	RL RADIAL LENGTH
5.13	10.57	13.25	24.00
6.63	13.72	16.25	32.00
8.19	14.83	19.38	36.00
10.90	17.28	24.80	44.00
15.13	20.87	33.25	56.00

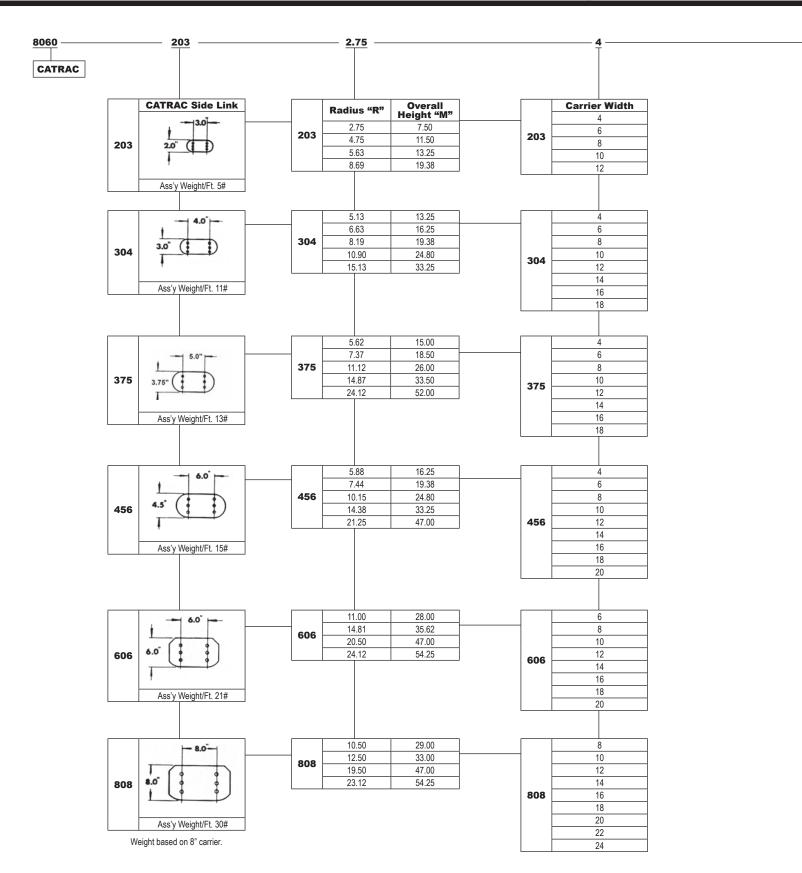
<sup>\*</sup> CONSULT FACTORY FOR SPECIAL RADIUS

CATRAC LENGTH = 
$$\frac{T}{2}$$
 + RL + Y\*\*

	Х		Α	В	E
STYLE	CARRIER	С	OUTSIDE	OVERALL	INSIDE
	WIDTH		MTG.		MTG.
3CP	4.00	7.32	6.21	5.50	3.38
307	X	X + 3.32	X + 2.21	X + 1.50	X62

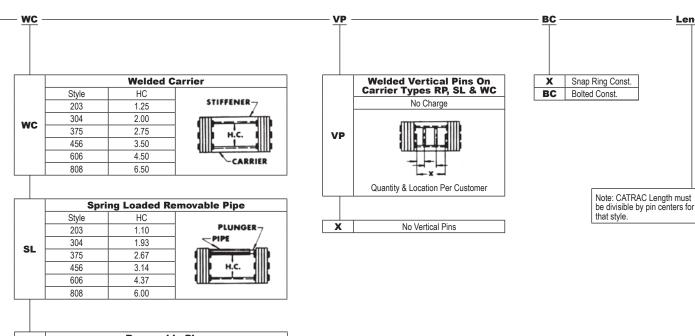


# Mill-Duty CATRAC® Part Number System





# Mill-Duty CATRAC® Part Number System



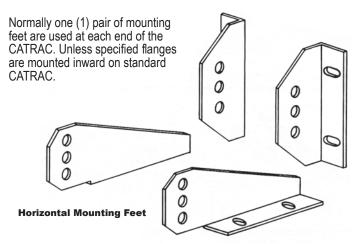
		Removab	le Pipe
	Style	HC	
	203	1.10	PIPE
RP	304	1.93	
KP	375	2.67	H.C.
	456	3.14	(     <del>                                </del>
	606	4.37	
	808	6.00	

	Sp	olit Aluminum	Bar Carrier
	Style	Max. Hole	
	203	1.25	√DIA.
АВ	304	2.00	/ Tallin
AB	375	2.75	
	456	3.50	
	606	4.50	
	808	6.50	

	Standard Mounting Feet					
CATRAC Style	Horiz. Mount Feet P/N	Vert. Mount Feet P/N	Req'd per CATRAC			
203	PC-0089000-B	PC-0089200-B	2 Pair			
304	PC-0091000-B	PC-0091200-B	2 Pair			
375	PC-0191900-B	PC-0192000-B	2 Pair			
456	PC-0093000-B	PC-0093200-B	2 Pair			
606	PC-0095000-B	PC-0095200-B	4 Pair			
808	PC-0097000-B	PC-0097200-B	4 Pair			

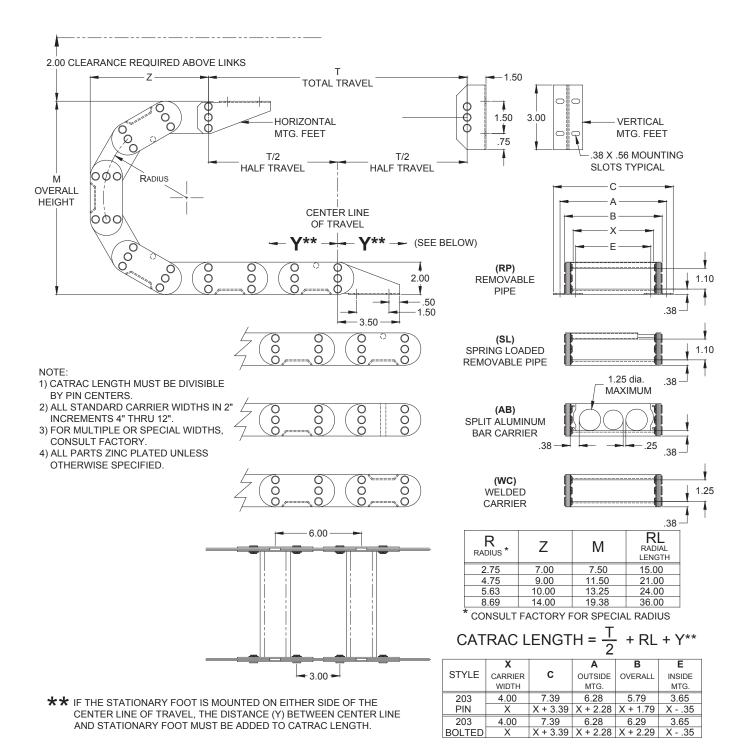
### **Vertical Mounting Feet**

Length





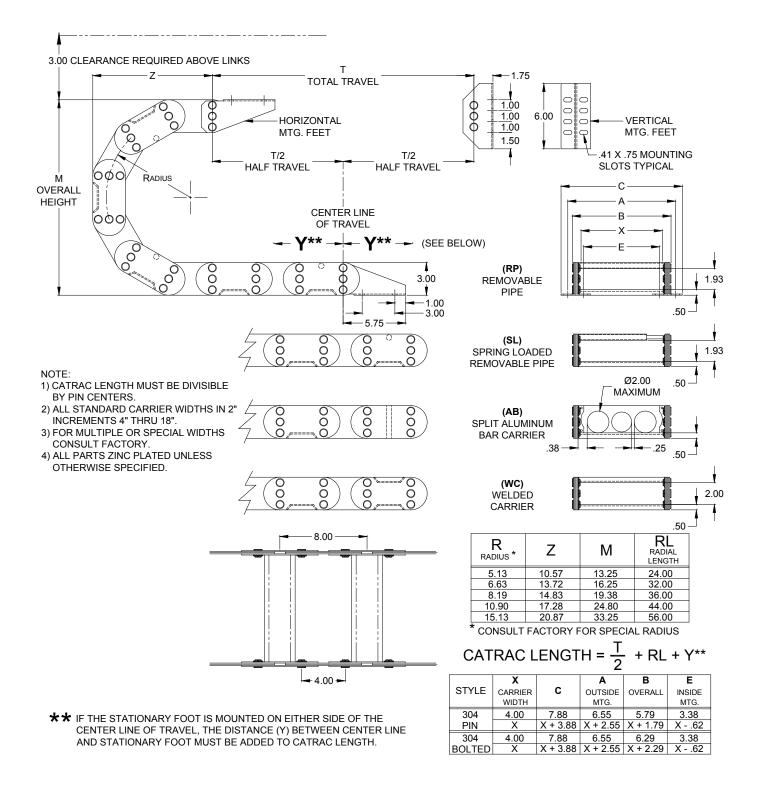
## CATRAC® 203 Dimensions



12

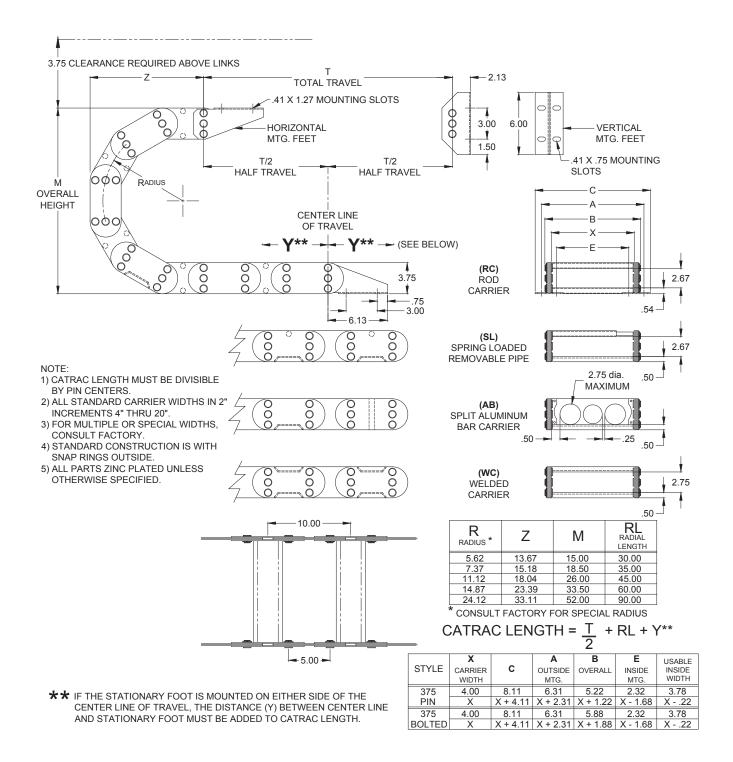


## CATRAC® 304 Dimensions



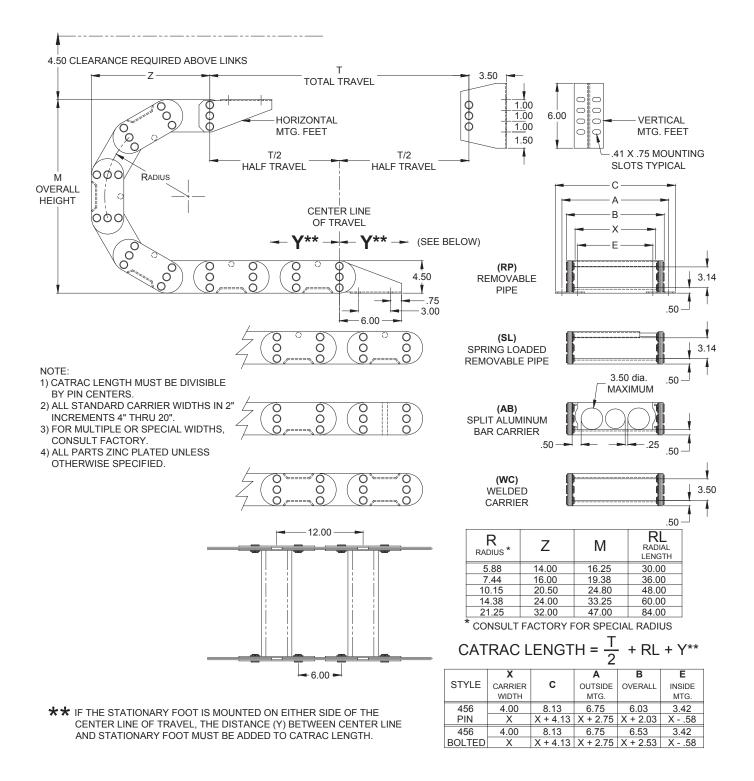


## CATRAC® 375 Dimensions



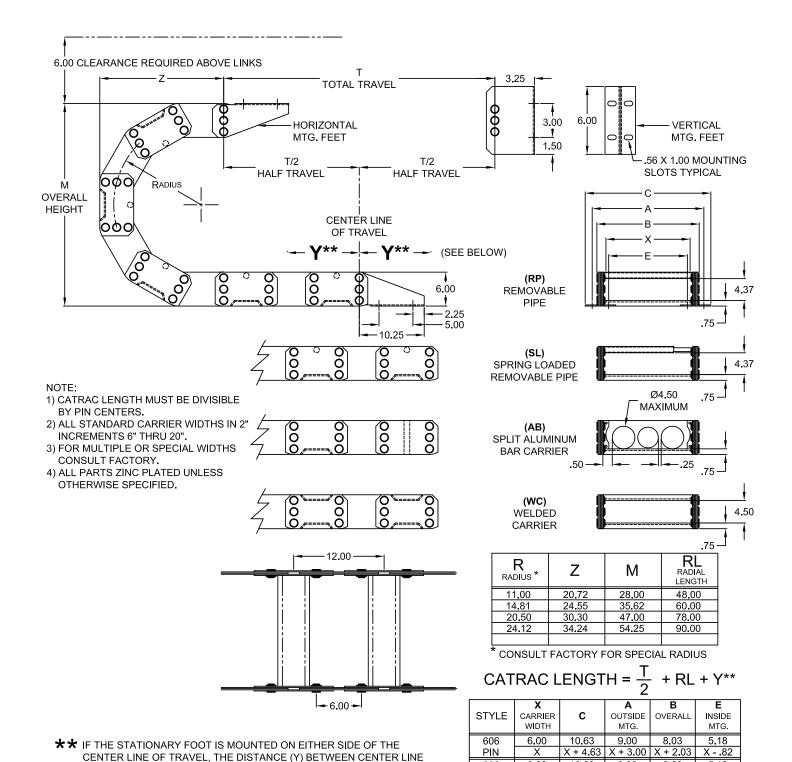


## CATRAC® 456 Dimensions





## CATRAC® 606 Dimensions



AND STATIONARY FOOT MUST BE ADDED TO CATRAC LENGTH.

606

BOLTED

6.00

10.63

9.00

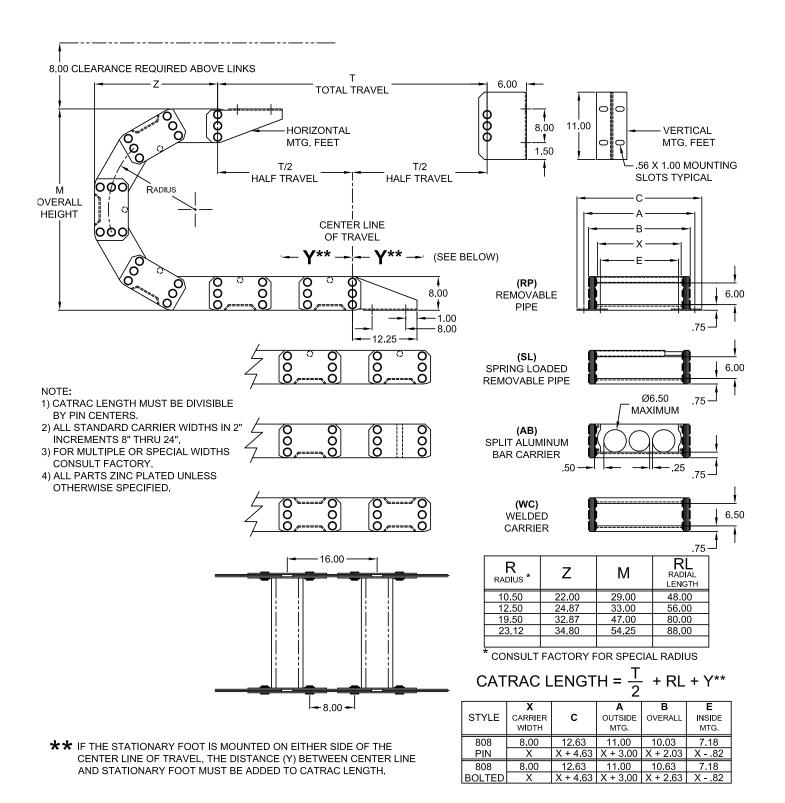
X + 4.63 X + 3.00 X + 2.63 X - .82

8.63

5.18

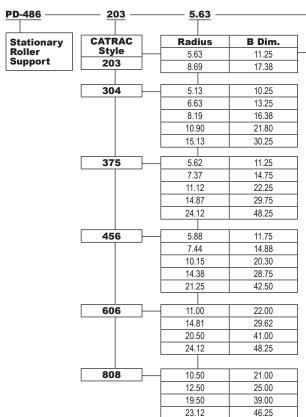


## CATRAC® 808 Dimensions





# **Stationary Roller Part Number System**



Car	rier Wid	lth
	4	
	6	
	8	
	10	
	12	
	14	
	16	
	18	
	20	
	22	
	24	

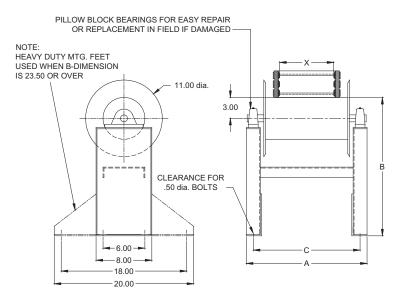
4

Consult factory for carrier widths and radii not shown.

### **CATRAC®** with roller support systems

The roller supports provide a means of maintaining the maximum unsupported length while increasing the total travel. There are four methods of extending the total travel:

- 1. Utilize a CATRAC with a high side link which provides a greater unsupported length.
- 2. Utilize stationary roller supports.
- 3. Utilize a combination of stationary and retractable roller supports.
- 4. Utilize a carriage support system.



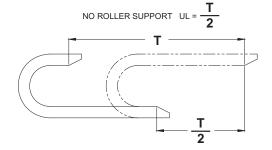
203, 304, 456, 606, 808 Styles of CATRAC*				
Carrier Width A Dim. C Dim.				
4.00	13.52	11.52		
Х	x + 9.52	x + 7.52		
Nuts Out x + 10.02 x + 8.02				

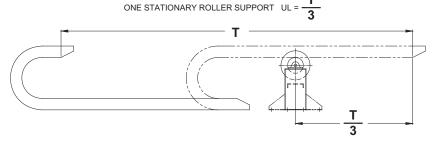
\*375 Style Consult Factory.

Note: Approximate dimensions, not for construction unless certified.

All dimensions in inches unless otherwise specified.

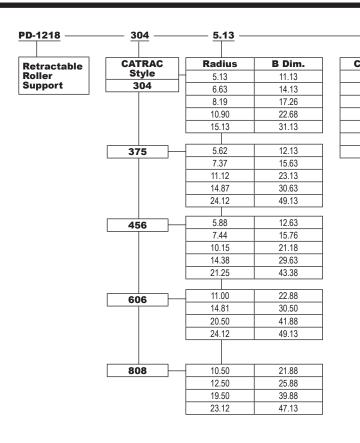
### T = TOTAL TRAVEL UL= MAXIMUM UNSUPPORTED LENGTH







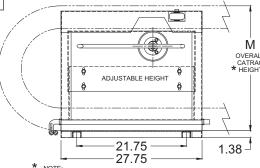
# **Retractable Roller Part Number System**



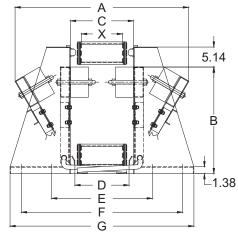
Carrier Width	
8	For radii not shown and
10	for multiple carrier widths
12	consult factory.
14	

16 18

20



\* NOTE:
FOR CATRAC SYSTEMS WITH RETRACTABLE ROLLER SUPPORTS,
OVERALL HEIGHT OF SYSTEM WILL BE INCREASED BY 1:38"
UNLESS RETRACTABLE ROLLER SUPPORT BASE IS RECESSED.



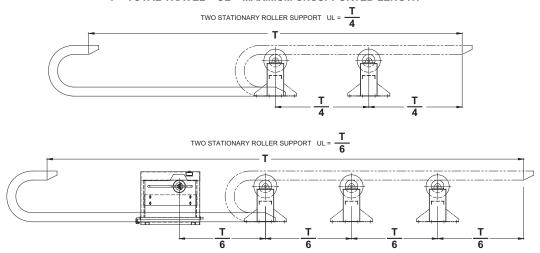
304, 456, 606, 808 Styles of CATRAC*						
Carrier Width	A Dim.	C Dim.	D Dim.	E Dim.	F Dim.	G Dim.
8.00	34.50	12.50	10.75	20.00	32.00	36.50
х	x + 26.50	x + 4.50	x + 2.75	x + 12.00	x + 24.00	x + 28.50
Nuts Out Consult Factory						

\*375 Style Consult Factory.

Note: Approximate dimensions, not for construction unless certified.

All dimensions in inches unless otherwise specified.

#### T = TOTAL TRAVEL UL = MAXIMUM UNSUPPORTED LENGTH



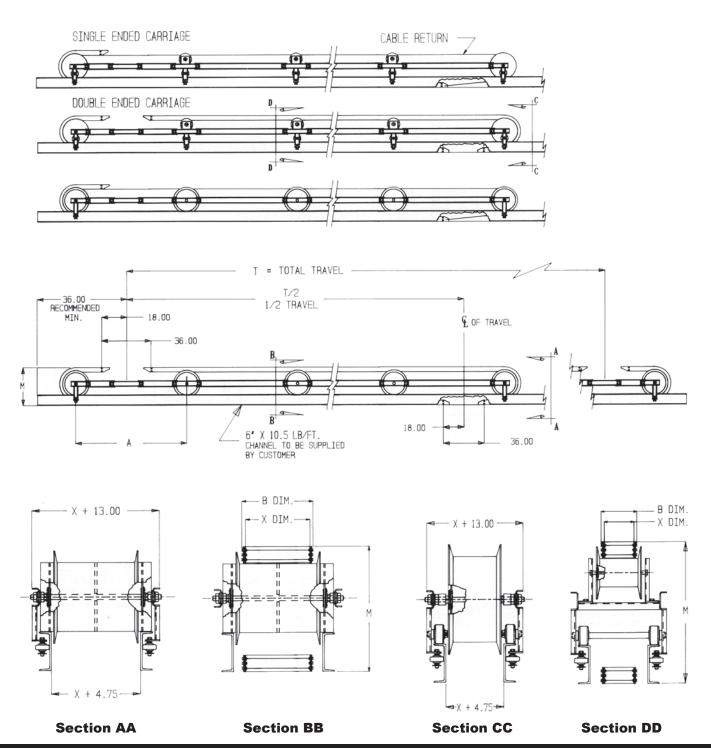


# **CATRAC®** Carriage Support System

### **Carriage Support Systems**

Carriage support systems are used when cable/hose loads and travel exceed the limits available with fixed roller supports and designed for applications requiring long travels, high speeds, quick accelerations and constant cycling. These systems are normally used in

conjunction with 304 and 456 CATRAC styles. Special Mill-Duty carriage support systems are available for extreme environments. Some of the varieties available are shown on this page. Call our application engineers for more information at 800.325.8074.





### **CATRAC®** Applications

### **CATRAC®** Applications

### **Primary Metals**

Tundish Cars Ladle Cars

Torch Cut Off Machines

Slab Markers

Mud Gun

Ladle Lance

Pickling Line

Strip Mills

**Furnaces** 

"Dummy" Bar

Continuous Annealing Lines

### **Construction Machinery**

Manlifts

Aerial Lifts

**Utility Trucks** 

**Underground Boring** 

### Milling/Drilling Machinery

**Drilling Machines** 

Offshore Drilling Platforms

#### **Rolling Mill Machinery**

Coil Processing Equipment

Slitting Line

Roll Grinders

Walking Beam

### Machine Tool & Specialty Equipment

Lathes

Milling Machines

Routers

Shearing

Stamping

Loaders/Extractors

Flame Cutters

Automatic Vehicle Wash

Gantry Crane

Part Shuttles

Press Feeders

High-Pressure Water Washdown

Equipment

Stackers/Reclaimers

X-Ray Gauges

### Packaging/Material Handling

**Palletizers** 

Wrappers

Shuttles

Rubber Tired Vehicles

**Factory Automation** 

Automation Storage & Retrieval

System

#### Other

Pulp/Paper Industry Lumber Industry

### CATRAC Automotive Applications

### Stamping Related

Coil Handling Equipment

Die Transfer Carts

Shuttles

In Die Transfer Equipment

Stacker & Destacker Equipment

Stamping Press Heads

#### **Assembly Plants**

Radiator Fluid Filling Lines

Brake Fluid Filling Lines

Body Transfer Lines

Welding Lines
Chassis Assembly Lines

#### **Raw Material**

Loading/Unloading Cranes Stacker/Reclaimer Cranes

### Steel Making

Ladle Lance

Ladle Transfer Cars

Tundish Cars

Starter Bar

Torch Cut-Off Machine

Run Out Table

Soaking Pit Transfer Car

Scarfing Machine

### **Hot/Cold Strip Mills**

Walking Beam

Reheat Surface

Coil Buggies

X-Ray Machines

Slitter Machines

Back Up Roll Sleds

Pay Off Reel

Coil Upender

Entry/Exit Cars



### **Steel Mill Applications**

### Mining - Iron Ore - Coal - Limestone

#### **Ore Beneficiation**

Preparation
Cleaning
Belt Trippers
Stackers
Reclaimers
Bedding Machines
Trenchers

### Shipping - Rail - Water - Raw Material Storage

Stackers Reclaimers Belt Trippers Car Dumpers

### Integrated Steel Making Plants

### Raw Material - Storage & Preparation

Stackers Reclaimers Belt Trippers Car Dumpers Trenchers

### **Sinter Plants**

Belt Trippers
Bedding Machine
Trenching Machine
Reclaimer

### **Coke Oven Batteries**

### **Coal Preparation - Coke Storage**

Stackers Reclaimers Belt Trippers Trenchers

### Coke Battery Ovens - Coal Side

Lary Charge Cars Smoke Blow Pipe Cleaners Charge & Cover Machine Pushing Machine - Levelers

### Coke Battery Ovens - Coke Side

Door Machine Smoke Suppressor Quench Cars Wharf Plows

#### **Blast Furnaces**

Taphole Drills
Mud Guns
Burden Distributor Car
Sensing Lances

### **Steel Making Open Hearth**

Charging Machine
Ladle Transfer Cars
Hot Metal (Molten Iron)
Teeming Aisle (Molten Steel)
Slag Pot
Mold Preparation Vacuum & Dust
Machine

### **Basic Oxygen Furnace (BOF)**

Scrap Prep. Cutting Gantry
Water Cooled Doors
Removable Hood Section
Belt Tripper - Flux Handling
Refractory Gunning Machines
Lance Carriage
Horizontal
Preheat
Temperature Data
Ladle Transfer Cars
Hot Metal (Molten Iron)
Teeming Aisle (Molten Steel)
Slag Pot
Argon Lance

### **Electric Furnace**

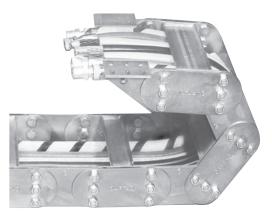
Ladle Transfer Cars
Furnace Tilt
Teeming Aisle (Molten Steel)
Cover Turn
Charge Machines
Argon Lance

### Continuous Casting - Slab, Boom, Billet

Ladle Transfer Car Tundish Transfer Car Heat Shield Car Pouring Station **Shroud Positioner** Starting Bar Transfer Car Heat Shield Car Pouring Station Shroud Positioner Starter Bar Storage Rack **Cut Off Machine** Torch Machine **Cutoff Torch Traverse** Torch Edge Cutting Machine **Upcut Shear** Slab Sizing Mill - Roll Sleds Stamping Marking Machine Disappearing Stop Piler - Pusher

### Slab, Blooming, Billet Mills - Shapers

- Snapers
Soaking Pit Transfer Cars
Double Manipulator - Rolling Edge
Guides
Roll Sleds
Scarfing Machine
Supply
Adjustable Heads
Crop Shear
Marking - Stamping Machine





### **Steel Mill Applications**

### Hot Strip Mills

**Primary Rolling** 

Roll Sleds, Backup and Work Roll

Vertical Scale Breaker

Horizontal Scale Breaker

Roughing Mills

Finishing Mills

Descale Systems

Morgoil Lubrications

Coilers

Mandrel Carriage

Stripper Cars

X-Ray Machines

Finishing - Processing

Transfer Cars

Oil Buggies

Combo Line

Skin Pass Line

Slitters & Shears

Coil Carrier Hook

Walking Beam Coil Transfer

**Auxiliaries** 

Transfer Cars

Work Rolls

Backup Rolls

Bearing Extractor Car

### **Sheet Mills - Cold Rolling**

### **Continuous Pickling Line**

Entry Coil Cars - Buggies

Welders

Tension Wheels - Exit Coil Cars

Mandrel Carriages - Coilers

**Belt Wrappers** 

Oilers

Pay Off Reels

Upender/Downender

Tandem Cold Rolling Mills

**Coil Transfer Cars** 

Entry Horn Car

Quick Work Roll Change Car

Backup Roll Sled

Work Roll Turntable Sled

Belt Wrapper Transfer

Lift & Turn Coil Transfer

#### Temper Mill - Single Stand - Duo Mill

Coil Prep & Transfer

Entry Coil Car

Quick Work Roll Change Car

Exit Transfer Car

**Back Uproll Sleds** 

### **Auxiliary Cold Mill Equipment**

Dechocking Car - Roll Shop

Lathes & Grinders - Roll Shop

Slitter & Shear Process Lines

Entry & Exit Coil Cars

Recoil Mandrel Carriage

Pavoff Reels

Belt Wrapper Transfer

Coil Band & Strapping

Upender/Downender

### **Continuous Anneal Lines**

Exit & Entry Coil Cars

X-Ray Machines

Tension Reel Mandrel Carriages

Coating & Plating

Lines - Tin - Al - Chrome - Zinc

Galvanize

Vertical Spangle Unit

Horizontal Steam Supply

Zinc Hot Metal Pot

Welding Machine

Corrugating Lines

Upender/Downender

#### **Plate Mills**

Roll Change Sleds

Morgoil & Lube Systems

X-Ray Gauge

Descale Piping

Side Shear & Edge Gauge

End Gauge

Leveler

#### **Structural Mills - Rail Mills**

Rolling Mill Sleds

**End Shear** 

Straightener

#### **Bar and Rod Mills**

Roll Sleds

**End Shears** 

Straightener

Coiler Mandrel Carriage

Billet Charging Machine

### Seamless and Butt Weld Pipe Mills

End Piercing Machine

Roll Shops

Grinders

Lathes

Chock Extractors

Roll Transfer Cars

#### **Auxiliary Process Lines**

**Tension Leveling** 

Degreasing

Paint Coating

Shear

**Shot Blast** 

**Cut to Length** 

**Slitting Line** 

**Continuous Paint Line** 

Galvanize Line

**Edge Trim Line** 

Grind & Polish

**Anneal** 

**Embossing** 

Side Trim Chrome - TFS

Tin Line



### Mill-Duty CATRAC®

### **CATRAC® MD for the Primary Metals Industry**

This industry readily accepts only those products that are made exceptionally strong to the point of being "overbuilt". If the product doesn't look like it belongs in that environment, it doesn't.

### **Reliability is the Foremost Requirement**

This industry knows no product that they can't destroy regularly, our mill-duty CATRACs are designed to be the most rugged assemblies available.

### **CATRAC** is Stronger

All steel construction fabricated from 80,000 lb. tensile steel links, assembled with 9/16, 3/4 or 1" hardened shoulder bolts and locknuts, welded box beam carriers absorb side thrust loads, can be made to travel and span the longest distances in the industry.

### **Cable & Hose Replacement is Easy**

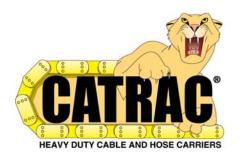
The box beam carrier has free space that allows the bad cable or hose to be easily snaked out. The carrier bars can have spring loaded retaining rods, allowing the whole bundle of hoses to be removed and replaced at once.

#### **CATRAC** is Field Repairable

Because the CATRAC is all steel, it can be straightened or welded in position. It can be easily unbolted to replace carriers and links.

#### **CATRAC** Value

The competitively priced CATRAC offers more options for your dollar. Since 1967, CATRAC brand carriers have been solving customer problems. These years of experience have supplied us with an opportunity to provide solutions for numerous applications. This data allows us to incorporate new and better features into all CATRAC styles.



#### **Available in Any and ALL Sizes**

Made to any width or radius with more hose and cable carrying capacity in a box beam carrier, it can handle 8" I.D. hose or 12" O.D. cable. We also offer multiple widths and double deck carrier assemblies.

### **Retrofit into Present Track Systems**

CATRAC is the only known track that can be easily and regularly made to retrofit into competitors original applications. We need only four dimensions to build CATRAC:

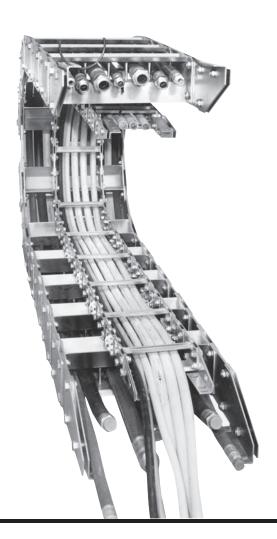
Track Height - "M"

Track Height - "B"

Track Height - "TL"

Hose & Cable Clearance - "HC"

We'll deliver a stronger system quicker, and at a minimum cost.





### **CATRAC®** Options

### **Chip Covers**

Stainless steel chip covers protect hoses against damage from hot metal chips. The chip covers fit over the full length of the CATRAC® assembly, on either the top or bottom or both sides for maximum protection. The ends of the chip covers extend six inches beyond the ends of the CATRAC assembly for attachment. Chip covers should be fastened on either end to allow them to roll with the CATRAC. When ordering, specify either outside or inside covers or both.



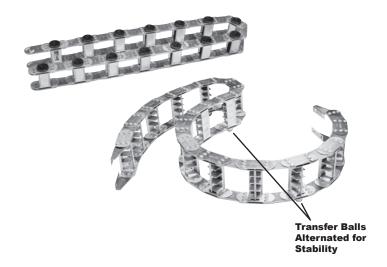
### **Heavy Duty Mounting Feet**

Heavy Duty horizontal and vertical mounting feet are made from 3/16" or 1/4" plate steel and provide the ultimate in strength at the mounting point. Typical applications include mill duty equipment and high speed applications. Custom designs are also available upon request.



### Glide Bars and Transfer Bar for Side Mounted Applications

We offer a wide range of options for side mounted applications including Nylatron glide bars, round pads and steel or stainless steel ball casters. We can side mount virtually any style of CATRAC. Dual radius CATRACS are also available for rotary applications.



### **Multiple Carrier Widths**

All styles of 3 Pin Center Pivot CATRAC are available in multiple widths. This type of construction provides additional strength in wide systems. When width is a problem double decking of compartments is also available.

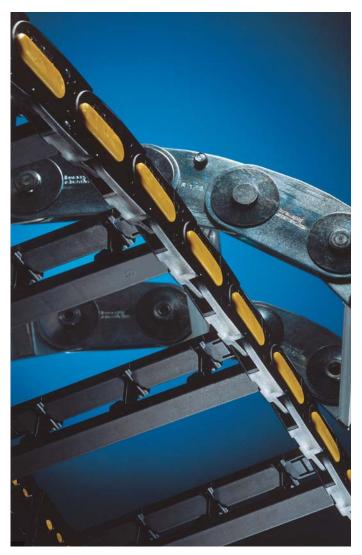




### **Available in a Variety of Sizes**

SnapTrac® was developed to offer a light weight, low cost carrier for protected and controlled movement of cables and hoses. This corrosion resistant, nonconductive carrier is made of a longwearing nylon composition. SnapTrac can be used with electric, air, gas or hydraulic hoses.

A variety of carriers are available offering solutions for every type of travel. Typical applications for this carrier include robotics, machine tools, and all types of industrial equipment. Our application engineers are at your disposal to study and solve problems related to complex applications.



### **Technical Characteristics**

Light and secure even at high speeds, SnapTrac carriers will provide protection for the components inside the carrier. The carrier is durable against harsh corrosive environments as found in refineries and marine application, chemical fumes, refrigeration fluids, lubricating oils and solvent present in a temperature range from -13°F to 257°F.

### **Choosing a Carrier**

The designer must consider the travel length of the carrier and the minimum bending radii of the hoses to be carried. The additional load per foot must also be considered.

### **Layout of Cable in Carrier**

Observe the allowable minimum bending radii of the cables and hoses to be carried; it is advisable to add an additional 10%. Cables of small diameter may be grouped together and tied.

### **Options**

- Enclosed Designs
- Vertical Separator
- Horizontal Separator
- · Vertical/Horizontal Separators
- Drilled Frames





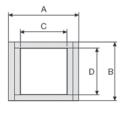


### **Light SnapTrac**

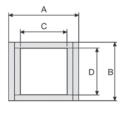
Light series SnapTrac with small to medium sections for applications where high filling weight is not required.

	Light SnapTrac				
Series	A External Width mm	B External Height mm	C Inner Width mm	D Inner Height mm	R Bending Radius mm
8061SR200	18-41	15	12-35	12	18-40
8061SR250	23	22	15	18	40
8061SR30090	29-49	23.5	18-38	18.5	33-100
8061SR325A	57-120	37	40-103	25.5	50-150
8061SR325	55-118	37	40-103	25.5	50-150

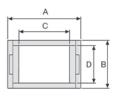




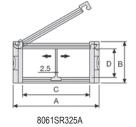
8061SR200

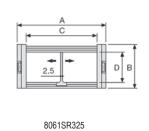


8061SR250



8061SR30090





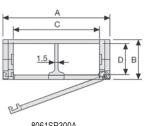


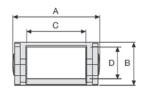
### **Medium SnapTrac**

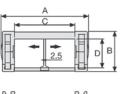
Small to medium size SnapTrac with yellow connecting pivot pins offer high capacity in high performace applications. Available with snap open cover or closed styles.

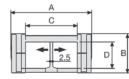
Medium SnapTrac					
Series	A External Width mm	B External Height mm	C Inner Width mm	D Inner Height mm	R Bending Radius mm
8061SR300A	27-87	23	15-75	18	40-120
8061SR300	30-52	23	14-36	18	40-120
8061SR305A	54-74	30	30-50	24	50-150
8061SR305	52-72	30	30-50	20	50-150
8061SR355A	74-124	43	45-95	31	75-200
8061SR355	74-124	45	45-95	30	75-200
8061SR400	62-82	35	40-60	25	50-150
8061SR435MI/ME	60-170	49	40-150	35	60-170
8061SR445MI/ME	72-384	64	50-362	45	75-300
8061SR660A	75-387	55	50-362	37	100-250
8061SR770A	80-392	78	45-357	60	150-300
8061SR475MI/ME	112-412	100.5	74-374	75.5	150-400









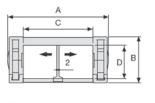


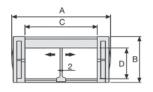
8061SR300A

8061SR300

8061SR305A

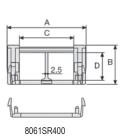
8061SR305

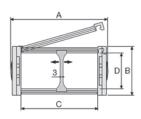




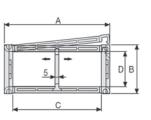
8061SR355

8061SR660A



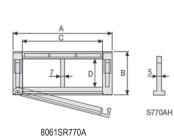


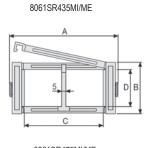
8061SR355A



8061SR445MI/ME

S660AH





8061SR475MI/ME

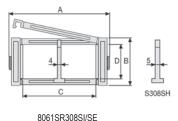


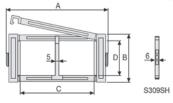
### **Heavy SnapTrac**

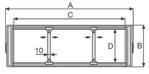
A strong design with triple connecting pivot pins. This design allows unsupported length up to 6.5 m and extends the service life of the SnapTrac and cables.

Heavy SnapTrac					
Series	A External Width mm	B External Height mm	C Inner Width mm	D Inner Height mm	R Bending Radius mm
8061SR308SI/SE	82-394	75	38-350	57	150-400
8061SR309SI/SE	120-420	100	64-364	75.5	200-500
8061SR310T	260-660	150	200-600	112	200-750









8061SR310T

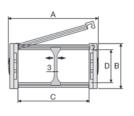
8061SR309SI/SE

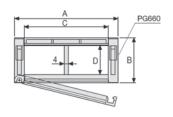
**Protection SnapTrac** 

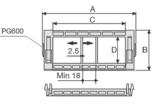
A completely enclosed design prevents contact between cables, chips or dust. Each link has a quickly removable cover for easy installation of the cables and hoses.

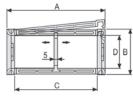
Protection SnapTrac					
Series	A External Width mm	B External Height mm	C Inner Width mm	D Inner Height mm	R Bending Radius mm
8061SR435PI/PE	60-170	49	40-150	35	75-200
8061SR660	79-179	55	50-150	36	100-250
8061SR445PI/PE	72-384	64	50-362	45	100-300
8061SR770	120-285	78	85-250	51	150-300
8061SR309C	256-456	100	200-400	72	200-500
8061SR475PI/PE	112-412	100.5	74-374	75.5	180-400





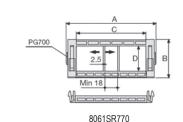






8061SR435PI/PE

8061SR770



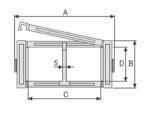
8061SR660

8061SR660

A D B

8061SR309C

8061SR445PI/PE



8061SR475PI/PE



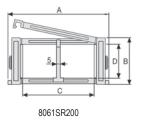


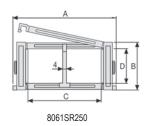
### Sliding SnapTrac

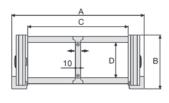
Sliding SnapTrac is made to be used where travel distance is long. The links are equipped with skids, allowing the trac to slide on itself. It is made of special polymers to reduce friction and wear.

Sliding SnapTrac					
Series	A External Width mm	B External Height mm	C Inner Width mm	D Inner Height mm	R Bending Radius mm
8061SR326SI/SE	106-418	59	61-373	37	107-300
8061SR328SI/SE	119-431	79	61-373	57	150-400
8061SR319B	164-464	107	100-400	70	200-500









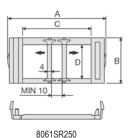
8061SR30090

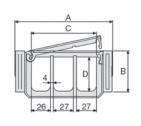
### Robot SnapTrac

SnapTrac offers an innovative solution for circular applications like welding and painting robots by allowing rotation of over 360°. Available in 9 different models, each link has an opening cross piece to allow easy installation of cables and hoses.

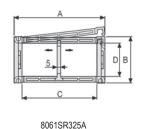
	Robot SnapTrac				
Series	A External Width mm	B External Height mm	C Inner Width mm	D Inner Height mm	R Bending Radius mm
8061SR495	69	45	45	35	100
8061SR500	93	43	65	30	100-150
8061SR510TN	132	55	88	46	125
8061SR515TN	132	55	88	46	175
8061SR545	123	62	100	46	100
8061SR599	272	85	210	59	220

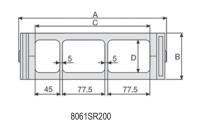






8061SR30090





AMETEK®
AUTOMATION & PROCESS TECHNOLOGIES



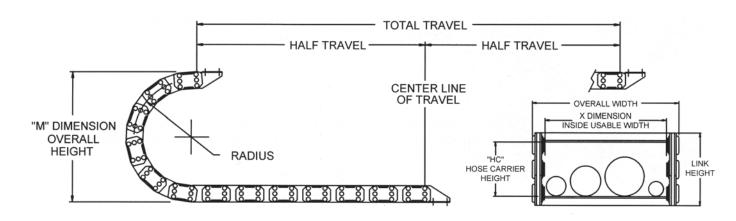
# **CATRAC® Development Sheet**

### Please fill in completely and accurately and fax to the CATRAC Sales Department @ (810) 378-5516.

	Customer Information				
Contact Name		Fax			
Company		Email			
Phone	Phone Date				

	Machine / Environment Specifications					
Machine Type or Name						
Machine Total Travel Distance						
Direction / Orientation of Travel	☐ Horizontal ☐ Vertical ☐ Side Running ☐ Other If other, please provide sketch.					
Fixed End Mounting Location	☐ Center (Of total machine travel) ☐ Off Center (Distance from center)					
Mounting Bracket Position	□ Inward □ Outward □ Both □ Other					
Operating Speed (ft/sec)	□ ≤ 5 ft/sec □ ≤ 10 ft/sec □ ≤ 15 ft/sec □ ≥ 15 ft/sec					
Acceleration (ft/sec)	□ ≤ 5 ft/sec² □ ≤ 10 ft/sec² □ ≤ 15 ft/sec² □ ≥ 15 ft/sec²					
Environmental Data	□ Indoor □ Outdoor □ Wet* □ Dry □ Corrosive □ Abrasive □ Humidity* □ Chemical* □ Chips* □ Hot Metal □ Fluid Exposure* *Please explain type or level					
Operating Temperature	□ ≤ 40°F (5°C) □ ≤ 150°F (66°C) □ ≤ 250°F (121°C)					
Dimensional Limitations	OAW = OAL = OAH = (Allow an additional 2 in. for operating clearance in OAH)					

Carrier Contents			
Critical information. Please include MFG cut sheets when possible.			
Note: If a bend radius is not provided, the customer agrees to using 8 to 10 times the cable or hose diameter as a factor.			
Cable / Hose Quantity	Outside Diameter	Weight Per Foot (Fluid filled on hoses)	Min. Bend Radius (MFG Specifications)







### **Other Products**











Copyright 2010 by AMETEK AUTOMATION & PROCESS TECHNOLOGIES. All Rights Reserved. Made in the USA.



1080 N. Crooks Road, Clawson, MI 48017-1097 Phone: 248.435.0700 Toll Free: 800.635.0289 Fax: 248.435.8120 www.ametekapt.com

8060.C5R 3/10.Z88 1M