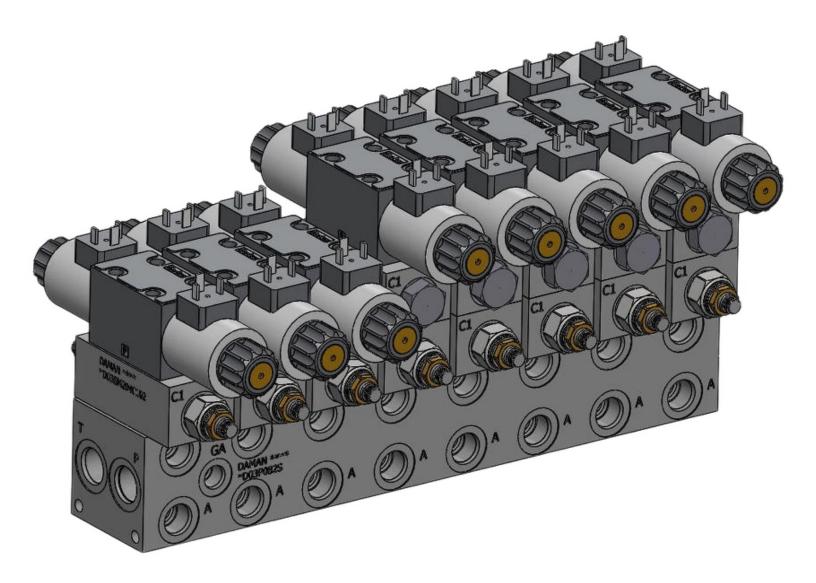


# Hydraulic Valve Manifold Build Program



## **The MFCP Build Program**

The modular hydraulic manifold system is the ideal solution for anyone who needs a flexible, expandable system that utilizes standardized valves yet is customized for each machine's needs.

## Save Time

- One part number orders the entire manifold assembly
- MFCP stocks most common valves and manifolds for fast delivery

## **Design Assistance**

- With years of experience, MFCP engineers are industry certified with a deep understanding and knowledge about hydraulic systems
- Entire assembly schematics available upon request

## **Quality Assurance**

- MFCP technicians are factory trained experts with years of hydraulic experience
- You can be sure that you're getting a quality product with all assembled manifolds because they are inspected and tested by our team before being shipped to you

## The MFCP Advantage

Motion & Flow Control Products is a team of engineers, technicians, and salespeople that work together to support the production and implementation of your hydraulic and machine controls.

MFCP specializes in bringing innovative solutions into the controls that operate your manufacturing processes. We do this by establishing a collaborative relationship, sharing expert advice, and to deliver solutions based on the customer's requirements.

We offer OEM scale or one-of-a-kind hydraulic solutions to improve efficiency and maximize profitability for your business from start-up companies with limited resources or established manufacturers seeking new technology or competitive edge.

## <u>mfcp.com</u>

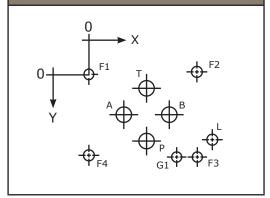
## **Standard Valves**



## **D03 Valves**

- Direct Operated
- Nominal Flow 10 GPM
  - Spool / Manufacture Specific
- NFPA D03
- CETOP 3
- NG6

### **D03** ISO 4401-03-02-0-05 NFPA T3.5.1 R2-2002 D03

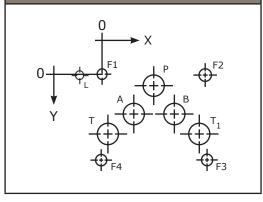




## **D05 Valves**

- Direct Operated
- Nominal Flow 20 GPM
  - Spool / Manufacture Specific
- NFPA D05
- CETOP 5
- NG10

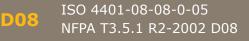
## LSO 4401-05-04-0-05 NFPA T3.5.1 R2-2002 D05

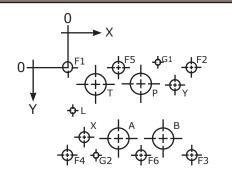




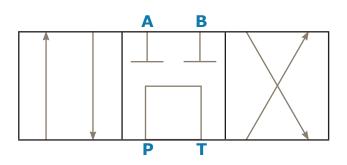
## D08 Valves

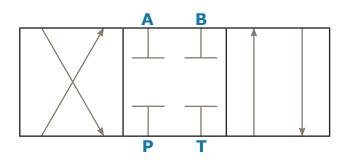
- Pilot Operated
- Nominal Flow 60 GPM
  - Spool / Manufacture Specific
- NFPA D08
- CETOP 8
- NG25

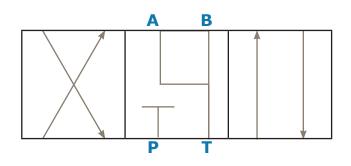


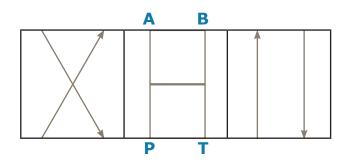


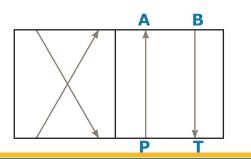
## **Common Valve Functions**











## 4/3 Tandem Center

Typical Applications:

- Fixed Displacement Pump
- Cylinder Application No load holding

## 4/3 Closed Center

Typical Applications:

- Pressure Compensated Pump
- Cylinder Application No load holding

## 4/3 Float Center

Typical Applications:

- Pressure Compensated Pump
- Motor Application
- Cylinder Application With Load Holding

## 4/3 Open Center

Typical Applications:

- Fixed Displacement Pump
- Motor Application
- Cylinder Application With Load Holding

## 4/2 Spring Offset

Typical Applications:

- Full Extend / Full Retract of Cylinder
- Motor Rotation control



## **Sandwich Modules**



The modular hydraulic manifold system is the ideal solution for anyone who needs a flexible, expandable system that utilizes standardized valves yet is customized for each machine's needs.

## Sandwich Modules provide

- Flexible Design
- Reduced Leakage
- Increase Response Times
- Less Pressure Loss
- Reduced Space
- Easier Maintenance



### **Common Modules**

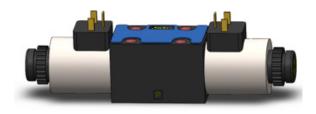
- Flow Control Port A, B, A & B Speed Control
- Counterbalance for load holding applications
- PO Check Valves
- Pressure Reducing
- Pressure Relief



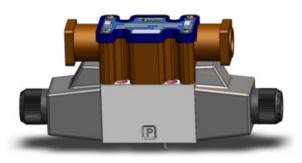
## **Wiring/Operator Options**



**Deutsch Style** 



**DIN Style** 



**Conduit Style** 

# 

**Manual Style** 

## **Wiring Connections**

- Conduit
- Din
- Deutsch
- Additional connections available per request

## **Voltage Options**

- 12VDC
- 24VDC
- 120VAC
- Additional voltages available per request



**Wiring Accessories** 

## **How to Order**

Identify each valve station function or application, and control needed.

## **Example:**

Valve Size	D03	
Stations	4	
Pressure Rating	3000 PSI	
Relief Valve	Yes (Set a 2500 PSI)	
Electrical	DIN	

## Valve Stations Available

- D03 Standard options up to 13
- D05 Standard options up to 13
- D08 Standard options up to 7

### **Pressure Rating**

- 3000 PSI Aluminum
- 5000 PSI Ductile Steel

### **Pressure Relief Valve**

- Yes Preset, Adjustable
- No Already in System

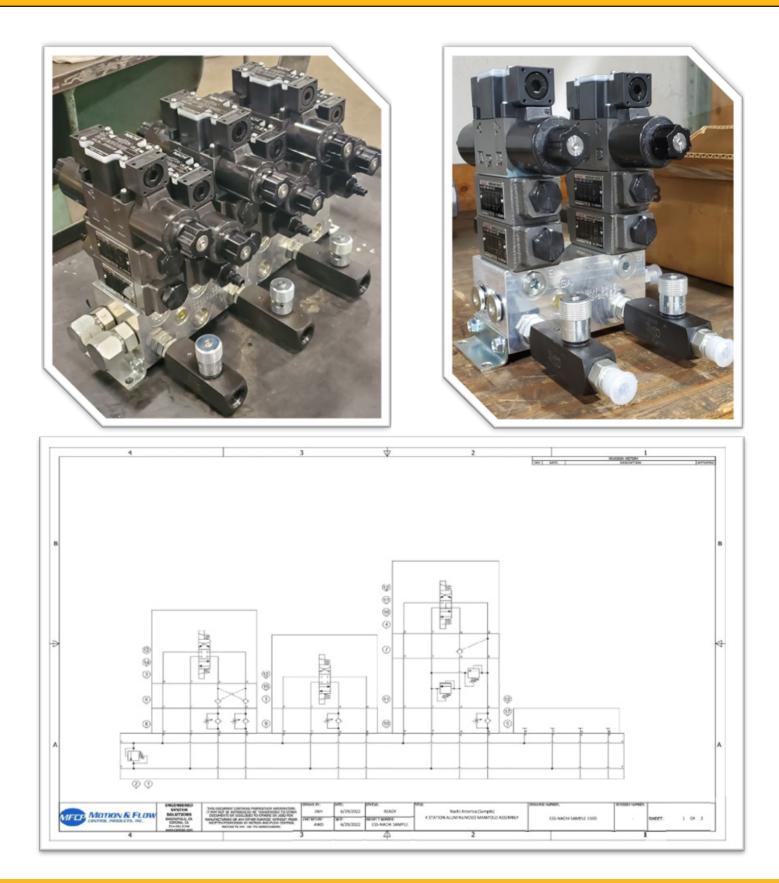
### **Electrical Connection**

- Conduit
- DIN Connector
- Deutsch
- Other Upon Request

Station	Application/Function	Flow Control	PO Check	Counter Balance	Pressure Relief	Pressure Reducing
1	Double Acting Cylinder No Load Holding	Yes	No	No	No	No
2	Double Acting Cylinder With Load Holding	Yes	Yes	No	No	Yes, P Port
3	Double Acting Cylinder No Load Holding	Yes	No	No	No	No
4	Bidirectional Motor No Load Holding	No	No	No	No	No
5						
6						
7						
8						



## **Examples**



<u>mfcp.com</u>

## **Hydraulic Components**



## **Hydraulic Cylinders**

**Hydraulic Motors** 

Gear

LSHT

Fixed

Variable

**Radial Piston** 

	Most Popular	Round Body
P	NFPA	ISO
	Compact	Electrohydraulic
	Large Bore	Custom
	Heavy Duty	Sensors

Flow Meters Gauges Isolators Level Indicators

**Gauges & Measurement** 

Thermometers Pressure

## **Heat Exchanges & Chillers**



Air Oil Coolers Water Cooled Water Oil

Chillers
Mobile
Accessories

## **Hydraulic Rotary Actuators**



Vane Helical

Custom

Rack & Pinion

High Speed

Bent Axis

Brakes

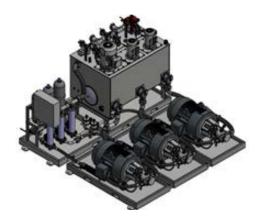
Clutches

Winches



Piston Bladder Diaphragm Dampers Gas Bottles Isolators Charge Kits Safety Equip Metal Bellows

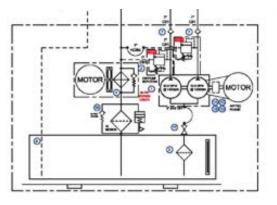
## **Hydraulic Systems**



## **Fixed Displacement Pumps**

Most Popular	Bent Axis
Gear	Screw
Multiple Gear	Radial
Vane	Hybrid
Piston	Hydrostatic

## **Variable Displacement Pumps**



## **Directional Control Valves**



- Most Popular Solenoid Proportional Servo Lever
- Cam Air Pilot Hydraulic Pilot Sandwhich Manifolds

## **Cartridge Valves**



- Solenoid Proportional Directional Control Pressure Control Shuttle
- Flow Control Load Controls Manual Valves Check

## **Hydraulic System**



Relief Proportional Flow Control Pressure Control Directional Control Shuttle

Sandwhich Bali Check

## **Electronics**



Motion Controllers **Display Units** PID Controls Safety

**Pump Controls** Signal Converters Sensors Transducers & Switches

Piston
Vane
Bent A

## Axis

## **Reservoirs**

	Steel	Filler Breathers
	Aluminum	Diffusers
2	Stainless Steel	Strainers
	Endcovers	Isolations
	Trays/Stands	

## **Hydraulic Filters**



Low Pressure Medium Pressure **High Pressure** Water Removal Return Line

Suction
Spin-On
Inline
Duplex
Elements



## **Hydraulic Repairs**



## REMANUFACTURING

ALL MAJOR BRANDS 100% TESTED ONE YEAR WARRANTY Most Quotes in 48 hours or less

- Cylinders
- Pumps & Motors
- Valves
- Accumulators
- High-Pressure Hydraulics
- Field Service

## **Repair or Remanufacture?**

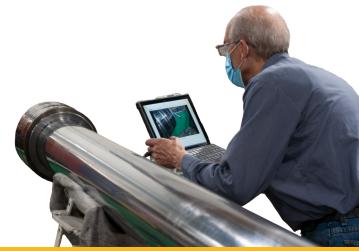
## **TRADITIONAL REPAIR**

Fix, mend or restore to working condition. Normally includes little or no warranty.

## **MFCP REMANUFACTURE**

Remanufacture products to a condition which meets or exceeds specification of the original manufactured product.

## Includes a 1 Year Warranty. 100% Tested.







### Products

Actuators, Stages & Cylinders Automation Components Compressed Air Equipment Controls Drives & Motors Electrical Filtration Gauges & Measurement Hose, Tubing & Fittings Hydraulics Machine Safety Mobile & Truck Pneumatics O-Rings & Seals Sensors & Switches Tools & Assembly Vacuum Valves



## Services

Seal Kitting Services Hose Kitting Services Cylinder Interchanges Hydraulic Component Repair Tube Bending and Fabrication Rental Units/Equipment Vendor Managed Inventory



### **Engineered Solutions**

Control Systems & Enclosures Standard Hydraulic Power Units Custom Hydraulic Power Units

Custom Hydraulic Manifolds Pneumatic Systems & Assemblies Seal Engineering System Installation System Design Schematics Custom Machine Guarding Workstations & Workcells



### Technologies

Automation Compressed Air & Pneumatics Controls/Control Panel Electromechanical Filtration

Hose, Tubing & Fittings Hydraulics Mobile Controls & Hydraulics Machine Safety Seals & Engineered Materials Industrial Hose



### Locations

We support our customers in the Western United States with a growing number of locations. When you visit one of our ParkerStores, you can count on quick, friendly service from one of our store professionals.

All of our ParkerStores stock products provide hose assemblies while you wait, adapters, and many Parker fluid connector products. Individual stores offer additional products and services to support the industries in their specific locations.