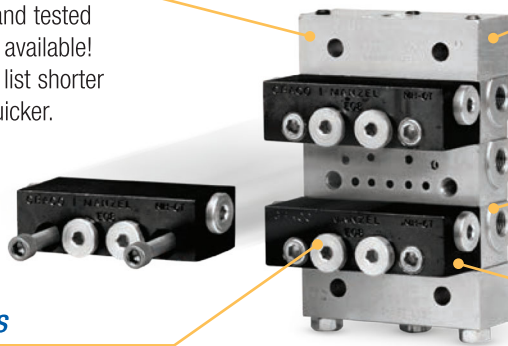


## Modular Design for Easy Maintenance

Same capable design as the Trabon MSP Series with even tighter and more exacting tolerances. The Manzel MHH Series delivers highly accurate lube delivery for demanding high-pressure oil applications.

### Baseplate Assemblies

Pre-assembled and tested base plates now available! Make your parts list shorter and assembly quicker.



### Easily Accessorized

Accessories such as proximity switch cycle indicators provide positive assurance of a successful lube event.

### Built-In Outlet Check Valves

Ensure accurate lube delivery, every time.

### Indicator Ports

Alternate outlets on face of each valve can be fitted with optional performance indicators, taking the guesswork out of troubleshooting.

### Quick Change Valve Sections

Easily removed from the base assembly without disturbing any lube lines – minimizing labor cost and maximizing your machine uptime.

### Typical Applications

- Compressors, industrial equipment, and where high-pressure lubrication is required

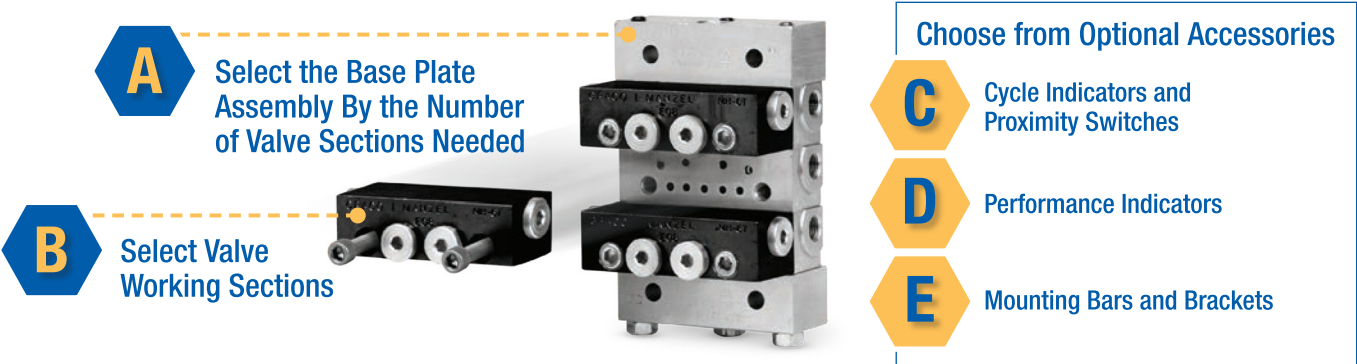
### Typical Fluids

- Synthetic or Mineral Oil

### Technical Specifications

Material	Plated Steel
Maximum Pressure	7,500 psi (517 bar)
Maximum Operating Temperature	350°F (176°C)
Maximum Cycle Rate	200 cycles/min
Instruction Manual	312497

Steps to Build Your MHH Divider Valve System:



**A** Ordering Information

Factory-Tested MHH Base Plate Assemblies

How many sections are in the assembly? Count up the number of sections, and order a base assembly that has the correct number of sections. Base plate assembly is delivered completely assembled and tested with inlets, intermediate base plate sections, end section, tie rods and nuts.

Item	Maximum Number of Outlets	Number of Valve Sections	Part Number
			NPSF
1/2/3/4/5	6	3	24F596
	8	4	24F597
	10	5	24F598
	12	6	24F599
	14	7	24F600
	16	8	24F601

# A

## Ordering Information (continued)

### Build Your Own MHH Base Plate Assemblies

Item	Component	Description	Part Number	Note
			NPSF	
1	Inlet section options	"MH" inlet with bleed ports	563421	Must be ordered in multiples of 5
		"MS" inlet without bleed ports	560919	
2	Intermediate base plate	Two outlet ports	563425	
3	End section options plate	Standard end	563424	
		With alternate inlet port*	563279	
4	Tie Rods (3 required)	3-section	557731	3 tie rods and tie rod nuts required for assembly
		4-section	557732	
		5-section	557733	
		6-section	557734	
		7-section	557735	
		8-section	557736	
		9-section	557738	
		10-section	557739	
5	Tie Rod Nuts (3 required)	11-section	557740	
		Tie rod nuts	556371	

\*Alternate inlet port in end section 563279 requires Leak Proof Zerk fitting such as part number 555888, 556429 or similar.

NOTE: Refer to MSP pages for BSPP and SAE inlet and base plate porting options.

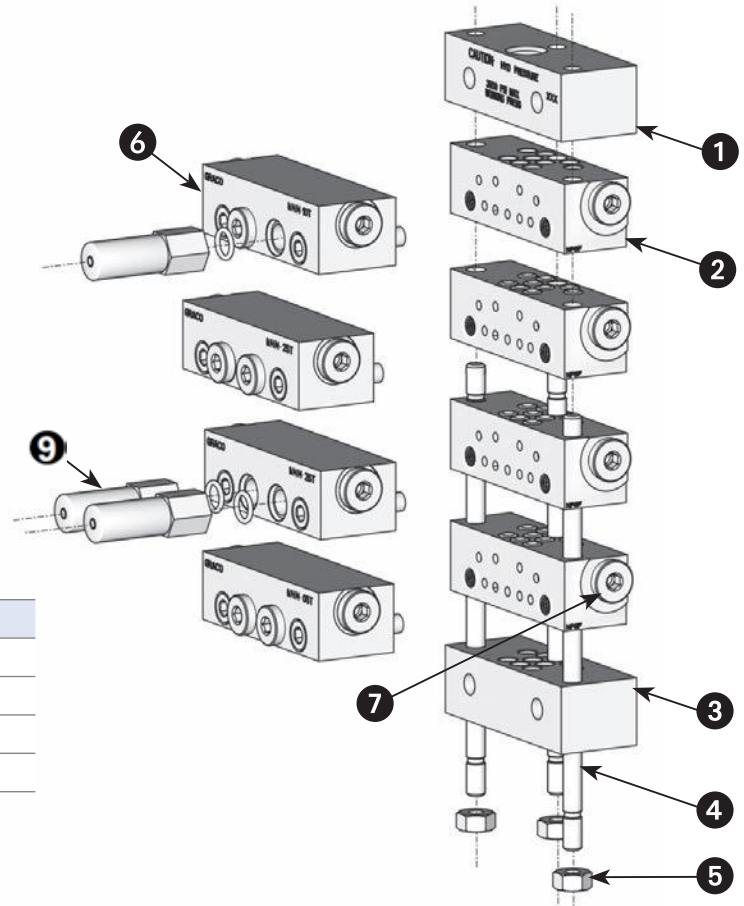
### Legend

1	Inlet Section
2	Intermediate Base Section / Subplate
3	End Section
4	Tie Rod
5	Tie Rod Nut
6	MSP Valve Section
7	Outlet Port Plug
9	Performance Indicator

### MHH Section Spare Parts

Part Number	Description
122276*	Standard O-ring (90 DURO Fluoroelastomer), black
556540*	Alternate O-ring (70 DURO Buna-N), black
556327	Outlet check ball
557508	Outlet check spring

\*Part numbers are for a single O-ring; each section requires nine O-rings.



## B

### Ordering Information

#### MHH Valve Sections

Also called "Working" sections. Must be ordered in multiples of 5.


Outlet Configuration	Description	Output Per Outlet, in <sup>3</sup> (cm <sup>3</sup> )	Part Number
			Standard Section
Single	MHH-6S*	0.012 (0.197)	562679
	MHH-9S*	0.018 (0.295)	562680
	MHH-12S*	0.024 (0.393)	562681
	MHH-15S*	0.030 (0.492)	24X029
	MHH-18S*	0.036 (0.590)	562682
	MHH-21S*	0.042 (0.688)	24X030
	MHH-24S*	0.048 (0.787)	562683
	MHH-30S*	0.060 (0.983)	562684
Twin	MHH-6T	0.006 (0.098)	562685
	MHH-9T	0.009 (0.149)	562686
	MHH-12T	0.012 (0.197)	562687
	MHH-15T	0.015 (0.246)	24X027
	MHH-18T	0.018 (0.295)	562688
	MHH-21T	0.021 (0.344)	24X028
	MHH-24T	0.024 (0.393)	562689
	MHH-30T	0.030 (0.492)	562690

\*Each "S" section uses only one outlet, but each intermediate base has two outlets. For each "S" section in the assembly, order one of part number 557349 (1/8 in NPTF Outlet Port Plug) to plug the unused outlet.

## C

### Ordering Information

#### Cycle Indicators and Proximity Switches

	Part Number	Component	Note
	563251	Magnetic Visual Cycle Indicator	The highly visible cycle indicator has a snap-action movement which allows the user to visually determine the timing of each divider valve cycle.
<i>Image Coming Soon</i>	557745	Explosion-Proof FSmech Proximity Switch	Explosion-proof dry contact switch dual rated for 115 VAC or 10-32 VDC. Includes potted 6 ft (1.8 m) cable with flying leads. Used at pressures that do not exceed 7,500 psi (517 bar) at cycle rates up to 200 cycles per minute. Approved for hazardous locations: Class I, Groups A, B, C and D – Division 1.
<i>Image Coming Soon</i>	558941	Micro-Monitor	LCD shows total cycle count up to 999,999. Reset to zero by inserting the reset magnet into the recessed opening. An LED will also flash with each cycle of the piston in the divider block indicating a complete stroke.

#### Proximity Switch Spare Parts

Part Number	Component
556570	Standard O-ring (90 DURO Fluoroelastomer), black
556568	Alternate O-ring (90 DURO Buna-N), black
567251	Enclosure Port Plug, with O-ring 556570

## D

## Ordering Information

**Performance Indicators**

These vital safeguards react to excess lube pressure when points or lines become blocked. Installed in indicator ports on the working piston sections, they quickly identify the affected lines.

**Reset Indicators with Memory****Features and Benefits**


- Provides quick troubleshooting tool with visual indication
- No tools for reset or parts to replace after indication
- Easy information on blocked lines, high system pressure or blocked bearings
- 1/8 NPSF thread with O-ring seal

<i>Image Coming Soon</i>	Part Number	Cracking Pressure
	563258	2,500 psi (172 bar)
	563261	3,000 psi (207 bar)
	563263	3,500 psi (241 bar)
	563262	5,000 psi (345 bar)

**Disk-Type Pressure Indicator****Features and Benefits**

A blow-out disk ruptures when lube line blockage occurs and lubricant forces a pin to protrude from the body of the indicator. There is no provision for relief and the pressure escalates until relieved elsewhere in the system. The disk must be replaced and the pin reset manually after the blockage is eliminated.

- Easy information on blocked lines, high system pressure or blocked bearings
- 1/8 NPSF thread with O-ring seal

	Part Number	Cracking Pressure	Replacement Rupture Disks
	563229	2,800 psi (193 bar)	557422
	563221	3,700 psi (255 bar)	557423
	563222	4,600 psi (317 bar)	557424
	563224	5,500 psi (380 bar)	557425
	563226	6,400 psi (441 bar)	557427
	N/A	7,300 psi (503 bar)	557428
	N/A	8,200 psi (565 bar)	557429

**Performance Indicator Spare Parts**

Part Number	Description
556569	Standard O-ring (90 DURO Fluoroelastomer), black
556567	Alternate O-ring (90 DURO Buna-N), black
16U217	Indicator Port Plug, with O-ring 556569

## E

## Ordering Information

“Manzel Mount” MHH valves have the same footprint as the Trabon MSP valves. Please refer to the MSP pages for mounting bar and bracket options available from Graco.