

### DESCRIPTION

Modular MXP Divider Valves use a stackable subplate design. The valve section containing the displacement piston is bolted to an individual subplate. A complete divider valve assembly consists of an inlet section, an end section, and a minimum of 3, to a maximum of 10, stacked subplates and valve sections. These components are bolted together with three tie rods.

A complete divider valve assembly with the maximum of 10 subplates and valve sections can serve up to 20 lubrication points.

Because outlet connections are made to the subplate, valve sections may be changed without disturbing existing tubing. More lubrication points may be added to an existing assembly by installing additional subplates, valve sections, and outlet tubing. A bypass is available allowing points of lubrication to be deleted (installing a bypass section) or added (removing an installed bypass section and replacing it with a valve section).

The amount of lubricant dispensed by each valve section is determined by the size of the piston. A twin valve section dispenses equal amounts of lubricant to two outlets. A single valve section combines the lubricant from both ends of the piston and dispenses it to one outlet. Existing twin valve sections may be converted to singles by installing an external singling kit. By installing an external crossport kit, lubricant from adjacent valve sections can be combined for larger output needs.

A cycle indicator pin, attached to the valve piston, is available to visually check divider valve cycling. A cycle switch may be added to produce an electrical signal for monitoring divider valve functioning. Proximity switches are also available for monitoring divider valve assemblies having high cycle rates.

Alternate outlet ports allow high pressure (performance) indicators to be added to assist in locating crushed lines. These ports are sealed with plugs when performance indicators are not used.



### FEATURES

- Stackable subplate/valve design simplifies system planning, installation and maintenance; helps to minimize initial as well as spare parts inventory costs.
- Series progressive operation provides added opportunities to use feedback for local or remote monitoring.
- Modular valve section design permits adding valve sections (maximum of ten sections per assembly) to meet changed lubrication requirements. Adding or bypassing of lube points can be done without removing the assembly or disturbing previously installed connections or lube lines. Choice of SAE or NPSF inlet and outlet connections.
- Built-in outlet check valves prevent the lubricant in the outlet lines from reentering the valve section, help keep lines full to assure lube delivery and help maintain system pressure for more effective monitoring.
- Optional cycle indicator pin plus optional cycle switch provide electric fault warning in case of faulty valve cycling and/or lube line blockage.
- Available in carbon steel with zinc plating as standard, or nickel plating for improved appearance, or in type 316 stainless steel for corrosive environments.

### OPERATION

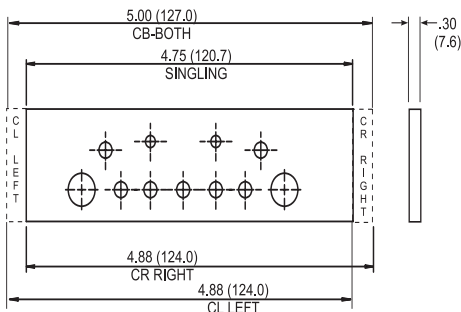
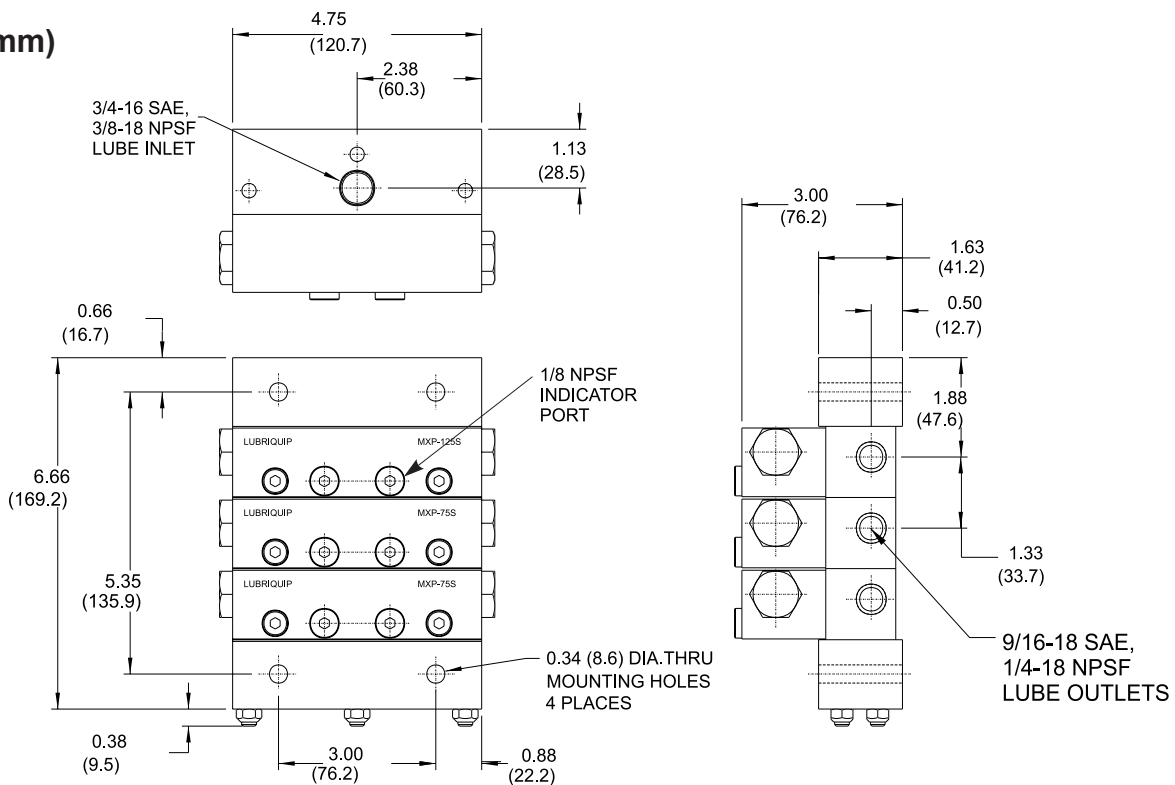
Modular MX Divider Valves are positive displacement, series progressive types. Each valve piston must complete its stroke, dispensing a measured amount of lubricant to the bearings it serves before the inlet flow is ported to the next valve piston.

The valves will continue to operate in this manner as long as fluid is supplied to the inlet of the divider valve assembly. When flow to the divider valve inlet ceases, the valve pistons will stop their movement. When flow resumes, the valve pistons will begin moving from the same point at which they stopped.

Because the valves are positive displacement, a blocked line downstream of a valve piston will prevent piston movement and create high pressure. When performance indicators are used, the blocked line may be located by identifying which indicator pin is extended. Pressure switches and relief type performance indicators and broken line indicators are also available.

### DIMENSIONS

Inches/(mm)



**PRODUCT I.D.**

STYLE	TAB(S)
CR RIGHT	RIGHT
CL LEFT	LEFT
CB-BOTH	RIGHT & LEFT
SINGLING	NONE

NUMBER OF SECTIONS	A-DIM		B-DIM		WEIGHT	
	Inches	(mm)	Inches	(mm)	Lbs	(Kg)
3	6.66	(169.21)	5.35	(135.89)	18.2	8.3
4	8.01	(203.45)	6.70	(170.13)	22.6	10.2
5	9.36	(237.69)	8.05	(204.37)	26.9	12.2
6	10.71	(271.93)	9.39	(238.61)	31.3	14.2
7	12.05	(306.17)	10.74	(272.85)	35.6	16.2
8	13.40	(340.41)	12.09	(307.09)	39.9	18.1
9	14.75	(374.65)	13.44	(341.33)	44.3	20.1
10	16.10	(408.89)	14.79	(375.57)	48.6	22.1

**SPECIFICATION**

**Material** ..... Zinc Plated Steel  
**O-Ring Seal** ..... 90 Durometer Viton  
**Maximum Cycle Rate**  
 (with Cycle Pin) ..... 60 CPM  
 (w/o Cycle Pin, or w/Prox Cycle Sw ..... 200 CPM  
**Pressure (Max.)** ..... 3000 PSI (207 bar)  
**Temperature (Max)** ..... 350°F (177°C)  
**Lubricant** ..... Oil or Grease  
**Torques Specification**  
 Tie Rod Nut ..... 6-9 ft. lbs.  
 Valve Sect. Mounting Screw ..... 12-13 ft. lbs.  
 Indicator Port Plug ..... 12-15 ft. lbs.  
 Enclosure Plug ..... 48 ± 2 ft. lbs.

**ACCESSORIES**

**ORDER PART NO.**

\*Field Sensitive Prox. Mag. Sw. (3 Pin) ..... 527-005-520  
 \*Field Sensitive Prox. Switch (5 Pin) ..... 527-005-190  
 Cycle Switch (SPDT) & Bracket ..... 510-599-000  
 Cycle Switch (DPDT) & Bracket ..... 510-577-000  
 \*FS Mech AC/DC Exp. Prf. .... 527-006-150  
 \*FS Mech AC/DC 3 Pin BH ..... 527-006-160  
 \*FS Mech AC/DC 5 Pin BH ..... 527-006-170

Prox. Switch  
 \*FS Mech 24 VDC 3 Pin BH ..... 527-006-130  
 \*FS Mech 24 VDC 5 Pin BH ..... 527-006-140  
 \*\*FS Mag 20-28 VDC 4 Pin BH ..... 527-007-110  
 \*\*FS Mag 115 VAC 5 Pin BH ..... 527-007-140  
 Crossport Plate (Left) ..... 527-300-970  
 Crossport Plate (Right) ..... 527-300-980  
 Crossport Plate (Both) ..... 527-300-990  
 Singling Plate ..... 527-301-000  
 Indicator Port Adapter (7/16-20 SAE) ..... 527-300-851  
 Outlet Plug (9/16-18 SAE) ..... 412-700-494

For additional accessories, refer to the following Trabon bulletins:

Performance Indicators ..... 15401  
 Accessories and Parts ..... 10161  
 Check Valves ..... 15825  
 Broken Line Indicators ..... 15416  
 Cycle Indicator Proximity Switches ..... 15600

\*NOTE: O'Ring seal for new style valve sections (K94 and later). For old style using aluminum gaskets (J94 and earlier) use 570-999-050 (3 pin) or 570-999-210 (5 pin).

\*\* 10,000 psi switch designed for stamping press applications

**DIVIDER VALVE COMPONENT ORDERING INFORMATION**

SIZE	DESCRIPTION	DISPLACEMENT PER VALVE CYCLE		VALVE SECTION	W/CYCLE PIN RIGHT SIDE	W/FIELD SENSITIVE 5 PIN PROX SWITCH RIGHT SIDE
		CU.IN.	CC			
25T	.025 Twin Outlet	.025	.410	106-300-010	-	106-300-840
25S	.025 Single Outlet	.050	.820	106-300-070	-	106-300-830
50T	.050 Twin Outlet	.050	.820	106-300-020	106-300-130	106-300-230
50S	.050 Single Outlet	.100	1.639	106-300-080	106-300-180	106-300-280
75T	.075 Twin Outlet	.075	1.230	106-300-030	106-300-140	106-300-240
75S	.075 Single Outlet	.150	2.459	106-300-090	106-300-190	106-300-290
100T	.100 Twin Outlet	.100	1.639	106-300-040	106-300-150	106-300-250
100S	.100 Single Outlet	.200	3.278	106-300-100	106-300-200	106-300-300
125T	.125 Twin Outlet	.125	2.049	106-300-050	106-300-160	106-300-260
125S	.125 Single Outlet	.250	4.098	106-300-110	106-300-210	106-300-310
150T	.150 Twin Outlet	.150	2.459	106-300-060	106-300-170	106-300-270
150S	.150 Single Outlet	.300	4.917	106-300-120	106-300-220	106-300-320
B.P.	Bypass	-	-	106-300-410	-	-
	Inlet (NPSF)			527-300-000		
	Inlet (SAE)			527-300-001		
	Intermediate Base (NPSF)			527-300-100		
	Intermediate Base (SAE)			527-300-710		
	End			527-300-090		
	*Tie Rod	3 Section		527-300-270		
	*Tie Rod	4 Section		527-300-280		
	*Tie Rod	5 Section		527-300-290		
	*Tie Rod	6 Section		527-300-300		
	*Tie Rod	7 Section		527-300-310		
	*Tie Rod	8 Section		527-300-320		
	*Tie Rod	9 Section		527-300-330		
	*Tie Rod	10 Section		527-300-340		
	*Tie Rod Nut			410-440-020		

\*3 Tie Rods and 3 Nuts are Required Per Divider Assembly

**ORDERING INFORMATION**

**FAMILY CODE**

MXP-XXX-X-XX-XX-X-XX

**PORTING OPTION**

SAE - Straight Thread O'Ring Seal  
NPT-NPSF Pipe Thread

**ACCESSORY OPTION**

P - Assembly of performance indicators in all working outlets (Omit if Not Required)

**NUMBER OF SECTIONS**

03 - Three  
04 - Four  
05 - Five  
06 - Six  
07 - Seven  
08 - Eight  
09 - Nine  
10 - Ten

**VALVE CAPACITY**

BP - By Pass  
25 - .025 cu.in.  
50 - .050 cu.in.  
75 - .075 cu.in.  
100 - .100 cu.in.  
125 - .125 cu.in.  
150 - .150 cu.in.

**TYPE OF SECTION**

T - Twin Standard  
S - Single Standard - Right Hand Outlet  
L - Single Standard - Left Hand Outlet  
B - Twin W/Cycle Pin Right Side  
C - Single W/Cycle Pin - Right Side, Right Hand Outlet  
D - Single W/Cycle Pin - Left Side, Left Hand Outlet  
E - Twin W/Proximity Switch - Right Side  
F - Single w/Proximity Switch - Right Side, Right Hand Outlet  
G - Single W/Proximity Switch - Right Side, Left Hand Outlet

**CROSSPORTING OPTION**

CR - Right Hand Side  
CL - Left Hand Side  
CB - Both Sides

**NOTES:**

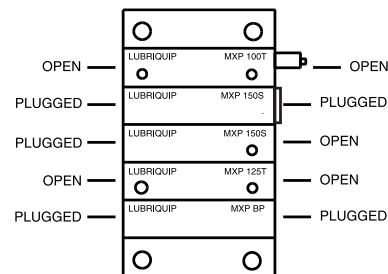
1. Capacity sections are specified starting from inlet section and must equal number of manifold sections in subplate.
2. When capacity section is crossported, its outlet is plugged and output is diverted to next section, farthest from inlet section.
3. Last capacity section, farthest from inlet, cannot be crossported.
4. Single output capacity sections can be crossported on one side only.
5. All cross porting is accomplished external using the cross port kits shown on page 2.
6. When capacity section is singled, the outlet not being used on the corresponding subplate section must be plugged.
7. By-pass block cannot be supplied on a three section assembly; all manifolded assemblies must have a minimum of three working capacity sections.
8. Contact Lubriquip for part numbers of loose components
9. Divider Systems should be limited to first and second stages only. Third staging is not recommended. Refer to Trabon bulletin 20101, 20105 and 20115 for further information on system design.

**Ordering Example**

5 section MXP divider valve with SAE ports and performance indicators in each working outlet consisting of:

- 1-100 Twin Valve w/Cycle Pin Right Side
- 1-150 Single Valve Crossport Right Side
- 1-150 Single Valve Right Side Outlet
- 1-125 Twin Valve
- 1-Bypass Section

Order Code: MSP-SAE-P-5-100B-150SCR-150S-125T-BP



Lubriquip endorses the SAE recommendation of ISO 18/14 (ISO 4406) oil cleanliness for most bearing applications. Some high speed bearings may require cleaner oil. Consult the bearing manufacturer for recommendation.

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