

# Trabon<sup>®</sup> Modular MXP Divider Valves

## 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 three (3) to a maximum of ten (10) stacked subplates and valve sections. These components are bolted together with three (3) tie rods.

A complete divider valve assembly with a maximum of ten (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 (2) 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 or blocked lube points. These ports are sealed with plugs with performance indicators are not used.



## FEATURES

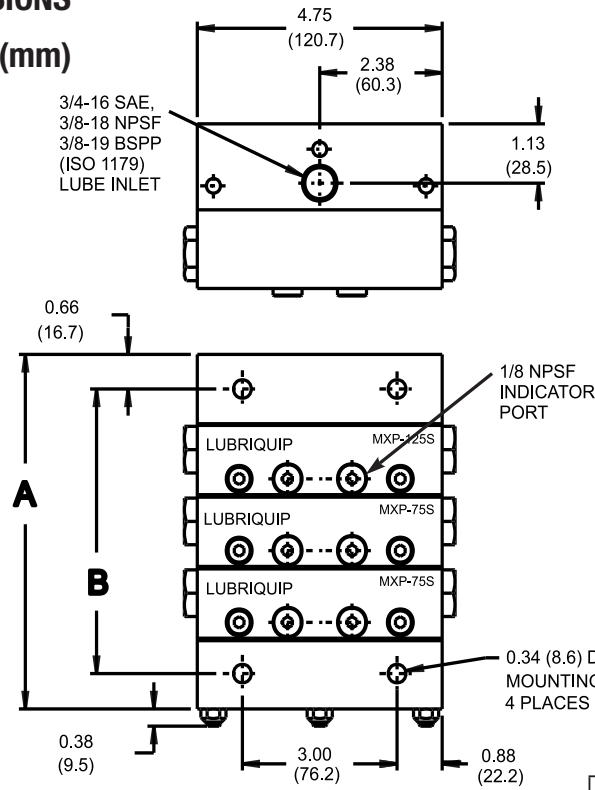
- Stackable subplate/valve design simplifies system planning, installation and maintenance; helps to minimize initial as well as spare parts inventory costs.
- Series progressive operation provides added opportunities to use feedback for local or remote monitoring.
- Modular valve section design permits adding valve sections (maximum of ten (10) 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 BSPP (ISO 1179) or NPSF inlet and outlet sections.
- Built-in outlet check valves prevent the lubricant in the outlet lines for 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.
- MXPO base sections (without check valves) are available for circulating oil applications.

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.

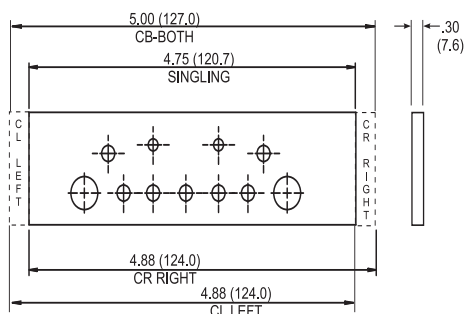
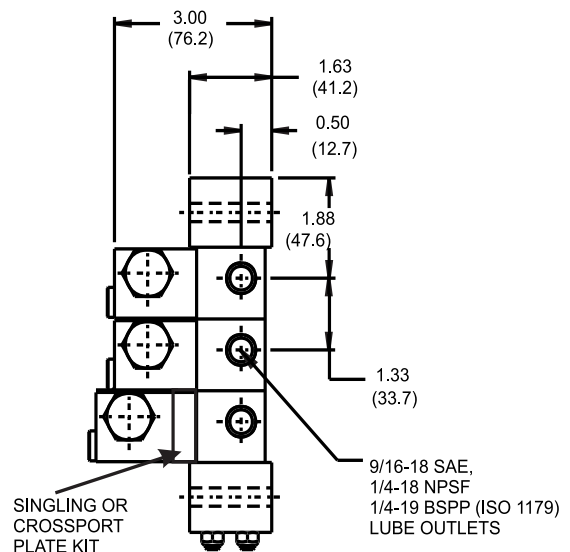
The valves will continue to operate in this manner as long as fluid is supplied to the inlet of the divider valve assembly. When flow to the divider valve inlet ceases, the valve pistons will stop their movement. When flow resumes, the valve pistons will begin moving from the same point at which they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

**DIMENSIONS**

Inches/(mm)



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.



**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
Max Cycle Rate:	
w/Cycle Pin	60 CPM
w/o Cycle Pin, or w/ Prox Cycle Sw	200 CPM
Pressure (max)	3,000 psi (207 bar)
Temperature (max)	350°F (177°C)
Lubricant	Oil or Grease
Torque:	
Tie Rod Nut	6-9 ft lbs
Valve Section Mounting Screw	12-13 ft lbs
Indicator Port Plug	12-15 ft lbs
Enclosure Plug	46-50 ft lbs

ACCESSORIES		
Description	Part No.	Old Part No.
Crossport Plate (Left)	563524	527-300-970
Crossport Plate (Right)	563525	527-300-980
Singling Plate	–	527-301-000
Indicator Port Adaptor (7/16-20 SAE)	–	527-300-851
Outlet Plug 1/4-18 NPTF	557391	508-975-000
Outlet Plug 9/16-18 SAE	556430	412-700-494
Outlet Plug 1/4-19 BSPP	556427	412-700-455
Performance Indicators	See bulletin L15401	
Accessories and Parts	See bulletin L10161	
Check Valves	See bulletin L15825	
Broken Line Indicators	See bulletin L15416	
Cycle Indicator Proximity Switch	See bulletin L15600	

DIVIDER VALVE COMPONENT ORDERING INFORMATION							
Size	Description	Displacement Per Valve Cycle		Valve Section Part No.	Valve Section Old Part No.	w/Cycle Pin Right Side Part No.	w/Cycle Pin Right Side Old Part No.
		cu.in	cc				
25T	.025 Twin Outlet	.025	.410	562813	106-300-010	–	–
25S	.025 Single Outlet	.050	.820	562819	106-300-070	–	–
50T	.050 Twin Outlet	.050	.820	562814	106-300-020	562825	106-300-130
50S	.050 Single Outlet	.100	1.639	562820	106-300-080	562830	106-300-180
75T	.075 Twin Outlet	.075	1.230	562815	106-300-030	562826	106-300-140
75S	.075 Single Outlet	.150	2.459	562821	106-300-090	562831	106-300-190
100T	.100 Twin Outlet	.100	1.639	562816	106-300-040	562827	106-300-150
100S	.100 Single Outlet	.200	3.278	562822	106-300-100	562832	106-300-200
125T	.125 Twin Outlet	.125	2.049	562817	106-300-050	562828	106-300-160
125S	.125 Single Outlet	.250	4.098	562823	106-300-110	562833	106-300-210
150T	.150 Twin Outlet	.150	2.459	562818	106-300-060	562829	106-300-170
150S	.150 Single Outlet	.300	4.917	562824	106-300-120	562834	106-300-220
B.P.	Bypass	–	–	562835	106-300-410	–	–
	Inlet (NPSF)			15R993	527-300-000		
	Inlet (SAE)			15R994	527-300-001		
	Inlet (BSPP)			561029	527-300-760		
	Intermediate Base (NPSF)			563519	527-300-100		
	Intermediate Base (SAE)			563521	527-300-710		
	Intermediate Base (BSPP)			563522	527-300-740		
	MXPO Base (NPSF)			563527	527-301-160		
	MXPO Base (SAE)			–	527-301-150		
	End			563518	527-300-090		
	*Tie Rod		3 Section	557766	527-300-270		
	*Tie Rod		4 Section	557767	527-300-280		
	*Tie Rod		5 Section	557768	527-300-290		
	*Tie Rod		6 Section	557769	527-300-300		
	*Tie Rod		7 Section	557770	527-300-310		
	*Tie Rod		8 Section	557771	527-300-320		
	*Tie Rod		9 Section	557772	527-300-330		
	*Tie Rod		10 Section	563520	527-300-340		
	*Tie Rod Nut			555406	410-440-020		

\*Three (3) Tie Rods and three (3) Nuts are required per divider assembly

# ORDERING INFORMATION

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

<b>PORTING OPTIONS</b>	
SAE - STRAIGHT THREAD O-RING SEAL NPT - NPSF PIPE THREAD BSP - BSPP (ISO 1179)	
<b>ACCESSORY OPTIONS*</b>	
P - ASSEMBLY OF PERFORMANCE INDICATORS IN ALL WORKING OUTLETS *OMIT IF NOT REQUIRED	
<b>NUMBER OF SECTIONS</b>	
03 - THREE	07 - SEVEN
04 - FOUR	08 - EIGHT
05 - FIVE	09 - NINE
06 - SIX	10 - TEN
<b>VALVE CAPACITY</b>	
BP - BYPASS	100 - .100 cu.in.
25 - .025 cu.in.	125 - .125 cu.in.
50 - .050 cu.in.	150 - .150 cu.in.
75 - .075 cu.in.	
<b>TYPE OF SECTION</b>	
T - TWIN STANDARD S - SINGLE STANDARD - RH OUTLET L - SINGLE STANDARD - LH OUTLET B - TWIN W/CYCLE PIN RIGHT SIDE C - SINGLE W/CYCLE PIN RIGHT SIDE - RH OUTLET D - SINGLE W/CYCLE PIN RIGHT SIDE - LH OUTLET	
<b>CROSSPORTING OPTIONS</b>	
CR - RIGHT HAND SIDE CL - LEFT HAND SIDE CB - BOTH SIDES	

**NOTES:**

- Capacity sections are specified starting from inlet section and must equal number of manifold sections in subplate.
- When capacity section is crossported, its outlet is plugged and the output volume is diverted to next section, farthest from inlet section.
- Last capacity section, farthest from inlet, cannot be crossported.
- Single output capacity sections can be crossported on one side only.
- All crossporting is accomplished external using the crossport kits listed on page 3.
- When capacity section is singled, only one outlet in its subplate can be used. Other outlet must be plugged.
- By-pass block cannot be supplied on a three section assembly; all manifolded assemblies must have a minimum of three working capacity sections.
- Contact Graco for part numbers of stainless steel components
- Divider Systems should be limited to first and second stages only. Third staging is not recommended. Refer to Trabon® bulletin L20101, L20105 and L20115 for further information on system design.

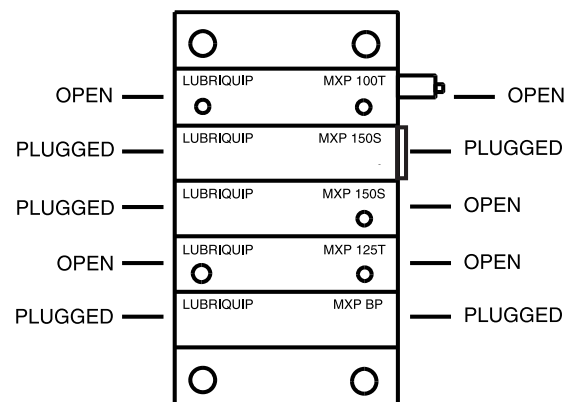
## Ordering Example

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

Graco 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.



All written and visual data contained in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

## Contact us today!

To receive product information or talk with a Graco representative, call **800-533-9655** or visit us online at [www.graco.com](http://www.graco.com).

