

M2500G Series Divider Valve Manifold

Progressive Systems



General

M2500G Series Divider Valve Manifolds are the principal components of a progressive lubricating system. Modular construction makes these blocks easy to install, modify and maintain, without removing any tubing.

Progressive movement lubricant divider blocks operate in a pre-arranged sequence for easy monitoring of system operation through a moving indicator pin. Normally, the pin transmits a signal to the system controller through an electrical limit switch at the end of a complete lubrication cycle.

Up to 20 bearings can be lubricated from one manifold assembly, and up to 20 manifolds can be included in a simple system. Cyclic discharge from a lubricator forces sequential movement of the pistons inside the divider block, which displaces fixed volumetric amounts of lubricant to each point connected to the system network.



Features

- + Zinc-Nickel plated steel body ensures longer life in nasty environments.
1000 hour salt spray proven.
4 times harder finish than comparable zinc plate.
- + Viton O-rings standard to protect against high heat and synthetic lubricants.
- + Form, fit and functionality interchangeable with all major competitive brands.
- + Tight toleranced - precision machined product.
- + SAE straight thread, NPSF or BSPP - all standard.
- + Integral or in-line solenoid valve for zone control.
- + Easy to assemble and replace valves without removing tube.
- + Three to ten section valve manifolds available.

Technical Data

Material	Steel (zinc-nickel plated)
Maximum Operating Pressure	400 bar (5,800 psi)
Discharge per cycle	.005 cu. in (.08 cc) to .080 cu. in. (1.31 cc)
Seals	Viton O-rings (70 durometer)
Maximum Temperature	350°F (163°C)
Lubricant	SAE 10 oil to NLGI #2 grease

Approximate Weight of Complete Divider Valve Assembly

Valve Assembly	Weight
3 Section Divider	2.8 kg (6.2 lb)
4 Section Divider	3.5 kg (7.6 lb)
5 Section Divider	4.1 kg (9.1 lb)
6 Section Divider	4.8 kg (10.5 lb)
7 Section Divider	5.4 kg (11.9 lb)
8 Section Divider	6.1 kg (13.4 lb)
9 Section Divider	6.7 kg (14.8 lb)
10 Section Divider	7.4 kg (16.2 lb)

BIJUR DELIMON INTERNATIONAL

(919) 465 4448 LOCAL
(800) 631 0168 TOLL-FREE
(919) 465 0516 FAX

WWW.BIJURDELIMON.COM

1 Copley Parkway, Suite 104
Morrisville, NC 27560

How To Order

Completely assembled single line modular valve manifolds can be ordered as follows:

First, select the manifold base assembly from the table. This assembly includes the inlet section, valve base sections, end section, tie rods, nuts and O-rings; the valve sections are installed on it. Each valve section and bypass section requires a base section and every manifold must have at least three operating valve sections.

Valve Section

Inlet Type	# of sections	Discharge Ports		
		#4SAE	1/8-27 NPSF	1/8-28 BSPP
Standard	3	M2500A3G	M2500B3G	M2500C3G
	4	M2500A4G	M2500B4G	M2500C4G
	5	M2500A5G	M2500B5G	M2500C5G
	6	M2500A6G	M2500B6G	M2500C6G
	7	M2500A7G	M2500B7G	M2500C7G
	8	M2500A8G	M2500B8G	M2500C8G
	9	M2500A9G	M2500B9G	M2500C9G
	10	M2500A10G	M2500B10G	M2500C10G

Add **Z** to the standard code for Zone-Oil MCZ2501 or **X** for Zone-Grease MCZ2501, e.g. M2500A7GZ for 7 section Zone-Oil.

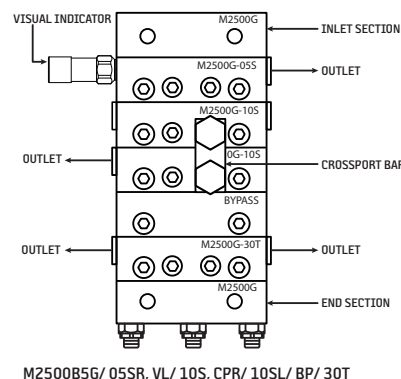
Next, specify the valve size, outlet type and optional accessories or bypass sections. Begin at the first section after the inlet and continue towards the end section. Choose one from each column on the chart below.

Valve Size	Outlet	Optional Accessories
05 25	T- Twin	V- Visual indicator
10 30	S- Single; no outlet	PP- Pin-type piston indicator
15 35	SL- Single; outlet to left	CS- Cycle switch*
20 40	SR- Single; outlet to right	CP- Crossport

Add **L** or **R** to the above codes to specify the location of each accessory. If bypass section is required, use **BP** in part number.

Example

Specifications	Code
5 section manifold, NPSF ports, standard inlet	M2500B5G
05 single, outlet to right, visual indicator left	05SR, VL
10 single, no outlet, crossport right	10S, CPR
10 single, outlet to left	10S, SL
Bypass section	BP
30 twin, outlets left and right	30T



BIJUR DELIMON INTERNATIONAL

(919) 465 4448 LOCAL
 (800) 631 0168 TOLL-FREE
 (919) 465 0516 FAX

WWW.BIJURDELIMON.COM

1 Copley Parkway, Suite 104
 Morrisville, NC 27560

M2500G Valve Components

Assembled valve manifolds contain:

- + Inlet section
- + Base section
- + Valve section
- + End section

Inlet Section (one required)

Inlet Port	Standard Part #	Zone Oil Part #	Zone Grease Part #
1/4" OD Tubing (#4 SAE)	MC12504AG	37499A	37500A
1/4"-18 NPSF	MC12504BG	37499B	37500B
1/4"-19 BSPP	MC12504CG	37499C	37500C

Base Section (three to ten required)

Outlet Discharge Port	Part #
1/4" OD Tubing (#4 SAE)	MCBA2502AG
1/8"-27 NPSF	MCBA2502BG
1/8"-28 BSPP	MCBA2502CG

Valve Section

Valve Size	Discharge cu. in. (cc)		Part #			
	Twin Outlet	Single Outlet	Twin Outlet		Single Outlet	
			Standard	w/ cycle pin	Standard	w/ cycle pin
05	.005 (.08)	.010 (.16)	MCVA250105TG	---	MCVA250105SG	---
10	.010 (.16)	.020 (.33)	MCVA250110TG	---	MCVA250110SG	---
15	.015 (.25)	.030 (.49)	MCVA250115TG	---	MCVA250115SG	---
20	.020 (.33)	.040 (.66)	MCVA250120TG	MCVA250120TPG	MCVA250120SG	MCVA250120SPG
25	.025 (.41)	.050 (.82)	MCVA250125TG	MCVA250125TPG	MCVA250125SG	MCVA250125SPG
30	.030 (.49)	.060 (.98)	MCVA250130TG	MCVA250130TPG	MCVA250130SG	MCVA250130SPG
35	.035 (.57)	.070 (1.15)	MCVA250135TG	MCVA250135TPG	MCVA250135SG	MCVA250135SPG
40	.040 (.66)	.080 (1.31)	MCVA250140TG	MCVA250140TPG	MCVA250140SG	MCVA250140SPG
Bypass valve	-	-	MCVA2501BPG			

End Section (one required)

Port Style	Standard Part #	With 1/8"NPT Port
Outlet Discharge Port	MCEA2503G	37484

Tie Rod Kit (one required)

Individual kits are available for three to ten sections. Kits include tie rods and locknuts (See Valve Service, page 4.)

BIJUR DELIMON INTERNATIONAL

(919) 465 4448 LOCAL
 (800) 631 0168 TOLL-FREE
 (919) 465 0516 FAX

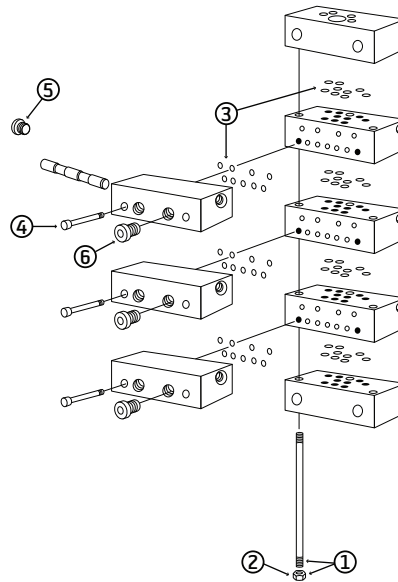
WWW.BIJURDELIMON.COM

1 Copley Parkway, Suite 104
 Morrisville, NC 27560

Service Parts

Item	Description		Part #		
1	Tie rod kit*	3 section	MCRK25053G		
		4 section	MCRK25054G		
		5 section	MCRK25055G		
		6 section	MCRK25056G		
		7 section	MCRK25057G		
		8 section	MCRK25058G		
		9 section	MCRK25059G		
		10 section	MCRK250510G		
		2	Tie rod nut		U251A
		3	Viton O-rings		U1720005S
4	Valve mounting screws		U212-A6		
5	Valve Section Piston Plug		PLU14038A		
6	Alternate outlet plug		37087		

*Note: Includes 3 tie rods & 3 locknuts



Accessories

Cross Port

Cross Port Kit	37083G
----------------	--------

Rapture Disc Indicator

These indicators burst at a selected pressure to automatically relieve excessive system pressure. They are installed in an alternate outlet port. All indicators are assembled with one rupture disc. Five extra discs are included.

Description	Burst Pressure	Disc Color	Replacement Disc Kit*	Part #
Rapture Disc Indicator	1450 psi	Yellow	FT15423YWK	10412YW
	1750 psi	Red	FT15423RDK	10412RD
	3250 psi	Purple	FT15423PRK	10412PR

*Note: Discs are sold in packs of 10 pieces

Pressure Indicator

These indicators are spring-loaded and can only be reset when system pressure decreases. The indicator's memory pin remains extended until manually reset. They are installed in the alternative outlet port.

Description	Pressure Rating	Non-Relieving	Pressure Rating	Relieving
Pressure Indicators	600 psi	20356	-	-
	1200 psi	203512	1000 psi	213510
	1600 psi	203516	1500 psi	213515
	2200 psi	203522	2000 psi	213520

BIJUR DELIMON INTERNATIONAL

(919) 465 4448 LOCAL
(800) 631 0168 TOLL-FREE
(919) 465 0516 FAX

WWW.BIJURDELIMON.COM

1 Copley Parkway, Suite 104
Morrisville, NC 27560

Accessories Cont.

Cycle Indicators / Cycle Switches

Manifold cycle indicators provide a means of monitoring lube flow thru the system - a pin cycles in and out when lubricant is flowing. Movement of the pin is caused by the piston (the two are pinned together) so that when the piston, and thus the entire manifold, cycles once, the pin moves in and out once. The switches can be wired to warn of system trouble. They can feed electric pulses to a control device such as SS2200 or SC400 controller or customer PLC.

ELECTRICAL CYCLE SWITCHES

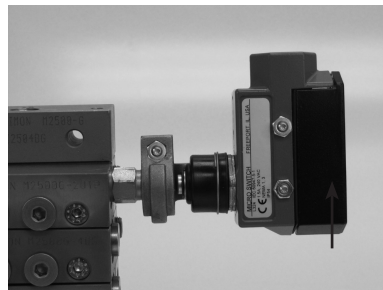
17324 w/1/2-14 NPSM conduit connector

33583 Bracket (required with switch)

(Order both parts separate)

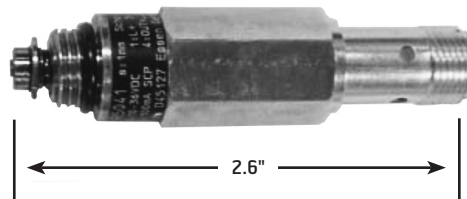
Couples to any M2500G metering valve having a cycle indicator pin and provides an electrical signal each time the divider valve operates.

SPDT switch is rated 15 amps @ 125/250 VAC, .5amps @ 125VDC.



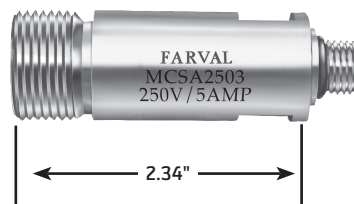
AC498-1 w/4 pin micro connector M12 X 1 & LED light. Couples to any M2500G metering valve.

Rated to 5000 PSI (350 BAR). Requires 10-36 VDC. To be used with the SC400 Controller or customer PLC only. (See M12 Connectors below)



MCSA2503 w/automotive type 3 pin connector

Because they use a magnet to sense piston position, entry of contaminants into the system is prevented. These cycle switches may be installed in the end of M2500G valve size '15' and larger. The SPDT switch is rated at 250 VAC/28 VDC-5 Amps. (See Automotive-Type Connectors below)

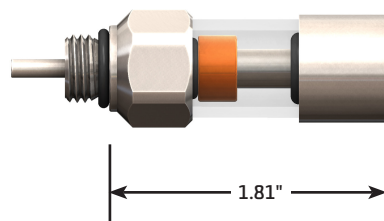


37786

Visual cycle indicator for monitoring. Reflective orange indicator is visible for over 30 feet.

Couples to any M2500G metering valve.

Pin reduces output of valve by 0.0038cu.(0.06cc)



M12 4-Pole ELEC. CONNECTORS WITH CABLE

These connectors, made to M12 specifications, are used with the AC498-1 switches.

76928-2863 - Straight, 10 meters long

76928-2833 - 90°, 10 meters long

Automotive-Type ELEC. CONNECTORS WITH CABLE

These cable assemblies are yellow PVC insulated STO and are used with the MCSA2503 switches.

MCC2505A - Straight, 6 feet long

MCC2505B - Straight, 12 feet long

BIJUR DELIMON INTERNATIONAL

(919) 465 4448 LOCAL
(800) 631 0168 TOLL-FREE
(919) 465 0516 FAX

WWW.BIJURDELIMON.COM

1 Copley Parkway, Suite 104
Morrisville, NC 27560