

# 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

|                                   |  |
|-----------------------------------|--|
| <b>Material</b>                   | Steel (zinc-nickel plated)                     |
| <b>Maximum Operating Pressure</b> | 400 bar (5,800 psi)                            |
| <b>Discharge per cycle</b>        | .005 cu. in (.08 cc) to .080 cu. in. (1.31 cc) |
| <b>Seals</b>                      | Viton O-rings (70 durometer)                   |
| <b>Maximum Temperature</b>        | 350°F (163°C)                                  |
| <b>Lubricant</b>                  | 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](http://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.

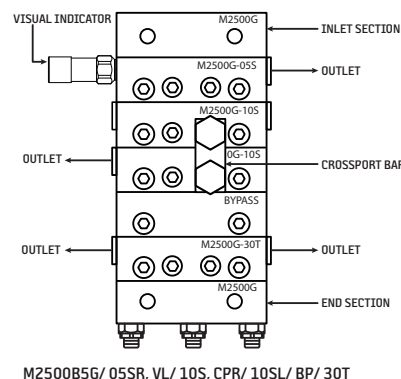
Next, specify the valve size, outlet type and optional accessories or bypass sections. Begin at the first section after the inlet and continue towards the end section. Choose one from each column on the chart below.

| 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](http://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

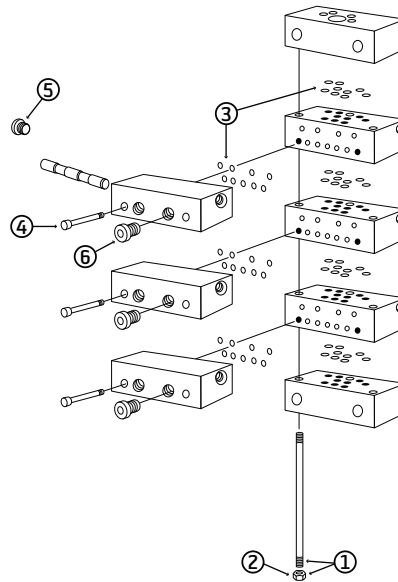
[WWW.BIJURDELIMON.COM](http://WWW.BIJURDELIMON.COM)

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 | 64161S001              |               |           |
| 6    | Alternate outlet plug     | 64161S002              |               |           |

\*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](http://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)

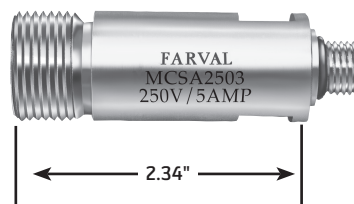
Couples to any M2500G metering valve having a cycle indicator pin and provides an electrical signal each time the divider valve operates.

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



**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)

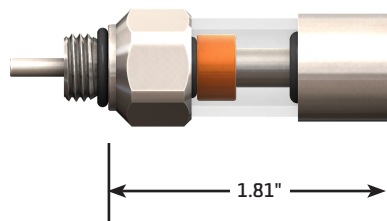


**37786**

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](http://WWW.BIJURDELIMON.COM)

1 Copley Parkway, Suite 104  
Morrisville, NC 27560