## SPECIFICATIONS:

| Max. Operating <br> Pressure | Seal <br> Material | Lube <br> Inlet | Lube <br> Outlets | Indicator <br> Ports | Mounting Screw <br> Torque | Tie Rod <br> Nut Torque |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2500 PsI | Nitrle | $1 / 8 \mathrm{NPTF}$ | $1 / 8 \mathrm{NPTF}$ | $5 / 16^{\prime \prime}-24 \mathrm{UNF}$ | $48 \mathrm{in} .-\mathrm{lb}$. | $36 \mathrm{nn} .-\mathrm{lb}$. |



## DESCRIPTION

MM Divider Valves are comprised of three to eight valve blocks fastened to a segmented baseplate with gasket plate seals between the valve blocks and the baseplate and between the baseplate segments These divider valves are used in a single line, progressive lubrication system and can be used for dispensing oll or grease. MM valves and baseplate segments are supplied with nitrile seals.

Refer to the Modular Lube Planning Manual for system design information and an in-depth explanation of operation. An in-line filter should be installed between the pump and divider valves Check vaives should be installed at the inlets of all lube points Refer to Service Page M50 Page 1 for check valve information

Valve blocks containing metering pistons discharge a predetermined amount of lubricant with each cycle Valve blocks can be single or twin and can be externally singled or crossported with Model 87903 Single/Crossport Bar. Outlets not to be used when singling or crossporting must be plugged Use 68645 pipe plug

An 871000 By-Pass Block can be used in any position on the baseplate The use of a by-pass block allows the addition or deletion of lubrication points without disturbing existing piping. Both outlets under a by-pass block must be plugged

The valve blocks and by-pass blocks are fastened to a baseplate mounted on the machine to be lubricated The baseplate contains the divider valve's inlet and outlet connections, interrelated passageways and built-in check valves All piping of lubricant to and from the divider valve is connected to the baseplate.

The baseplate consists of one inlet block, three to eight intermediate blocks, one end block and three tie rods Gasket plate seals are included with the baseplate segments The valve block capacity of each baseplate is dependent upon the number of intermediate blocks in the baseplate There must be a minimum of three working valves on each valve and baseplate assembly

Optional cycle indicator pins provide positive identification of system operation. The indicator pin is an extension of the piston
in a valve block and will cycle back and forth as the piston moves.

Optional mounting brackets are shown below for mounting the valve assembly.


## ASSEMBLY INSTRUCTIONS

NOTE The center tie rod in the baseplate is offset so that the intermediate blocks cannot be assembled backwards If excessive force is encountered during assembly, make sure block is not backwards.
1 Screw three tie rods into inlet block until ends are flush with surface of block
2 Slide inlet gasket onto tie rods.
3 Alternately slide an intermedıate block and an intermediate gasket plate onto the tie rods untul the last intermediate block is in place.
4 Discard remainıng intermediate gasket plate
5 Slide end gasket plate and end block onto tie rods.
6. Lay baseplate assembly on flat surface and torque nuts to 36 in -lbs
7 Mount divider valves with gasket plates onto baseplate and torque mounting screws to 48 in -lbs

MM VALVE BLOCKS

|  | Single | Twin | Cycle Indicator Pin |  |  |  | Single (1 Outlet) Discharge/Outlet | Twin (2 Outlets) Discharge/Outlet |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Single-Right | Twin-Right | Single-Left | Twin-Left |  |  |
| MM-5 | 871051 | 871052 | - | - | - | - | $010 \mathrm{cu} . \mathrm{in}$. | 005 cu. in |
| MM-10 | 871101 | 871102 | - | - | - | - | 020 cu. in | $.010 \mathrm{cu} . \mathrm{in}$. |
| MM-15 | 871151 | 871152 | 871153 | 871154 | 871155 | 871156 | $030 \mathrm{cu} . \mathrm{in}$. | 015 cu in . |

MM BASEPLATES

| Baseplate <br> Designation | Outlets | Inlet <br> Block | Intermediate <br> Blocks | End <br> Block | Tie Rods |
| :--- | :---: | :---: | :---: | :---: | :---: |
| MM-3 | $2-6$ | 87906 | $(3) 87907$ | 87908 | $(3) 236646$ |
| MM-4 | $2-8$ | 87906 | $(4) 87907$ | 87908 | $(3) 236647$ |
| MM-5 | $2-10$ | 87906 | $(5) 87907$ | 87908 | $(3) 236648$ |
| MM-6 | $2-12$ | 87906 | $(6) 87907$ | 87908 | $(3) 236649$ |
| MM-7 | $2-14$ | 87906 | $(7) 87907$ | 87908 | $(3) 236650$ |
| MM-8 | $2-16$ | 87906 | $(8) 87907$ | 87908 | $(3) 236651$ |

## LNCOLN

One Lincoln Way
St. Lours, Missour 63120-1578
(314) 679-4200

Copyright 1991
Printed in USA

Page

## OPERATION

The inlet passageway is connected to all piston chambers at all times with only one piston free to move at any one time With all pistons at the far right, lubricant from the inlet flows against the right end of piston 1 (See illustration 1)

Lubricant flow shifts piston 1 from right to left dispensing piston 1 output through connecting passages to outlet 1 Piston 1 shift directs flow against right side of piston 2 (See Illustration 2)

Lubricant flow shifts piston 2 from right to left dispening piston 2 output through valve ports of piston 1 and through outlet 2 Piston 2 shift directs lubricantflow against right side of piston 3 (See illustration 3)

Lubricant flow shifts piston 3 from right to left dispensing piston 3 output through valve ports of piston 2 and through outlet 3 Piston 3 shift directs lubricant through connecting passage to the leftside of piston 1 (See Illustration 4)

Lubricant flow against left side of piston begins the second half-cycle which shits pistons from left to right dispensing lubricant through outlets 4,5 and 6 of the divider valve



SERVICE PARTS

| Part | Description | Part | Description | Part | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 15056 | Bearıng Retaıner | 236063 | Plug | 236244 | Indicator Body |
| 34579 | O-Ring | 236142 | Gasket Plate | 236248 | Indicator |
| 34595 | O-Rıng | 236143 | Gasket Plate | 236249 | Groove Pin |
| 50823 | Screw | 23644 | Gasket Plate | 236561 | Nut |
| 56157 | Sprıng | 236149 | Gasket Plate |  |  |
| 70449 | Ball | 236243 | Bearıng |  |  |

## DIMENSIONS



| Baseplate | A | B |
| :---: | :--- | :--- |
| $M M-3$ | $3-1 / 4^{\prime \prime}$ | $4-15 / 32^{\prime \prime}$ |
| $M M-4$ | $4-1 / 32^{\prime \prime}$ | $5-1 / 4^{\prime \prime}$ |
| $M M-5$ | $4-13 / 16^{\prime \prime}$ | $6-1 / 32^{\prime \prime}$ |
| $M M-6$ | $5-19 / 32^{\prime \prime}$ | $6-13 / 166^{\prime \prime}$ |
| $M M-7$ | $6-3 / 8^{\prime \prime}$ | $7-19 / 32^{\prime \prime}$ |
| $M M-8$ | $7-5 / 32^{\prime \prime}$ | $8-3 / 8^{\prime \prime}$ |

