

# DDM & SDM Modular Valves

## Dualine, Grease & Oil

### General

Dualine DDM and SDM lubricating valves have many advantages over traditional line mounted models. All working parts are in the module and these modules are fitted to base manifolds which are permanently fitted to the centralized lubrication system. The double discharge module DDM feeds two lubrication points on alternative system cycles while the single discharge module SDM feeds a single lubrication point on each cycle.

A mixture of double and single discharge modules can be fitted to each manifold either for assembly to serve an odd number of bearings or to give a greater lubricant quantity to selected points. Three sizes of modules can be supplied to cover a wide range of metered application volumes.



### Features

#### Modules

- + Each module can be individually adjusted within its capacity to suit the bearing requirements.
- + A malfunctioning module can be changed in seconds, reducing maintenance time and costs.
- + Positive hydraulic operation – Within design limitations, these valve assemblies can be mounted long distances from the central pumping station.
- + Visual indicator showing operation of each module.
- + Body protected by corrosion resistant electrophoretic paint.

#### Manifolds

- + Manifolds can be permanently fixed to the lubrication system pipework before valves are fitted, reducing possibility of contamination during installation period.
- + O-ring recesses are fitted into the top of the adapter so that the fitter can observe the condition of the O-rings when he is fitting the module.
- + Manifolds are available in various sizes for multiple module configurations.

### Technical Data

<b>Maximum Supply Pressure</b>		5075 psi (350 bar)
<b>Temperature Range</b>		-5°F to 248°F (-20°C to 120°C) -5°F to 194°F (-20°C to 90°C)
<b>Lubricant</b>		Oil or grease (NLGI #3 max)
<b>Materials</b>	Body	Module-Steel (electrophoretically painted) Manifold-Steel zinc plated
	Pistons	Hardened steel
	Packing gland	DDM1/SDM1-Brass DDM5/SDM5-Brass DDM15/SDM15-Steel
	Seals	DDM1/SDM1-Viton DDM5/SDM5-Viton DDM15/SDM15-Nitrile
	Indicator stem	Stainless steel

#### BIJUR DELIMON INTERNATIONAL

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

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

2100 Gateway Centre Blvd., Suite 109  
Morrisville, NC 27560

## Discharge

Valve Size	Discharge Per Outlet Per Double Cycle	
	Maximum	Minimum
DDM1	0.06 cu. in. (1.0 cc)	0.006 cu. in. (0.1 cc)
SDM1	0.12 cu. in. (2.0 cc)	0.012 cu. in. (0.2 cc)
DDM5	0.31 cu. in. (5.0 cc)	0.031 cu. in. (0.5 cc)
SDM5	0.61 cu. in. (10.0 cc)	0.061 cu. in. (1.0 cc)
DDM15	0.92 cu. in. (15.0 cc)	0.183 cu. in. (3.0 cc)
SDM15	1.83 cu. in. (30.0 cc)	0.366 cu. in. (6.0 cc)

## Installation

### Module

Each module can be supplied with four Viton O-rings and four M4 socket headed cap screws to enable it to be fitted to the selected manifold base.

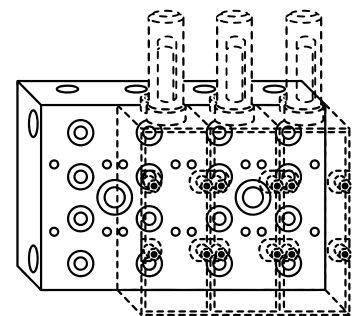
### Manifold

Each manifold requires two mounting screws, except the two-module unit which requires one central mounting screw. (See accessories list on page 3 for ordering information.)

The manifold should be mounted onto a flat surface on the machine in any aspect before the modules are fitted. This is necessary because the mounting screws are fitted into counterbores which are partially covered by the module.

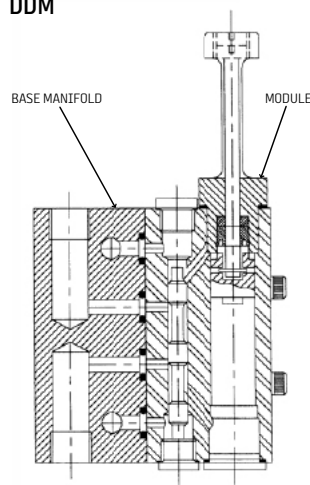
All ports are suitable for use with standard BSP fittings (parallel or taper). The O-rings are supplied with each module and will be retained in their recesses after being pressed into position.

The manifold bases are supplied with two outlet ports for each module section. If a single outlet port is required, either to suit the installation or to give up to twice the maximum discharge, a single discharge valve module model SDM must be used. The outlet port not required under that module must be plugged.

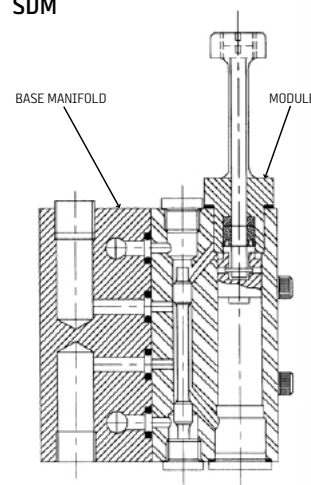


### Assembly

#### DDM



#### SDM



BIJUR DELIMON INTERNATIONAL

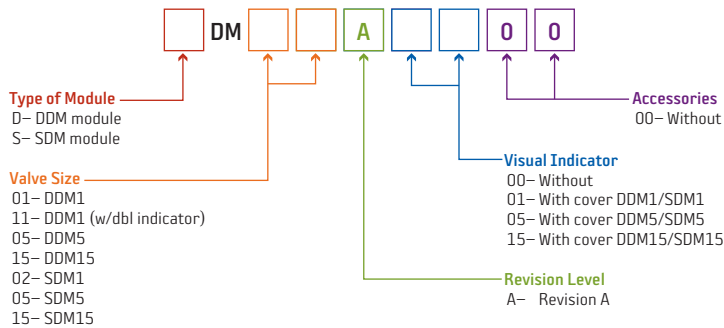
(919) 465 4448 LOCAL  
 (800) 631 0168 TOLL-FREE  
 (919) 465 0516 FAX

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

2100 Gateway Centre Blvd., Suite 109  
 Morrisville, NC 27560

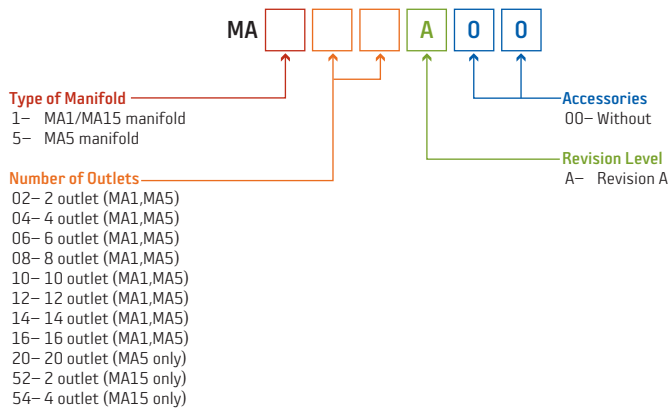
## How to Order

### Modules



The DDM & SDM Modular Valves feature a smart part number ordering system. Choose the module type, valve size and visual indicator. For example: To order a DDM module, valve size DDM15, without a visual indicator, you would use Part #DDM15A0000.

### Manifolds



The DDM & SDM Manifolds feature a smart part number ordering system. Choose the manifold type and the number of outlets. For example: To order a MA5 manifold with 8 outlets, you would use Part #MA508A00.

### Accessories

Description	DDM1/SDM1	DDM5/SDM5	DDM15/SDM15
Mounting kit	DDM100050	DDM500050	DDM150050
Blanking Plate Kit	DDM100001E	DDM500002E	DDM1500002E
Visual indicator with cover	DDMETA0101	DDMETA0501	DDMETA1501
	<b>MA1</b>	<b>MA5/MA15</b>	
Mounting kit (screws and plugs)	MA1022204E	MA515022003E	

BIJUR DELIMON INTERNATIONAL

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

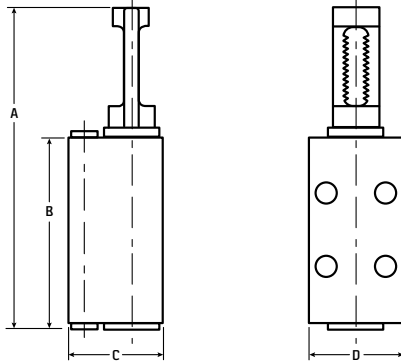
[WWW.BIJURDELIMON.COM](http://WWW.BIJURDELIMON.COM)

2100 Gateway Centre Blvd., Suite 109  
 Morrisville, NC 27560

## Dimensional Schematics

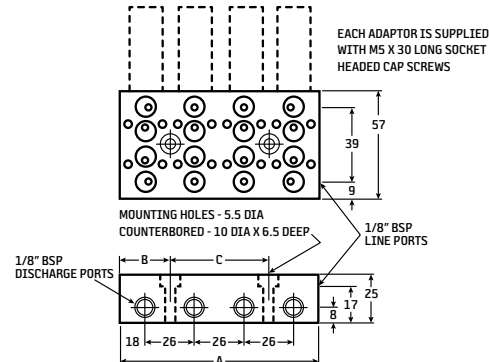
Measurements shown in millimeters.

### DDM & SDM Modules



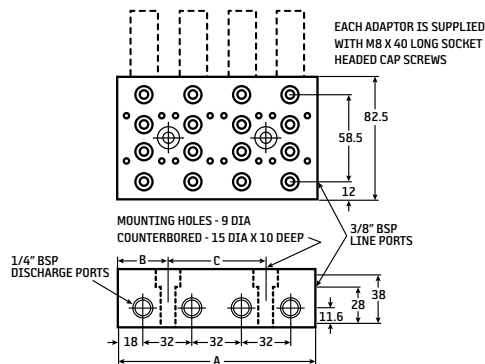
Model	Dimensions (mm)			
	A	B	C	D
DDM1	91	57	29	25
SDM1	91	57	29	25
DDM5	140	80	42	31.7
SDM5	140	80	42	31.7
DDM15	157	88.9	39.7	76.2
SDM15	157	88.9	39.7	76.2

### MA1 Manifold Adapter



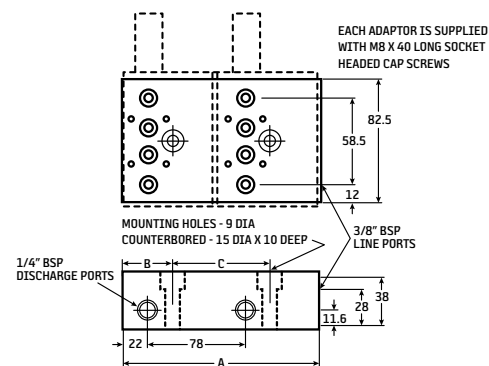
Model	# of modules	# of outlets	Dimensions (mm)		
			A	B	C
MA1-2	1	2	36	7	22
MA1-4	2	4	64	32	--
MA1-6	3	6	90	32	26
MA1-8	4	8	116	32	52
MA1-10	5	10	142	32	78
MA1-12	6	12	168	32	104
MA1-14	7	14	194	32	130
MA1-16	8	16	220	32	156

### MA5 Manifold Adapter



Model	# of modules	# of outlets	Dimensions (mm)		
			A	B	C
MA5-2	1	2	46	9	28
MA5-4	2	4	68	34	--
MA5-6	3	6	100	34	32
MA5-8	4	8	132	34	64
MA5-10	5	10	164	34	96
MA5-12	6	12	196	34	128
MA5-14	7	14	228	34	160
MA5-16	8	16	260	34	192
MA5-20	10	20	324	34	256

### MA15 Manifold Adapter



Model	# of modules	# of outlets	Dimensions (mm)		
			A	B	C
MA15-2	1	2	77	38	--
MA15-4	2	4	155	38	78

BIJUR DELIMON INTERNATIONAL

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

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

2100 Gateway Centre Blvd., Suite 109  
Morrisville, NC 27560

35514 • R2 11/16