



This valve is a 3-way, meter-in, electro-proportional throttle. The flow path, unenergized, has the supply blocked at port 1 and port 2 is drained to tank at port 3. Energizing the coil generates a closing force on the spool, creating a metering orifice in the 1 to 2 direction that is proportional to the coil command current. The valve self-compensates in the 1-to-2 direction and with the addition of an external compensator will provide pressure compensated flow control. Flow in the 2-to-3 direction is not proportional and is limited in the interest of increased resolution and capacity. Flow capacity in the 2-to-3 direction is about 1.5 gpm (6 L/min). This valve is meant to be used in a circuit that has a separate passage to tank such as a cushion lock circuit. Two FMDFs in conjunction with a cushion lock circuit create a meter-in/meter-out 3-position 4-way.

**TECHNICAL DATA** NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Maximum Operating Pressure	5000 psi
Manual Override Force Requirement	5 lbs/1000 psi @ Port 1
Manual Override Stroke	.10 in.
Maximum Valve Leakage at 110 SUS (24 cSt)	2 in <sup>3</sup> /min.@1000 psi

- NOTES:**
- Please verify cartridge clearance requirements when choosing a Sun manifold. Different valve controls and coils require different clearances.
  - An additional 2.00 inches (50,8 mm) beyond the valve extension is needed for coil installation and removal.

CONFIGURATION OPTIONS		Model Code Example: FMDFXCDN				
CONTROL	(X)	FLOW RATE	(C)	SEAL MATERIAL	(N)	COIL *
<b>X</b>	No Manual Override	<b>C</b>	.1 - 6 gpm (0,4 - 23 L/min.)	<b>N</b>	Buna-N	No coil
<b>D</b>	Twist/Lock (Dual) Manual Override	<b>A</b>	.1 - 1.6 gpm (0,4 - 6.1 L/min.)	<b>V</b>	Viton	* Additional coil options are available
<b>L</b>	Twist/Lock (Detent) Manual Override	<b>B</b>	.1 - 4 gpm (0,4 - 15 L/min.)			
		<b>D</b>	.1 - 9 gpm (0,4 - 34 L/min.)			
<b>M</b>	Manual Override					
<b>T</b>	Twist (Momentary) Manual Override					