



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 FMDAs 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 Valve Leakage at 110 SUS (24 cSt)	30 cc/min.@70 bar
Manual Override Force Requirement	33 N/100 bar @ Port 1
Manual Override Stroke	2,5 mm
Seal kit - Cartridge	Buna: 990411007
Seal kit - Cartridge	Viton: 990411006

NOTES Please verify cartridge clearance requirements when choosing a Sun manifold. Different valve controls and coils require different clearances.

CONFIGURATION OPTIONS

Model Code Example: FMDAXDN

CONTROL	(X) FLOW RATE	(D) SEAL MATERIAL	(N) COIL *
X No Manual Override	D .1 - 9 gpm (0,4 - 34 L/min.)	N Buna-N	No coil
D Twist/Lock (Dual) Manual Override	A .1 - 1.6 gpm (0,4 - 6.1 L/min.)	V Viton	212 DIN 43650-Form A, 12 VDC
E Twist (Extended) Manual Override	B .1 - 4 gpm (0,4 - 15 L/min.)		224 DIN 43650-Form A, 24 VDC
L Twist/Lock (Detent) Manual Override	C .1 - 6 gpm (0,4 - 23 L/min.)		712 Twin Lead, 12 VDC
M Manual Override			724 Twin Lead, 24 VDC
T Twist (Momentary) Manual Override			912 Deutsch DT04-2P, 12 VDC
			924 Deutsch DT04-2P, 24 VDC

* Additional coil options are available