



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 connected 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.

CONFIGURATION

M	Control	Manual Override
B	Flow Rate	.1 - 4 gpm (0,4 - 15 L/min.)
N	Seal Material	Buna-N
(none)	Coil	No coil

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: FMDBMBN

CONTROL	(M) FLOW RATE	(B) SEAL MATERIAL	(N) COIL *
M Manual Override	B .1 - 4 gpm (0,4 - 15 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	C .1 - 6 gpm (0,4 - 23 L/min.)		224 DIN 43650-Form A, 24 VDC
L Twist/Lock (Detent) Manual Override			224NX01 DIN 43650-Form A, 24 VDC, no transient voltage suppression (TVS) diodes, with XMD-01 driver
T Twist (Momentary) Manual Override			224NX02 DIN 43650-Form A, 24 VDC, no transient voltage suppression (TVS) diodes, with XMD-02 driver
X No Manual Override			912 Deutsch DT04-2P, 12 VDC
			912NX01 Deutsch DT04-2P, 12 VDC, no transient voltage suppression (TVS) diodes, with XMD-01 driver
			912NX02 Deutsch DT04-2P, 12 VDC, no transient voltage suppression (TVS) diodes, with XMD-01 driver

diodes, with XMD-02
driver

924 Deutsch DT04-2P, 24 VDC

924NX01 Deutsch DT04-2P, 24
VDC, no transient voltage
suppression (TVS)
diodes, with XMD-01
driver

924NX02 Deutsch DT04-2P, 24
VDC, no transient voltage
suppression (TVS)
diodes, with XMD-02
driver

* Additional coil options are available