



**CONFIGURATION**

<b>M</b>	Control	Manual Override
<b>A</b>	Flow Rate	.1 - 1.6 gpm (0,4 - 6.1 L/min.)
<b>N</b>	Seal Material	Buna-N
<b>(none)</b>	Coil	No coil

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.

**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: FMDBMAN**

<b>CONTROL</b>	<b>(M) FLOW RATE</b>	<b>(A) SEAL MATERIAL</b>	<b>(N) COIL *</b>
<b>M</b> Manual Override	<b>A</b> .1 - 1.6 gpm (0,4 - 6.1 L/min.)	<b>N</b> Buna-N	No coil
<b>D</b> Twist/Lock (Dual) Manual Override	<b>B</b> .1 - 4 gpm (0,4 - 15 L/min.)	<b>V</b> Viton	<b>212</b> DIN 43650-Form A, 12 VDC
<b>E</b> Twist (Extended) Manual Override	<b>C</b> .1 - 6 gpm (0,4 - 23 L/min.)		<b>224</b> DIN 43650-Form A, 24 VDC
<b>L</b> Twist/Lock (Detent) Manual Override			<b>224NX01</b> DIN 43650-Form A, 24 VDC, no transient voltage suppression (TVS) diodes, with XMD-01 driver
<b>T</b> Twist (Momentary) Manual Override			<b>224NX02</b> DIN 43650-Form A, 24 VDC, no transient voltage suppression (TVS) diodes, with XMD-02 driver
<b>X</b> No Manual Override			<b>912</b> Deutsch DT04-2P, 12 VDC
			<b>912NX01</b> Deutsch DT04-2P, 12 VDC, no transient voltage suppression (TVS) diodes, with XMD-01 driver
			<b>912NX02</b> 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