

### CONFIGURATION

<b>M</b> Control	Manual Override
<b>A</b> Poppet Configuration	Normally Open 1 to 2, Closed 2 to 3
<b>N</b> Seal Material	Buna-N
<b>224</b> Coil	DIN 43650-Form A, 24 VDC

This solenoid-operated 3-way, 2-position cartridge is a direct-acting, poppet-style directional valve. The valve is normally open between port 1 and port 2 with port 3 blocked. Energizing the valve connects port 2 to 3 and blocks port 1. All flow paths are bidirectional and blocked paths are blocked in both directions. Due to the poppet style construction, this valve has extremely low leakage.

This valve is designed to be used with FLEx Series coils.

### TECHNICAL DATA

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

Maximum Operating Pressure	5000 psi
Maximum Valve Leakage at 110 SUS (24 cSt)	10 drops/min.@5000 psi
Manual Override Force Requirement	5 lbs/1000 psi @ Port 1
Manual Override Stroke	.10 in.
Response Time - Typical	50 ms
Switching Frequency	15,000 max. cycles/hr
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.
- An additional 2.00 inches (50,8 mm) beyond the valve extension is needed for coil installation and removal.

### CONFIGURATION OPTIONS

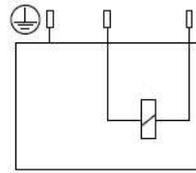
#### Model Code Example: DWDFMAN224

CONTROL	(M) POPPET CONFIGURATION	(A) SEAL MATERIAL	(N) COIL *	(224)
<b>M</b> Manual Override	<b>A</b> Normally Open 1 to 2, Closed 2 to 3	<b>N</b> Buna-N	<b>224</b> DIN 43650-Form A, 24 VDC	
<b>D</b> Twist/Lock (Dual) Manual Override		<b>V</b> Viton	No coil	
<b>L</b> Twist/Lock (Detent) Manual Override				
<b>T</b> Twist (Momentary) Manual Override				
<b>X</b> No Manual Override				

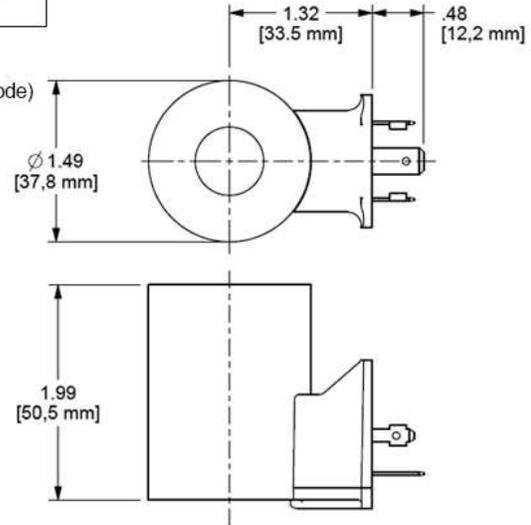
\* Additional coil options are available



**CONFIGURATION**



DC COIL  
(without TVS Diode)



**TECHNICAL DATA**

Operating Temperature Range	-22 to 230 °F
Arc Suppression (TVS)	None
Power Consumption (cold) - at rated voltage	25 Watts
Maximum Ambient Temperature	122 °F
Voltage/Frequency	24 VDC
Operating Voltage Range	+10%/-15%
Duty Cycle Rating	100 %
Connector	ISO4400 - EN/DIN175301-803, Form A (ISO/DIN 43650) 3-pin
Coil Nut Torque	4.5 lbf in.

**USED WITH**

DBAF	DFBF	DFBG	DLDF	DMBF	DNBF	DTAF	DTBF	DTDF	DWDF
FPBF	FPBG	FPBI	FPBJ	FPBU	RVCK	RVCL	RVCM	RVCN	991711300
991711600	991712300	991712600	991713030	991713060	991740001	XMD-01	XMD-02		