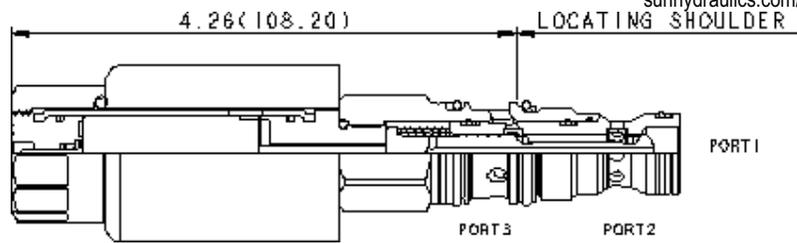


M or S-Control, N-Spool



This solenoid-operated 3-way, 2-position cartridge is a direct-acting, balanced spool directional valve.

**CONFIGURATION**

<b>M</b>	Control	Manual Override
<b>N</b>	Spool Configuration	Normally Open 2 to 3, Closed 1 to 2
<b>N</b>	Seal Material	Buna-N
<b>224</b>	Material/Coating	
<b>(none)</b>	Coil	No coil

**TECHNICAL DATA**

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

Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	80 cc/min.@210 bar
Manual Override Force Requirement	33 N/100 bar @ Port 1
Manual Override Stroke	2,5 mm
Response Time - Typical	50 ms
Switching Frequency	15,000 max. cycles/hr
Seal kit - Cartridge	Buna: 990411007
Seal kit - Cartridge	EPDM: 990411014
Seal kit - Cartridge	Viton: 990411006

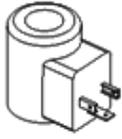
**NOTES**

- 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.

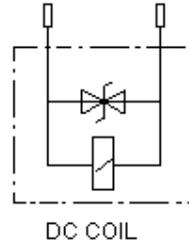
**CONFIGURATION OPTIONS**
**Model Code Example: DMDAMNN224**

<b>CONTROL</b>	<b>(M)</b>	<b>SPOOL CONFIGURATION</b>	<b>(N)</b>	<b>SEAL MATERIAL</b>	<b>(N)</b>	<b>MATERIAL/COATING</b>
<b>M</b> Manual Override		<b>N</b> Normally Open 2 to 3, Closed 1 to 2		<b>N</b> Buna-N		Standard Material/Coating
<b>X</b> No Manual Override		<b>A</b> Normally Open 1 to 2, Closed 2 to 3		<b>E</b> EPDM		/LH Mild Steel, Zinc-Nickel
<b>D</b> Twist/Lock (Dual) Manual Override		<b>B</b> Normally Open 1 to 2, Closed 2 to 3, Closed Transition		<b>V</b> Viton		<b>COIL *</b> <b>(224)</b>
<b>L</b> Twist/Lock (Detent) Manual Override		<b>P</b> Normally Open 1 to 3, Closed 1 to 2				<b>224</b> DIN 43650-Form A, 24 VDC
<b>T</b> Twist (Momentary) Manual Override		<b>R</b> Normally Open 2 to 3, Closed 1 to 2, Closed Transition				No coil
						<b>212</b> DIN 43650-Form A, 12 VDC
						<b>912</b> Deutsch DT04-2P, 12 VDC
						<b>924</b> Deutsch DT04-2P, 24 VDC

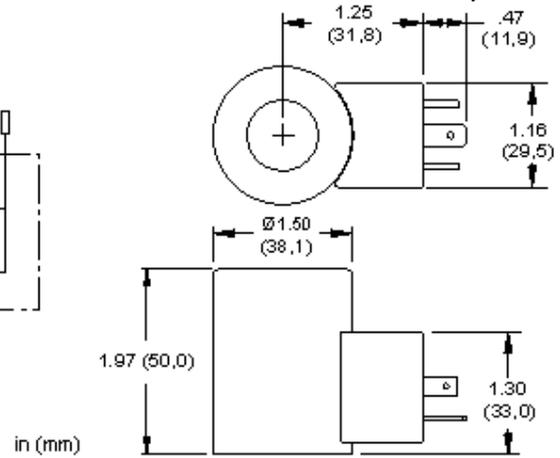
\* Additional coil options are available



**CONFIGURATION**



DC COIL



**TECHNICAL DATA**

Maximum Coil Temperature at 68°F (20°C) Ambient	218°F (105°C)
Arc Suppression (TVS)	Included
Power Consumption (cold) - at rated voltage	22 watts
Maximum Ambient Temperature	50 °C
Voltage/Frequency	24 VDC
Operating Voltage Range	+/- 10% nominal
Duty Cycle Rating	100 %
Connector	ISO4400 - EN/DIN175301-803, Form A (ISO/DIN 43650) 3-pin
Connector Environment Rating	IP65/IP67
Coil Nut Torque	0,5 Nm

**USED WITH**

- |      |       |      |      |       |      |      |       |      |      |
|------|-------|------|------|-------|------|------|-------|------|------|
| DMDA | DMDAS | DNCA | DNDA | DNDAS | DNDC | DNDY | DNDYS | FMDA | FMDB |
| FPCC | FPCH  | FPFK | FPHK | HDDA  | PRDM | PRDN | PSDL  | PSDP | RBAN |
| RBAP |       |      |      |       |      |      |       |      |      |