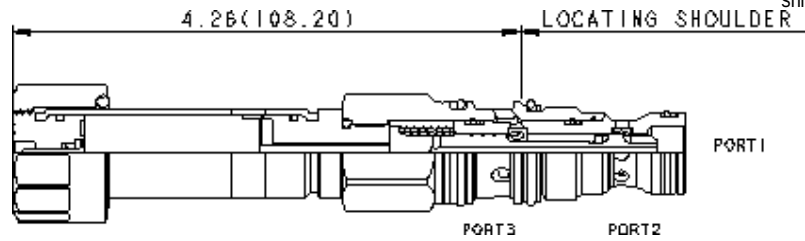


M or S-Control, A-Spool



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

CONFIGURATION

M	Control	Manual Override
A	Spool Configuration	Normally Open 1 to 2, Closed 2 to 3
N	Seal Material	Buna-N
(none)	Coil	No coil

TECHNICAL DATA

Maximum Operating Pressure	5000 psi
Response Time - Typical	50 ms
Maximum Valve Leakage at 110 SUS (24 cSt)	5 in ³ /min.@3000 psi
Switching Frequency	15000 cycles/hr
Manual Override Force Requirement	5 lbs/1000 psi @ Port 1
Manual Override Stroke	.10 in.
Seal kit - Cartridge	Buna: 990-411-007
Seal kit - Cartridge	Viton: 990-411-006

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: DMDAMAN

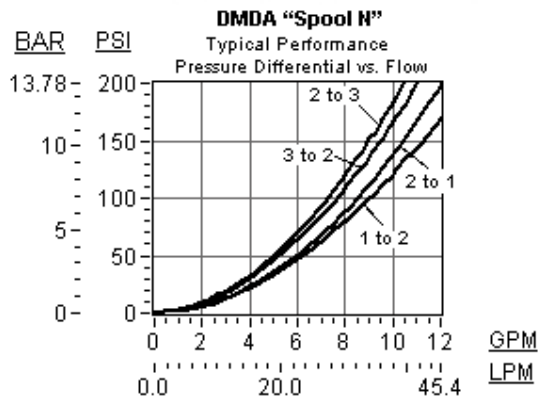
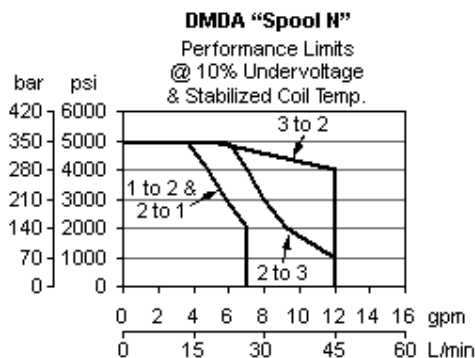
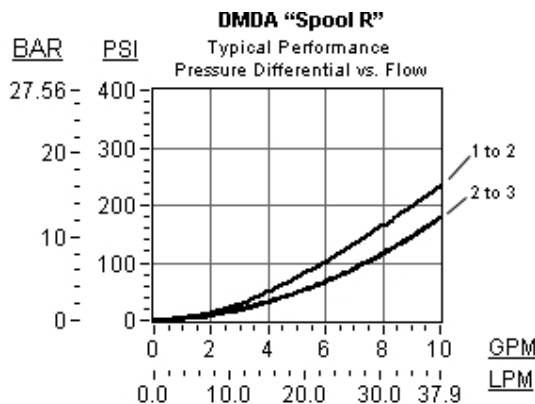
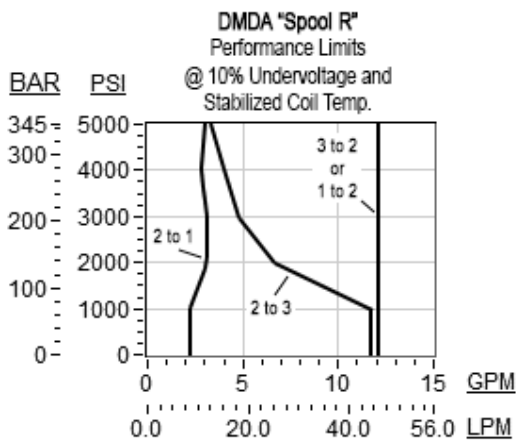
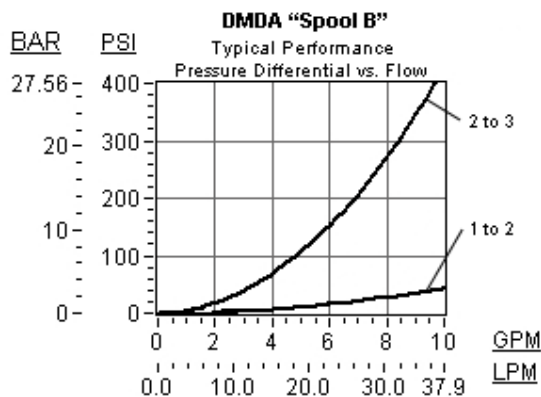
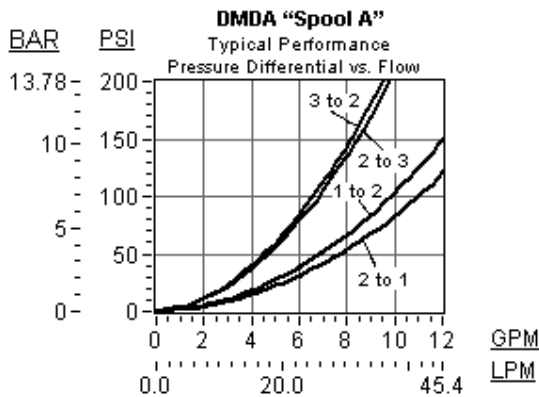
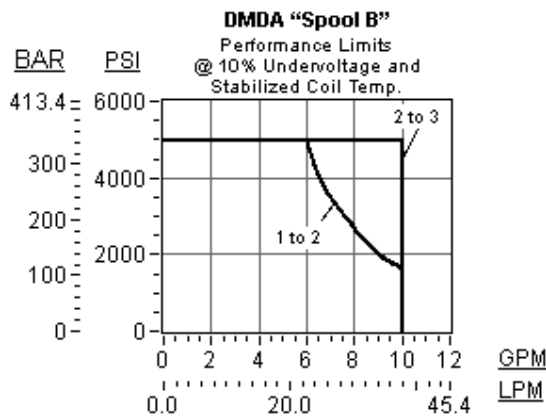
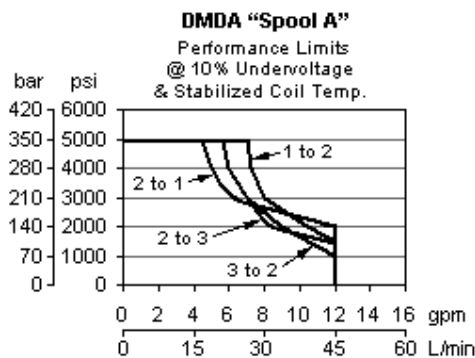
CONTROL	(M)	SPOOL CONFIGURATION	(A)	SEAL MATERIAL	(N)	COIL *
M Manual Override		A Normally Open 1 to 2, Closed 2 to 3		N Buna-N		No coil
X No Manual Override		N Normally Open 2 to 3, Closed 1 to 2		E EPDM		212 DIN 43650 3 pin (Hirschman), 12 VDC
D Twist/Lock (Dual) Manual Override		B Normally Open 1 to 2, Closed 2 to 3, Closed Transition		V Viton		224 DIN 43650 3 pin (Hirschman), 24 VDC
L Twist/Lock (Detent) Manual Override		P Normally Open 1 to 3, Closed 1 to 2				712 Twin Lead, 12 VDC
T Twist (Momentary) Manual Override		R Normally Open 2 to 3, Closed 1 to 2, Closed Transition				724 Twin Lead, 24 VDC
						912 Deutsch DT04-2P, 12 VDC
						924 Deutsch DT04-2P, 24 VDC

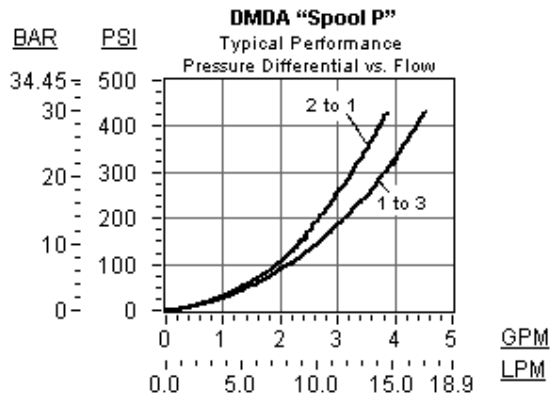
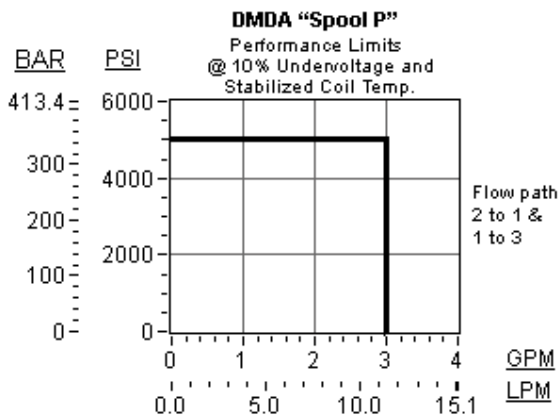
* Additional coil options are available

TECHNICAL FEATURES

- The solenoid tube assembly is fatigue rated for 5000 psi (350 bar) service.
- Spools B and R are closed in the transition between their two positions. This results in a higher performance limit at the expense of lower capacity. When used as pilot controls, where capacity is not a factor, the closed transition will provide faster and more consistent response times.
- This valve is direct actuated and requires no minimum hydraulic pressure for operation.
- On models equipped with the D or L control, the detent mechanism in the manual override is meant for temporary actuation. The D, L and T manual control assembly has a mechanical life expectancy of approximately 7,000 cycles.
- This valve utilizes a wet armature design. This means that the working fluid surrounds the armature and is exposed to the heat generated by the coil. This can be a factor if the coil is energized for long periods of time. Some fluids, notably water/glycol mixtures, break down at these temperatures over time and form varnishes that will affect the function of the cartridge.
- Coils are interchangeable with other Sun Series 1 solenoid products and can be mounted on the tube in either direction.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

PERFORMANCE CURVES





RELATED MODELS

- [DMDAS](#) 3-way, soft shift, solenoid-operated directional spool valve
- [DMDAZ](#) 3-way, solenoid-operated directional spool valve with position switch

RELATED ACCESSORIES

- [773-812](#) 12 VDC weatherized coil with Metri-Pack, Series 150-2M connector
- [773-814](#) 14 VDC weatherized coil with Metri-Pack, Series 150-2M connector
- [773-824](#) 24 VDC weatherized coil with Metri-Pack, Series 150-2M connector
- [773-828](#) 28 VDC weatherized coil with Metri-Pack, Series 150-2M connector
- [991-055](#) T-11A cavity, weatherized coil seal kit
- [991-225](#) Momentary/twist operation, manual override control kit, T control
- [991-226](#) Detent/lock operation, manual override control kit, L control
- [991-227](#) Dual twist/lock operation, manual override control kit, D control