



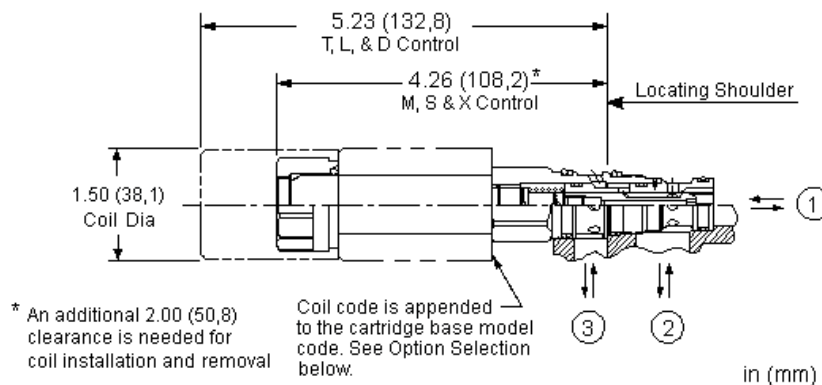
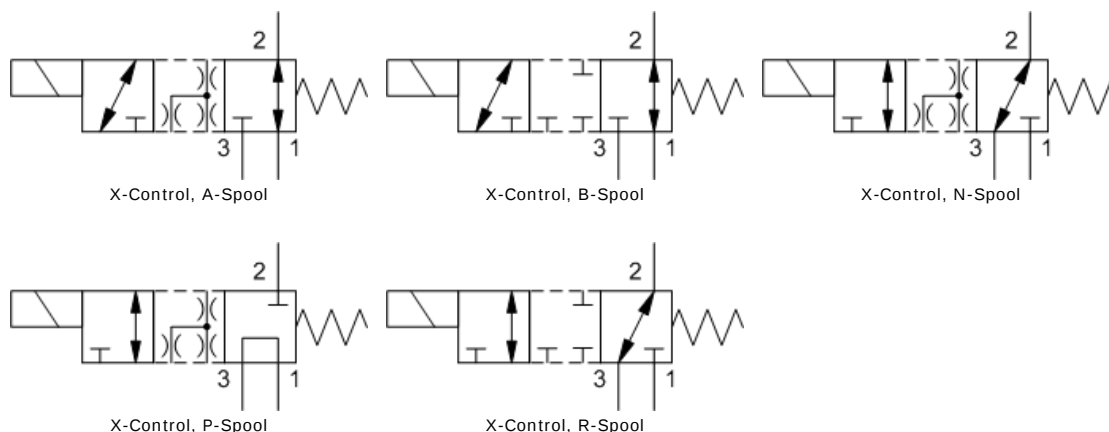
3-way, solenoid-operated directional spool valve

Capacity:
12 gpm (45 L/min.)

Model:
DMDA

Product Description

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



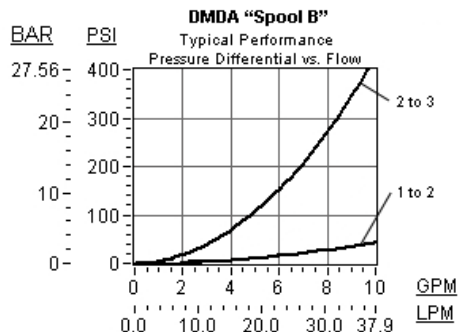
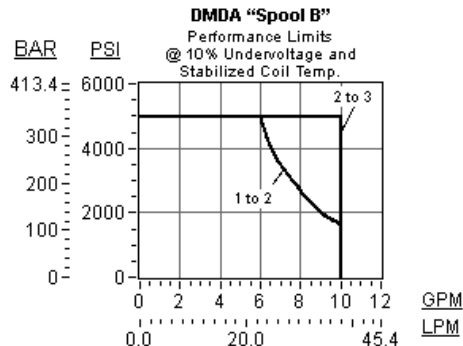
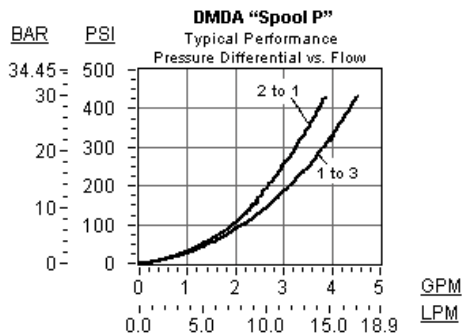
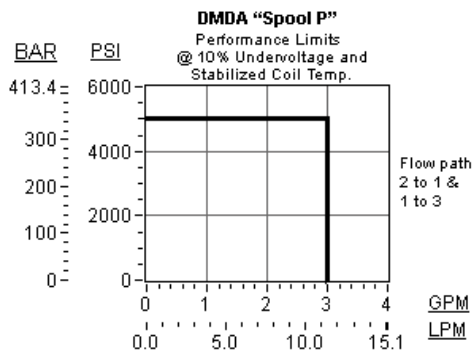
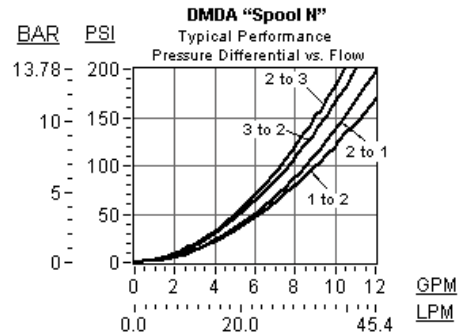
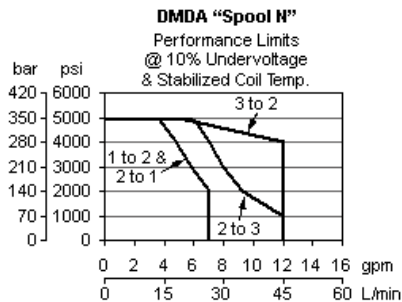
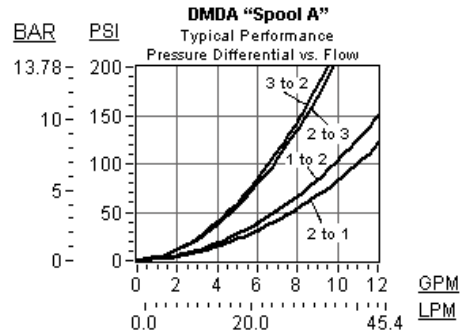
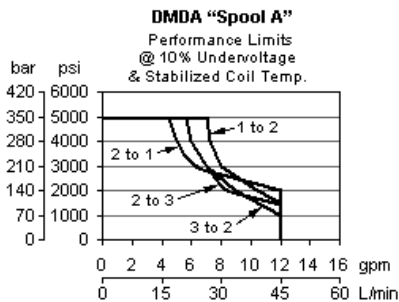
Technical Features

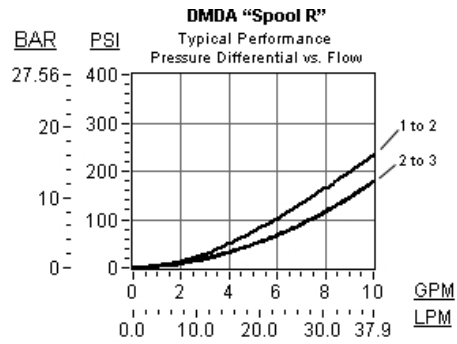
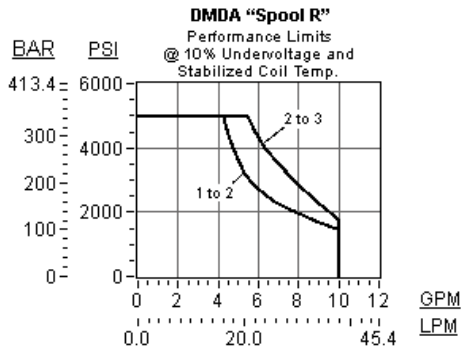
- The solenoid tube assembly is fatigue rated for 5000 psi (350 bar) service.
- This valve utilizes a wet armature design. This means that the working fluid surrounds the armature and is exposed to the heat generated by the coil. This can be a factor if the coil is energized for long periods of time. Some fluids, notably water/glycol mixtures, break down at these temperatures over time and form varnishes that will affect the function of the cartridge.
- 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.
- Coils are interchangeable with other Sun Series 1 solenoid products and can be mounted on the tube in either direction.
- This valve is direct actuated and requires no minimum hydraulic pressure for operation.
- 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.

Technical Data

	U.S. Units	Metric Units
Cavity		T-11A

Capacity	12 gpm	45 L/min.
Manual Override Force Requirement	5 lbs/1000 psi @ Port 1	3 kgs/100 bar @ Port 1
Manual Override Stroke	.10 in.	2,5 mm
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	5 in ³ /min. @3000 psi	80 cc/min. @210 bar
Response Time - Typical	50 ms	
Series (from Cavity)	Series 1	
Switching Frequency	15000 cycles/hr	
Solenoid Tube Diameter	.75 in.	19 mm
Valve Hex Size	7/8 in.	22,2 mm
Valve Installation Torque	30 - 35 lbf ft	40 - 50 Nm
Seal Kits - Cartridge	Buna: 990-411-007	
Seal Kits - Cartridge	Viton: 990-411-006	
Seal Kits - Coil	Viton: 990-770-006	
Model Weight	0.74 lb.	0.34 kg.





DMDA-XAN-***

Control	Spool Configuration	Seal Material	Coil
Preferred Options	Preferred Options	Preferred Options	*** See Coil Options Below
M Manual Override	A Normally Open 1 to 2, Closed 2 to 3	N Buna-N	
X No Manual Override	N Normally Open 2 to 3, Closed 1 to 2	Standard Options	
Standard Options	Standard Options	V Viton	
D Twist/Lock (Dual) Manual Override	B Normally Open 1 to 2, Closed 2 to 3, Closed Transition		
L Twist/Lock (Detent) Manual Override	P Normally Open 1 to 3, Closed 1 to 2		
T Twist Manual Override	R Normally Open 2 to 3, Closed 1 to 2, Closed Transition		

Standard Coil Options

AMP Junior Timer	Deutsch DT04-2P	DIN 43650 4 pin (Hirschman)	Metri-Pack	SAE J858A	Twin Lead

*** no coil	524 SAE J858A 24 VDC	812 Metri-Pack 12 VDC
211 DIN 43650 4 pin (Hirschman) 115 VAC	528 SAE J858A 28 VDC	814 Metri-Pack 14 VDC
212 DIN 43650 4 pin (Hirschman) 12 VDC	536 SAE J858A 36 VDC	824 Metri-Pack 24 VDC
214 DIN 43650 4 pin (Hirschman) 14 VDC	612 AMP Junior Timer 12 VDC	828 Metri-Pack 28 VDC
223 DIN 43650 4 pin (Hirschman) 230 VAC	614 AMP Junior Timer 14 VDC	836 Metri-Pack 36 VDC
224 DIN 43650 4 pin (Hirschman) 24 VDC	624 AMP Junior Timer 24 VDC	848 Metri-Pack 48 VDC
228 DIN 43650 4 pin (Hirschman) 28 VDC	628 AMP Junior Timer 28 VDC	912 Deutsch DT04-2P 12 VDC
236 DIN 43650 4 pin (Hirschman) 36 VDC	636 AMP Junior Timer 36 VDC	914 Deutsch DT04-2P 14 VDC
248 DIN 43650 4 pin (Hirschman) 48 VDC	712 Twin Lead 12 VDC	924 Deutsch DT04-2P 24 VDC
297 DIN 43650 4 pin (Hirschman) 24 VAC	724 Twin Lead 24 VDC	928 Deutsch DT04-2P 28 VDC
298 DIN 43650 4 pin (Hirschman) 220 VDC	728 Twin Lead 28 VDC	936 Deutsch DT04-2P 36 VDC

299 DIN 43650 4 pin
(Hirschman) 127 VDC

514 SAE J858A 14 VDC

Embedded Coil Options

2E12V DIN 43650 4 pin
(Hirschman) programmable
via IR link coil/power saver
12 VDC 0-10V

2E24V DIN 43650 4 pin
(Hirschman) programmable
via IR link coil/power saver
24 VDC 0-10V

Additional Options

Additional Coils

512 SAE J858A 12 VDC

548 SAE J858A 48 VDC

648 AMP Junior Timer 48 VDC

71219 Twin Lead to Delphi
Weather-Pack Connector, 9
inch lead length, 12 VDC

736 Twin Lead 36 VDC

4E12V Deutsch DT04-6P
programmable via IR link
coil/power saver 12 VDC 0-
10V

71239 Twin Lead to Connector, 9
inch lead length

71299 Twin Lead to Deutsch
connector, 9 inch lead
length

714 Twin Lead 14 VDC

72419 Twin Lead to Delphi
Weather-Pack Connector, 9
inch lead length 24 VDC

948 Deutsch DT04-2P 48 VDC

4E24V Deutsch DT04-6P
programmable via IR link
coil/power saver 24 VDC 0-
10V

72429 Twin Lead to Connector, 9
inch lead length

72439 Twin Lead to Connector, 9
inch lead length

72499 Twin Lead to Deutsch
connector, 9 inch lead
length

748 Twin Lead 48 VDC

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