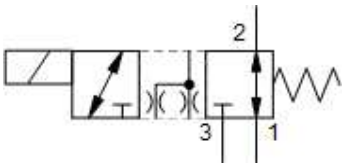
MODEL
DMBD

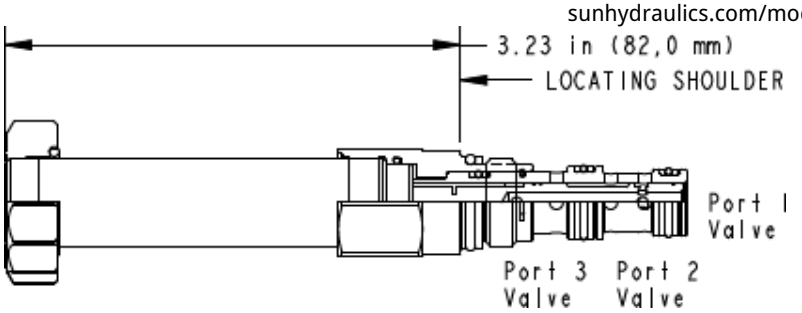
FLeX Series 3-way, solenoid-operated directional spool valve - 3000 psi (210 bar)

CAPACITY: 4 gpm / CAVITY: T-150A

sunhydraulics.com/model/DMBD



X-Control, A-Spool



CONFIGURATION

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

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

TECHNICAL DATA

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

Cavity	T-150A
Series	0
Capacity	4 gpm
Maximum Operating Pressure	3000 psi
Typical Valve Leakage at 110 SUS (24 cSt) from port 1 to port 3	3 in³/min.@3000 psi
Response Time - Typical	50 ms
Switching Frequency	15,000 max. cycles/hr
Solenoid Tube Diameter	.63 in.
Valve Hex Size	3/4 in.
Valve Installation Torque	25 - 30 lbf ft
Seal kit - Cartridge	Buna: 990150007
Seal kit - Cartridge	Viton: 990150006
Seal and nut kit - Coil	Viton: 990740006
Model Weight	0.43 lb.

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: DMBDArray

CONTROL (X)	SPOOL CONFIGURATION (A)	SEAL MATERIAL (N)	COIL *
X No Manual Override	**A** Normally Open 1 to 2, Closed 2 to 3	**N** Buna-N	No coil
P Manual Pull Override	**N** Normally Open 2 to 3, Closed 1 to 2	**V** Viton	

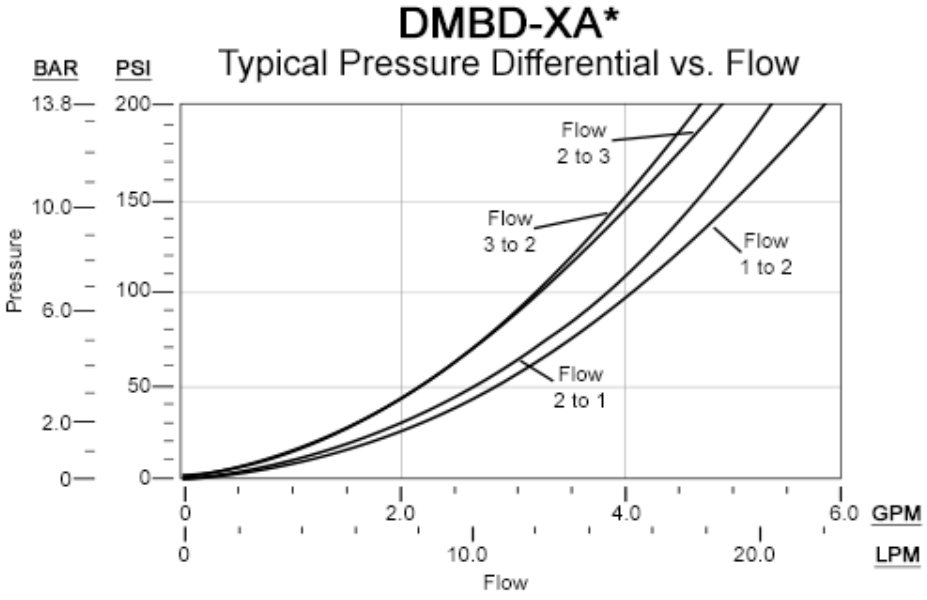
* Additional coil options are available

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TECHNICAL FEATURES

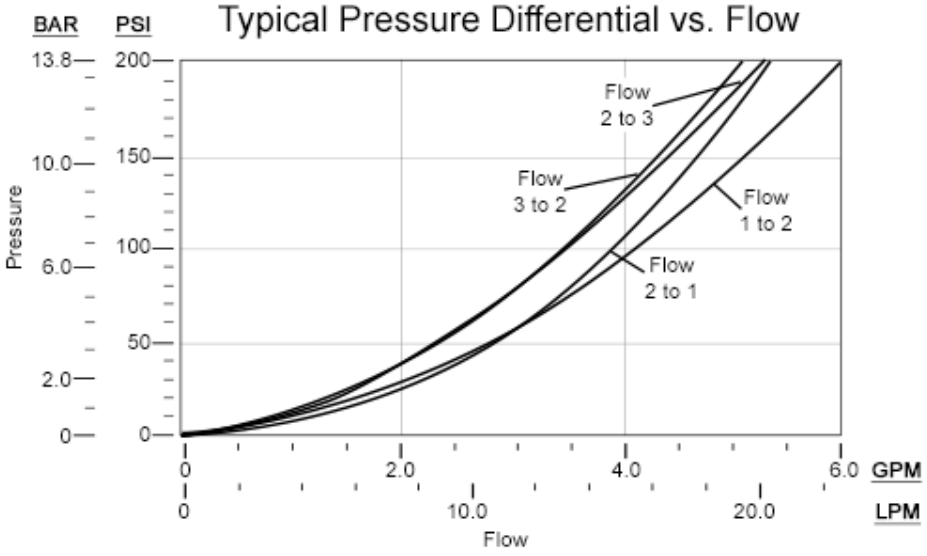
- This valve is direct actuated and requires no minimum hydraulic pressure for operation.
- Designed and tested to 10-million operational cycles at full-rated pressure.
- Exceeds new NFPA test standard T2.6.1 R2014 for fatigue and burst pressure ratings.
- Designed using CFD simulation for optimized geometries.
- All configurations of this valve include zinc-nickel plating as standard for 1000-hour salt fog protection.
- Coil connector options offer ratings up to IP69K. See individual coil product pages for details.
- A FULL DATA SHEET is available for this model using the link at the top of the page.
- 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.
- A wide variety of coil termination and voltage options are available, with and without surge protection. See the CONFIGURATION section.
- 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



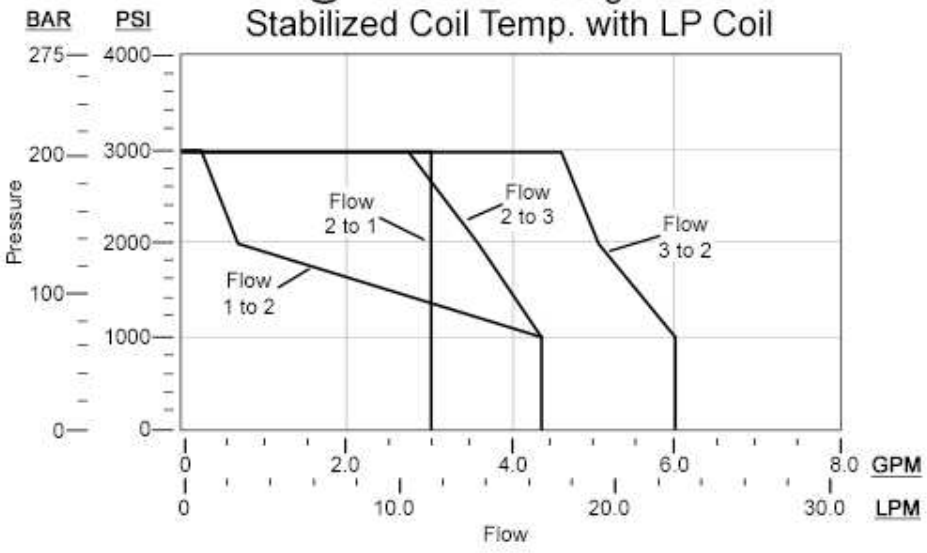
DMBD-XN*

Typical Pressure Differential vs. Flow



DMBD-XA*

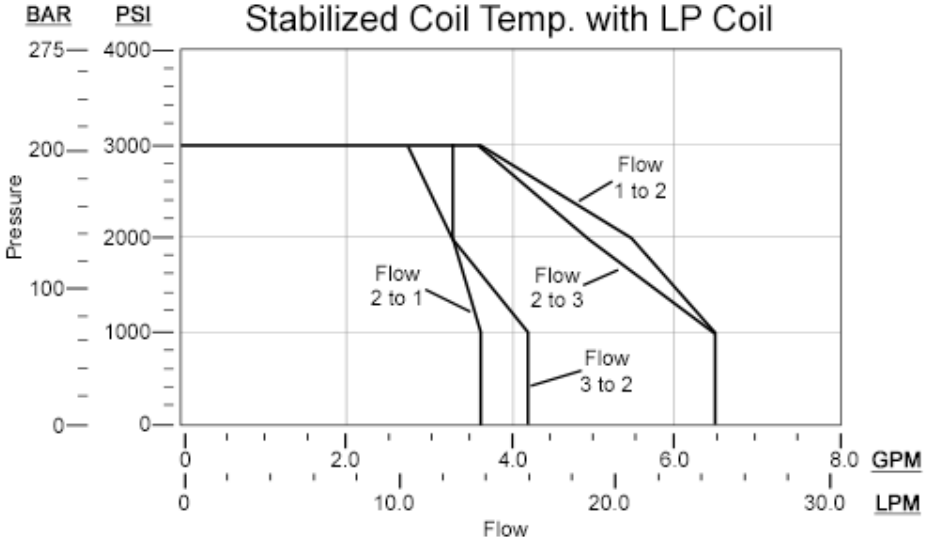
Performance Limits
@ 15% Undervoltage and
Stabilized Coil Temp. with LP Coil



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DMBD-XN*

Performance Limits
@ 15% Undervoltage and
Stabilized Coil Temp. with LP Coil



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