

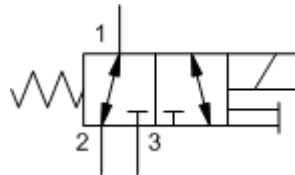
## 3-way, 2-position, solenoid-operated directional spool valve - pilot capacity

Functional Group:  
 Products : Cartridges : Directional : 3 Way : Solenoid Operated Spool

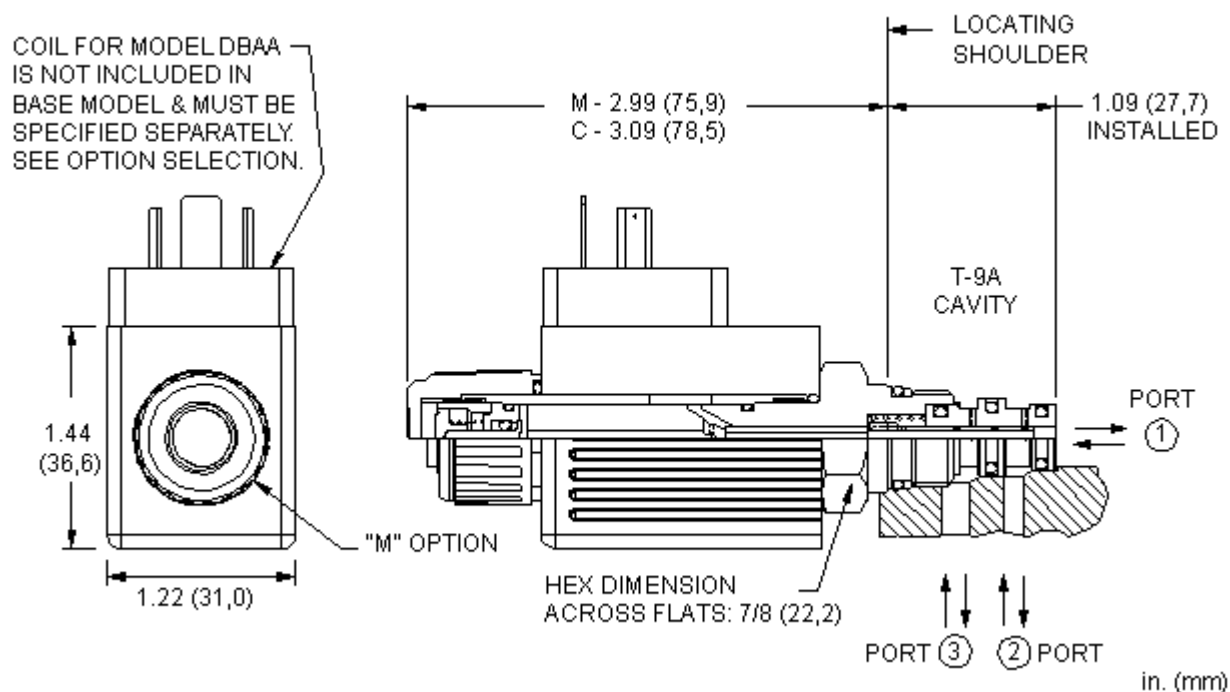
Capacity:  
 .25 gpm (1 L/min.)  
 Model:  
 DBAA-MHN

### Product Description

This solenoid-operated, 2-position, 3-way cartridge is a direct-acting, balanced spool pilot valve used to pilot other full-flow valves. The valve is normally open between port 1 and port 2 or port 1 and port 3 and all flow paths are bidirectional.



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### Technical Features

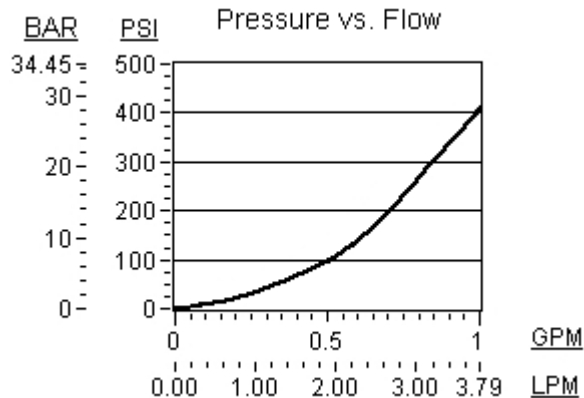
- This valve is direct actuated and requires no minimum hydraulic pressure for operation.
- Valves exhibit extremely low leakage rates; less than 10 drops/min. @ 5000 psi (350 bar).
- Highly efficient tube design requires only 12 Watts to shift the valve.
- This valve utilizes a wet armature design. 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.
- Coils are interchangeable with other Sun Series P pilot 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.

Technical Data

	U.S. Units	Metric Units
Model Weight	0.33 lb.	0.15 kg.
Cavity	T-9A	
Capacity	.25 gpm	1 L/min.
Manual Override Force Requirement	10 lbs/1000 psi @ Port 1	6,6 kgs/100 bar @ Port 1
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	10 drops/min. @5000 psi	10 drops/min. @350 bar
Response Time - Typical	30 ms	
Series (from Cavity)	Series P	
Switching Frequency	15000 cycles/hr	
Solenoid Tube Diameter	.56 in.	14,2 mm
Valve Hex Size	7/8 in.	22,2 mm
Valve Installation Torque	25 - 30 lbf ft	35 - 40 Nm
Seal Kits	Buna: 990-009-007	
Seal Kits	Viton: 990-009-006	



DBAA-MHN

Control

Spool Configuration

External Material/Seal Material

M Manual Override +0.00

H Normally Open 1 to 2,  
Closed 1 to 3

+0.00 N Buna-N +0.00

Stainless material/seal options not available for this model

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