



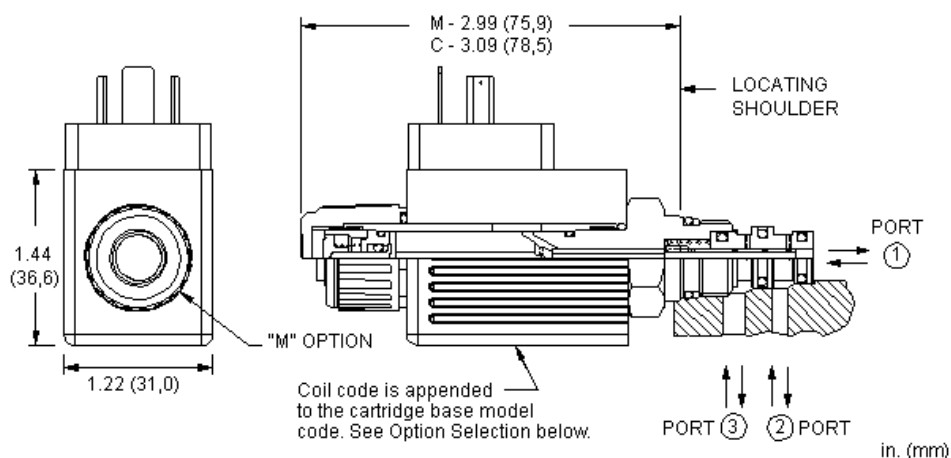
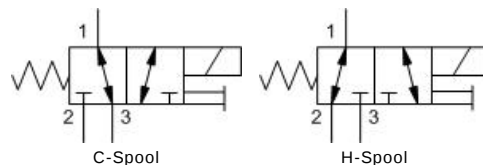
3-way, solenoid-operated directional spool valve - pilot capacity

Capacity:
.25 gpm (1 L/min.)

Model:
DBAA

Product Description

This solenoid-operated 3-way, 2-position 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.



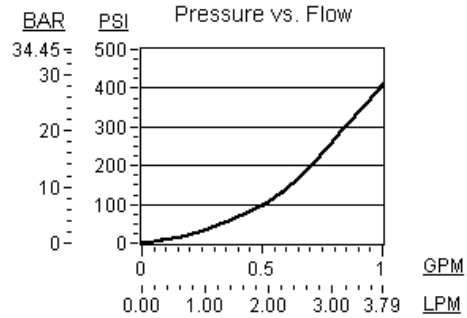
Technical Features

- The solenoid tube assembly is fatigue rated for 5000 psi (350 bar) service.
- This valve is direct actuated and requires no minimum hydraulic pressure for operation.
- Highly efficient tube design requires only 12 Watts to shift the valve.
- Valves exhibit extremely low leakage rates; less than 10 drops/min. @ 5000 psi (0,7 cc/min @ 350 bar).
- 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
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	0,7 cc/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	20 - 25 lbf ft	27 - 33 Nm
Seal Kits - Cartridge	Buna: 990-009-007	
Seal Kits - Cartridge	Viton: 990-009-006	
Seal Kits - Coil	Viton: 990-760-006	
Model Weight	0.33 lb.	0.15 kg.



DBAA-MCN- * * *

Control	Spool Configuration	Seal Material	Coil
Standard Options	Standard Options	Standard Options	*** See Coil Options Below
C Concealed Manual Override	C Normally Open 1 to 3, Closed 1 to 2	N Buna-N	
M Manual Override	H Normally Open 1 to 2, Closed 1 to 3	V Viton	

Standard Coil Options

		
DIN 43650 4 pin (Hirschman)	SAE J858A	Twin Lead

*** no coil	236 DIN 43650 4 pin (Hirschman) 36 VDC	506 SAE J858A 6 VDC
206 DIN 43650 4 pin (Hirschman) 6 VDC	248 DIN 43650 4 pin (Hirschman) 48 VDC	512 SAE J858A 12 VDC
211 DIN 43650 4 pin (Hirschman) 115 VAC	311 NFPA 115 VAC	524 SAE J858A 24 VDC
212 DIN 43650 4 pin (Hirschman) 12 VDC	323 NFPA 230 VAC	712 Twin Lead 12 VDC
223 DIN 43650 4 pin (Hirschman) 230 VAC	324 NFPA 24 VDC	724 Twin Lead 24 VDC
224 DIN 43650 4 pin (Hirschman) 24 VDC		

Additional Options

Additional Coils

706 Twin Lead 6 VDC