

2-way, pilot operated, directional valve with internal drain to port 3 - normally open

Functional Group:

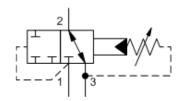
Products: Cartridges: Directional; DP**, DR**, DV**: 2 Way - 3 Port - Normally Open: Pilot Operated

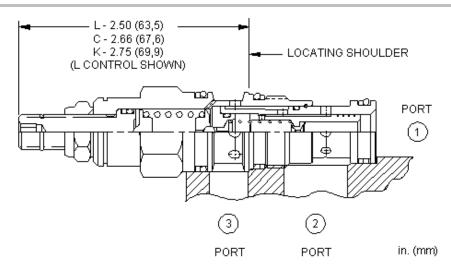
Capacity:
7 gpm (28
L/min.)

Model: **DPBA**

Product Description

Normally open, pilot-operated, 2-way directional cartridges are switching devices typically used in moderate flow circuits. They can be used by themselves or to actuate larger pilot-operated directional cartridges or logic cartridges. The valve shifts when the pressure differential between port 1 and port 3 exceeds the setting.





Technical Features

Seal Kits - Cartridge Model Weight

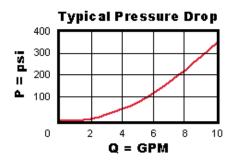
- Pressure at port 3 is directly additive to the setting of the valve.
 Because of this, port 3 may not be useable as a work port in your circuit. If this is a consideration, the 4 port version of this valve may be a solution.
- Direct-acting and pilot-operated versions of these valves are interchangeable. They fit the same cavities and have the same flow paths.
- This valve is not bistable; it is capable of modulating between the two positions shown.
- Maximum pressure at port 3 should be limited to 3000 psi (210 bar).
 This is due to fatigue strength limits not hydraulic operating limits.
- When pilot pressure exceeds the valve setting, pilot flow may be a consideration. See performance curves for pilot consumption vs. load pressure above the valve setting. If this is a problem, the direct acting version of this valve would be a solution.
- 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.

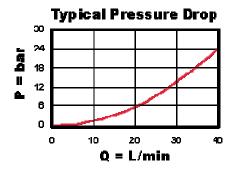
Viton: 990-011-006

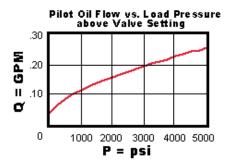
0.15 kg.

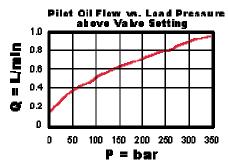
0.33 lb.

Technical Data		
	U.S. Units	Metric Units
Cavity	T-11A	
Capacity	7 gpm	28 L/min.
Control Pilot Flow	7 - 10 in³/min.	0,11 - 0,16 L/min.
Factory Pressure Settings Established at	4 gpm	15 L/min.
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	1 in³/min.@1000 psi	15 cc/min.@70 bar
Series (from Cavity)	Series 1	
Adjustment - Number of Clockwise Turns to Increase Setting	5	
Valve Hex Size	7/8 in.	22,2 mm
Valve Installation Torque	30 - 35 lbf ft	40 - 50 Nm
Adjustment Screw Internal Hex Size	5/32 in.	4 mm
Adjustment Locknut/Cap Hex Size	9/16 in.	15 mm
Adjustment Nut Torque	80 - 90 lbf in.	9 - 10 Nm
Seal Kits - Cartridge	Buna: 990-011-007	









DPBA-LAN

Control

Standard Options

- C* Tamper Resistant Factory Set
- **K** Handknob
- L Standard Screw Adjustment

Adjustment Range

A 100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting

Standard Options

- **B** 50 1500 psi (3,5 105 bar), 1000 psi (70 bar) Standard Setting
- D 25 800 psi (1,7 55 bar), 400 psi (28 bar) Standard Setting
- **E** 25 400 psi (1,7 28 bar), 200 psi (14 bar) Standard Setting
- **W** 150 4500 psi (10,5 315 bar), 1000 psi (70 bar) Standard Setting

Seal Material

Standard Options

N Buna-NV Viton

Material/Coating Modifier

Preferred Options

No modifier (standard material with no special coating)
Special Options

/AP Stainless Steel, Passivated

Control: C

Control: L

Our corrosion resistant product line is growing! If you are interested in a corrosion resistant option for this model, please contact Sun.

Additional Options

Control

O Handknob with Panel Mount

Adjustment Range

- **C** 150 6000 psi (10,5 420 bar), 1000 psi (70 bar) Standard Setting
- **K** 75 1500 psi (5 105 bar), 1000 psi (70 bar) Standard Setting

Seal Material

When the modifier is /AP, the control must be C or L