

2-way, pilot operated, directional valve with drain to port 4 - normally open

Capacity:
7 gpm (28 L/min.)

Functional Group:

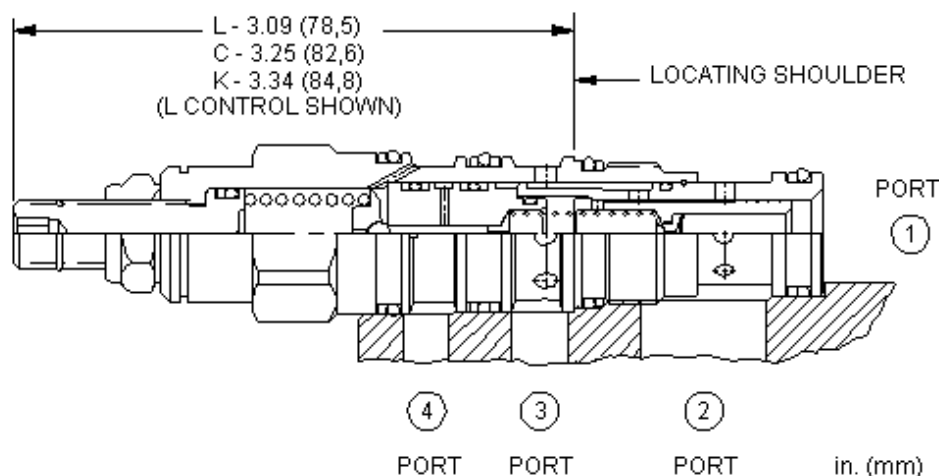
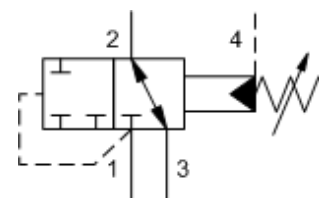
Products : Cartridges : Directional; DP**, DR**, DV** : 2 Way - 4 Port - Normally Open : Pilot Operated

Model:

DPBM

Product Description

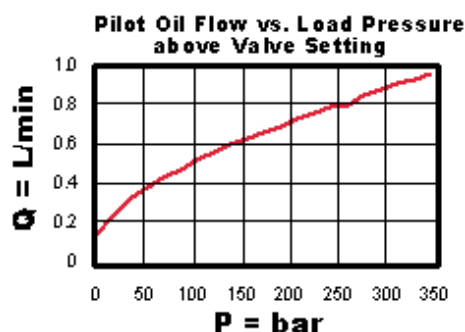
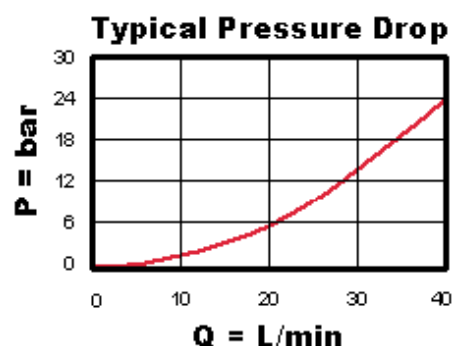
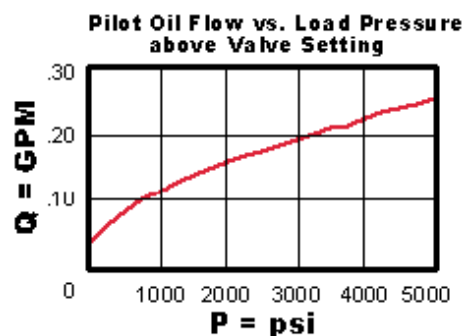
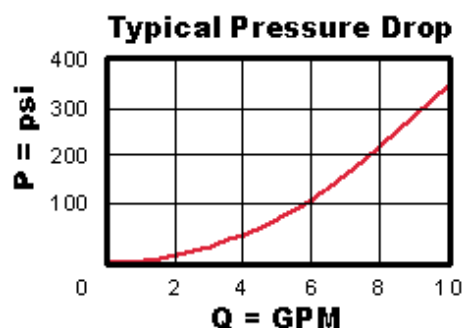
Normally open, pilot-operated, 2-way directional cartridges are switching devices typically used in moderate flow circuits. They can be used by themselves or to actuate larger pilot-operated directional cartridges or logic cartridges. The valve shifts when the pressure differential between port 1 and port 4 exceeds the setting.



Technical Features

- Port 4 can be blocked to prevent the valve from shifting.
- Port 3 can be used as a work port.
- Direct-acting and pilot-operated versions of these valves are interchangeable. They fit the same cavities and have the same flow paths.
- Pressure at port 4 is directly additive to the setting of the valve.
- 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.

Technical Data	U.S. Units	Metric Units
Cavity	T-21A	
Capacity	7 gpm	28 L/min.
Control Pilot Flow	7 - 10 in ³ /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 in ³ /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: 990-021-007	
Seal Kits - Cartridge	Viton: 990-021-006	
Model Weight	0.41 lb.	0.19 kg.



DPBM-LAN

Control

Adjustment Range

Seal Material

Standard Options

Standard Options

Standard Options

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

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

- N** Buna-N
V Viton

Additional Options

Control

Adjustment Range

Seal Material

- J** 25 - 1500 psi (1,7 - 105 bar), 1000 psi (70 bar) Standard Setting

* Special Setting required, specify at time of order
 Customer specified setting stamped on hex.