

3-way, pilot operated, directional valve with internal drain to port 3 (1 blocked, 2 to 3 open)

Functional Group:

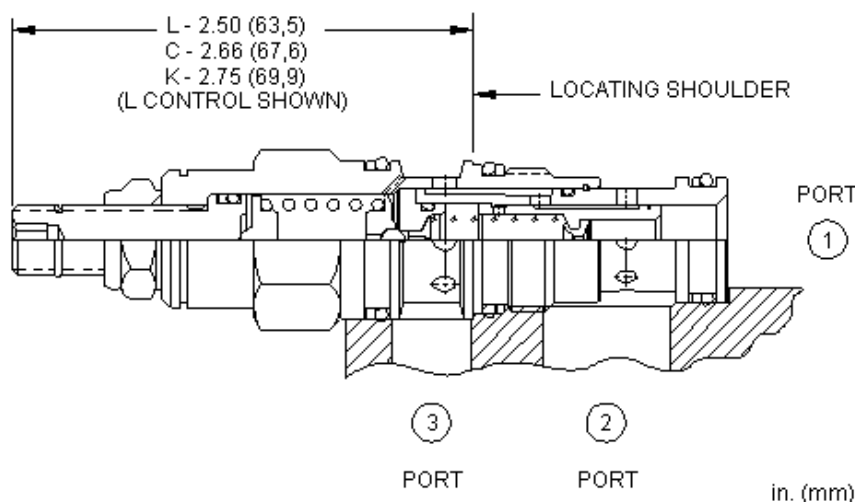
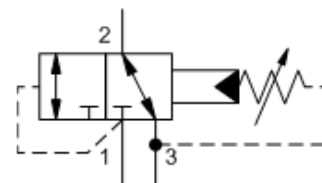
Products : Cartridges : Directional; DP, DR**, DV** : 3 Way - 3 Port - 1 Blocked, 2 to 3 Open : Pilot Operated**

Capacity:
7 gpm (28 L/min.)

Model:
DPBC

Product Description

Pilot-operated, 3-way directional cartridges (1 blocked, 2 to 3 open) 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.

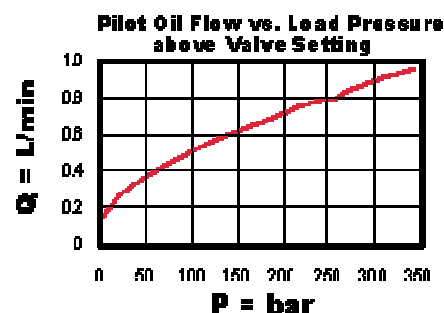
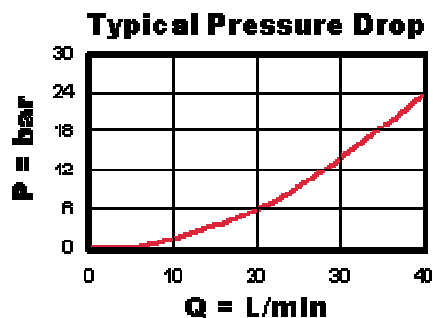
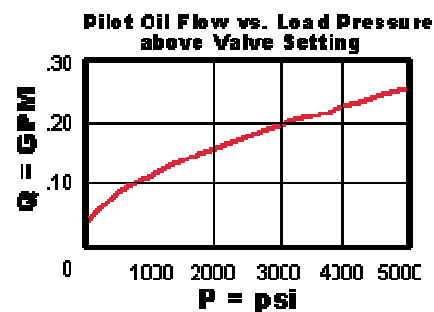
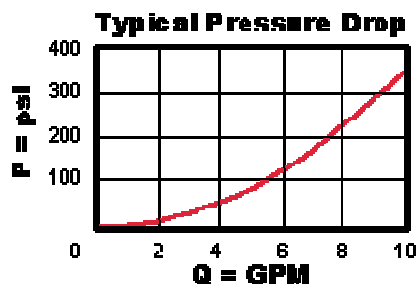


Technical Features

- 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.
- Port 3 can be blocked to prevent the valve from shifting.
- This valve is not bistable; it is capable of modulating between the two positions shown.
- 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-11A	
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: 990-011-007	
Seal Kits - Cartridge	Viton: 990-011-006	
Model Weight	0.33 lb.	0.15 kg.



DPBC-LAN

Control	Adjustment Range	Seal Material	Material/Coating Modifier
Standard Options	Standard Options	Standard Options	Preferred Options
C* Tamper Resistant - Factory Set	A 100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting	N Buna-N	No modifier (standard material with no special coating)
K Handknob	B 50 - 1500 psi (3,5 - 105 bar), 1000 psi (70 bar) Standard Setting	V Viton	Special Options
L Standard Screw Adjustment	D 25 - 800 psi (1,7 - 55 bar), 400 psi (28 bar) Standard Setting		/AP Stainless Steel, Passivated
	E 25 - 400 psi (1,7 - 28 bar), 200 psi (14 bar) Standard Setting		Control: C
	W 150 - 4500 psi (10,5 - 315 bar), 1000 psi (70 bar) Standard Setting		Control: L
Additional Options			<i>Our corrosion resistant product line is growing! If you are interested in a corrosion resistant option for this model, please contact Sun.</i>
Control	Adjustment Range	Seal Material	
O Handknob with Panel Mount	C 150 - 6000 psi (10,5 - 420 bar), 1000 psi (70 bar) Standard Setting		
	H 30 - 3000 psi (2 - 210 bar), 1000 psi (70 bar) Standard Setting		
	K 75 - 1500 psi (5 - 105 bar), 1000 psi (70 bar) Standard Setting		

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

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