

3-way, 2-position, pilot operated, directional valve with drain to port 4 (1 blocked, 2 to 3 open)

Capacity:
7 gpm (28 L/min.)

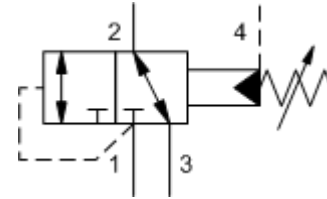
Functional Group:

Products : Cartridges : Directional; DP**, DR**, DV** : 3 Way - 4 Port - 1 Blocked, 2 to 3 Open : Pilot Operated

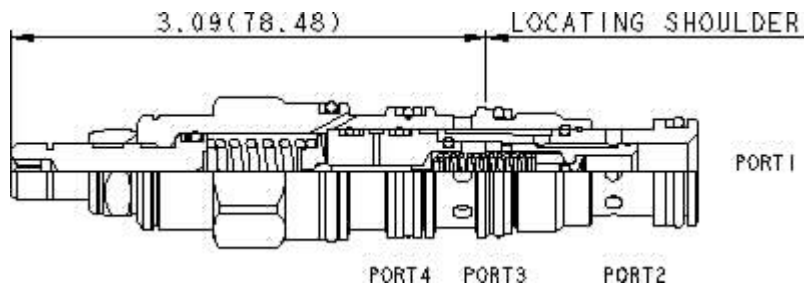
Model:
DPBO-LAN

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 4 exceeds the setting.



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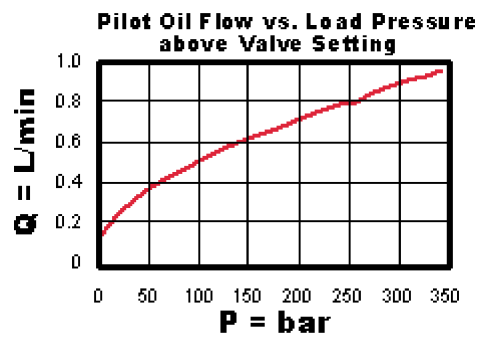
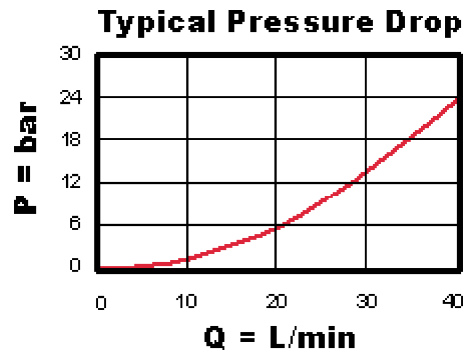
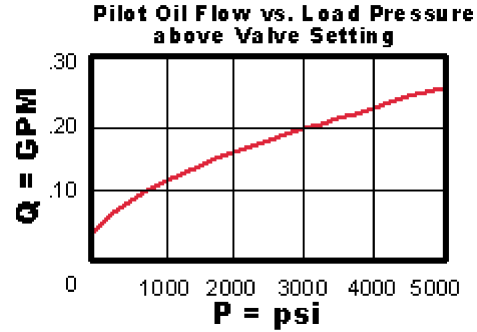
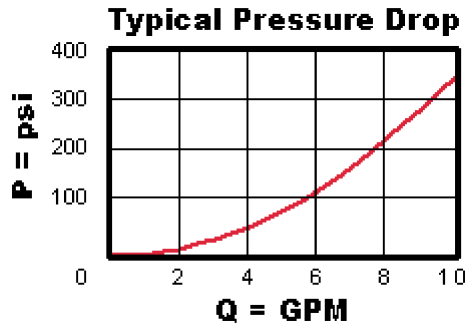
Technical Features

- Port 4 can be blocked to prevent the valve from shifting.
- 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.
- 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.
- Port 3 can be used as a work port.
- Pressure at port 4 is directly additive to the setting of the valve.
- Maximum pressure at port 3 should be limited to 3000 psi (210 bar). This is due to fatigue strength limits not hydraulic operating limits.
- 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	0.40 lb.	0.18 kg.
Cavity	T-21A	
Capacity	7 gpm	28 L/min.
Adjustment - Number of Clockwise Turns to Increase Setting	5	
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	
Valve Hex Size	7/8 in.	22,2 mm
Valve Installation Torque	30 - 35 lbf ft	45 - 50 Nm
Adjustment Screw Hex Socket Size	5/32 in.	4 mm
Adjustment Nut Hex Size	9/16 in.	15 mm
Adjustment Nut Torque	108 lbf in.	12 Nm
Seal Kits	Buna: 990-021-007	
Seal Kits	Viton: 990-021-006	



DPBO-LAN

Control

Adjustment Range

External Material/Seal Material

L Standard Screw Adjustment	+0.00	100 - 3000 psi (7 - 210 A bar), 1000 psi (70 bar) Standard Setting	+0.00	N Buna-N +0.00
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Customer specified setting stamped on hex \$1.10

- Explanation of Sun cartridge control options - US units.
- Explanation of Sun cartridge control options - metric units.

