

3-way, direct-acting, directional valve with drain to port 4 (1 to 2 open, 3 blocked)

Functional Group:

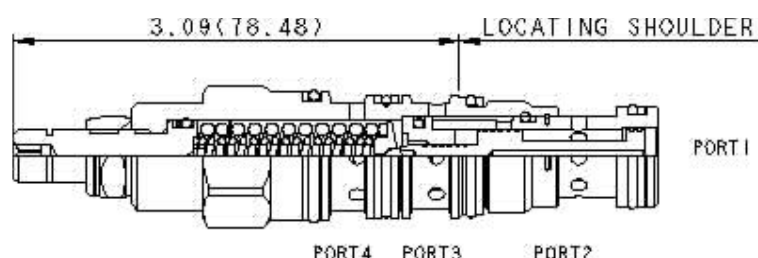
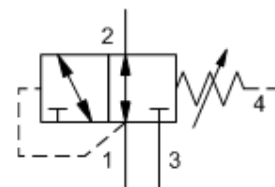
Products : Cartridges : Directional; DP, DR**, DV** : 3 Way - 4 Port - 1 to 2 Open, 3 Blocked : Direct Acting**

Capacity:
7 gpm (28 L/min.)

Model:
DRBP

Product Description

Direct-acting, 3-way directional cartridges (1 to 2 open, 3 blocked) 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.

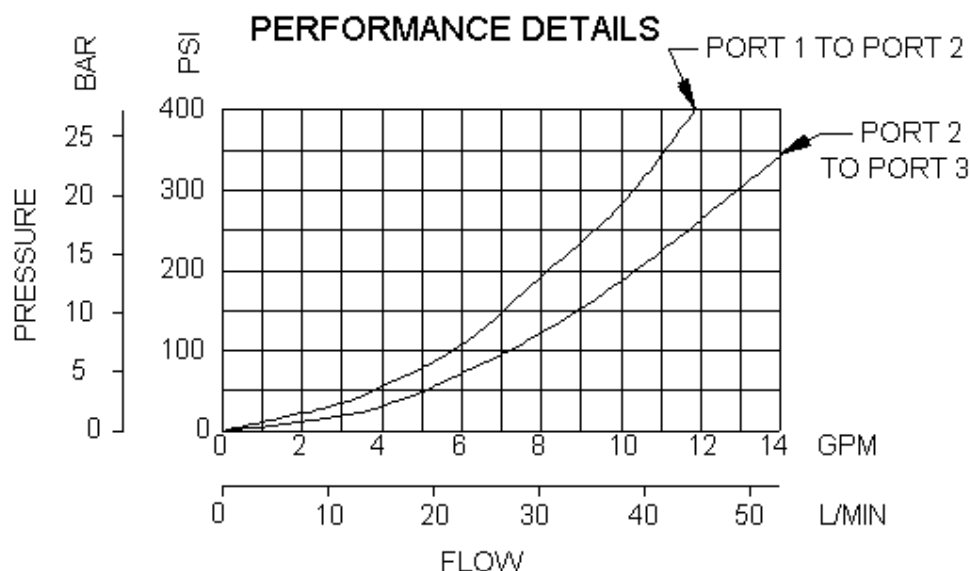


Technical Features

- Port 3 can be used as a work port.
- The flow path between port 2 and port 3 is bidirectional.
- Because of their direct-acting design, these cartridges feature low internal leakage and low pilot flow consumption.
- 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.
- The flow path between port 1 and port 2 is bidirectional.
- 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
Cavity	T-21A	
Capacity	7 gpm	28 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)	2 in ³ /min.	30 cc/min.
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.



DRBP-LAN

Control	Adjustment Range	Seal Material
Standard Options	Standard Options	Standard Options
C* Tamper Resistant - Factory Set	A 500 - 3000 psi (35 - 210 bar), 1000 psi (70 bar) Standard Setting	N Buna-N
K Handknob	B 50 - 1500 psi (3,5 - 105 bar), 200 psi (14 bar) Standard Setting	V Viton
L Standard Screw Adjustment	D 25 - 800 psi (1,7 - 55 bar), 200 psi (14 bar) Standard Setting	
O Handknob with Panel Mount	E 25 - 400 psi (1,7 - 28 bar), 200 psi (14 bar) Standard Setting	
	S 25 - 200 psi (1,7 - 14 bar), 200 psi (14 bar) Standard Setting	
	W 750 - 4500 psi (50 - 315 bar), 1000 psi (70 bar) Standard Setting	

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