



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

Functional Group:

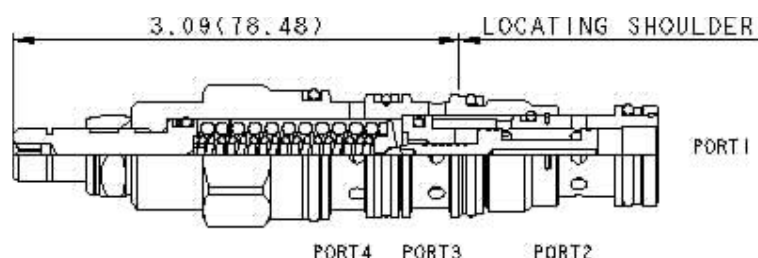
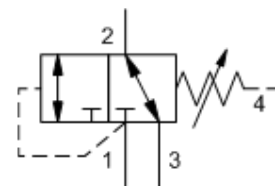
Products : Cartridges : Directional; DP, DR**, DV** : 3 Way - 4 Port - 1 Blocked, 2 to 3 Open : Direct Acting**

Capacity:
7 gpm (28 L/min.)

Model:
DRBO

Product Description

Direct-acting, 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.

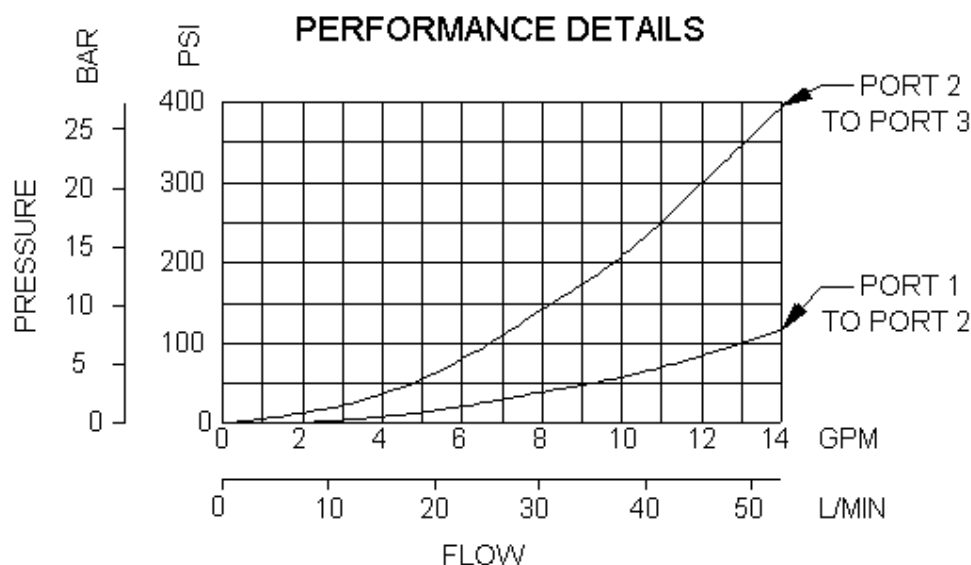


Technical Features

- 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	0.40 lb.	0.18 kg.



DRBO-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		V Viton
L Standard Screw Adjustment	B 50 - 1500 psi (3,5 - 105 bar), 200 psi (14 bar) Standard Setting	
O Handknob with Panel Mount	D 25 - 800 psi (1,7 - 55 bar), 200 psi (14 bar) Standard Setting	
	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.