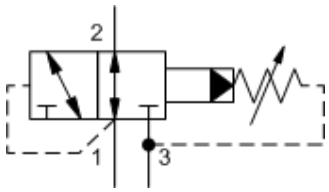
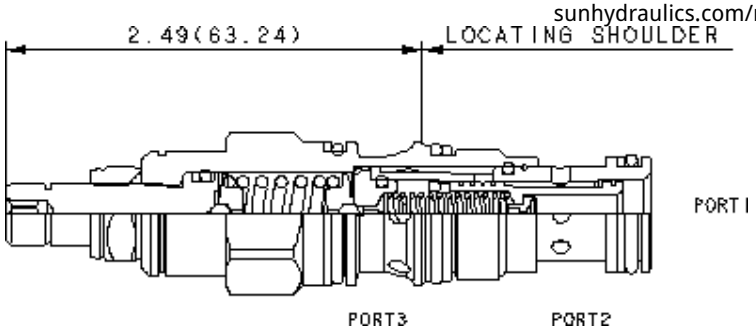
MODEL
DPBD

3-way, pilot-operated, directional valve with internal drain to port 3 (1 to 2 open, 3 blocked)
SERIES 1 / CAPACITY: 7 gpm / CAVITY: T-11A

sunhydraulics.com/model/DPBD





CONFIGURATION

L	Control	Standard Screw Adjustment
W	Adjustment Range	150 - 4500 psi (10,5 - 315 bar), 1000 psi (70 bar) Standard Setting
N	Seal Material	Buna-N
(none)	Material/Coating	

Pilot-operated, 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 3 exceeds the setting.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	T-11A
Series	1
Capacity	7 gpm
Maximum Operating Pressure	5000 psi
Factory Pressure Settings Established at	4 gpm
Control Pilot Flow	7 - 10 in³/min.
Maximum Valve Leakage at 110 SUS (24 cSt)	1 in³/min.@1000 psi
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	7/8 in.
Valve Installation Torque	30 - 35 lbf ft
Adjustment Screw Internal Hex Size	5/32 in.
Locknut Hex Size	9/16 in.
Locknut Torque	80 - 90 lbf in.
Seal kit - Cartridge	Buna: 990011007
Seal kit - Cartridge	Polyurethane: 990011002
Seal kit - Cartridge	Viton: 990011006
Model Weight	0.33 lb.

CONFIGURATION OPTIONS

Model Code Example: DPBDArray

CONTROL (L)	ADJUSTMENT RANGE (W)	SEAL MATERIAL (N)	MATERIAL/COATING
L Standard Screw Adjustment	**W** 150 - 4500 psi (10,5 - 315 bar), 1000 psi (70 bar) Standard Setting	**N** Buna-N	Standard Material/Coating
C Tamper Resistant - Factory Set	**A** 100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting	**V** Viton	**/AP** Stainless Steel, Passivated
K Handknob	**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		
	K 75 - 1500 psi (5 - 105 bar), 1000 psi (70 bar) Standard 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.

PERFORMANCE CURVES