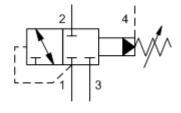
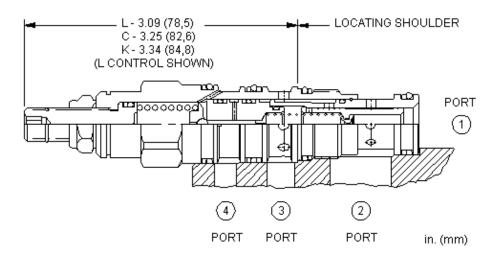


MODEL



sunhydraulics.com/model/DPBN





Normally closed, pilot-operated, 2-way directional cartridges 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 DATA	NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.
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Cavity	T-21A	
Series	1	
Capacity	7 gpm	
Maximum Operating Pressure	5000 psi	
Control Pilot Flow	7 - 10 in³/min.	
Factory Pressure Settings Established at	4 gpm	
Maximum Valve Leakage at 110 SUS (24 cSt)	1 in <sup>3</sup> /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.	
Model Weight	.60 lb	
Seal kit - Cartridge	Buna: 990-021-007	
Seal kit - Cartridge	Polyurethane: 990-021-002	
Seal kit - Cartridge	Viton: 990-021-006	

## **OPTION SELECTION EXAMPLE: DPBNLANV**

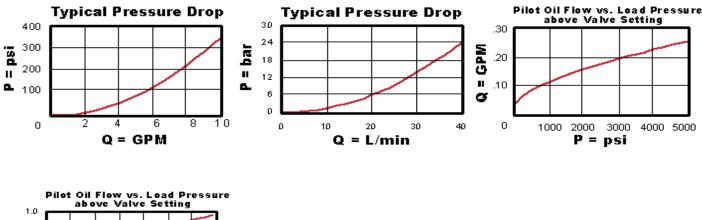
CONTROL	(L)	ADJUSTMENT RANGE	(A)	SEAL MATERIAL	(N)
<ul> <li>L Standard Screw Adjustment</li> <li>C Tamper Resistant - Factory Set</li> </ul>		A 100 - 3000 psi (7 - 210 bar), 1000 psi (70 bar) Standard Setting		N Buna-N V Viton	
		B 50 - 1500 psi (3,5 - 105 bar), 1000 psi (70 bar Standard Setting	)	V VIION	
		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			
		W 150 - 4500 psi (10,5 - 315 bar), 1000 psi (70 b	oar)		

## **TECHNICAL FEATURES**

- Port 4 can be blocked to prevent the valve from shifting.
- Port 3 can be used as a work port.
- Direct-acting and pilot-operated versions of these valves are interchangeable. They fit the same cavities and have the same flow paths.

Standard Setting

- 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.
- Maximum pressure at port 3 should be limited to 3000 psi (210 bar). This is due to fatigue strength limits not hydraulic operating limits.
- 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