



Normally open, balanced poppet, logic element - pressure adjustable

Capacity:
15 gpm (60 L/min.)

Functional Group:

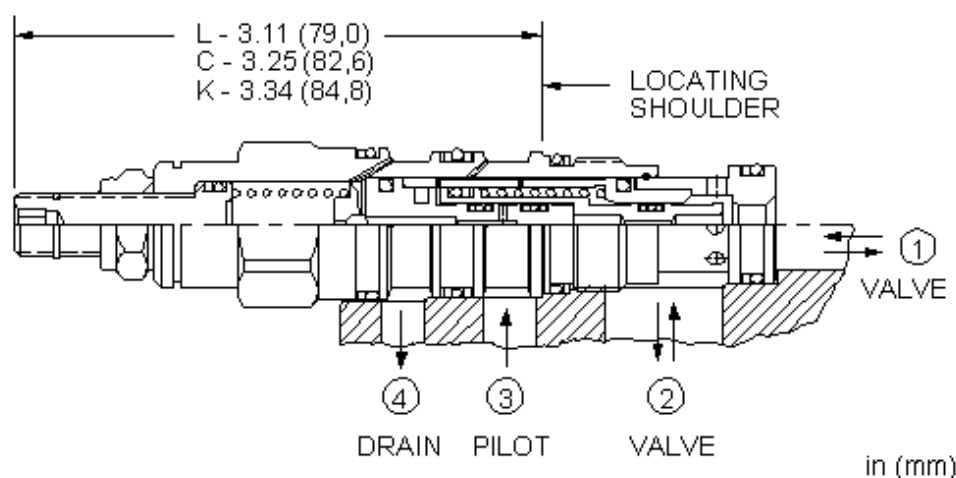
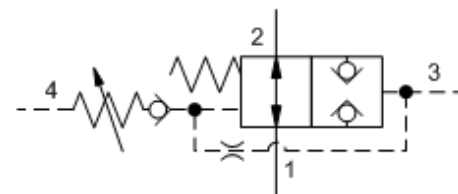
Products : Cartridges : Logic Element : Balanced Poppet : Normally Open, Pressure Adjustable

Model:

DODP

Product Description

This is a normally open, balanced poppet, switching element. When pilot pressure is applied to port 3, the poppet remains open until the pilot pressure reaches the setting established by the integral pilot relief stage, at which point the poppet shifts to the closed position.

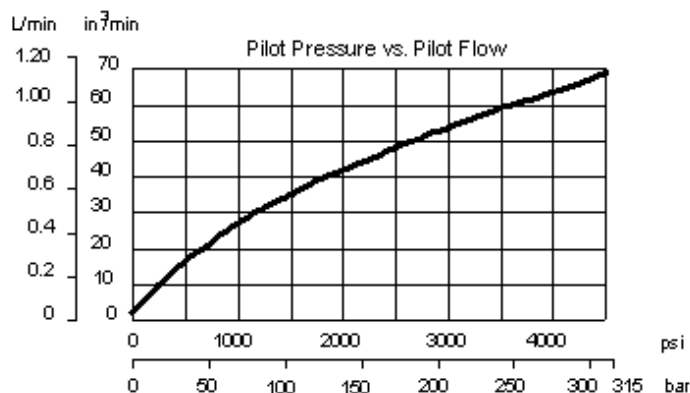
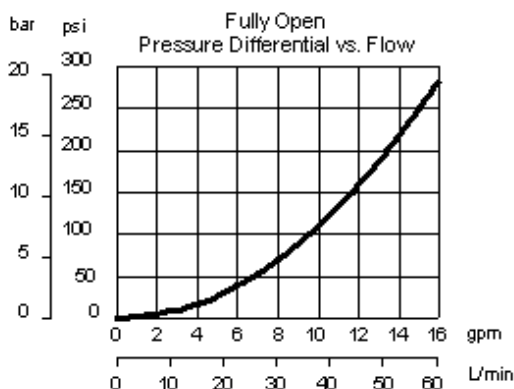


Technical Features

- Unique balanced construction provides predictable switching with 5000 psi (350 bar) at both port 1 and port 2. When the remote pressure signal at port 3 exceeds the internal valve setting, the valve shifts to the closed position.
- Valve will open when the pilot pressure falls below 145 psi (10 bar).
- These valves are hydraulically balanced between port 1 and port 2.
- Port 1 and port 2 are fully sealed from port 3 and port 4. Ports 3 and 4 are positively sealed.
- Leakage rate between port 1 and port 2 is very low, typically less than 10 drops/min. at 5000 psi (0,7 cc/min at 350 bar).
- Any backpressure at the drain port is directly additive to the valve setting.
- All ports will accept 5000 psi (350 bar).
- 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	15 gpm	60 L/min.
Minimum Pilot Pressure Required to Shift Valve	400 psi	28 bar
Control Pilot Flow	15 - 30 in ³ /min.	0,25 - 0,50 L/min.
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	10 drops/min.@5000 psi	0,7 cc/min.@350 bar
Series (from Cavity)	Series 1	
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	0.43 lb.	0.20 kg.

**DODP-LAN****Control****Standard Options**

- C*** Tamper Resistant - Factory Set
- K** Handknob
- L** Standard Screw Adjustment

Adjustment Range**Standard Options**

- A** 400 - 3000 psi (28 - 210 bar), 1000 psi (70 bar) Standard Setting
- B** 400 - 1500 psi (28 - 105 bar), 1000 psi (70 bar) Standard Setting
- W** 400 - 4500 psi (28 - 315 bar), 1000 psi (70 bar) Standard Setting

Seal Material**Standard Options**

- N** Buna-N
- V** Viton

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

Related Documents:

- [Explanation of Sun cartridge control options - US units.](#)
- [Explanation of Sun cartridge control options - metric units.](#)