

PTS2-10

Pilot to shift valve

Description

The PTS2-10 is a 3-way, 2 position, pilot operated, directional screw-in cartridge valve.

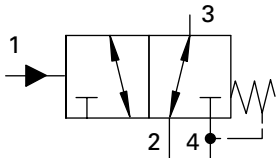
Operation

This valve allows flow between ports 2 and 3 while port 4 is blocked until sufficient pressure has been applied to port 1 and the

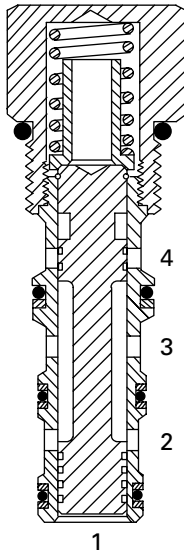
spring bias is overcome. At this time, flow is directed between ports 3 and 4 while blocking port 2. **During the cross-over transition all**

ports are blocked. The spring chamber for this valve is vented internally to port 4 (tank).

Functional Symbol



Sectional View



RATINGS AND SPECIFICATIONS

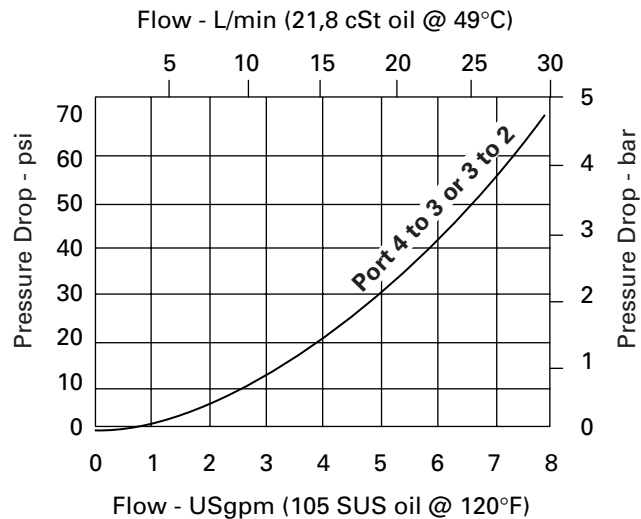
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated flow	30 L/min (8 USgpm)
Internal leakage	164 cc/min (10 in ³ /min) maximum @ 210 bar (3000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Pilot pressures	40 - 2,75 bar (40 psi) 80 - 5,5 bar (80 psi) 160 - 11,0 bar (160 psi)
Pilot displacement volume	0,49 cm ³ (0.02 in ³)
Cavity	C-10-4
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20, etc.
Filtration	Cleanliness code 18/16/13
Standard housing materials	Aluminum
Weight cartridge only	0,14 kg (0.32 lbs)
Seal kit	889625 (Buna-N) 566080 (Viton®)

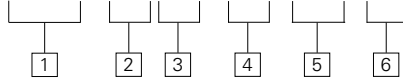
Viton is a registered trademark of E.I. DuPont

Pressure Drop Curve

Cartridge only



PTS2 - 10 (V) - ** - * - 10**



1 Function
PTS2 - Pilot to shift valve

2 Size
10 - 10 Size

3 Seals
Blank - Buna-N
V - Viton®

4 Port size
O - Cartridge only

CODE	PORT SIZE	HOUSING NUMBER	
		Aluminum Light duty	Aluminum Fatigue rated
3B	3/8" BSPP	02-179705	–
6T	SAE 6	566161	–
2G	1/4" BSPP	–	876709
3G	3/8" BSPP	–	876715
6H	SAE 6	–	876708
8H	SAE 8	–	876713

See section J for housing details.

5 Pilot to shift (nominal)
40 - 2,75 bar (40 psi)
80 - 5,5 bar (80 psi)
160 - 11,0 bar (160 psi)

6 Special features
00 - None
 (Only required if valve has special features, omitted if "00")

Dimensions

mm (inch)

Torque cartridge in aluminum housing
 47-54 Nm (35-40 ft. lbs)

