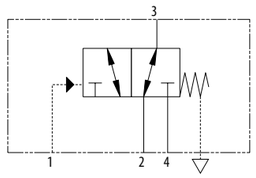
PTS1-10 - Pilot to shift valve

Pilot operated, directional control valve
30 L/min (7.9 USgpm) • 210 bar (3000 psi)



Operation

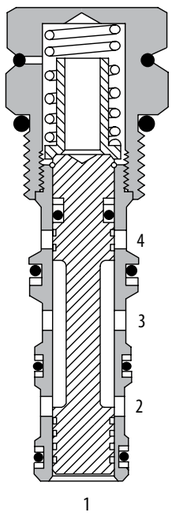
This valve allows flow between ports 2 and 3 while blocking port 4 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

At this time, flow is directed between port 3 and port 4 while blocking port 2. During the cross-over transition, all ports are blocked. The spring chamber for this valve is externally vented to atmosphere.

Features

Hardened, ground and honed sleeve and spool for low internal leakage.

Sectional view



Performance data

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 in³/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 cm3 (0.02 in³)
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®)

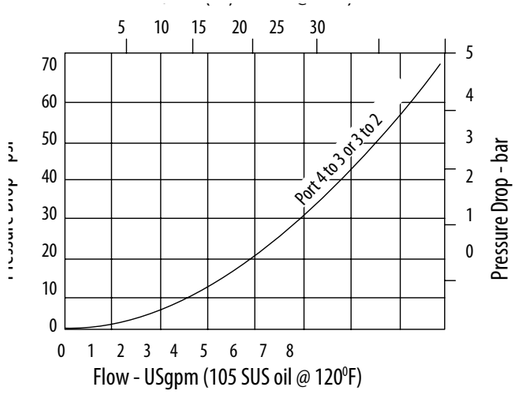
Viton is a registered trademark of E.I. DuPont

Description

This is a 3-way 2 position, pilot operated directional control valve ideal for selecting a function when the pilot pressure is applied or removed.

Pressure drop curves

Cartridge only



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS1-10 - Pilot to shift valve

Pilot operated, directional control valve
30 L/min (7.9 USgpm) • 210 bar (3000 psi)

Model code

PTS1 – 10 (V) – ** – ** – 00**

1 2 3 4 5 6

1 Function

PTS1 - Pilot to shift valve

2 Size

10 - 10 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Port size

0 - Cartridge only

Code	Port size	Housing number	
		Aluminium light duty	Aluminium 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

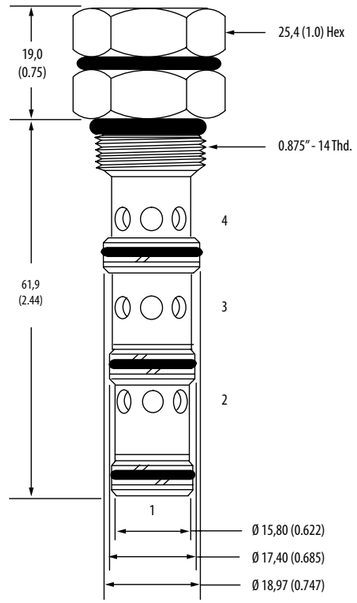
00 - None
(Only required if valve has special features, omitted if "00.")

Dimensions

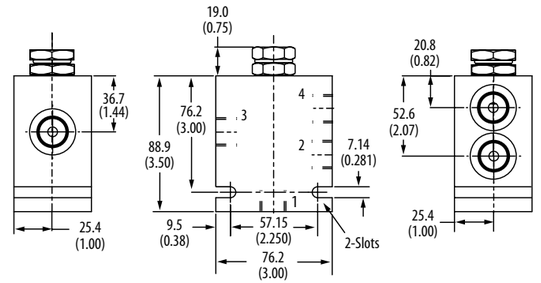
mm (inch)

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

Cartridge only



Installation drawing



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.