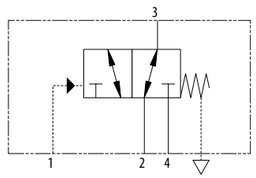
PTS1-16 - Pilot to shift valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 210 bar (3000 psi)



Operation

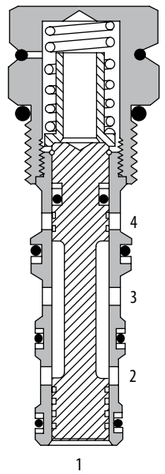
This valve allows flow between ports 2 and 3 while blocking port 4 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

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	132 L/min (35 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	1,97 cm3 (0.12 in³)
Cavity	C-16-4
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	0,5 kg (1.12 lbs)
Seal kit	889634 (Buna-N), 889638 (Viton®)

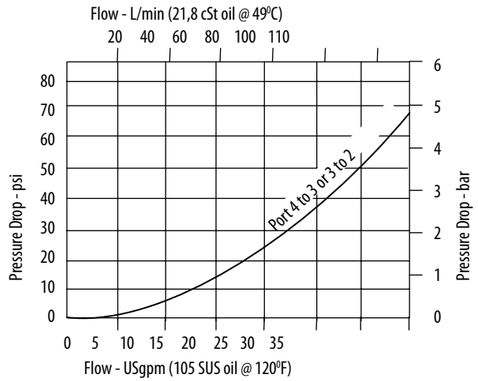
Viton is a registered trademark of E.I. DuPont

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.

PTS1-16 - Pilot to shift valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 210 bar (3000 psi)

Model code

PTS1 – 16 (V) – * – *** – 00**
1 2 3 4 5 6

1 Function

PTS1 - Pilot to shift valve

2 Size

16 - 16 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
12T	SAE 12	566411	–
6B	3/4" BSPP	02-175468	–
10H	SAE 10	–	876729
12H	SAE 12	–	876731
4G	1/2" BSPP	–	876728
6G	3/4" BSPP	–	876730

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

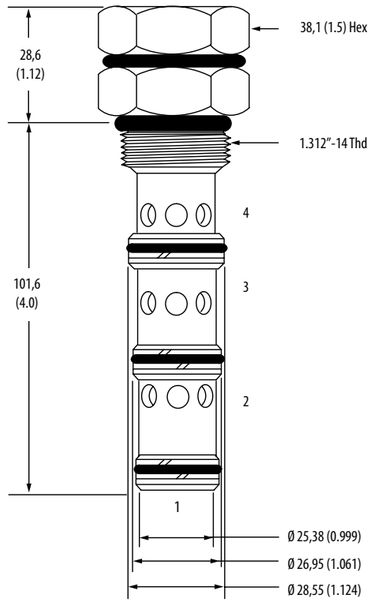
00 - None
(Only required if valve has special features, omitted if "00.")

Dimensions

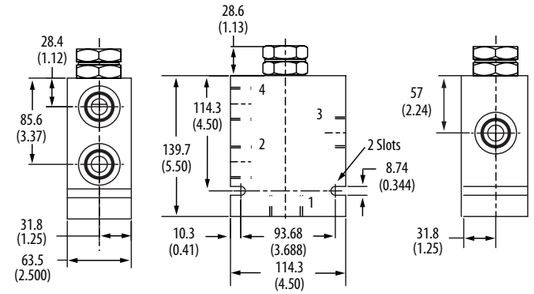
mm (inch)

Torque cartridge in aluminum housing 108-122 Nm (80-90 ft. lbs)

Cartridge only



Installation drawing



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