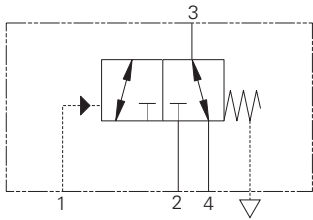


PTS15-16 - Pilot to Shift Valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 350 bar (5000 psi)



Operation

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

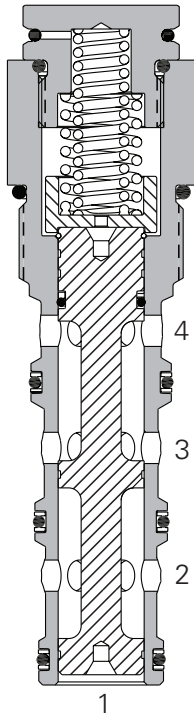
At this time, flow is directed between port 2 and port 3 while blocking port 4. During the cross-over transition, all ports are open. The spring chamber for this valve is externally vented to atmosphere.

Features

Hardened, ground and honed sleeve and spool for low internal leakage. Working pressure 350 bar.

Sectional View

D



Performance Data

Ratings and Specifications

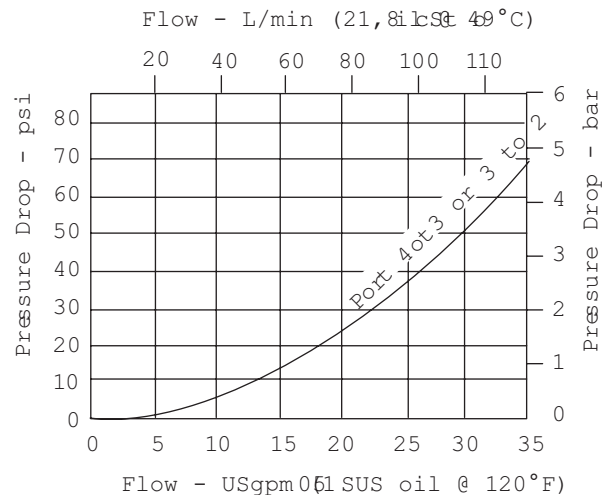
Performance data is typical with fluid at 21,8 cST (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	132 L/min (35 USgpm)
Internal leakage	210 cc/min (13 in ³ /min) @ 350 bar (5000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Pilot pressures	80 - 5,5 bar (80 psi) 160 - 11,0 bar (160 psi)
Pilot displacement volume	1,97 cm ³ (0.12 in ³)
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 or Steel
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

Pressure Drop Curves

Cartridge only



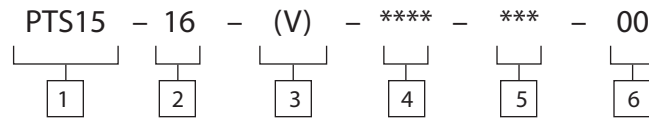
Description

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

PTS15-16 - Pilot to Shift Valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 350 bar (5000 psi)

Model Code



1 Function
PTS15 - Pilot to shift valve

2 Size
16 - 16 Size

3 Seals
Blank - Buna-N

4 Port size
0 - Cartridge only

Code	Port Size	Housing Number		
		Aluminum Light Duty	Aluminum Fatigue Rated	Steel
A12T	SAE 12	566411		
A6B	3/4" BSPP	02-175468		
A10H	SAE 10		876729	
A12H	SAE 12		876731	
A4G	1/2" BSPP		876728	
A6G	3/4" BSPP		876730	
S4G	1/2" BSPP			02-175143
S6G	3/4" BSPP			02-175144
S10T	SAE 10			02-175141
S12T	SAE 12			02-175142

See section J for housing details.

5 Pilot to shift (nominal)
40 - 2,7 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")



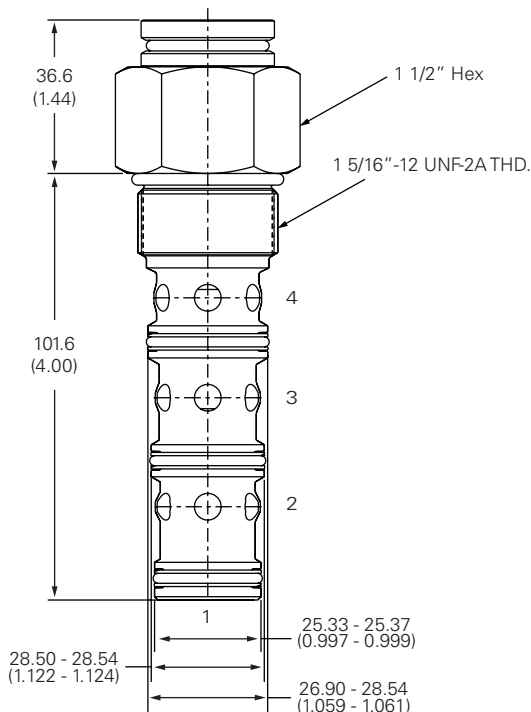
Dimensions

mm (inch)

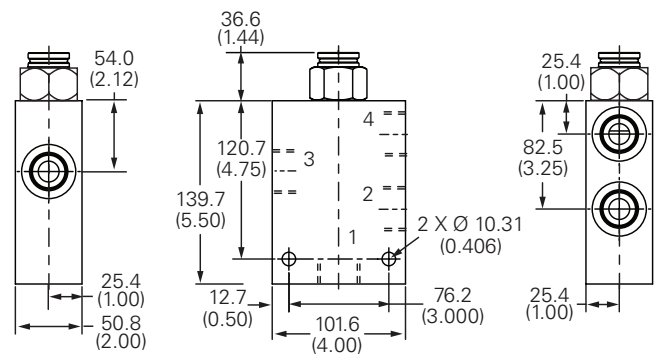
Torque cartridge in aluminum housing 108-122 Nm (80-90 ft. lbs)

Torque cartridge in steel housing 136-149.6 Nm (100-110 ft. lbs)

Cartridge Only



Installation Drawing (Steel)



WARNING
Aluminum housings can be used for pressures up to 210 bar (3000 psi). Steel housings must be used for operating pressures above 210 bar (3000 psi).