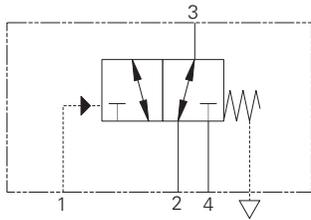


# PTS1-16 - Pilot to Shift Valve

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.

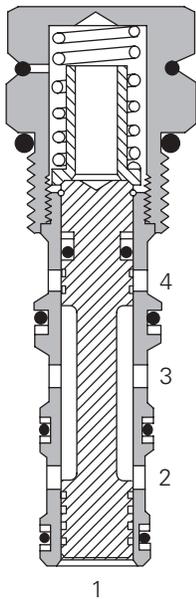
At this time, flow is directed between port 3 and port 4 while blocking port 2. During the cross-over transition, all ports are blocked. The spring chamber for this valve is externally vented to atmosphere.

## Features

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

D

## 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 in <sup>3</sup> /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 cm <sup>3</sup> (0.12 in <sup>3</sup> )
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®)

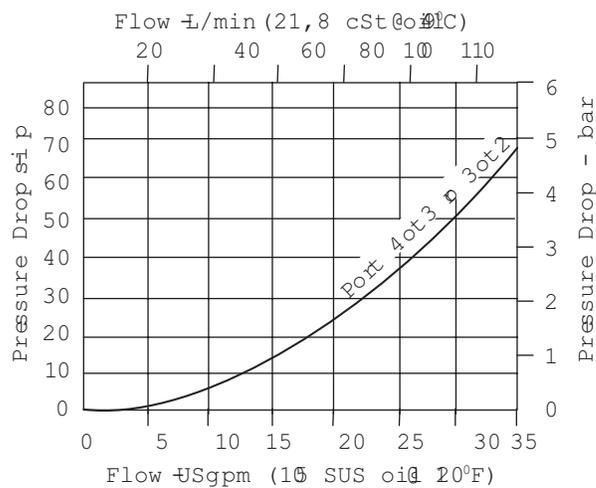
Viton is a registered trademark of E.I. DuPont

## 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

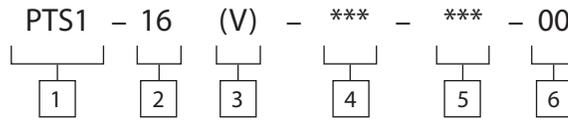


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

# PTS1-16 - Pilot to Shift Valve

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

## Model Code



**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)

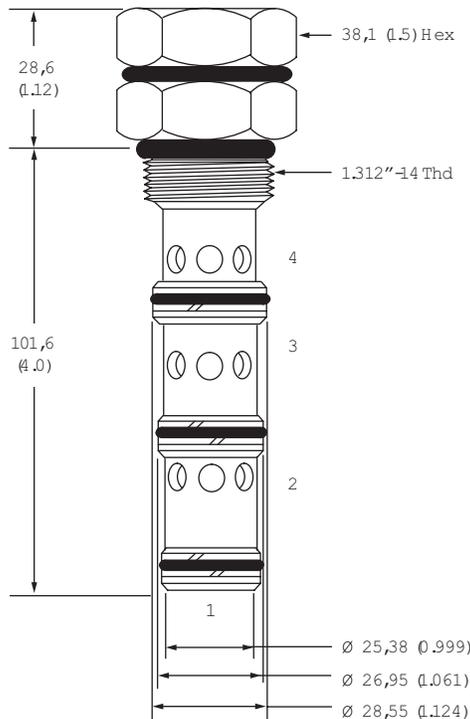
**6** Special features  
00 - None  
(Only required if valve has special features, omitted if "00.")

## Dimensions

mm (inch)

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

### Cartridge Only



### Installation Drawing

