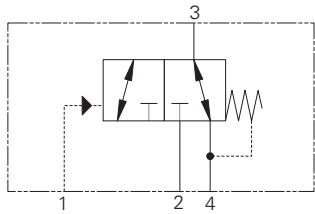


# PTS16-16 - Pilot to Shift Valve

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



## Operation

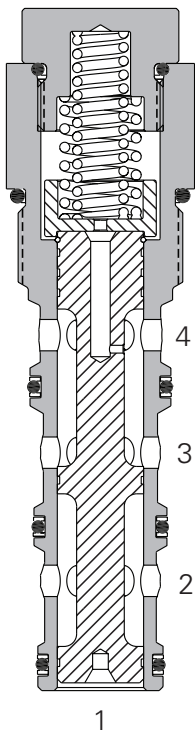
This valve allows flow between ports 3 and 4 while blocking port 2 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

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 vented to port 4.

## Features

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

## Sectional View



## Performance Data

### Ratings and Specifications

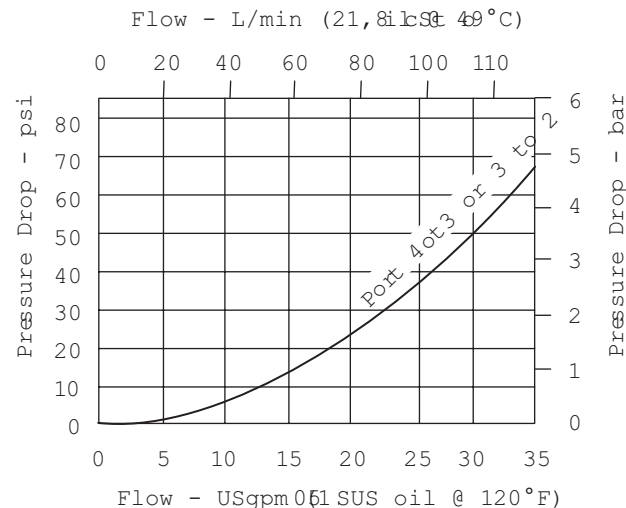
Performance data is typical with fluid at 21,8 cST (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	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 (13in <sup>3</sup> /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 <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 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

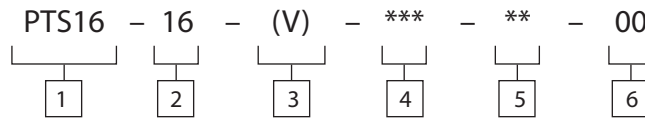
This is a 3-way 2 position, high pressure pilot operated, directional control valve ideal for selecting a function when the pilot pressure is applied or removed.

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

# PTS16-16 - Pilot to Shift Valve

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

## Model Code



### 1 Function

PTS16 - Pilot to shift valve

### 2 Size

16 - 16 Size

### 3 Seals

Blank - Buna-N  
V - Viton®

### 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)

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")

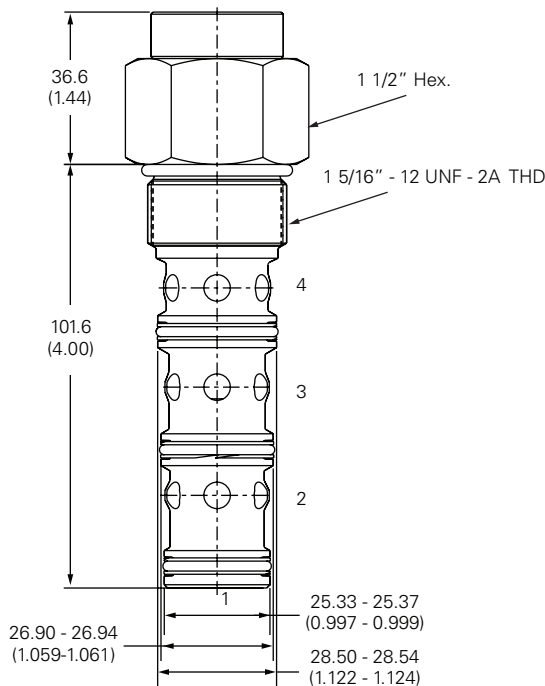
## Dimensions

mm (inch)

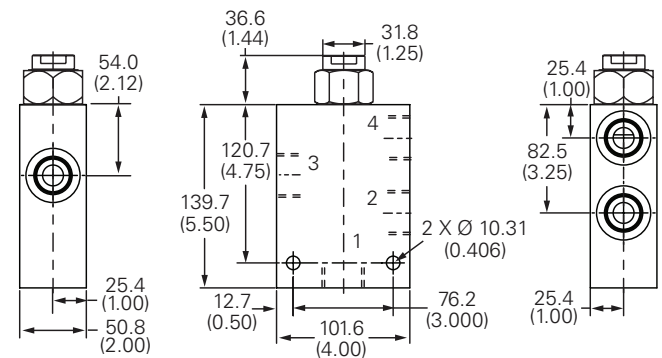
Torque cartridge in aluminum housing 81-95 Nm (60-70 ft. lbs)

Torque cartridge in steel housing 102-115 Nm (75-85 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).