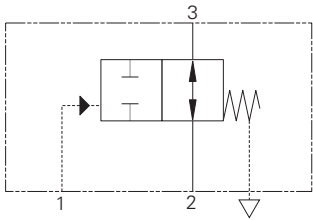


# PTS17-10 - Pilot to Shift Valve

2/2, pilot operated directional control valve  
 30 L/min (8 USgpm) • 350 bar (5000 psi)



## Operation

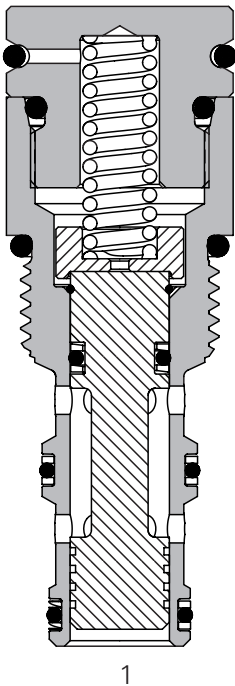
This valve allows flow between ports 2 and 3 until sufficient pressure at port 1 overcomes the spring bias, which closes both ports.

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



## Performance Data

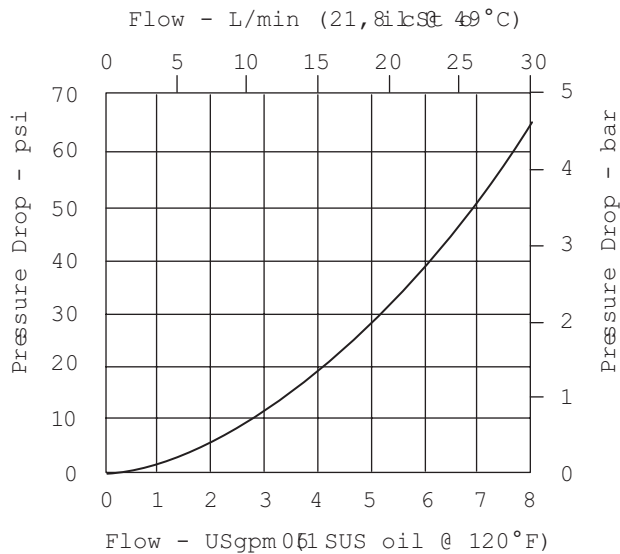
### Ratings and Specifications

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                                       | 30 L/min (8 USgpm)   |
| Internal leakage                                 | 210 cc/min (13 in <sup>3</sup> /min) @ 350 bar (5000 psi)                      |
| Temperature range                                | -40° to 120°C (-40° to 248°F)  |
| Pilot pressures                                  | 40 - 2,75 bar (40 psi)<br>80 - 5,5 bar (80 psi)<br>160 - 11,0 bar (160 psi)    |
| Pilot displacement volume                        | 0,49 cm <sup>3</sup> (0.02 in <sup>3</sup> )                                   |
| Cavity   | C-10-3   |
| Fluids   | All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20, etc. |
| 3 Filtration                                     | Cleanliness code 18/16/13  |
| Standard housing materials                       | Aluminum and Steel   |
| Weight cartridge only                            | 0,10 kg (0.23 lbs)   |
| Seal kit   | 889624 (Buna-N), 889628 (Viton®)   |
| 2 Viton is a registered trademark of E.I. DuPont |  |

## Pressure Drop Curves

### Cartridge only



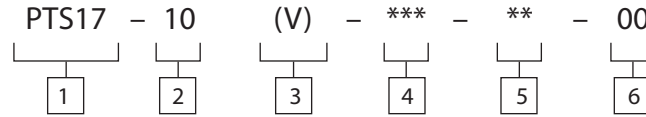
## Description

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

# PTS17-10 - Pilot to Shift Valve

2/2, pilot operated directional control valve  
30 L/min (8 USgpm) • 350 bar (5000 psi)

## Model Code



**1** Function  
PTS17 - Pilot to shift valve

**2** Size  
10 - 10 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     |
| A3B  | 3/8" BSPP | 02-173358           |                        |           |
| A6T  | SAE 6     | 566162              |                        |           |
| A2G  | 1/4" BSPP |                     | 876705                 |           |
| A3G  | 3/8" BSPP |                     | 876714                 |           |
| A6H  | SAE 6     |                     | 876704                 |           |
| A8H  | SAE 8     |                     | 876711                 |           |
| S2G  | 1/4" BSPP |                     |                        | 02-175127 |
| S3G  | 3/8" BSPP |                     |                        | 02-175128 |
| S6T  | SAE 6     |                     |                        | 02-175124 |
| S8T  | SAE 8     |                     |                        | 02-175125 |

See section J for housing details.

**5** Pilot to shift (nominal)  
Note: Code based on pressure in psi.  
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")

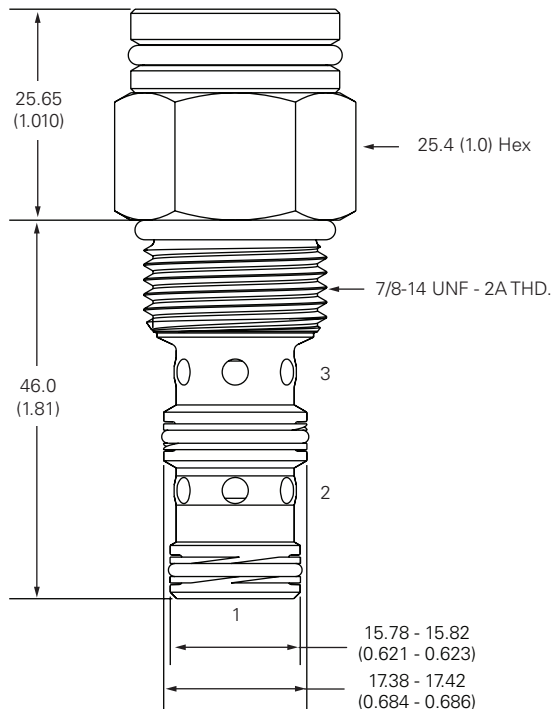


## Dimensions mm (inch)

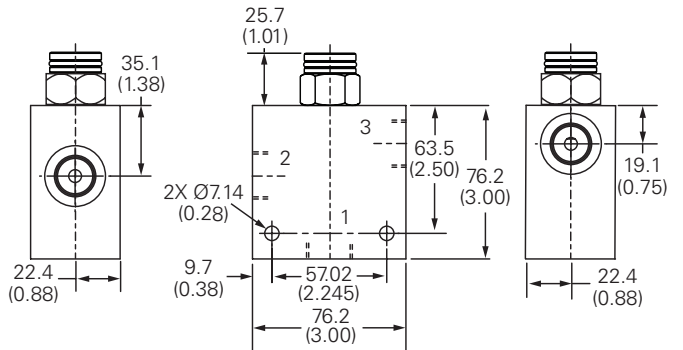
Torque cartridge in aluminum housing 47-54 Nm (35-40 ft. lbs)

Torque cartridge in steel housing 68-75 Nm (50-55 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).