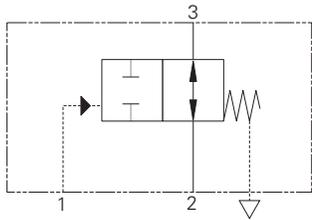


PTS17-12 - Pilot to Shift Valve

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



Operation

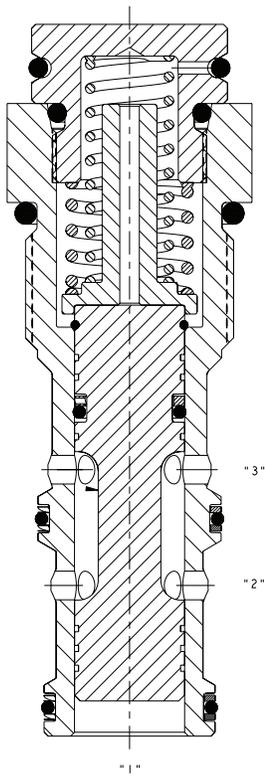
This valve allows flow between ports 2 and 3 until sufficient pressure at port 1 overcomes the spring bias, which closes both ports.

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

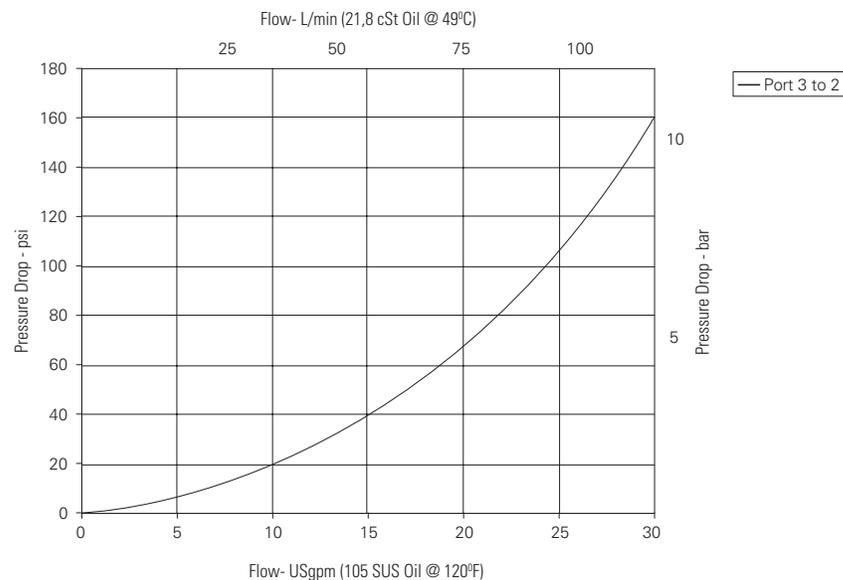
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	114 L/min (30 USgpm)
Internal leakage	210 cc/min (13in ³ /min) @ 350 bar (5000 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) 120 - 8,3 bar (120 psi) 160 - 11,0 bar (160 psi)
Pilot displacement volume	0,49 cm ³ (0.02 in ³)
Cavity	C-12-3
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 and Steel
Weight cartridge only	0.25 kg (0.55 lbs)
Seal kit	9900171 (Buna-N), 9900172 (Viton®)

Viton is a registered trademark of E.I. DuPont

Pressure Drop Curves

Cartridge only



Description

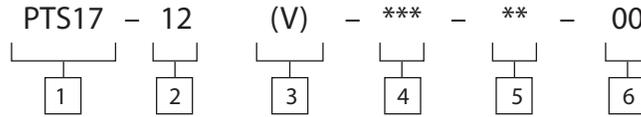
This is a 2-way 2 position, high pressure, pilot operated directional control valve ideal for isolating a function when the pilot pressure is applied or removed.

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

PTS17-12 - Pilot to Shift Valve

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

Model Code



1 Function
 PTS17 - Pilot to shift valve

2 Size
 12 - 12 Size

3 Seals
 Blank - Buna-N
 V - Viton®

4 Port size
 0 - Cartridge only

Code	Port Size	Housing Number	
		Aluminum	Steel
A4G	1/2" BSPP	02-161817	
A6G	3/4" BSPP	02-161816	
A10H	SAE 10	02-160642	
A12H	SAE 12	02-160646	
S4G	1/2" BSPP		02-169815
S6G	3/4" BSPP		02-169814
S10T	SAE 10		02-161070
S12T	SAE 12		02-169816

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)
 120 - 8,3 bar (120 psi)
 160 - 11,0 bar (160 psi)

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

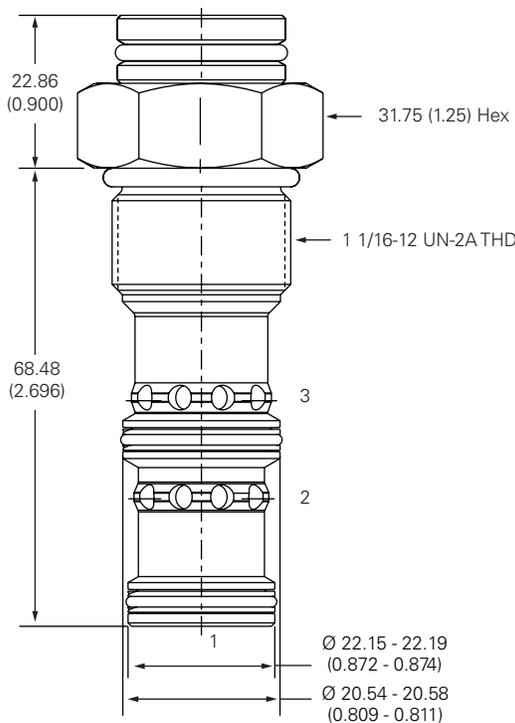
Dimensions

mm (inch)

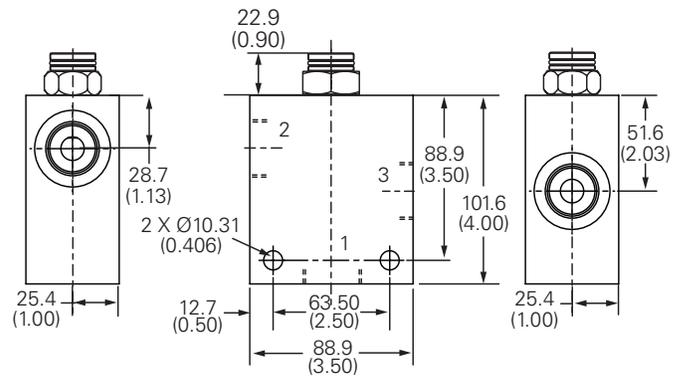
Torque cartridge in aluminum housing 81-95 Nm (60-70 ft. lbs)

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).