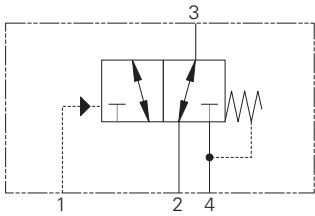


PTS12-12 - Pilot to Shift Valve

Pilot operated, directional control valve
 114 L/min (30 USgpm) • 350 bar (5000 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.

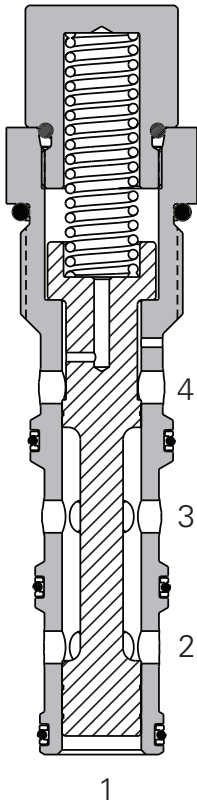
At this time, flow is directed between port 3 and port 4 while blocking port 2. During the cross-over transition, all ports are blocked. The spring chamber for this valve is vented to port 4.

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

Features

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)

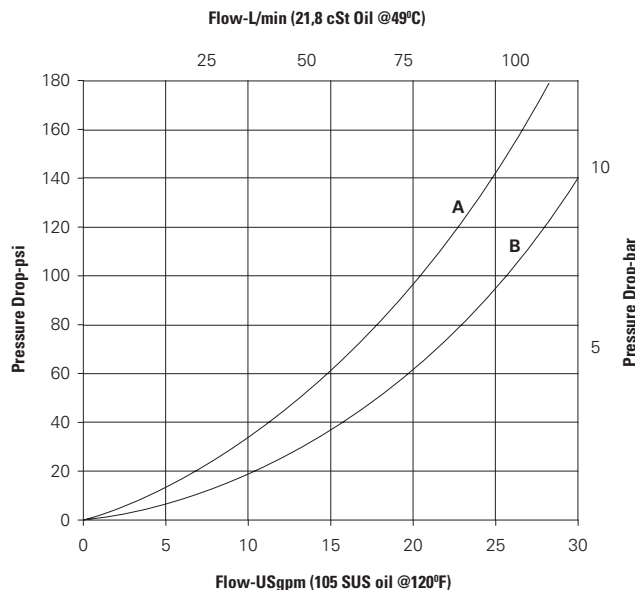
Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	114 L/min (30 USgpm)
Internal leakage	250 cc/min (15in ³ /min) @ 350 bar (5000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Pilot pressures	80 - 5,5 bar (80 psi) 120 - 8,3 bar (120 psi) 160 - 11,0 bar (160 psi)*
*Only for adjustable types	
Pilot displacement volume	0,49 cm ³ (0.02 in ³)
Cavity	C-12-4
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, Steel
Weight cartridge only	0.32 kg (0.70 lbs)
Seal kit	02-160979 (Buna-N), 02-160980 (Viton®)

Viton is a registered trademark of E.I. DuPont

Pressure Drop Curves

Cartridge only

A - P3 to P2
 B - P3 to P4



Description

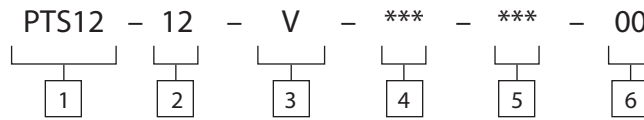
This is a 3-way 2 position, high pressure pilot operated, directional control valve ideal for selecting a function when the pilot pressure is applied or removed.

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

PTS12-12 - Pilot to Shift Valve

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

Model Code



1 Function

PTS12 - 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
0		Aluminum Fatigue rated
		Steel
A4G	1/2" BSPP	5986431-001
A6G	3/4" BSPP	5986432-001
A8H	SAE 8	5986433-001
A10H	SAE 10	5986434-001
A12H	SAE 12	5986436-001
S6G	3/4" BSPP	5991073-001
S10H	SAE 10	5981074-001
S12H	SAE 12	5981075-001

5 Pilot to shift (nominal)

80 - 5,5 bar (80 psi)
120 - 8,3 bar (120 psi)
160 - 11,0 bar (160 psi)*
* Only for adjustable types

6 Special features

04 - "F Type" fixed type
03 - "C Type" cap adjustable type
05 - "K Type" knob adjustable type
06 - "S Type" screw adjustable type

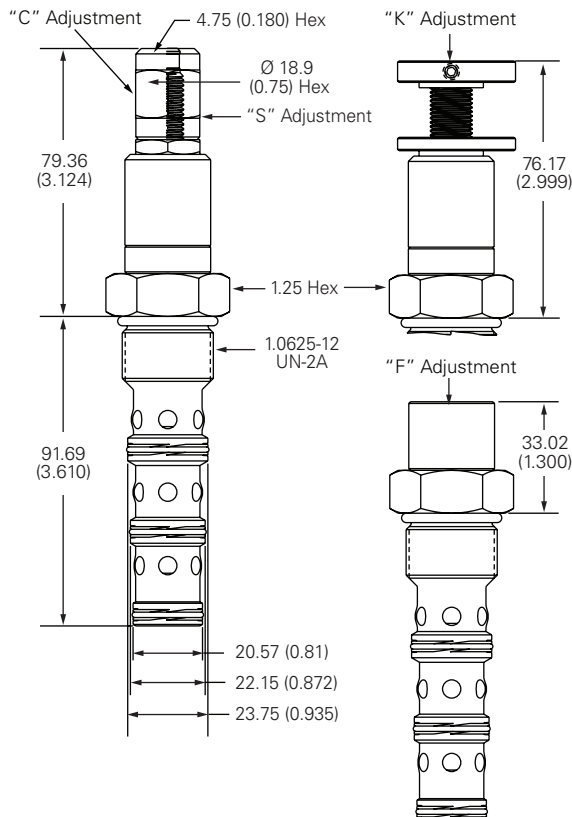
Dimensions

mm (inch)

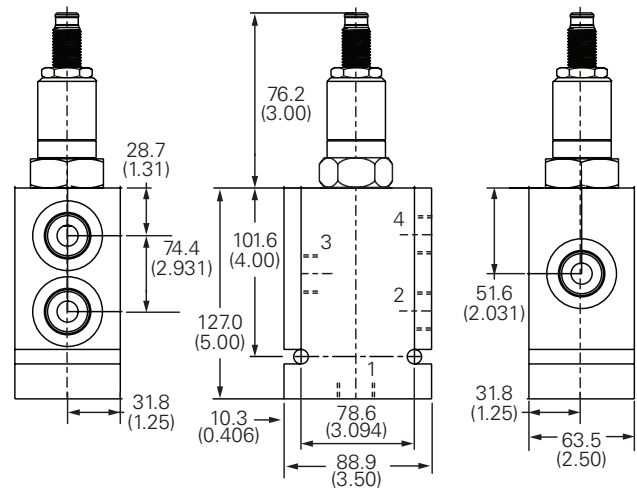
Torque cartridge in aluminum housing 81-95 Nm (60-70 ft. lbs)

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).