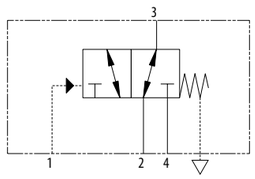
PTS11-20 - Pilot to shift valve

Pilot operated, directional control valve
265 L/min (70 USgpm) • 210 bar (3000 psi)



Operation

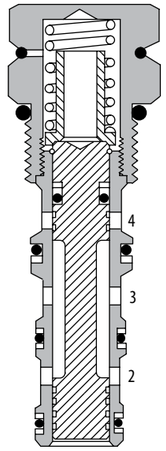
This valve allows flow between ports 2 and 3 while blocking port 4 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

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.

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	265 L/min (70 USgpm)
Internal leakage	164 cc/min (10 in^3/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)
Pilot displacement volume	6,72 cm^3 (0.41 in^3)
Cavity	C-20-4
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	1,1 kg (2.40 lbs)
Seal kit	565916 (Buna-N), 889646 (Viton®)

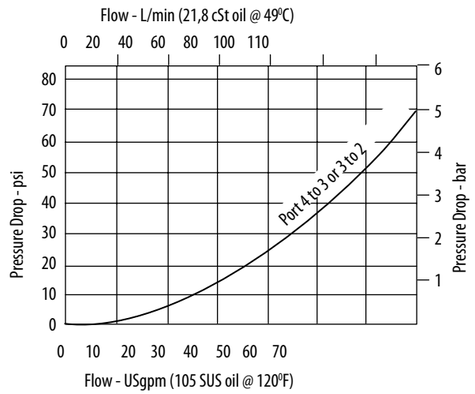
Viton is a registered trademark of E.I. DuPont

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.

PTS1-20 - Pilot to shift valve

Pilot operated, directional control valve
265 L/min (70 USgpm) • 210 bar (3000 psi)

Model code

PTS1 – 20 (V) – * – ** – 00**
1 2 3 4 5 6

1 Function
PTS1 - Pilot to shift valve

2 Size
20 - 20 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**
16T	SAE 16	566412	–
8B	1" BSPP	02-175469	–
12H	SAE 12	–	876745
16H	SAE 16	–	876747
6G	3/4" BSPP	–	876744
8G	1" BSPP	–	876746

See section J for housing details.

5 Pilot to Shift (Nominal)
40 - 2,75 bar (40 psi)
80 - 5,5 bar (80 psi)

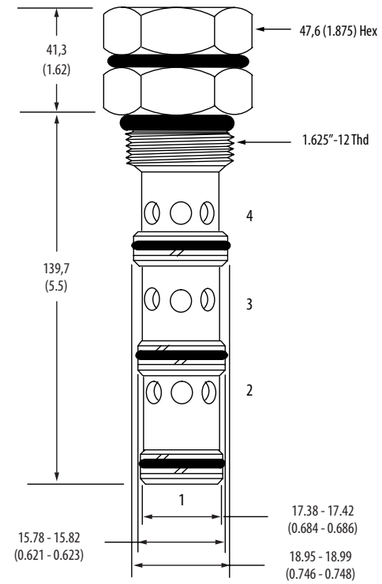
6 Special features
00 - None
(Only required if valve has special features, omitted if "00.")

Dimensions

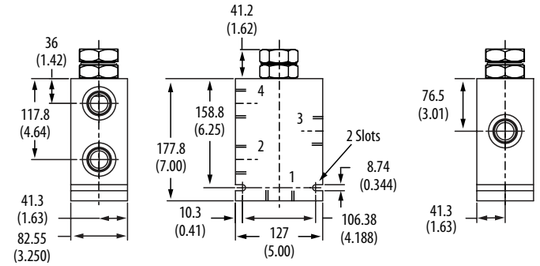
mm (inch)

Torque cartridge in aluminum housing
128-155 Nm (95-115 ft. lbs)

Cartridge only



Installation drawing



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