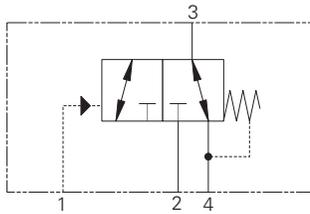


# PTS3-20 - Pilot to Shift Valve

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



## Operation

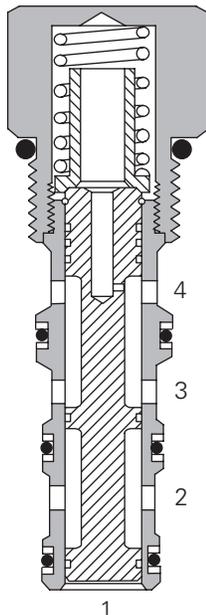
This valve allows flow between ports 3 and 4 while blocking port 2 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

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

## 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 <sup>3</sup> /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 <sup>3</sup> (0.41 in <sup>3</sup> )
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 material	Aluminum
Weight cartridge only	0,5 kg (1.12 lbs)
Seal kit	565916 (Buna-N), 889646 (Viton)

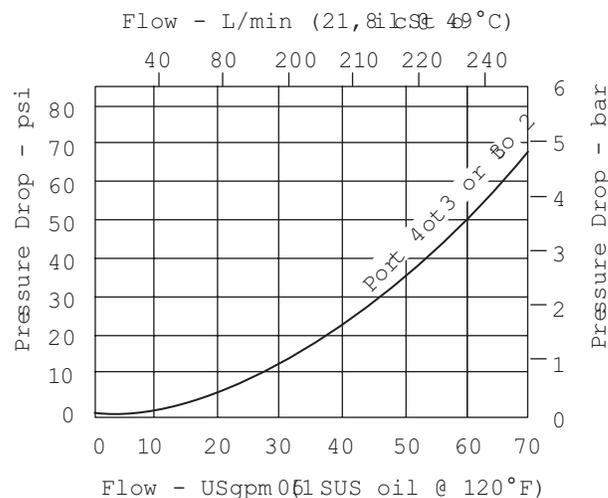
Viton is a registered trademark of E.I. DuPont

## 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

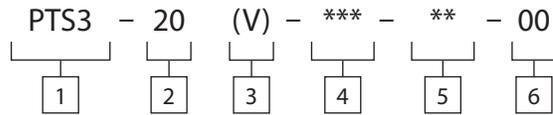
### Cartridge only



# PTS3-20 - Pilot to Shift Valve

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

## Model Code



**1** Function  
PTS3 - Pilot to shift valve

**2** Size  
20 - 20 size

**3** Seal Material  
Blank - Buna-N  
V - Viton®

**4** Port Size

Code	Port Size	Housing Number	
		Aluminum Light Duty	Aluminum Fatigue Rated
0	Cartridge only		
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)

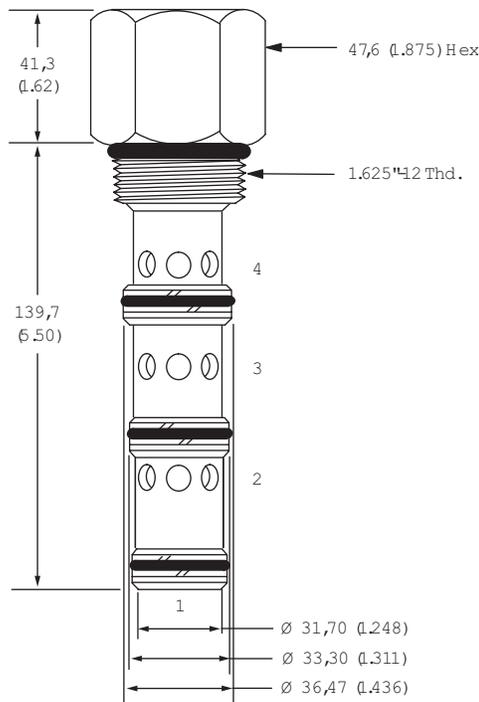
**6** Special Features  
00 - None  
(Only required if valve has special features, omitted if "00")

## Dimensions

mm (inch)

Torque cartridge in aluminum housing  
129-155 Nm (95-115 ft lbs)

### Cartridge Only



### Installation Drawing

