PTS15 - 12 - (V) - \*\* - \*\* - 00

1 Function

PTS15 - Pilot to shift valve

2 Size

**12** - 12 size

3 Seal Material

**Blank** - Buna-N **V** - Viton® 4 Port Size

Code	Port Size	Housing Number	
		Aluminum	Steel
0	Cartridge		
A4G	1/2" BSPP	02-161817	
A6G	3/4" BSPP	02-161816	
A10H	SAE 10	02-160642	
A12H	SAE 12	02-160646	
S8G	1/2" BSPP		02-169814
S10T	SAE 10		02-161070
S12T	SAE 12		02-169816
See section	n J for housing details.		

5 Pilot to shift (nominal)

**40** - 2,7 bar (40 psi)

6 Special Features

**00** - None

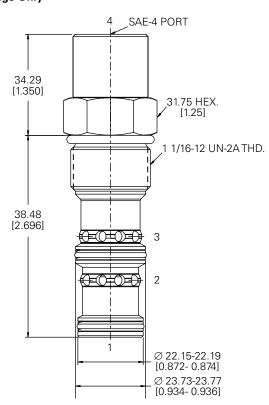
(Only required if valve has special features, omitted if "00".)

**Dimensions** 

mm (inch)

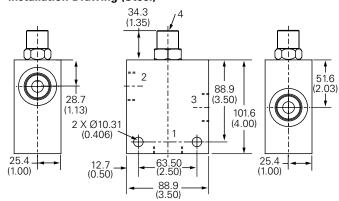
Torque cartridge in aluminum housing 81-93 Nm (60-70 ft lbs

**Cartridge Only** 



Torque cartridge in steel housing 102-115 Nm (75-85 ft lbs)

### **Installation Drawing (Steel)**



### WARNING



Aluminum housings can be used for pressures up to 210 psi). Steel housings

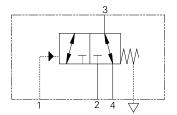
bar (3000 psi). Steel housings must be used for operating pressures above 210 bar (3000 psi).





# PTS5-16 - Pilot to Shift Valve

Pilot operated, directional control valve 132 L/min (35 USgpm) • 210 bar (3000 psi)



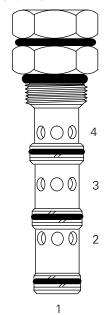
#### Operation

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 open. 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	<b>Specifications</b>

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	132 L/min (35 USgpm)
Internal leakage	164 cc/min (10 in³/min) maximum @ 210 bar (3000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Pilot pressures	<b>40</b> - 2,75 bar (40 psi) <b>80</b> - 5,5 bar (80 psi) <b>160</b> - 11,0 bar (160 psi)
Pilot displacement volume	1,97 cm³ (0.12 in³)
Cavity	C-16-4
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	0,5 kg (1.12 lbs)
Seal kit	889634 (Buna-N), 889638 (Viton®)

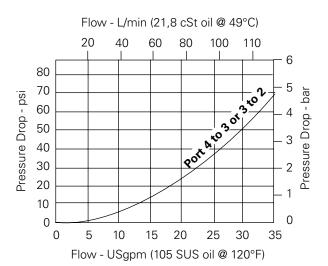
Viton is a registered trademark of E.I. DuPont

### 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.



