Directional Control Valves

PTS13-16

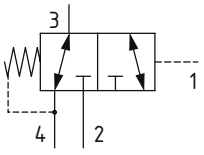
Directional Control Valve, 3-Way, Spool Type, Hydraulic Pilot, Internal Drain

350 bar [5000 psi] • 132 l/min [35 US gpm]

DESCRIPTION AND OPERATION

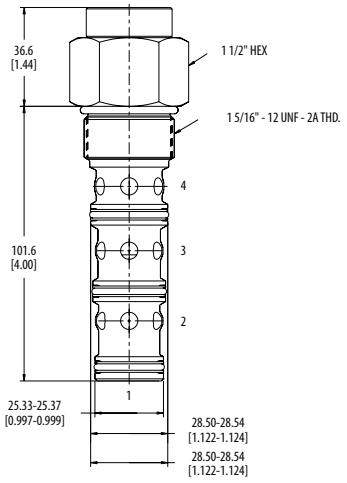
This is a 3-way, spool type, hydraulically piloted directional control valve with an internal drain. In the normal condition, port 3 is connected to port 4 with port 2 blocked. Pilot pressure at port 1 will cause the valve to shift, connecting port 3 to port 2 with port 4 blocked. During the cross-over transition all ports are blocked. Due to the internal hydraulic vent, the pilot pressure required shift the valve is dependent on the pressure in port 4, which would normally be connected to tank.

SCHEMATIC



DIMENSIONS

mm [in]

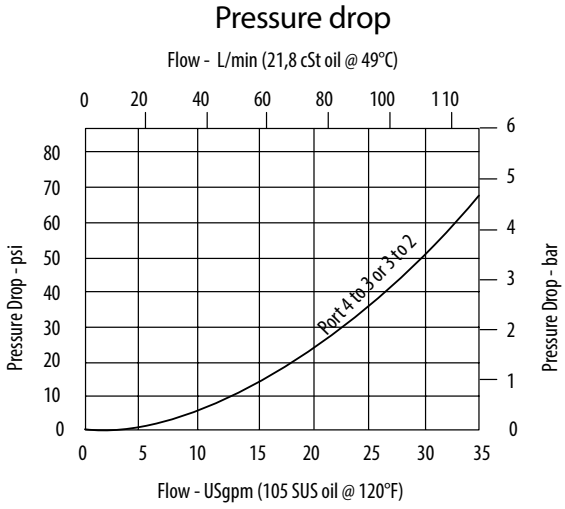


Installation torque
A-108-122 Nm [80-90 ft. lbs]
S-136-149.6 Nm [100-110 ft. lbs]

PERFORMANCE DATA

Rated pressure	**350 bar [5000 psi]**
Rated flow	**132 l/min [35 US gpm]**
Leakage	210 ml/min [13in³/min] @ 350 bar [5000 psi]
Weight	0.5 kg [1.12 lb]
Cavity	SDC16-4

PERFORMANCE CURVES



MODEL CODE

PTS13 - 16 - V - A - 6B - 80

Seal Option

Code	Seal Kit
Omit-Buna-N	889634
V-Viton	889638

Shift Pressure

Code	Bar	[Psi]
80	5.5	[80]
160	11.0	[160]

Housing Material

Omit-No housing
A-Aluminum
S-Steel

Housing

Code	Ports	Aluminum Standard duty	Aluminum Heavy duty	Steel
0	No housing			
10T	#10 SAE			02-175141
12T	#12 SAE	566411		02-175142
6B	3/4" BSP		02-175468	
10H	#10 SAE		876729	
12H	#12 SAE		876731	
4G	1/2" BSP		876728	02-175143
6G	3/4" BSP		876730	02-175144

* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].
* Additional housings available