Directional Control Valves

PTS13-12

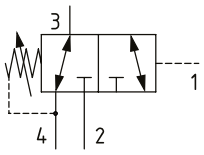
Directional Control Valve, 3-Way, Spool Type, Hydraulic Pilot, Internal Drain

350 bar [5000 psi] • 114 l/min [30 US gpm]

DESCRIPTION AND OPERATION

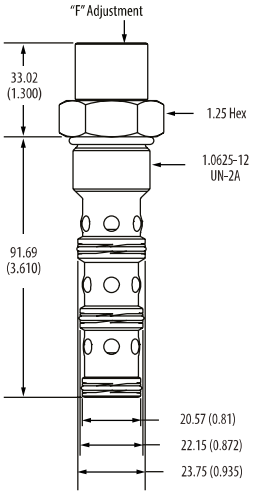
This is a 3-way, spool type, hydraulically piloted directional control valve with an internal drain. In the normal condition, port 3 is connected to port 4 with port 2 blocked. Pilot pressure at port 1 will cause the valve to shift, connecting port 3 to port 2 with port 4 blocked. During the cross-over 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. It is available with a fixed or adjustable spring setting.

SCHEMATIC



DIMENSIONS

mm [in]

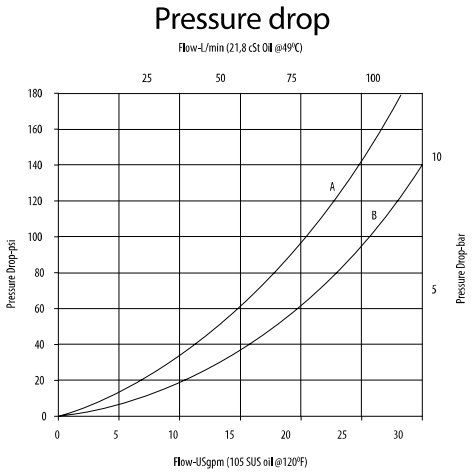


Installation torque
A-81-95 Nm [60-70 ft. lbs]
S-102-115 Nm [75-85 ft. lbs]

PERFORMANCE DATA

Rated pressure	**350 bar [5000 psi]**
Rated flow	**114 l/min [30 US gpm]**
Leakage	210 ml/min [13in³/min] @ 350 bar [5000 psi]
Weight	0.32 kg [0.70 lb]
Cavity	C-12-4

PERFORMANCE CURVES



A-Port 3 to 2 • **B**-Port 3 to 4

MODEL CODE

PTS13 - 12 - V - A - 4G - 80 - 04

Seal Option

Code	Seal Kit
Omit-Buna-N	02-160979
V-Viton	02-160980

Housing Material

Omit - No housing
A - Aluminum
S - Steel

Housing

Code	Ports	Aluminum	Steel
0	No housing		
4G	1/2" BSP	5986431-001	
6G	3/4" BSP	5986432-001	5991073-001
8H	#8 SAE	5986433-001	
10H	#10 SAE	5986434-001	5991074-001
12H	#12 SAE	5986436-001	5991075-001

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

Adjustment/Transition Option

Code	Adjustment	Transition
04	F (Fixed)	Closed

Shift Pressure

Code	Bar	[Psi]
80	5.5	[80]
120	8.3	[120]
160	11.0	[160]