Directional Control Valves

PTS14-12

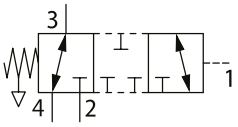
Directional Control Valve, 3-Way, Spool Type, Hydraulic Pilot, Atmospheric Vent

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

DESCRIPTION AND OPERATION

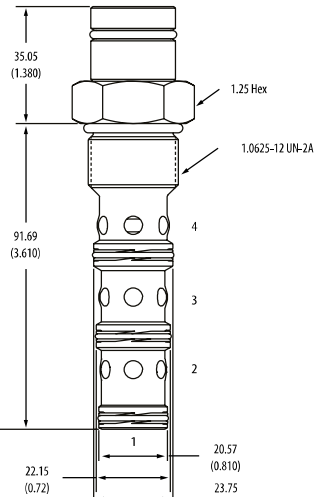
This is a 3-way, spool type, hydraulically piloted directional control valve with an atmospheric vent. In the normal condition, port 3 is connected to port 4 with port 2 blocked. Pilot pressure at port 1 will cause the valve to shift, connecting port 3 to port 2 with port 4 blocked. During the cross-over transition all ports are blocked. Due to the atmospheric vent, the pilot pressure required to keep the valve switched is independent of the pressure at the work ports.

SCHEMATIC



DIMENSIONS

mm [in]



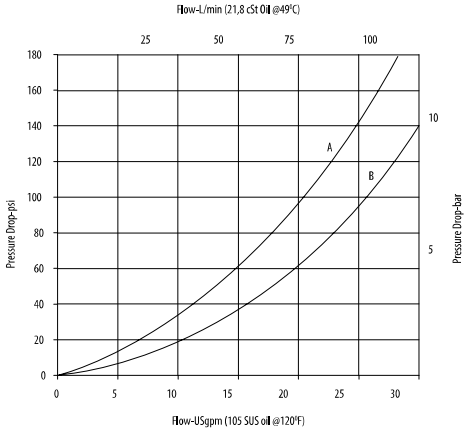
Installation torque
A-81-95 Nm [60-70 ft. lbs]
S- 102-115.6 Nm [75-85 ft. lbs]

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

Pressure drop



A-Port 3 to 2 • **B**-Port 3 to 4

MODEL CODE

PTS14 - 12 - V - A - 6G - 80

Seal Option

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

Housing Material

Omit - No housing
A - Aluminum
S - Steel

Shift Pressure

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

Housing

Code	Ports	Aluminum Heavy duty	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