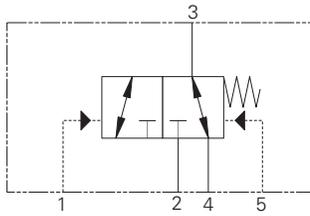


PTS9-20 - Pilot to Shift Valve

Pilot operated, directional control valve
230 L/min (60 USgpm) • 280 bar (4000 psi)



Operation

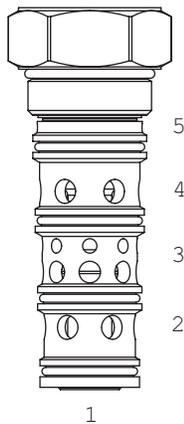
This valve allows flow between ports 3 and 4 while blocking port 2 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

At that time flow is directed between ports 3 and 2 while blocking port 4. During the cross-over transition, all ports are open. The spring chamber for this valve is vented to port 5.

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)

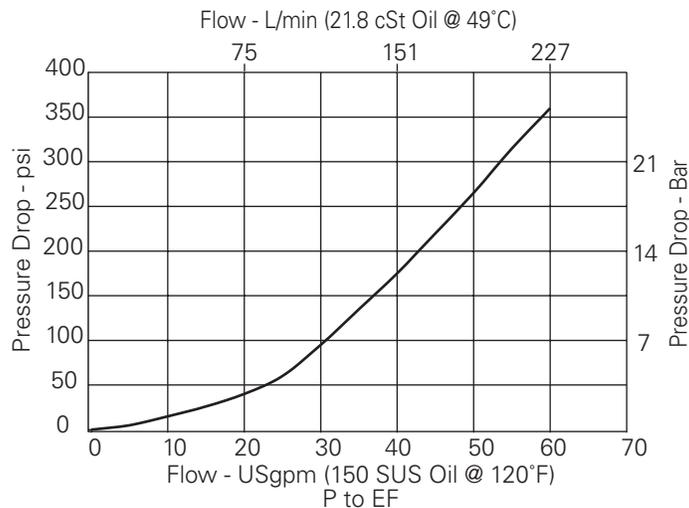
Typical application pressure (all ports)	280 bar (4000 psi)
Cartridge fatigue pressure (infinite life)	280 bar (4000 psi)
Rated flow	230 L/min (60 USgpm)
Transition	All ports open
Internal leakage, port 2 to port 1	164 cc/min (10 in ³ /min) @ 210 bar (3000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-20-5S
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 or Steel
Weight cartridge only	0,86 kg (1.9 lbs)
Seal kit	(Urethane) 02-187543

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 lost or as a pilot operated shuttle valve.

Performance Characteristics

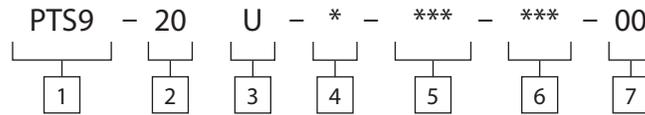
Cartridge only



PTS9-20 - Pilot to Shift Valve

Pilot operated, directional control valve
230 L/min (60 USgpm) • 280 bar (4000 psi)

Model Code



1 Function
PTS9 - Pilot to shift valve

2 Size
20 - C-20-5S cavity

3 Seal Material
U - Urethane (standard)

4 Body
O - Cartridge only
A - Aluminum
S - Steel

5 Port Size

Code	Port Size		Housing Number	
	Port 2, 3 & 4	Port 1 & 5	Aluminum	Steel
000	No Body	-	-	-
16T	SAE 16	SAE 4	4994880-002	4994881-002
08G	1" BSPP	1/4" BSPP	4994880-004	4994881-004

See section J for housing details.

6 Shift Pressure
40 - 2,75 bar (40 psi)
80 - 5,5 bar (80 psi)

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

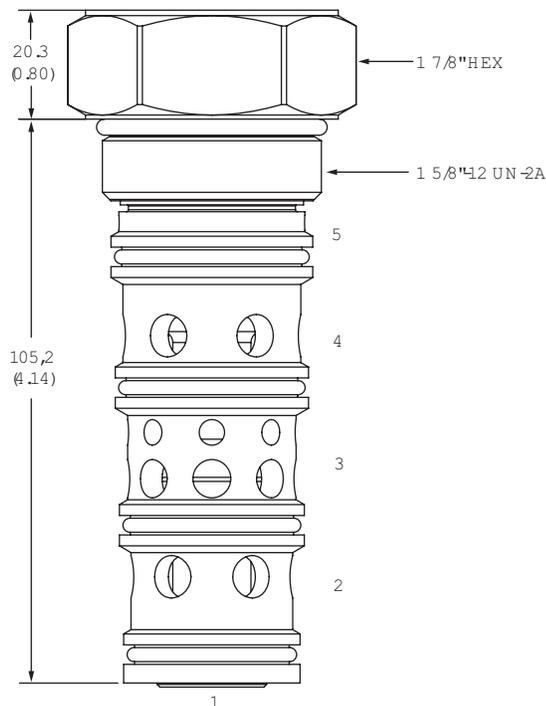
Dimensions

mm (inch)

Cartridge Only

Torque cartridge in housing:

A - 108-122 Nm (80-90 ft lbs)
S - 136-149 Nm (100-110 ft lbs)



WARNING
Aluminum housings can be used for pressures up to 210 bar (3000 psi). Steel housings must be used for operating pressures above 210 bar (3000 psi).