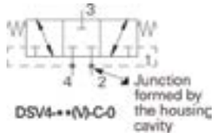
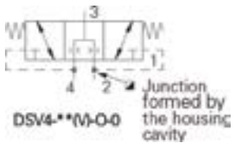
DSV4-16 - Shuttle valve

Spring centered, open or closed center spool type shuttle valve
190 L/min (50 USgpm) • 350 bar (5000 psi)

Functional symbols





Description

The DSV4-16 is a 3-way, 3 position, spring centered, open or closed center spool, transmission shuttle, screw-in cartridge valve. Usually built into a customized housing along with other transmission components, see "Functional Symbols." The valve should be installed in a Blind C-10-4 cavity or in a standard housing with port 1 plugged.

Operation

When the spring bias is overcome at port 2, the flow is directed from port 4 to port 3 while closing port 2. When the spring bias is overcome at port 4, the flow is directed form port 2 to port 3 while closing port 4. This valve is available in both a closed and open center spool configuration.

Performance data

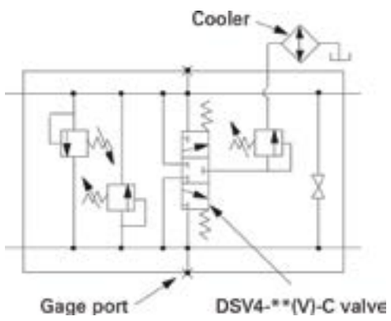
Ratings and specifications	
Performance data is typical with fluid at 21,8 cST (105 SUS) and 49°C (120°F)	
Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	190 L/min (50 USgpm)
Internal leakage	164 cc/min (10 in³ /min) maximum @ 210 bar (3000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Pilot pressures	**40** - 2,75 bar (40 psi) **80** - 5,5 bar (80 psi) **160** - 11,0 bar (160 psi)
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 or steel
Weight cartridge only	0,5 kg (1.12 lbs)
Seal kit	889634 (Buna-N) 889634 (Viton®)

Viton is a registered trademark of E.I. DuPont.

Profile Views

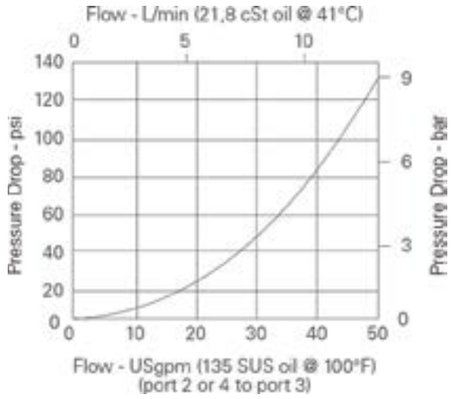


Typical application



Pressure drop curve

Cartridge only



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

DSV4-16 - Shuttle valve

Spring centered, open or closed center spool type shuttle valve
190 L/min (50 USgpm) • 350 bar (5000 psi)

DSV4 – 16 (V) – * – 0 – * – 00**

1 2 3 4 5 6 7

1 Function
DSV4 - Directional shuttle valve

2 Size
16 - 16 size

3 Seal
Blank - Buna-N
V - Viton®

4 Spool configuration
C - Closed center
O - Open center

5 Port size
O - Cartridge only (Not available with standard housing)

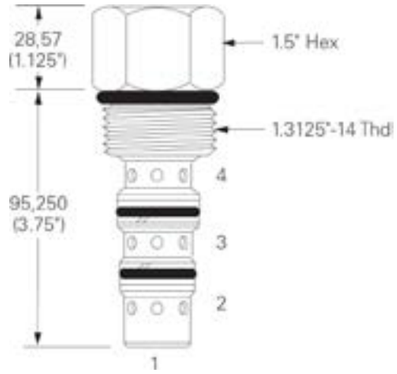
6 Pilot to shift (nominal)
40 - 2,75 bar (40 psi)
80 - 5,5 bar (80 psi)
160 -11,0 bar (160 psi)

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

Dimensions

mm (inch)

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).

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