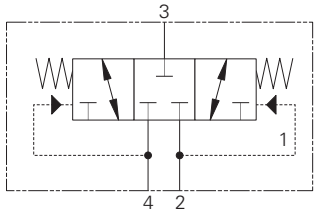


# DSV4-10 - Shuttle Valve

Sprung centered, open or closed center spool type shuttle valve  
 26 L/min (6.9 USgpm) • 350 bar (5000 psi)



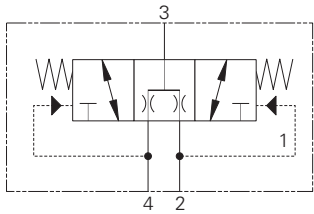
## Operation

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 from port 2 to port 3 while closing port 4. This valve is available in both a closed and open center spool configuration.

## Features

Hardened, ground and honed working parts to limit leakage and prolong life. The valve should be fitted into a blind C-10-4 cavity or a standard body with port 1 plugged. Several switching pressures available. Compact design with a low pressure drop.



## Performance Data

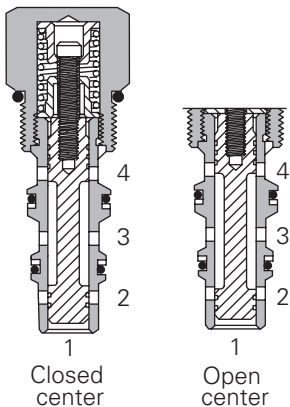
### Ratings and Specifications

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	26 L/min (6.9 USgpm)
Internal leakage	164 cc/min (10 in <sup>3</sup> /min) maximum @ 210 bar (3000 psi)
Pilot pressures	40 - 2,75 bar (40 psi) 80 - 5,5 bar (80 psi) 160 - 11,0 bar (160 psi)
Pilot displacement volume	0,49 cm <sup>3</sup> (0.02 in <sup>3</sup> )
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-10-4
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	0,14 kg (0.32 lbs)
Seal kit	889597 (Buna-N), 02-172397 (Viton®)

Viton is a registered trademark of E.I. DuPont

## Sectional View

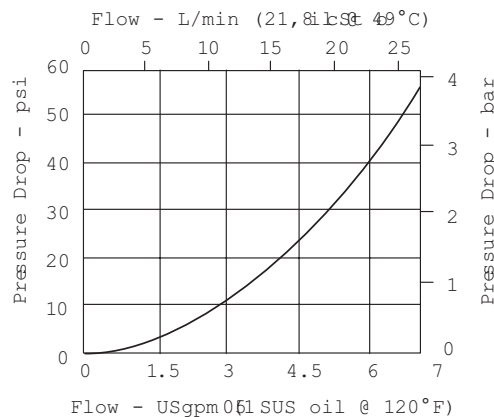


## Description

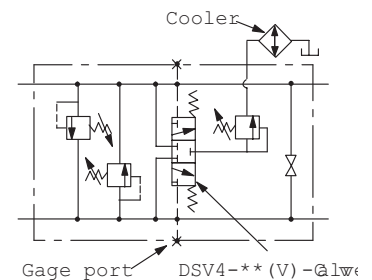
This is a 3-way 3-position, sprung centered, open or closed center spool type hot oil shuttle valve for transmission applications. This is usually built into manifolds containing other transmission components such as cross line relief valves and purge reliefs.

## Pressure Drop Curves

Cartridge only



## Typical Application

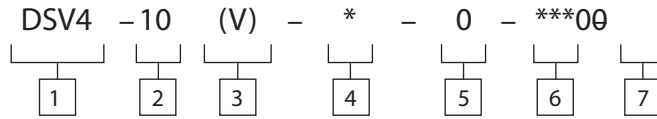


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

# DSV4-10 - Shuttle Valve

Sprung centered, open or closed center spool type shuttle valve  
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## Model Code



<b>1</b> Function DSV4 - Directional shuttle valve	<b>4</b> Spool Configuration C - Normally closed O - Open center	<b>6</b> Pilot to Shift (Nominal) Note: Code based on pressure in psi. 40 - 2,75 bar (40 psi) 80 - 5,5 bar (80 psi) 160 - 11,0 bar (160 psi)	<b>7</b> Special features 00 - None (Only required if valve has special features, omitted if "00.")
<b>2</b> Size 10 - 10 size	<b>5</b> Port Size 0 - Cartridge only (Not available with standard housing)		
<b>3</b> Seal Material Blank - Buna-N V - Viton®			

## Dimensions

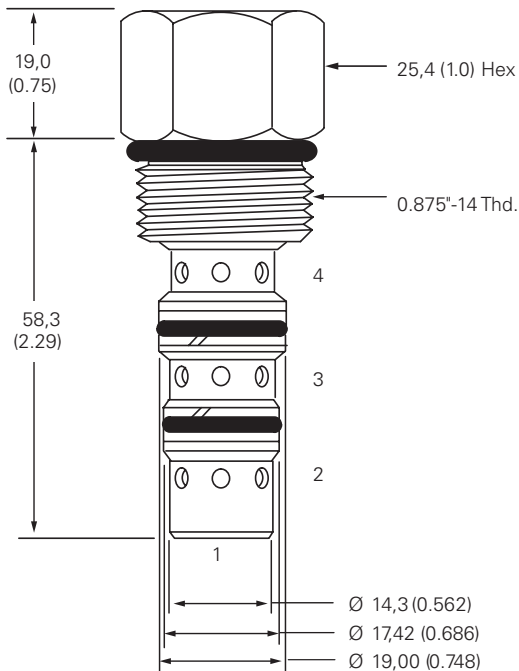
mm (inch)

Torque cartridge in housing

A - 47-54 Nm (35-40 ft. lbs)

S - 68-75 Nm (50-55 ft. lbs)

Cartridge Only



### 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).