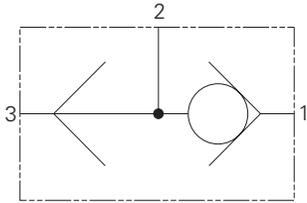


# DSV2-8 - Shuttle Valve

Ball type

23 L/min (6 USgpm) • 240 bar (3500 psi)



## Operation

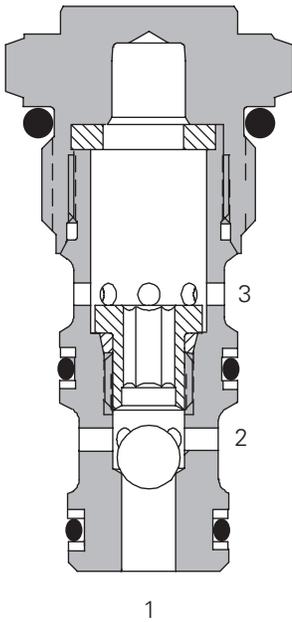
When a higher pressure is sensed at inlet 1 than at inlet 2 the ball within the cartridge is forced against a seat opening the higher pressure to outlet.

When the higher pressure appears at inlet 2 the ball is forced against the other seat which blocks inlet 1 and opens up inlet 2 to outlet.

## Features

Cartridge design enabling speedy servicing when mounted in a body or in a composite manifold.

## 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)	240 bar (3500 psi) steel housing
Cartridge fatigue pressure (infinite life)	240 bar (3500 psi)
Rated flow	23 L/min (6 USgpm)
Internal leakage	Between ports 2 and 1, and 2 and 3 <5 drops/min maximum @ 240 bar (3500 psi)
Cavity	C-8-3
Standard housing materials	Aluminum or steel
Temperature range	-40°C to +120°C (-40° to + 248°F)
Fluids	All general purpose hydraulic fluids such as MIL-H-5606, SAE 10, SAE 20, etc.
Filtration level	Cleanliness code 18/16/13
Weight cartridge only	0,06 kg (0.14 lbs)
Seal kits	02-160755 (Buna-N) 02-160756 (Viton®)

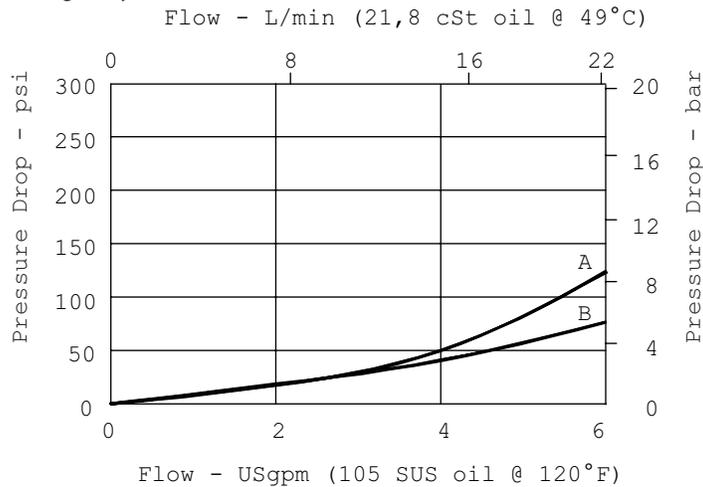
Viton is a registered trademark of E. I. DuPont

## Description

This valve provides a means of sensing the higher pressures between two lines on a hydraulic circuit allowing this line to be used for an auxiliary function such as the removal of a mechanically applied brake, the operation of a gauge or to give a remote pressure sensing line for the control of a separate valve.

## Pressure Drop

### Cartridge only



A - Port 1 to port 2

B - Port 3 to port 2

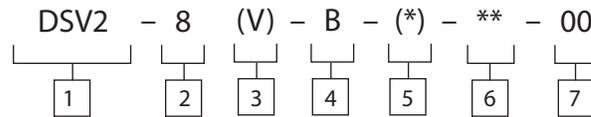
Note: This valve is intended for application as a load sense shuttle valve in load sensing systems

# DSV2-8 - Shuttle Valve

Ball type

23 L/min (6 USgpm) • 240 bar (3500 psi)

## Model Code



**1** Function  
DSV2 - Shuttle Valve

**2** Size  
8 - 8 Size

**3** Seals  
Blank - Buna-N  
V - Viton

**4** Style  
B - Ball

**5** Valve Housing Material  
Omit for cartridge only  
A - Aluminum  
S - Steel

**6** Port Size

Code	Port Size	Housing Number - Body Only	
		Aluminum Fatigue Rated	Steel Fatigue Rated
4T	SAE 4	02-160741	02-160745
6T	SAE 6	02-160742	02-160746
2G	1/4" BSPP	02-160739	02-160743
3G	3/8" BSPP	02-160740	02-160744

**7** Special Features

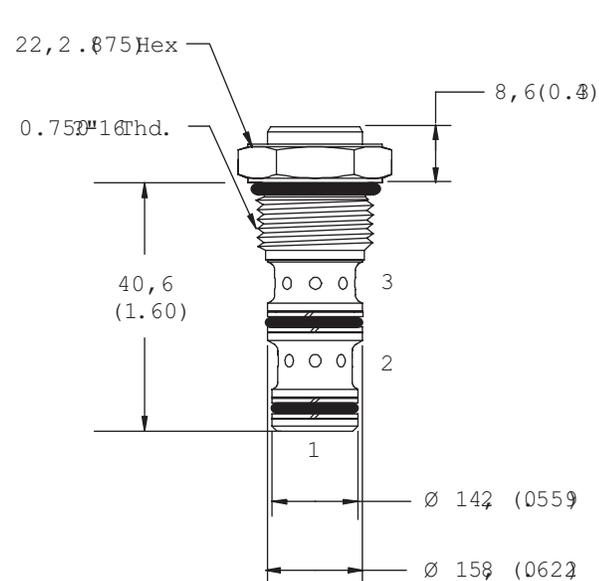
00 - None  
(Only required if valve has special features, omitted if "00")

SS - 316TI Stainless Steel External components

## Dimensions

mm (inch)

Cartridge Only  
Basic Code  
DSV2-8



Note: Torque cartridge in aluminum or steel housing 8.1-13.6 Nm (6-10 ft lbs).



Aluminum housings can be used for pressures up to 210 bar (3000 psi). Steel housings must be used for operating pressures above 1210 bar (3000 psi).

## Installation Drawing (Steel)

