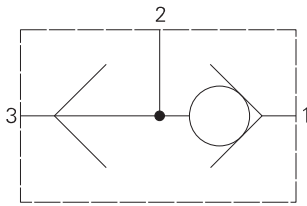
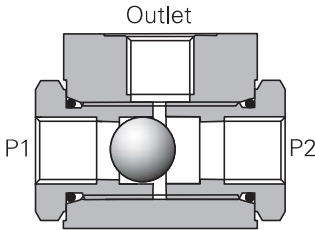


DSV3 ** B - Shuttle valve

Ball type, in-line housing
Up to 170 L/min (45 USgpm) • 350 bar (5000 psi)



Sectional view



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.

Performance data

Ratings and specifications

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

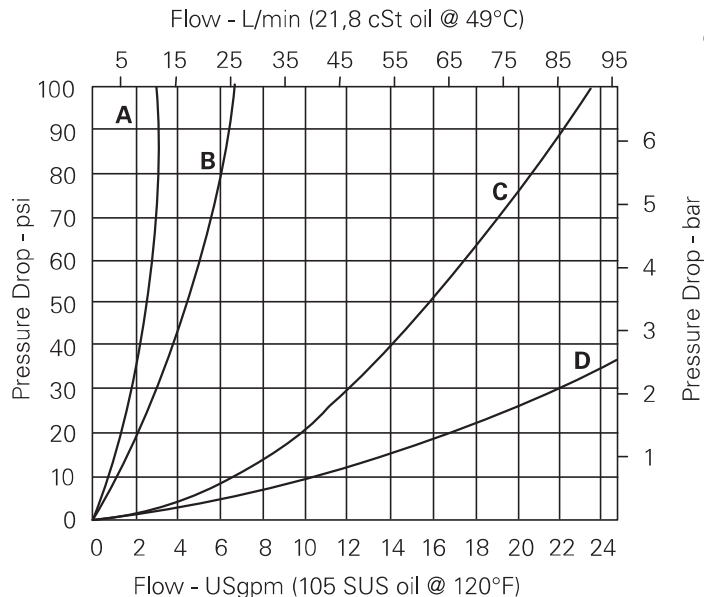
| | | | |
|----------------------------|---|---------------------------------------|---|
| Maximum pressure | 210 bar (3000 psi) Aluminum housing 350 bar (5000 psi) Steel housing | | |
| Rated flow | 6 series - 11 L/min (3 USgpm) 8 series - 24,6 L/min (6.5 USgpm) 12 series - 88,9 L/min (23.5 USgpm) 16 series - 170,3 L/min (45 USgpm) | | |
| Internal leakage | Between ports 2 to 1, and 2 to 3 <5 drops/min @ 210 bar (3000 psi) | | |
| 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 | Cleanliness code 18/16/13 | | |
| Standard housing materials | Aluminum or steel | | |
| Weight | 6 series | w/aluminum housing w/steel housing | 0,10 kg (0.22 bs) 0,30 kg (0.66 lbs) |
| | 8 series | w/aluminum housing w/steel housing | 0,28 kg (0.62 lbs) 0,90 kg (1.86 lbs) |
| | 12 series | w/aluminum housing w/steel housing | 0,75 kg (1.65 lbs) 2,25 kg (4.95 lbs) |
| | 16 series | w/aluminum housing w/steel housing | 1,76 kg (3.86 lbs) 5,25 kg (11.58 lbs) |
| Seals (2 required) | 6 series | 154128 (Buna-N) / 396096 (Viton®) | |
| | 8 series | 154129 (Buna-N) / 396098 (Viton®) | |
| | 12 series | 154131 (Buna-N) / 396102 (Viton®) | |
| | 16 series | 154132 (Buna-N) / 396105 (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

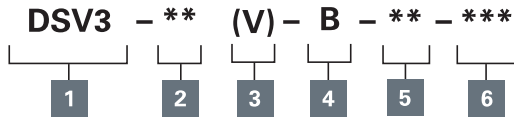


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

DSV3 ** B - Shuttle valve

Ball type, in-line housing
Up to 170 L/min (45 USgpm) • 350 bar (5000 psi)

Model code



1 Function

DSV3 - Shuttle Valve

2 Size

6 - 6 Size
8 - 8 Size
12 - 12 Size
16 - 16 Size

3 Seals

Blank - Buna-N
V - Viton

4 Style

B - Ball

5 Housing material

A - Aluminum
S - Steel

6 Port size

6 Series
1 - 1/8" NPTF
8 Series
2 - 1/4" NPTF
6T - SAE 6

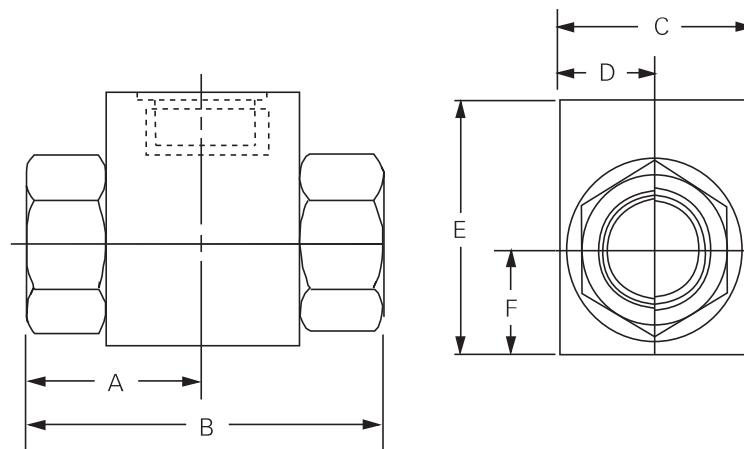
12 Series
4 - 1/2" NPTF
8T - SAE 8
16 Series
6 - 3/4" NPTF
12T - SAE 12

Dimensions

mm (inch)

Cartridge only

Basic code
DSV3



⚠ 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).

| Model number | A | B | C | D | E | F |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| DSV3-6-B-A1 | 22,2 (0.87) | 44,5 (1.75) | 19,0 (0.75) | 9,5 (0.37) | 25,4 (1.00) | 9,5 (0.37) |
| DSV3-6-B-S1 | 22,2 (0.87) | 44,5 (1.75) | 20,6 (0.81) | 10,3 (0.41) | 31,7 (1.25) | 12,7 (0.50) |
| DSV3-8-B-A2 | 23,8 (0.94) | 47,6 (1.87) | 25,4 (1.00) | 12,7 (0.50) | 38,1 (1.50) | 12,7 (0.50) |
| DSV3-8-B-S2 | 23,8 (0.94) | 47,6 (1.87) | 31,7 (1.25) | 15,9 (0.63) | 43,7 (1.72) | 15,9 (0.63) |
| DSV3-8-B-A6T | 23,8 (0.94) | 47,6 (1.87) | 25,4 (1.00) | 12,7 (0.50) | 38,1 (1.50) | 12,7 (0.50) |
| DSV3-8-B-S6T | 23,8 (0.94) | 47,6 (1.87) | 31,7 (1.25) | 15,9 (0.63) | 43,7 (1.72) | 15,9 (0.63) |
| DSV3-12-B-A4 | 31,7 (1.25) | 63,5 (2.5) | 38,1 (1.50) | 19,1 (0.75) | 50,8 (2.00) | 19,1 (0.75) |
| DSV3-12-B-S4 | 31,7 (1.25) | 63,5 (2.5) | 43,7 (1.72) | 21,8 (0.86) | 57,5 (2.25) | 22,2 (0.88) |
| DSV3-12-B-A8T | 31,7 (1.25) | 63,5 (2.5) | 38,1 (1.50) | 19,1 (0.75) | 50,8 (2.00) | 19,1 (0.75) |
| DSV3-12-B-S8T | 31,7 (1.25) | 63,5 (2.5) | 43,7 (1.72) | 21,8 (0.86) | 57,5 (2.25) | 22,2 (0.88) |
| DSV3-16-B-A6 | 47,6 (1.88) | 95,3 (3.75) | 47,6 (1.88) | 23,8 (0.94) | 63,5 (2.50) | 23,8 (0.97) |
| DSV3-16-B-S6 | 47,6 (1.88) | 95,3 (3.75) | 50,0 (1.97) | 25,0 (0.98) | 62,7 (2.47) | 25,4 (1.00) |
| DSV3-16-B-A12T | 47,6 (1.88) | 95,3 (3.75) | 47,6 (1.88) | 23,8 (0.94) | 63,5 (2.50) | 23,8 (0.97) |
| DSV3-16-B-S12T | 47,6 (1.88) | 95,3 (3.75) | 50,0 (1.97) | 25,0 (0.98) | 62,7 (2.47) | 25,4 (1.00) |

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