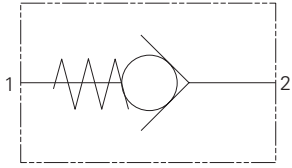


CV16-10 - Check Valve

Direct acting, poppet types, side in, nose out

76 L/min (20 USgpm) • 350 bar (5000 psi)



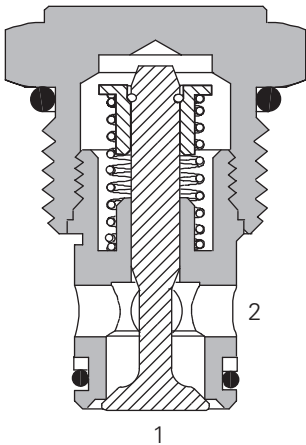
Operation

The valve remains closed until the spring bias is reached at port 2 at which time the poppet lifts off the seat and allows flow from port 2 to port 1. In the other direction the valve is closed.

Features

Hardened and ground working parts to limit leakage and extend service life. Robust design with a 350 bar max pressure rating.

Sectional View



Performance Data

Ratings and Specifications

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

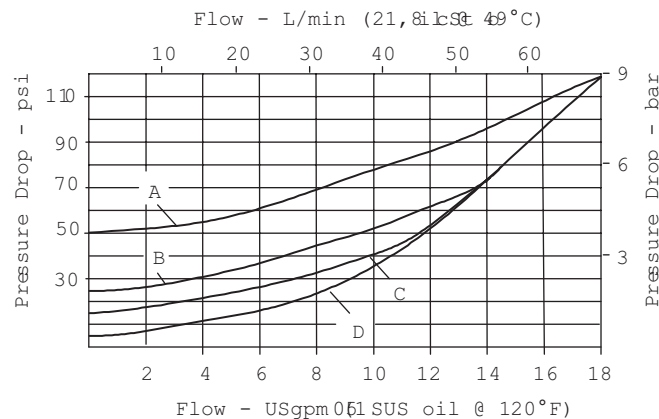
Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	310 bar (4500 psi)
Rated flow	76 L/min (20 USgpm)
Free flow cracking pressures @ 1.0 L/min (0.25 USgpm)	05 - 0.34 bar (5 psi) 15 - 1.03 bar (15 psi) 25 - 1.70 bar (25 psi) 50 - 3.40 bar (50 psi)
Internal leakage, Port 1 to 2	5 drops/min. maximum @ 350 bar (5000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-10-2
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	0.08 kg (0.17 lbs.)
Seal kit	565803 (Buna-N) 566086 (Viton)

Viton is a registered trademark of E.I. DuPont

Description

This is a poppet type screw-in cartridge valve allowing free flow from port 2 to 1. This gives flexibility to the manifold designer allowing the production of the most compact solution

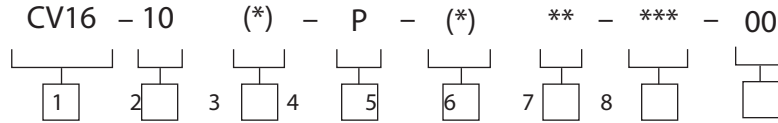
Pressure Drop



CV16-10 - Check Valve

Direct acting, poppet types, side in, nose out
76 L/min (20 USgpm) • 350 bar (5000 psi)

Model Code



1 Function
CV16 - Check valve

2 Size
10 - 10 size

3 Seal Material
Blank - Buna-N
V - Viton

4 Style
P - Poppet

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

6 Port Size

Code	Port Size	Housing Number	Aluminum Light Duty	Aluminum Fatigue Rated	Steel Fatigue Rated
0	Cartridge only				
3B	3/8" BSPP	02-175462	-	-	-
6T	SAE 6	566151	-	-	02-175100
8T	SAE 8	-	-	-	02-175101
2G	1/4" BSPP	-	-	876702	02-175102
3G	3/8" BSPP	-	-	876703	02-175103
6H	SAE 6	-	-	876700	-
8H	SAE 8	-	-	876701	-

See section J for housing details.

7 Free Flow Cracking Pressure

5 - 0.34 bar (5 psi)
(Anti-cavitation)
15 - 1.03 bar (15 psi)
25 - 1.70 bar (25 psi)
50 - 3.40 bar (50 psi)

8 Special Features

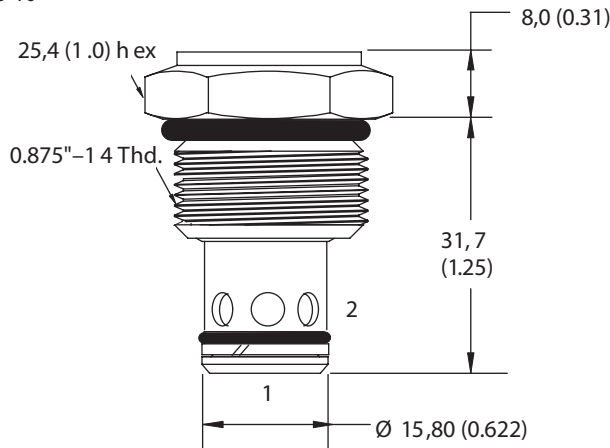
00 - None
(Only required if valve has special features, omitted if "00")
SS - 316 Stainless Steel external components

Dimensions

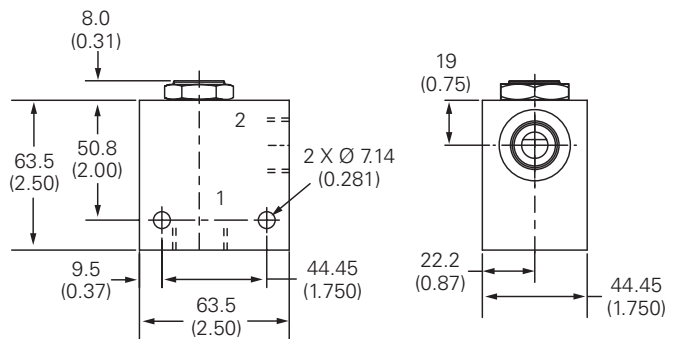
mm (inch)

Note: Torque
cartridge in housing
A - 47 - 54 Nm (35-40 ft. lbs)
S - 68 - 75 Nm (50-55 ft. lbs)

Cartridge Only
Basic Code
CV3-10



Installation Drawing (Steel)



WARNING
The cavity should be machined to 14,29 (0.562) maximum diameter and 36,00 (1.417) maximum depth (see cavity detail, page M-12)

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).