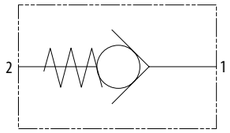
CV3-8 - Check valve

Direct acting, poppet type
30 L/min (8 USgpm) • 350 bar (5000 psi)



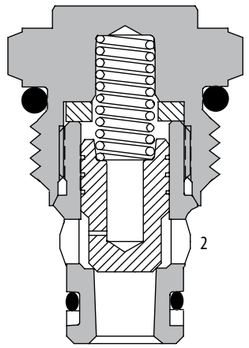
Operation

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

Features

Compact screw in cartridge design. Hardened steel ball to limit leakage and extend service life.

Sectional view



Description

This is a compact poppet type check valve ideal for use in manifolds for load sense or low flow applications.

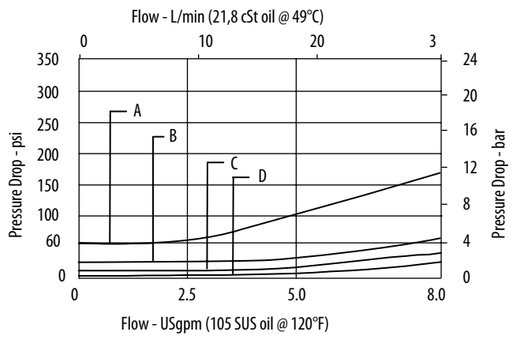
Performance data

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)	280 bar (4000 psi)
Rated flow	30 L/min (8 USgpm)
Cracking pressures @ 1.0 L/min (0.25 USgpm)	4 - 0.28 bar (4 psi) 10 - 0.70 bar (10 psi) 15 - 1.03 bar (15 psi) 25 - 1.70 bar (25 psi) 30 - 2.07 bar (30 psi) 60 - 4.00 bar (60 psi)
Internal leakage	5 drops/min. maximum @ 350 bar (5000 psi)
Temperature range	–40° to 120°C (–40° to 248° F)
Cavity	C-8-2
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	0.04 kg (0.09 lbs.)
Seal kit	02-165875 (Buna-N) 02-165877 (Viton®)

Viton is a registered trademark of E.I. DuPont

Pressure drop



A – CV3-8-P-O-60
B – CV3-8-P-O-25
C – CV3-8-P-O-10
D – CV3-8-P-O-4

G

CV3-8 - Check valve

Direct acting, poppet type
30 L/min (8 USgpm) • 350 bar (5000 psi)

Model code

CV3 – 8 (V) – P – (*) ** – * – 00**

1 2 3 4 5 6 7 8

1 Function

CV3 - Check valve

2 Size

8 - 8 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 Fatigue rated	Housing number Steel Fatigue rated
0	Cartridge only		
4T	SAE 4	02-160730	02-160736
6T	SAE 6	02-160731	02-160737
8T	SAE 8	02-160732	02-160738
2G	1/4" BSPP	02-160727	02-160733
3G	3/8" BSPP	02-160728	02-160734

See section J for housing details.

7 Cracking pressure

004 - 0.28 bar (4 psi)
010 - 0.70 bar (10 psi)
015 - 1.03 bar (15 psi)
025 - 1.70 bar (10 psi)
030 - 2.07 bar (30 psi)
060 - 4.00 bar (60 psi)

8 Special features

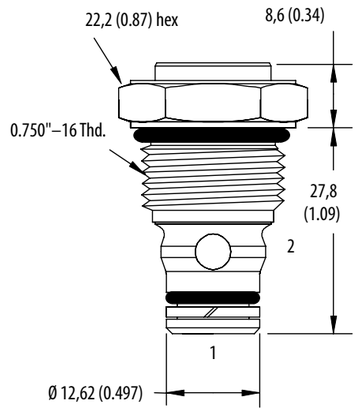
00 - None
(Only required if valve has special features, omitted if "00")
SS - 316 Stainless Steel external components

Dimensions

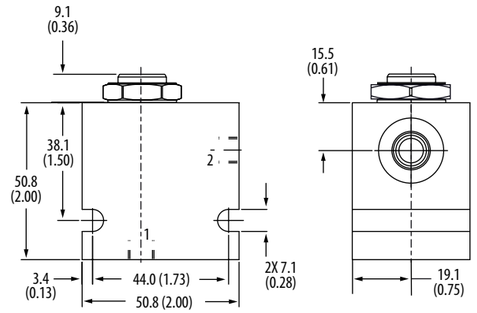
mm (inch)

Cartridge only

Basic code
CV3-8



Installation drawing (Steel)



Note: Torque cartridge in aluminum or steel housing to 34-41 Nm (25-30 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).