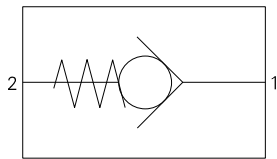


# CV3-8 - Check Valve

Direct acting, poppet type

30 L/min (8 USgpm) • 350 bar (5000 psi)



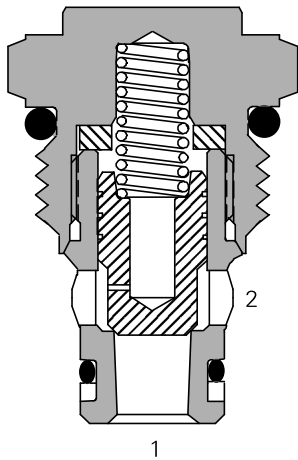
## Operation

The valve remains closed until the spring bias is reached at port 1 at which time the poppet lifts off 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

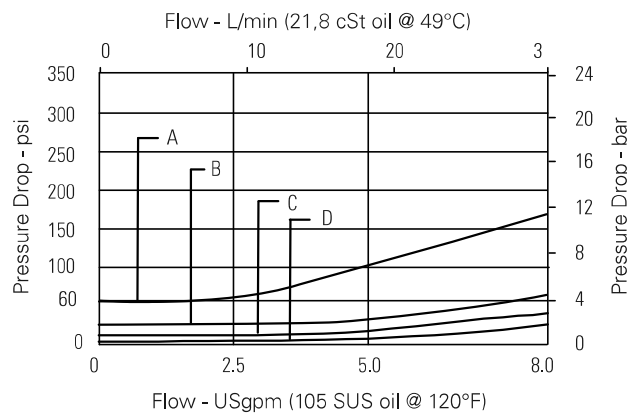
### Ratings and Specifications

*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

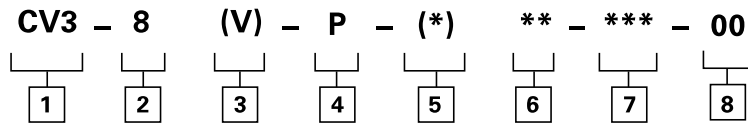
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

# CV3-8 - Check Valve

Direct acting, poppet type

30 L/min (8 USgpm) • 350 bar (5000 psi)

## Model Code



**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	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 (30 psi)  
030 - 2.07 bar (30 psi)  
060 - 4.00 bar (60 psi)

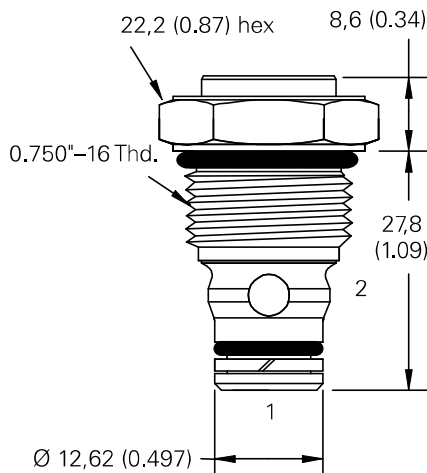
**8 Special features**  
00 - None  
(Only required if valve has special features, omitted if "00")  
SS - 316 Stainless Steel external components

## Dimensions

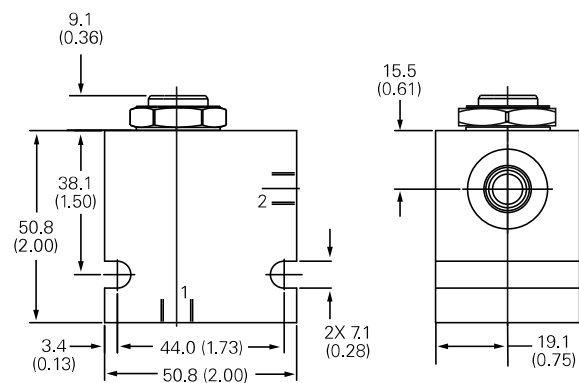
mm (inch)

### 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).

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