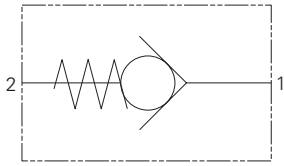


# CV3-8 - Check Valve

Direct acting, poppet type

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



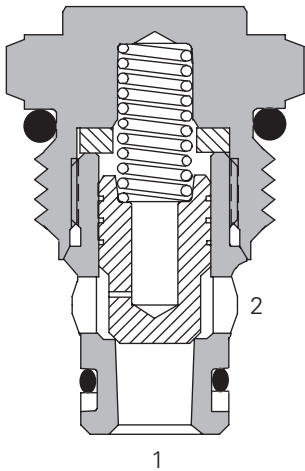
## Operation

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



## 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.)

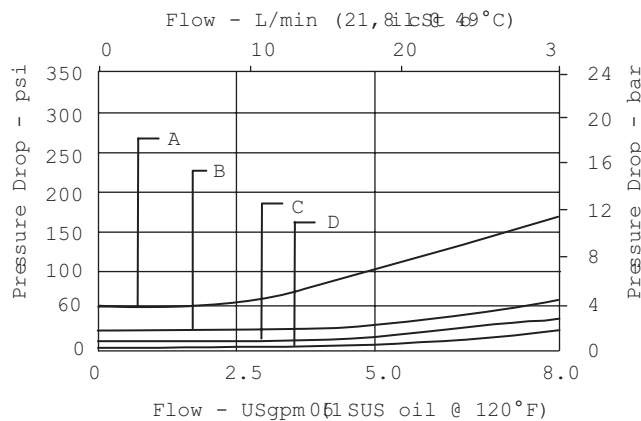
Seal kit 02-105875 (Buna-N)  
02-105877 (Viton)

Viton is a registered trademark of E.I. DuPont

## Description

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

## Pressure Drop



A - CV3-8-P-O-60  
B - CV3-8-P-O-25

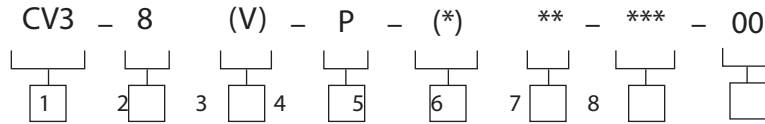
C - CV3-8-P-O-10  
D - CV3-8-P-O-4

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.

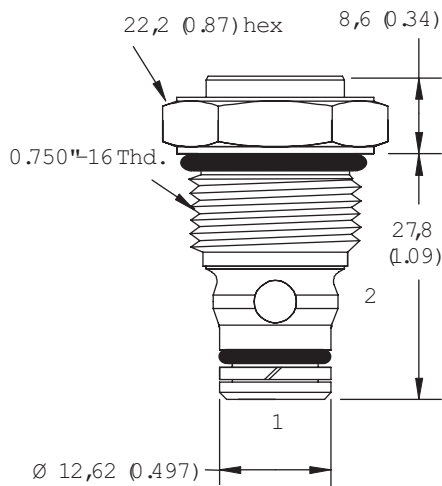
**7** Cracking Pressure  
004 - 0.28 bar (4 psi)  
010 - 0.70 bar (10 psi)  
015 - 1.03 bar (15 psi)  
025 - 1.70 bar (25 psi)  
030 - 2.07 bar (30 psi)  
060 - 4.00 bar (60 psi)

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

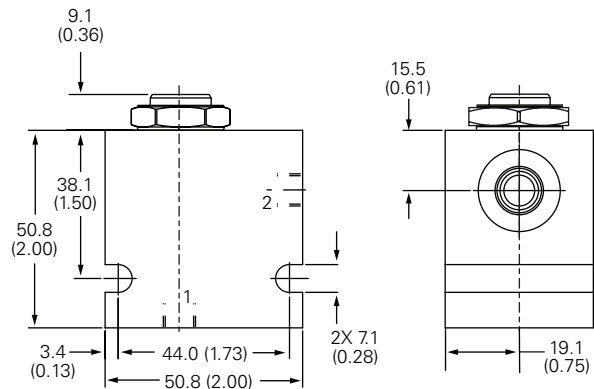
## Dimensions

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).