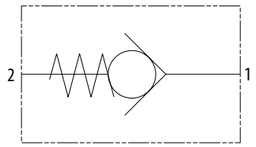
CV1-16/CV11-16 - Check valve

Direct acting, poppet type
151 L/min (40 USgpm) • 350 bar (5000 psi)



Operation

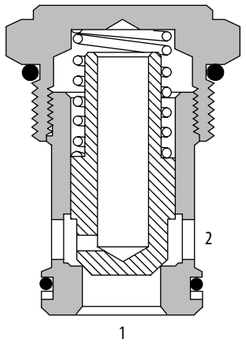
The valve remains closed until the spring bias is reached at port 1 at which time the poppet lifts of the seat and allows flow from port 1 to port 2. In the other direction the valve is closed.

Features

Hardened and ground working parts to limit leakage and extend service life.

Sectional view

CV1-16



Performance data

Ratings and specifications

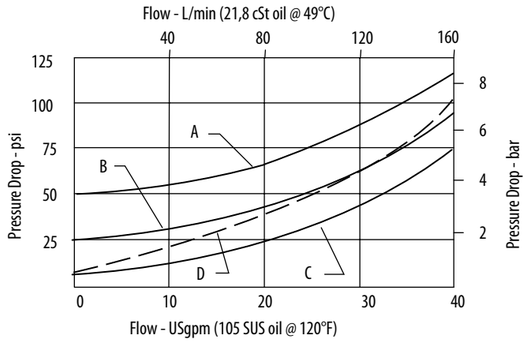
Performance data is typical with fluid at 21,8 cST (105 SUS) and 49°C (120°F)	
Typical application pressure (all ports)	CV1-16 210 bar (3000 psi)/CV11 350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	CV1-16 210 bar (3000 psi)/CV11-16 350 bar (5000 psi)
Rated flow	151 L/min (40 USgpm)
Free flow cracking pressures @ 1 L/min (0.25 USgpm)	**5** - 0,34 bar (5 psi) **20** - 1,34 bar (20 psi) **30** - 2,07 bar (30 psi) **40** - 2,67 bar (40 psi) **50** - 3,45 bar (50 psi) **100** - 6,90 bar (100 psi)
Note: Only the 5 psi option is available for CV11-16	
Internal leakage, Port 2 to 1	5 drops/min. maximum @ 210 bar (3000 psi)
Temperature range	–40° to 120°C (–40° to 248°F)
Cavity	C-16-2
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	0,26 kg (0.58 lbs.)
Seal kit	565810 (Buna-N) 889609 (Viton®)

Viton is a registered trademark of E.I. DuPont

Description

This is a poppet type, direct acting screw-in cartridge check valve allowing free flow from port 1 to 2.

Pressure drop



A – CV(*)1-16-P-O-50
B – CV(*)1-16-P-O-20
C – CV(*)1-16-P-O-15
D – CV(*)1-16-P-O-5

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

CV1-16/CV11-16 - Check valve

Direct acting, poppet type
151 L/min (40 USgpm) • 350 bar (5000 psi)

Model code

CV(*)1 – 16 (V) – P * – ** – 00**

1 2 3 4 5 6 7

1 Function

CV1 - Check valve, 210 bar
CV11 - Check valve, 350 bar

2 Size

16 - 16 size

3 Seal material

Blank - Buna-N
V - Viton

4 Style

P - Poppet

5 Port size

Code	Port size	Housing number		
		Aluminum light duty	Aluminum fatigue rated	Steel fatigue rated
0	Cartridge only			
6B	3/4" BSPP	02-175463	–	
10T	SAE 10	–	–	02-175104
12T	SAE 12	566149	–	02-175105
4G	1/2" BSPP	–	876716	02-175106
6G	3/4" BSPP	–	876718	02-175107
10H	SAE 10	–	876717	
12H	SAE 12	–	566113	

See section J for housing details.

6 Cracking pressure

5 - 0,34 bar (5 psi) (Anti-cavitation)
20 - 1,34 bar (20 psi)
30 - 2.07 bar (30 psi)
40 - 2.67 bar (40 psi)
50 - 3.45 bar (50 psi)
100 - 6.90 bar (100 psi)

7 Special features

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

Dimensions

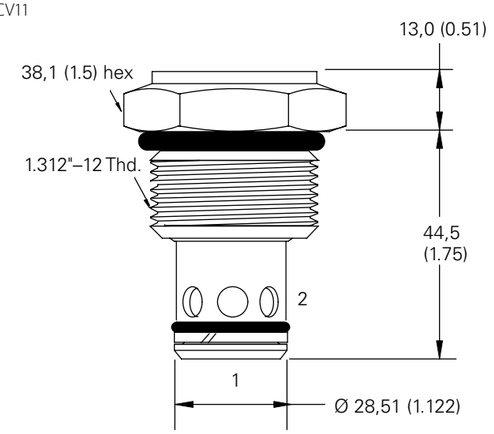
mm (inch)

Torque cartridge in housing
A- 108-122 Nm (80-90 ft lbs)
S -136-149 Nm (100-110 ft lbs)

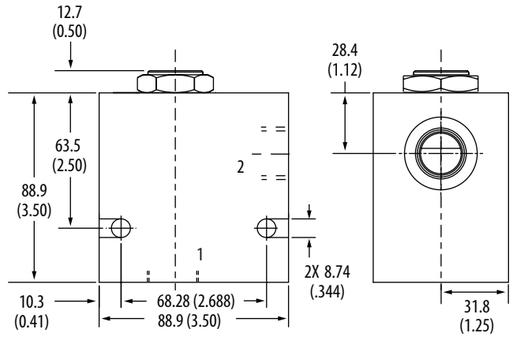
Cartridge only

Basic code

CV1, CV11



Installation drawing (Aluminum)



⚠ 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).

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