

CV1-16

Check Valve

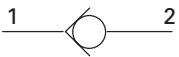
Description

The CV1-16-P is a poppet type, screw-in cartridge check valve.

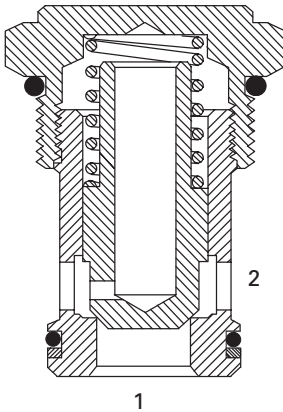
Operation

This 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.

Functional Symbol



Sectional View



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)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated flow	151 L/min (40 USgpm)
Free flow cracking pressure @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)
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
Weight cartridge only	0,26 kg (0.58 lb)
Seal kit	565810 Buna-N 889609 Viton®

Viton is a registered trademark of E.I.DuPont

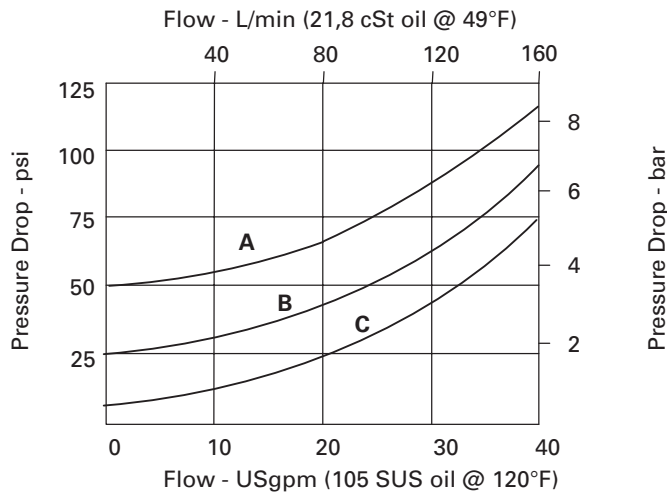
Pressure Drop Curves

Cartridge only

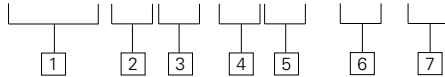
A – CV1-16-P-O-50

B – CV1-16-P-O-20

C – CV1-16-P-O-5



CV1 – 16 (V) – P * – ** – 00**



- 1 Function**
CV1 – Check Valve

- 2 Size**
16 – 16 Size

- 3 Seals**
Blank – Buna-N
V – Viton®

- 4 Style**
P – Poppet

5 Port size
0 – Cartridge only

CODE	PORT SIZE	HOUSING NUMBER	
		Aluminum Light duty	Aluminum Fatigue rated
6B	3/4" BSPP	02-175463	–
12T	SAE 12	566149	–
4G	1/2" BSPP	–	876716
6G	3/4" BSPP	–	876718
10H	SAE 10	–	876717
12H	SAE 12	–	566113

See Section J for housing details.

- 6 Free flow 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")

Dimensions

mm (inch)

Torque cartridge in aluminum housing
108-122 Nm (80-90 ft. lbs)

