

CV1-10

Check valve

Description

The CV1-10-P is a poppet type, screw-in cartridge check valve.

Operation

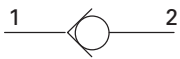
This valve remains closed until the bias is reached at port 1 at which time the

poppet lifts off the seat and allows flow from port 1 to port 2.

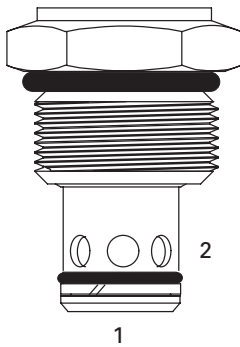
Important

Upgraded to 350 bar (5000 psi)

Functional Symbol



Profile View



RATINGS AND SPECIFICATIONS

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

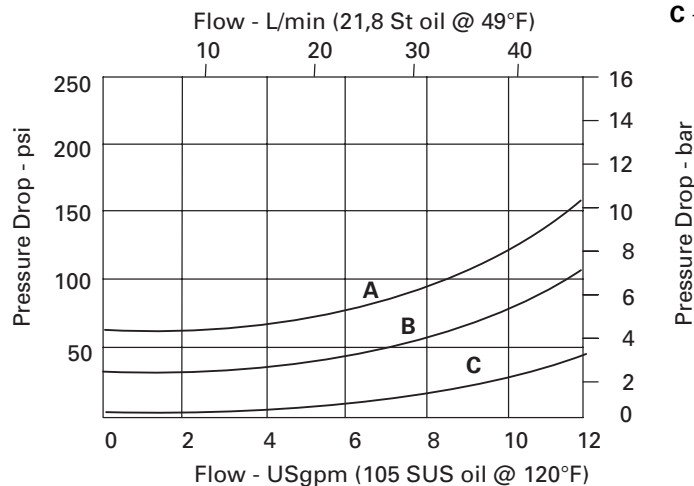
Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	45 L/min (12 USgpm)
Free flow cracking pressure @ 1 L/min (0.25 USgpm)	005 – 0,34 bar (5 psi) 015 – 1,03 bar (15 psi) 030 – 2,07 bar (30 psi) 065 – 4,48 bar (65 psi) 080 – 5,12 bar (80 psi) 100 – 6,90 bar (100 psi) 140 – 9,66 bar (140 psi) 260 – 17,93 bar (260 psi) 300 – 20,7 bar (300 psi)
Internal leakage, Port 2 to 1	5 drops / min. maximum @ 350 bar (5000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-10-2
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	0,08 kg (0.17 lb)
Seal kit	565803 Buna-N 566086 Viton®

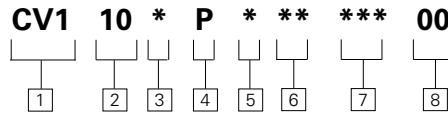
Viton is a registered trademark of E.I.DuPont

Pressure Drop Curves

Cartridge only

- A** - CV1 10*P 000 065 00
- B** - CV1 10*P 000 030 00
- C** - CV1 10*P 000 065 00





- 1 Function**
CV1 – Check valve

- 2 Size**
10 – 10 Size

- 3 Seals**
N– Buna-N
V – Viton

- 4 Style**
P – Poppet

- 5 Valve housing material**
0 – Cartridge only
A – Aluminum
S – Steel

6 Port size
00 – Cartridge only

CODE	PORT SIZE	HOUSING NUMBER		
		Aluminum Light Duty	Aluminum Fatigue rated	Steel Fatigue rated
3B	3/8" BSPP	02-175462	–	–
6T	SAE 6	566151	–	02-175100
8T	SAE 8	–	–	02-175101
2G	1/4" BSPP	–	876702	02-175102
3G	3/8" BSPP	–	876703	02-175103
6H	SAE 6	–	876700	–
8H	SAE 6	–	876701	–

See Section J for housing details.

7 Free flow cracking pressure

- | | |
|--|----------------------------------|
| 005 – 0,34 bar (5 psi)
(Anti-cavitation) | 080 – 5,12 bar (80 psi) |
| 015 – 1,03 bar (15 psi) | 100 – 6,90 bar (100 psi) |
| 030 – 2,07 bar (30 psi) | 140 – 9,66 bar (140 psi) |
| 065 – 4,48 bar (65 psi) | 260 – 17,93 bar (260 psi) |
| | 300 – 20,70 bar (300 psi) |

8 Special Features

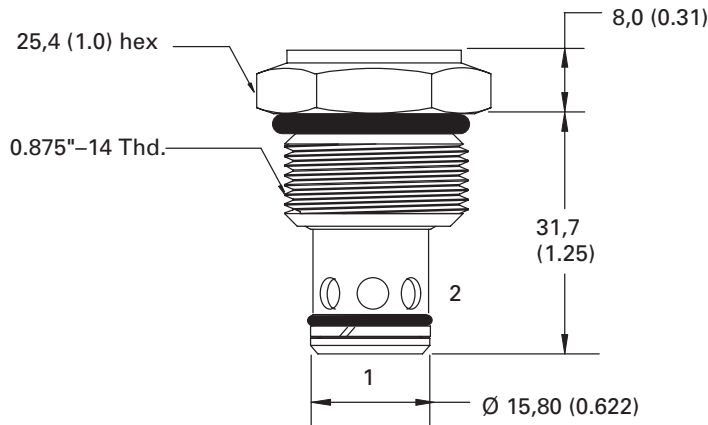
00 – None
(Only required if valve has special features - omitted if "00")

Dimensions

mm (inch)

Torque cartridge in housing

- A** - 47-54 Nm
(35-40 ft. lbs)
- S** - 68-70 Nm
(50-55 ft. lbs)



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)



CV3-10

Check valve

Description

The CV3-10-P is a poppet type, screw-in cartridge check valve.

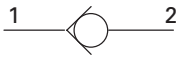
Operation

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.

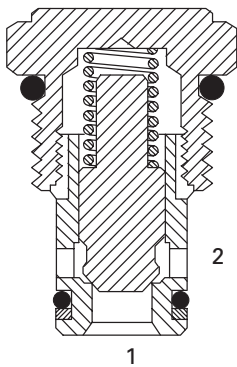
Important

Upgraded to 350 bar (5000 psi)

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)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	76 L/min (20 USgpm)
Free flow cracking pressure @1 L/min (0.25 USgpm)	003 – 0,21 bar (3 psi) 010 – 0,69 bar (10 psi) 020 – 1,38 bar (20 psi) 035 – 2,41 bar (35 psi) 040 – 2,76 bar (40 psi) 065 – 4,48 bar (65 psi) 100 – 6,90 bar (100 psi) 180 – 12,40 bar (180 psi) 210 – 14,50 bar (210 psi)
Internal leakage, Port 2 to 1	5 drops / min. maximum @ 350 bar (5000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-10-2
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	0,08 kg (0.17 lb)
Seal kit	565803 Buna-N 566086 Viton®

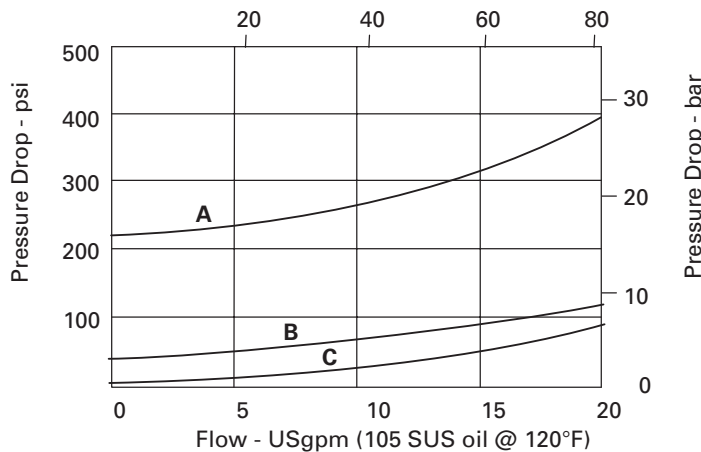
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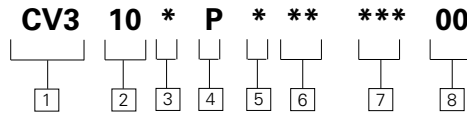
Pressure Drop Curves

Cartridge only

Flow - L/min (21,8 cSt oil @ 49°F)

- A** - CV3 10*P 000 210 00
- B** - CV3 10*P 000 040 00
- C** - CV3 10*P 000 003 00





- 1 Function**
CV3 – Check valve

- 2 Size**
10 – 10 Size

- 3 Seals**
N – Buna-N
V – Viton®

- 4 Style**
P – Poppet

- 5 Valve housing material**
0 – None
A – Aluminum
S – Steel

- 6 Port size**
00 – Cartridge only

CODE	PORT SIZE	HOUSING NUMBER		
		Aluminum Light Duty	Aluminum Fatigue rated	Steel Fatigue rated
3B	3/8" BSPP	02-175462	–	–
6T	SAE 6	566151	–	02-175100
8T	SAE 8	–	–	02-175101
2G	1/4" BSPP	–	876702	02-175102
3G	3/8" BSPP	–	876703	02-175103
6H	SAE 6	–	876700	–
8H	SAE 8	–	876701	–

See Section J for housing details.

- 7 Free flow cracking pressure**
003 – 0,21 bar (3 psi) (Anti-cavitation)
010 – 0,69 bar (10 psi) (Anti-cavitation)
020 – 1,38 bar (20 psi)
035 – 2,41 bar (35psi)

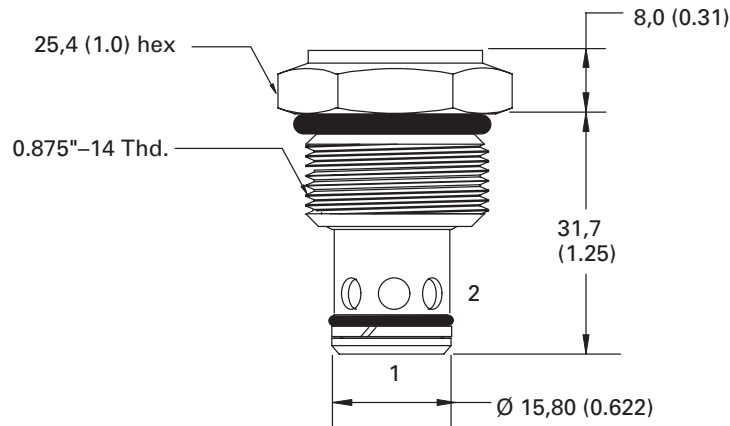
- 040 – 2,76 bar (40 psi)
- 065 – 4,48 bar (65 psi)
- 100 – 6,90 bar (100 psi)
- 180 – 12,4 bar (180 psi)
- 210 – 14,5 bar (210 psi)

- 8 Special Features**
00 – None
(Only required if valve has special features - omitted if "00")

Dimensions

mm (inch)

Torque cartridge in housing
A - 47-54 Nm (35-40 ft. lbs)
S - 68-70 Nm (50-55 ft. lbs)



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)

