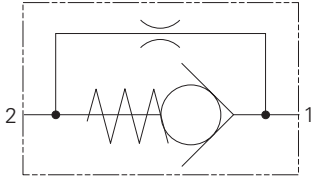


CV6-10 - Check Valve

Direct acting, poppet type with orifice
76 L/min (20 USgpm) • 350 bar (5000 psi)



Operation

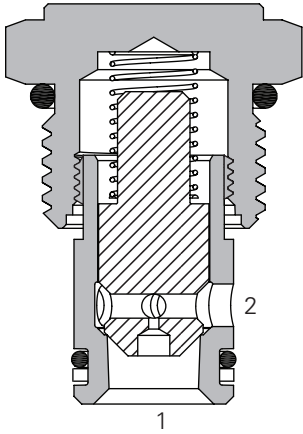
The poppet remains on its seat until the pressure drop across the orifice overcomes the spring force over the seat area. Full flow

will then take place from port 1 to 2. Flow from port 2 to 1 will be restricted by the orifice.

Features

Hardened and ground working parts extend service life. Robust design with a 350 bar (5000 psi) max pressure rating. Compact simple solution in a single cartridge.

Sectional View



Performance Data

Ratings and Specifications

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

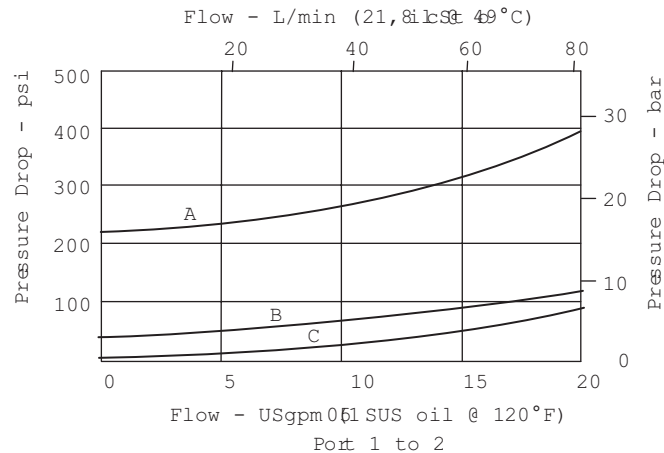
Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	76 L/min (20 USgpm)
Free flow cracking pressures @ 1 L/min (0.25 USgpm)	003 - 0,21 bar (3 psi) 010 - 0,69 bar (10 psi) 020 - 1,38 bar (20 psi) 035 - 2,41 bar (35 psi) 040 - 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)
Orifice size range	0.015 to 0.125" (0.381 - 3.175 mm)
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 material	Aluminum or steel
Weight, cartridge only	0,49 kg (1.09 lbs.)
Seal kit	889615 (Buna-N) 889619 (Viton)

Viton is a registered trademark of E.I. DuPont

Description

This is a poppet type screw-in cartridge check valve with a by-pass orifice. This will allow free flow into an actuator while restricting the flow out of it

Pressure Drop



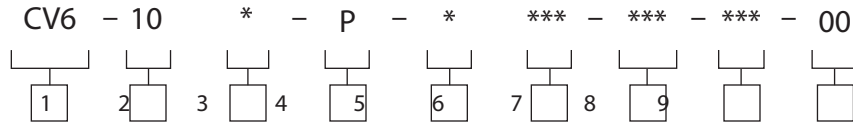
A - CV6 10*P 000 210 00
B - CV6 10*P 000 040 00

C - CV6 10*P 000 003 00

CV6-10 - Check Valve

Direct acting, poppet type with orifice
76 L/min (20 USgpm) • 350 bar (5000 psi)

Model Code



1 Function
CV6 - Check valve with bypass orifice

2 Size
10 - 10 size

3 Seal Material
N - Buna-N
V - Viton

4 Style
P - Poppet

5 Valve Housing Material
0 - No housing
A - Aluminum
S - Steel

6 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 (35 psi)
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)

7 Port Size

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	-

8 Orifice Size
Specify in thousandths of an inch
Ø - 0.125 max
Ø - 0.015 min

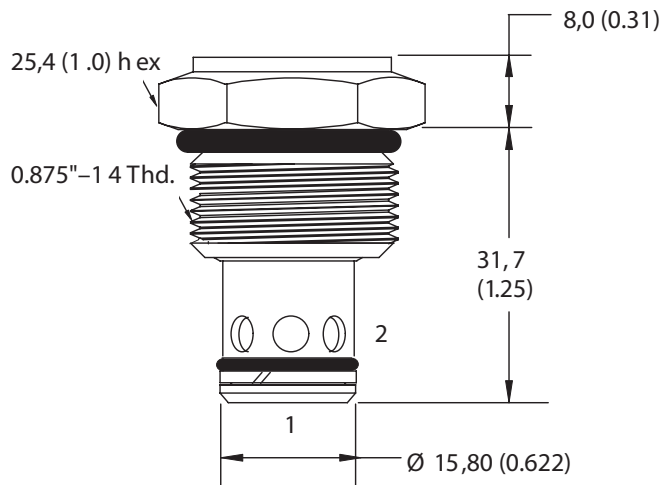
9 Special Features
00 - None
(Only required if valve has special features, omitted if "00")
SS - 316 Stainless Steel external components

Dimensions

mm (inch)

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

Cartridge Drawing
Basic Code
CV6-10



Installation Drawing (Steel)

