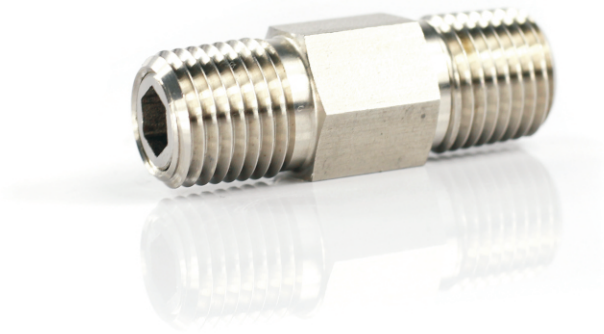


One-Piece Body, Adjustable cracking pressure **Check Valves**

CV5 Series



- ❖ Maximum working pressure up to 3000 psig (206 bar)
- ❖ Working temperature from -10°F to 400°F (-23°C to 204°C)
- ❖ One-piece body design
- ❖ Adjustable spring sets cracking pressure
- ❖ Cracking pressure: 3 to 600 psig (0.21 to 41.3 bar)
- ❖ 316 stainless steel, brass and alloy 400 body material

Features

- ❖ Maximum working pressure up to 3000 psig (206 bar)
- ❖ Working temperature from -10°F to 400°F (-23°C to 204°C)
- ❖ One-piece body design
- ❖ Fully contained O-ring seal
- ❖ Adjustable spring sets cracking pressure
- ❖ Locking screw maintains setting
- ❖ Cracking pressure: 3 to 600 psig (0.21 to 41.3 bar)
- ❖ 316 stainless steel, brass and alloy body material
- ❖ Variety of end connections

Cracking Pressure

Series	Nominal Cracking Pressure psig (bar)
CV5	3 to 50 (0.21 to 3.50)
	50 to 150 (3.50 to 10.4)
	150 to 350 (10.4 to 24.2)
	350 to 600 (2.40 to 41.4)

Pressure-Temperature Ratings

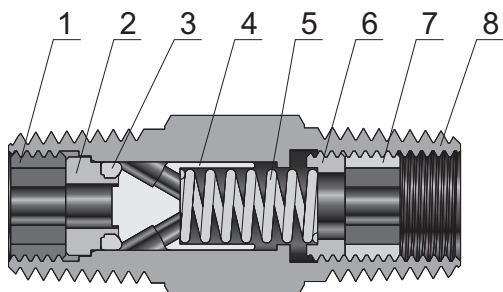
Ratings based on fluorocarbon FKM O-rings in 316 stainless steel valves and Buna N O-rings in brass valves.

Material	316S.S.	Brass
Temperature °F (°C)	Working Pressure, psig (bar)	psig (bar)
-10 (-23) to 100 (37)	3000 (206)	3000 (206)
200 (93)	2575 (177)	2600 (179)
250 (121)	2450 (168)	2405 (165)
300 (148)	2325 (160)	—
400 (204)	2185 (150)	—

Seal Materials

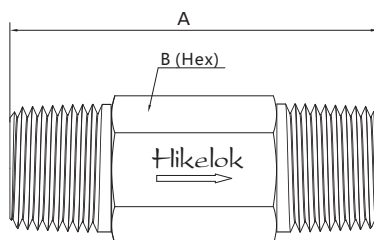
Seal Material	Temperature Range °F (°C)
Buna N	-10 to 250 (-23 to 121)
Ethylene propylene	-50 to 300 (-45 to 148)
Fluorocarbon FKM	-10 to 400 (-23 to 204)
Neoprene	-40 to 250 (-40 to 121)

Standard Materials of Construction



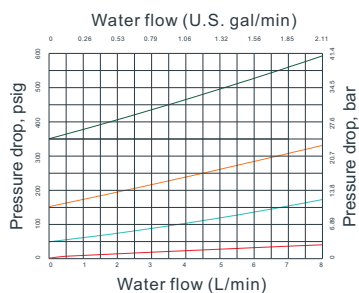
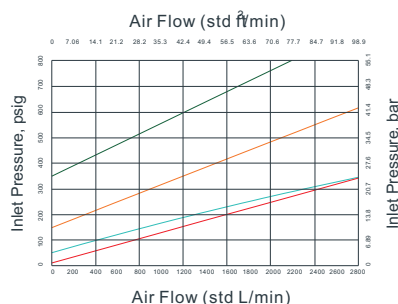
Component	Valve Material Grade/ASTM Specification	
	316 S.S.	Brass
1 Insert Locking Screw	316 S.S./A479	Brass C36000/B16
2 Insert	316 S.S./A479	Brass C36000/B16
3 O-ring	Fluorocarbon FKM	Buna N
4 Poppet	316 S.S./A479	Brass C36000/B16
5 Spring	302 S.S./A313	
6 Adjusting Screw	316 S.S./A276	
7 Locking Screw	316 S.S./A276	
8 Body	316 S.S./A479	Brass C36000/B16

Dimensions

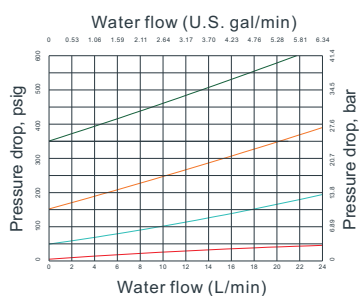
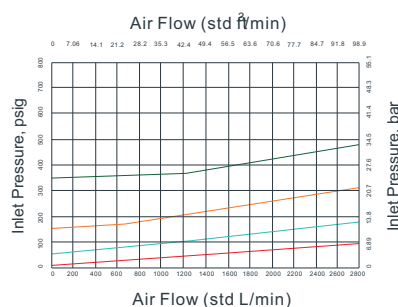


Basic Ordering Number	Connection Type and Size	Cv	Dimension, in. (mm)	
			A	B
CV5-FNPT4-	1/4 Female NPT	0.35	2.98 (75.7)	3/4 (19.05)
CV5-NPT4-	1/4 Male NPT	0.35	1.62 (41.1)	9/16 (14.29)
CV5-NPT8-	1/2 Male NPT	1.20	2.56 (65.0)	7/8 (22.23)
CV5-MBT4-	1/4 Male BSPT	0.35	1.62 (41.1)	9/16 (14.29)
CV5-MBT8-	1/2 Male BSPT	1.20	2.56 (65.0)	7/8 (22.23)

Flow Data at 70 °F (20 °C)



- Cv = 0.35
Cracking Pressure = 3 psig
- Cv = 0.35
Cracking Pressure = 50 psig
- Cv = 0.35
Cracking Pressure = 150 psig
- Cv = 0.35
Cracking Pressure = 350 psig



- Cv = 1.2
Cracking Pressure = 3 psig
- Cv = 1.2
Cracking Pressure = 50 psig
- Cv = 1.2
Cracking Pressure = 150 psig
- Cv = 1.2
Cracking Pressure = 350 psig

How to Order

CV5 — NPT8 — MBT8 — V — 50 — 316							
Series	Inlet Type	Inlet Size	Outlet Type	Outlet Size	Seal Material	Cracking Pressure	Body Material
CV5	FNPT Female NPT	2 1/8 in.	Same as inlet type and inlet size		V Fluorocarbon FKM	50 3 to 50 psig	316 316 S.S.
	NPT Male NPT	4 1/4 in.			B Buna N	150 50 to 150 psig	316L 316L S.S.
	FBT Female BSPT	6 3/8 in. or 6 mm	If outlet and inlet are the same, eliminate the outlet designator		E Ethylene propylene	350 150 to 350 psig	304 304 S.S.
	MBT Male BSPT	8 1/2 in. or 8 mm			N Neoprene	600 350 to 600 psig	304L 304L S.S.
	FMS Female ISO 261				Z Kalrez		A400 Alloy 400
	MS Male ISO 261						A20 Alloy 20
	FBP Female BSPP						A600 Alloy 600
	MBP Male BSPP						A825 Alloy 825
							A276 Alloy C276
							DU7 Duplex 2507
							BR Brass