

Check Valves

CV3 Series



- ❖ Maximum working pressure up to 6000 psig (413 bar)
- ❖ Working temperature from -65°F to 900°F (-53°C to 482°C)
- ❖ Metal to metal seal structure design
- ❖ Liquid or gas service

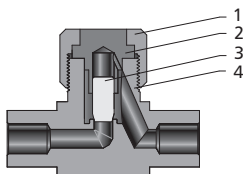
Features

- ❖ Maximum working pressure up to 6000 psig (413 bar)
- ❖ Working temperature from -65°F to 900°F (-53°C to 482°C)
- ❖ Metal to metal seal structure design
- ❖ Reverse flow coefficient less than 0.1% of forward flow coefficient
- ❖ No springs or elastomers
- ❖ Liquid or gas service
- ❖ Variety of end connections and materials

Pressure vs. Temperature

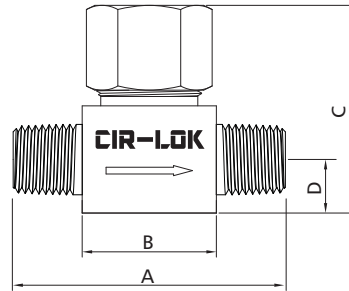
Material	316 S.S.
Temperature, °F(°C)	Working Pressure, psig(bar)
-10 (-23) to 100 (37)	6000 (413)
200 (93)	5160 (355)
250 (121)	4910 (338)
300 (148)	4660 (321)
350 (176)	4470 (307)
400 (204)	4280 (294)
450 (232)	4130 (284)
500 (260)	3980 (274)
600 (315)	3760 (259)
650 (343)	3700 (254)
700 (371)	3600 (248)
750 (398)	3520 (242)
800 (426)	3460 (238)
850 (454)	3380 (232)
900 (482)	3280 (225)

Standard Materials of Construction



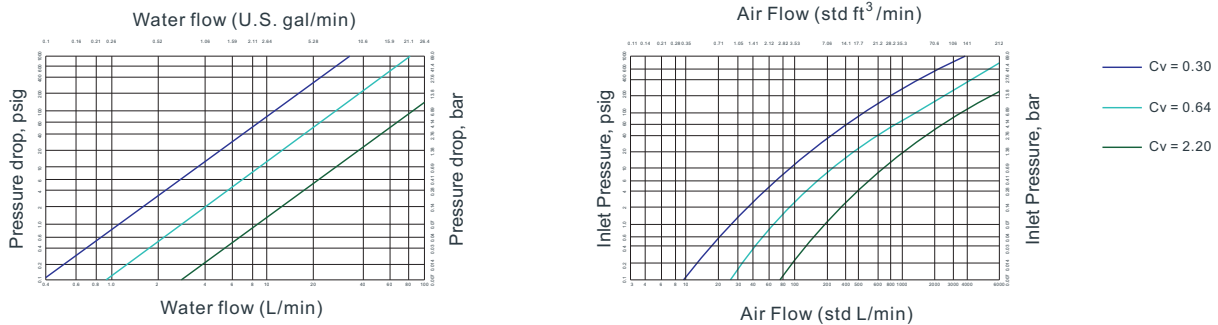
Component	Valve Material Grade/ASTM Specification
1 Bonnet Nut	316 S.S./A479
2 Bonnet	316 S.S./A479
3 Poppet	S17400/A564
4 Body	316 S.S./A479

Dimensions



Basic Ordering Number	Connection Type and Size	CV	Dimension, in. (mm)			
			A	B	C	D
CV3-F4-	1/4" CIR-LOK	0.30	2.40 (61.0)	1.01 (25.7)	1.47 (37.3)	0.39 (9.9)
CV3-F6-	3/8" CIR-LOK	0.64	2.83 (71.9)	1.31 (33.3)	1.85 (47.0)	0.50 (12.7)
CV3-F8-	1/2" CIR-LOK	2.20	3.92 (99.6)	2.19 (55.6)	2.44 (62.0)	0.62 (15.7)
CV3-F12-	3/4" CIR-LOK					
CV3-M6-	6 mm CIR-LOK	0.30	2.40 (61.0)	1.01 (25.7)	1.47 (37.3)	0.39 (9.9)
CV3-FNPT2-	1/8 Female NPT					
CV3-FNPT4-	1/4 Female NPT	0.64	2.25 (57.2)	1.25 (31.8)	1.85 (47.0)	0.50 (12.7)
CV3-FNPT6-	3/8 Female NPT	2.20	3.12 (79.2)	1.86 (47.2)	2.44 (62.0)	0.62 (15.7)
CV3-FNPT8-	1/2 Female NPT					
CV3-FSW4-	1/4" FSW	0.30	1.81 (46.0)	0.9 (22.9)	1.47 (37.3)	0.39 (9.9)
CV3-FSW6-	3/8" FSW	0.64	2.25 (57.2)	1.25 (31.8)	1.85 (47.0)	0.50 (12.7)
CV3-FSW8-	1/2" FSW	2.20	3.13 (79.5)	1.88 (47.8)	2.44 (47.0)	0.62 (15.7)
CV3-FBW4-	1/4" FBW	0.30	1.81 (46.0)	0.9 (22.9)	1.47 (37.3)	0.39 (9.9)
CV3-FBW6-	3/8" FBW	0.64	2.25 (57.2)	1.25 (31.8)	1.85 (47.0)	0.50 (12.7)
CV3-FBW8-	1/2" FBW	2.20	3.13 (79.5)	1.88 (47.8)	2.44 (62.0)	0.62 (15.7)

Flow Data at 70°F (20°C)



How to Order

CV3— F8 — M10 — 316

Series	Inlet Type	Inlet Size	Outlet Type	Outlet Size	Body Material
CV3	FNPT Female NPT	2 1/8 in.	Same as inlet type and inlet size If outlet and inlet are the same, eliminate the outlet designator		316 316 S.S.
	NPT Male NPT	4 1/4 in.			316L 316L S.S.
	FBT Female BSPT	6 3/8 in. or 6 mm			304 304 S.S.
	MBT Male BSPT	8 1/2 in. or 8 mm			304L 304L S.S.
	FMS Female ISO 261	10 10 mm			A400 Alloy 400
	MS Male ISO 261	12 3/4 in. or 12 mm			A20 Alloy 20
	FBP Female BSPP	14 14 mm			A600 Alloy 600
	MBP Male BSPP	16 1 in. or 16 mm			A825 Alloy 825
	MSW Metric Tube Socket Weld	18 18 mm			A276 Alloy C276
	FBW Fractional Tube Butt Weld	20 1 1/4 in. or 20 mm			DU7 Duplex 2507
	MBW Metric Tube Butt Weld	22 22 mm			CS Steel
	PSW Pipe Socket Weld	25 25 mm			
	PBW Pipe Butt Weld				
	F Fractional Tube Fitting				
	M Metric Tube Fitting				
UGF Nut + Gasket+ Fractional Bulge Nipple					
UGM Nut + Gasket+ Metric Bulge Nipple					