CIR-LOK
FLUID SYSTEM SOLUTIONS

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

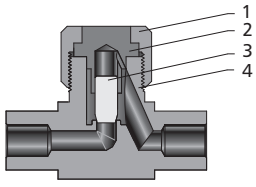
Features

- Maximum working pressure up to 6000 psig (413 bar)
- Working temperature from -65℉ to 900℉ (-53℃ to 482℃)
- 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

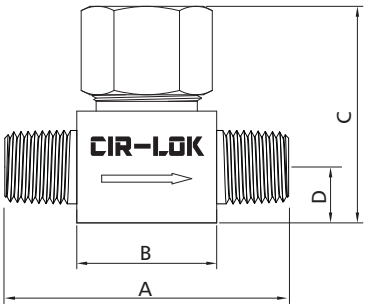
Material	316 S.S.
Temperature, ℉(℃)	Working Pressure, psig(bar)
-10 (-23) to 100 (37)	6000 (413)
200 (93)	5160 (355)
250 (121)	4910 (338)
300 (148)	4660 (321)
350 (176)	4470 (307)
400 (204)	4280 (294)
450 (232)	4130 (284)
500 (260)	3980 (274)
600 (315)	3760 (259)
650 (343)	3700 (254)
700 (371)	3600 (248)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

Standard Materials of Construction



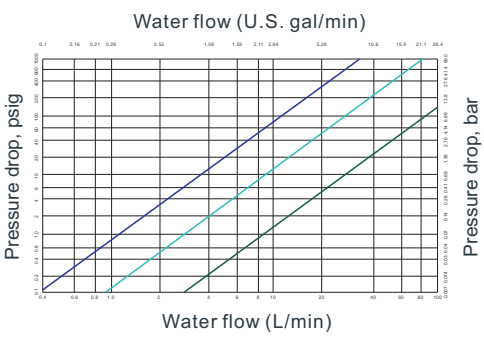
Component		Valve Material Grade/ASTM Specification
1	Bonnet Nut	316 S.S./A479
2	Bonnet	316 S.S./A479
3	Poppet	S17400/A564
4	Body	316 S.S./A479

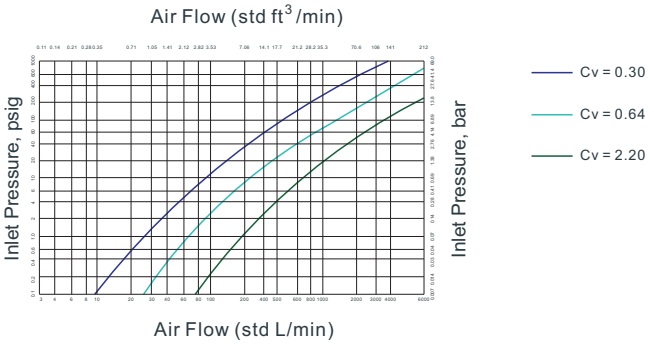
Dimensions



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		2.00 (50.8)	1.0 (25.4)	1.47 (37.3)	0.39 (9.9)
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℉ (20℃)





How to Order

CV3— F8 — M10 — 316

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