

# All-Welded Check Valves

CV7 Series



- ❖ Maximum working pressure up to 3000 psig (206 bar)
- ❖ Working temperature from -10°F to 400°F (-23°C to 204°C)
- ❖ Cracking pressure less than 2 psig (0.14 bar)
- ❖ 316L stainless steel 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)
- ❖ All-Welded body design
- ❖ Standard or high-purity wetted surface finishes for choice
- ❖ Cracking pressure less than 2 psig (0.14 bar)
- ❖ 316L stainless steel body material
- ❖ Tube butt weld, female GFS fitting, integral male GFS fitting, rotatable male GFS fitting, and Hikelok tube fitting end connections are available..

## Pressure-Temperature Ratings

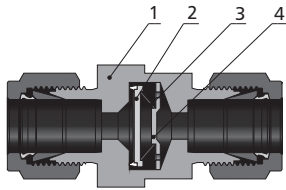
Ratings based on fuorocarbon FKM O-rings in 316L stainless

Material	316 S.S.	Brass
Temperature °F (°C)	Working Pressure, 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)	2065 (142)	—

## Seal Materials

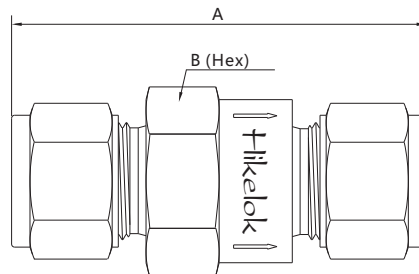
Seal Material	Temperature Range °F (°C)
Buna N	-10 to 250 (-23 to 121)
Ethylene propylene	-50 to 300 (-45 to 148)
Fluorocarbon FKM	-10 to 400 (-23 to 204)
Neoprene	-40 to 250 (-40 to 121)

## Standard Materials of Construction



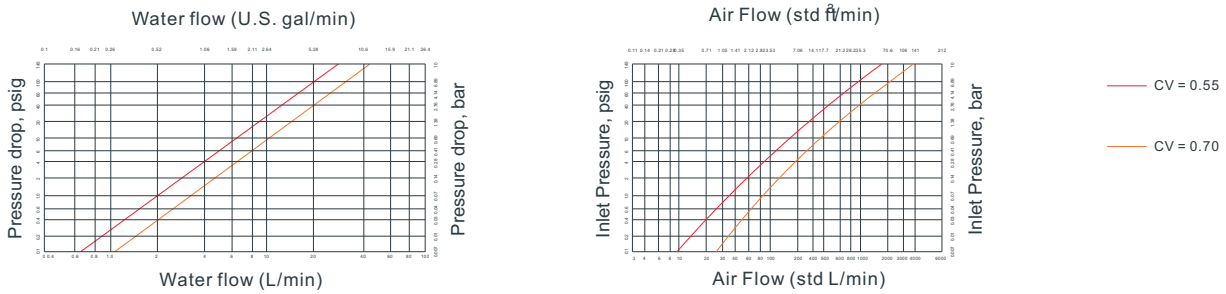
Component		Valve Material Grade/ASTM Specification
1	Body	316L S.S./A479
2	Poppet	Fluorocarbon FKM - bonded 316L S.S./A479
3	Guidance Wafer	Alloy X - 750/B637
4	Poppet Stop	316L S.S./A240

## Dimensions



Basic Ordering Number	Connection Type and Size	Cv	Dimension, in. (mm)	
			A	B
CV7-FBW4-	1/4" FBW	0.55	1.24 (31.5)	7/8 (22.23)
CV7-FBW6-	3/8" FBW	0.70		
CV7-FBW8-	1/2" FBW	0.55		
CV7-MBW6-	6 mm MBW	0.55	1.80 (45.7)	1 (25.4)
CV7-GFS4-	1/4" Male GFS	0.70	2.06 (53.8)	
CV7-GFS8-	1/2" Male GFS	0.55	1.96 (49.8)	7/8 (22.23)
CV7-F4-	1/4" Hikelok	0.70		
CV7-M6-	6 mm Hikelok	0.55		

## Flow Data at 70 °F (20 °C)



### How to Order

CV7 — F4 — M6 — V — 316L

Series	Inlet Type	Inlet Size	Outlet Type	Outlet Size	Seal Material	Body Material
CV7	<b>F</b> Fractional Tube Fitting	2 1/8 in.	Same as inlet type and inlet size		<b>V</b> Fluorocarbon FKM	<b>316</b> 316 S.S.
	<b>M</b> Metric Tube Fitting	4 1/4 in.			<b>B</b> Buna N	<b>316L</b> 316L S.S.
	<b>FBW</b> Fractional Tube Butt Weld	6 3/8 in. or 6 mm	If outlet and inlet are the same, eliminate the outlet designator		<b>E</b> Ethylene propylene	
	<b>MBW</b> Metric Tube Butt Weld	8 1/2 in. or 8 mm			<b>N</b> Neoprene	
	<b>GFS</b> Male GFS Fitting					
	<b>FGFS</b> Female GFS Fitting					
	<b>RGFS</b> Rotatable Male GFS Fitting					