

Surface-Mounting Check Valves

CI Series

Introduction

CI Series Check Valves are suitable for use in integrated gas systems for high purity and ultra high purity applications. Small-sized, these valves significantly save installation space. The poppet design minimizes particle generation. Additionally, multiple connection types are available.



Features

- ⦿ W-seal and C-seal optional
- ⦿ Wetted components electropolished to a surface finish of 5 μin. (0.13 μm) Ra max.

Technical Data

Max. Working Pressure	145 psig (10 bar)	
Working Temperature	14~176 °F (-10~80 °C)	
Flow Coefficient (Cv)	0.2	
Nominal Cracking Pressure ^①	2 psig (13.56 kPa)	
Leakage Rate (Helium)	Internal	≤ 1×10 ⁻⁹ std·cm ³ /s
	External	≤ 1×10 ⁻⁹ std·cm ³ /s

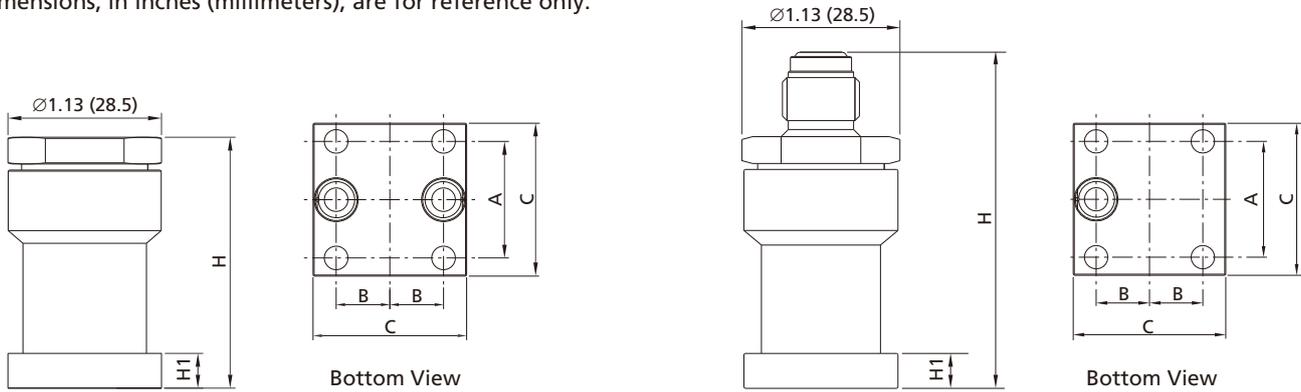
① If the check valve is not actuated for a period of time, its initial cracking pressure may be higher than set cracking pressure.

Process Specification

Process Specification	Ultra High Purity Process (FC-03)
Item	
Material	316L SS, 316L SS VAR
Wetted Surface Roughness	Ra 5 μin. (0.13 μm)
Polishing Process	Electropolished

Dimensions and Ordering Information

Dimensions, in inches (millimeters), are for reference only.



Basic Ordering Number	Inlet Type and Size	Outlet Type and Size	Dimension, in. (mm)				
			A	B	C	H	H1
CI□□-WS11-F3	1.125" W-Seal	1.125" W-Seal	0.86 (21.8)	0.39 (10.0)	1.13 (28.6)	1.85 (47.0)	0.26 (6.5)
CI□□-FR4-WS11-F3	1/4" Integral Male FR Fitting	1.125" W-Seal				2.47 (62.7)	
CI□□-WS11-FR4-F3	1.125" W-Seal	1/4" Integral Male FR Fitting				3.28 (83.4)	
CI□□-FFR4-WS11-F3	1/4" Female FR	1.125" W-Seal				3.31 (84.2)	
CI□□-WS11-FFR4-F3	1.125" W-Seal	1/4" Female FR					
CI□□-RFR4-WS11-F3	1/4" Rotatable Male FR Fitting	1.125" W-Seal					
CI□□-WS11-RFR4-F3	1.125" W-Seal	1/4" Rotatable Male FR Fitting					

Ordering Number Description

CI6LV - WS11 - FR4 - ZF3

Series	Body Material	Inlet Type	Inlet Size	Outlet Type	Outlet Size	Seat Material
CI	6L 316L SS	TB Fractional Tube Butt Weld	4 1/4" or 1/4" x 0.035"	Same as Inlet	Specified in the same way as Inlet	FKM
	6LV 316L SS VAR	MTB Metric Tube Butt Weld	6 6 x 1 mm or 3/8" x 0.035"			Z FFKM
		FR Integral Male FR Fitting	8 8 x 1 mm or 1/2" x 0.049"			Process Specification F3 FC-03
		FFR Rotatable Female FR Fitting	10 10 x 1 mm			
		RFR Rotatable Male FR Fitting	11 1.125"			
		WS W-Seal	12 12 x 1 mm or 3/4" x 0.049"			
		CS C-Seal	15 1.5"			

Notes:

- "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available, Should you have any questions, please contact FITOK or our authorized distributors.
- Mounting screws and gasket are not included, please contact FITOK or our authorized distributors if you have any requests.