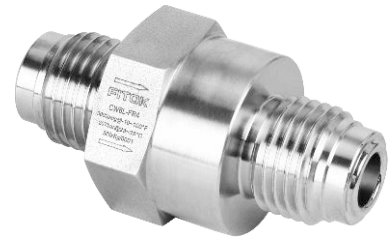


# All-Welded Check Valves

## CW Series



### Introduction

CW Series All-Welded Check Valves are suitable for high purity and ultra high purity applications. All-welded construction offers reliable control of system media, featuring low cracking pressure and low resealing pressure. This ensures sensitive and precise control of flow direction within the flow path.

### Features

- ⦿ Internally threadless and all-welded design
- ⦿ Forward flow starts at less than 2 psig (0.14 bar) pressure differential
- ⦿ Standard surface roughness finished to an average of Ra 20  $\mu\text{m}$ . (0.5  $\mu\text{m}$ ) or electropolished to Ra 10  $\mu\text{m}$ . (0.25  $\mu\text{m}$ ) optional
- ⦿ Variety of end connections available

### Technical Data

<b>Ports Size</b>	1/4" to 1/2" or 6 mm to 12 mm
<b>Flow Coefficient (Cv)</b>	0.55 or 0.70
<b>Cracking Pressure</b> <sup>①</sup>	Less than 2 psig (0.14 bar)
<b>Max. Working Pressure</b>	3000 psig (207 bar)
<b>Max. Pressure Drop</b>	145 psig (10 bar)
<b>Working Temperature</b>	-10 ~ 400 °F (-23 ~ 204 °C)

① For valves not actuated for a period of time, initial cracking pressure may be higher than the set cracking pressure.

### Flow Data

Air @ 70 °F (21 °C)

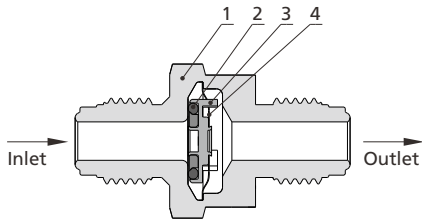
Pressure Drop to Atmosphere psig (bar)	Cv 0.55 (l/min)	Cv 0.70 (l/min)
10 (0.68)	170	220
50 (3.4)	450	590
100 (6.8)	820	1040

### Process Specification

Item	Process Specification	Standard Cleaning and Packaging (FC-01) Special Cleaning and Packaging (FC-02)	Ultra High Purity (FC-03)
	<b>Material</b>		316L SS
<b>Wetted Surface Roughness</b>		Ra 20 $\mu\text{m}$ . (0.5 $\mu\text{m}$ )	Ra 10 $\mu\text{m}$ . (0.25 $\mu\text{m}$ )
<b>Polishing Process</b>		Machine finished	Electropolished

Notes: Refer to page P-01 for a detailed description of Process Specification.

## Major Materials of Construction

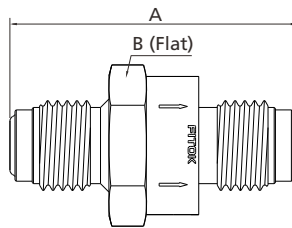


Item		Material Grade/ASTM Specification
1	Body	316L SS or 316L SS VAR
2	Seal	FKM and 316L SS or 316L SS VAR
3	Belleville Spring	N06022/ASTM B575
4	Stop	316L SS or 316L SS VAR

Note: Check valves are designed for directional flow control only and should never be used as code safety relief devices.

## Dimensions and Ordering Information

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



Basic Ordering Number	Connection Type and Size		Cv	Dimensions, in. (mm)	
	Inlet	Outlet		A	B
CW□□-TB4	1/4" x 0.035" Tube Butt Weld	1/4" x 0.035" Tube Butt Weld	0.55	1.24 (31.5)	7/8 (22.22)
CW□□-TB6	3/8" x 0.035" Tube Butt Weld	3/8" x 0.035" Tube Butt Weld	0.70		
CW□□-TB8	1/2" x 0.049" Tube Butt Weld	1/2" x 0.049" Tube Butt Weld	0.55		
CW□□-MTB6	6x1 mm Tube Butt Weld	6x1 mm Tube Butt Weld	0.55	1.80 (45.7)	1 (25.4)
CW□□-FR4	1/4" Integral Male FR Metal Gasket Face Seal Fitting	1/4" Integral Male FR Metal Gasket Face Seal Fitting	0.70		
CW□□-FR8	1/2" Integral Male FR Metal Gasket Face Seal Fitting	1/2" Integral Male FR Metal Gasket Face Seal Fitting	0.70	2.06 (52.3)	1 (25.4)

Fittings

Valves

Regulators

Filters

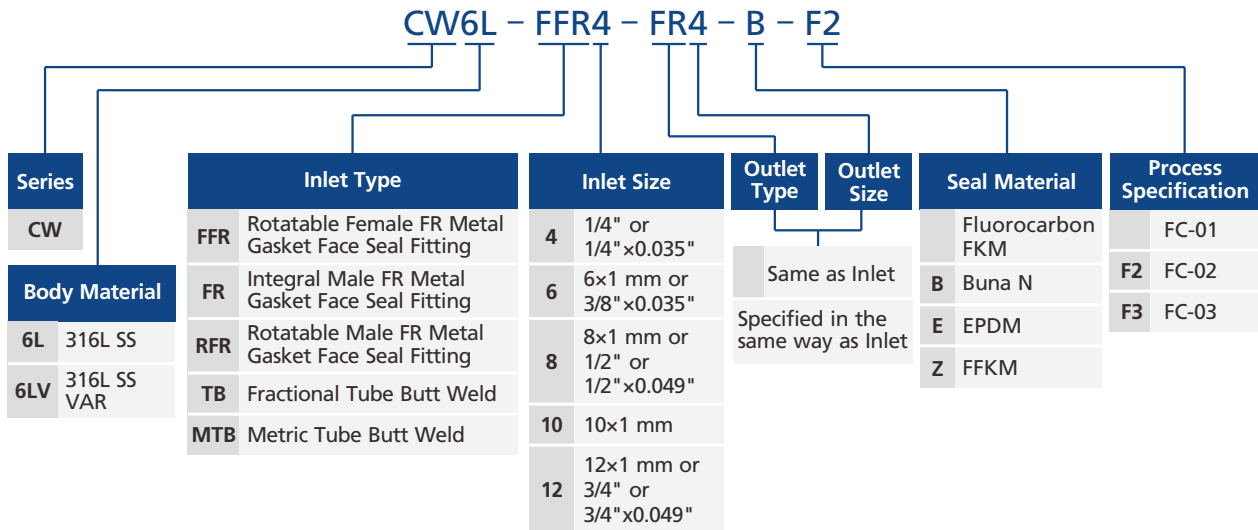
Tubing

Integrated Systems

Other Products

Technical Information

## Ordering Number Description



Note: "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 Group or our authorized distributors.

- Fittings
- Valves
- Regulators
- Filters
- Tubing
- Integrated Systems
- Other Products
- Technical Information