



**BEYOND FLUID**

Beyond Fluid

## **Instrumentation Check Valves**



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## Part NO. Discription

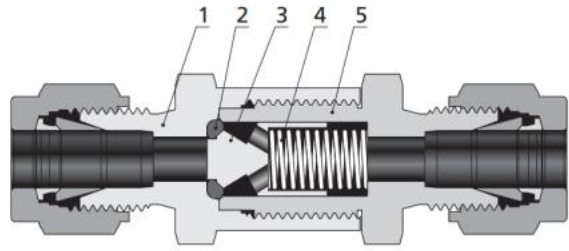
### SS - CPA - MN2 - FN 2

Material	Series	Inlet	Inlet Size	Outlet Size	Outlet Size
SS: Stainles Steel 316	C: C Series	FN: Female Npt	2: 1/8"	FN: Female Npt	2: 1/8"
S9: Stainles Steel 904L	CH: CH Series	MN: Male Npt	3: 3/16" or 3mm	MN: Male Npt	3: 3/16" or 3mm
S4: Stainles Steel 304	CP: CP Series	FR: Female BSPT	4: 1/4"	FR: Female BSPT	4: 1/4"
S2: Stainles Steel 321	CPA: CPA Series	MR: Male BSPT	5: 5/16"	MR: Male BSPT	5: 5/16"
M4: Monle 400	CA: CA Series	FT: Frantional Tube	6: 3/8" or 6mm	FT: Frantional Tube	6: 3/8" or 6mm
I6: Inconle 625	CL: CL Series	MT: Metric Tube	8: 1/2" Or 8mm	MT: Metric Tube	8: 1/2" Or 8mm
HC: Hastelly C 276		BW: Butt Weld	10: 5/8" or 10mm	BW: Butt Weld	10: 5/8" or 10mm
B: Brass		SW: Socket Weld	12: 3/4" or 12mm	SW: Socket Weld	12: 3/4" or 12mm
CS: Cabon Steel			16: 1" or 16mm		16: 1" or 16mm

# C Series Check Valves

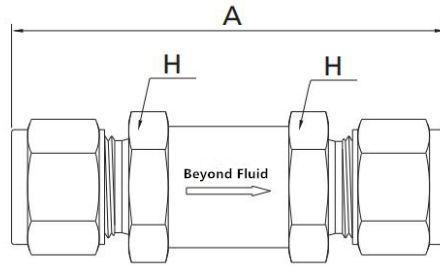
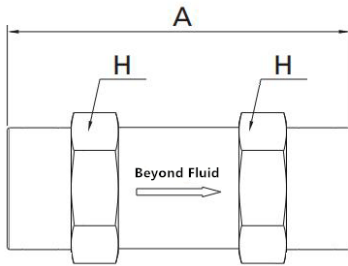
## C Series

- Resilient O-ring seat design for leak free sealing
- Variety of end connections and materials available
- Working pressure up to: 3000 psig (207 bar)
- Cracking pressure: 1/3 to 25 psig (0.02 to 1.7 bar)
- Working temperature: -10°F to 375°F (-23°C to 190°C)



NO.	Component	Material	
		316 SS	Brass
1	Inlet Body	316 SS/A479	Brass 36000/B16
2	O-ring	Fluorocarbon FKM	Buna N
3	Poppet	316 SS/A479	Brass 36000/B16
4	Spring	302 SS/A313	
5	Outlet Body	316 SS/A479	Brass 36000/B16

## Dimensions of C Series

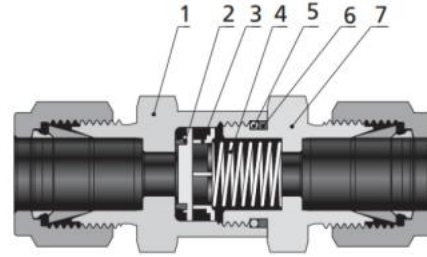


Basic Ordering Number	Connection Type and Size		CV	Dimension, in.(mm)	
	Inlet	Outlet		A	H
-C-FN2	1/8 Female NPT	1/8 Female NPT	0.1	1.89 (48.0)	5/8 (15.9)
-C-FN4	1/4 Female NPT	1/4 Female NPT	0.5	2.15 (54.6)	3/4 (19.1)
-C-FN6	3/8 Female NPT	3/8 Female NPT	1.5	2.98 (75.7)	7/8 (22.2)
-C-FN8	1/2 Female NPT	1/2 Female NPT	1.7	3.58 (91.0)	1 1/16 (27.0)
-C-FN12	3/4 Female NPT	3/4 Female NPT	4.5	4.08 (104)	1 1/4 (31.8)
-C-FN16	1 Female NPT	1 Female NPT	4.5	4.84 (123)	1 5/8 (41.3)
-C-MN2	1/8 Male NPT	1/8 Male NPT	0.1	1.71 (43.4)	5/8 (15.9)
-C-MN4	1/4 Male NPT	1/4 Male NPT	0.5	2.09 (53.1)	5/8 (15.9)
-C-MN6	3/8 Male NPT	3/8 Male NPT	1.5	2.78 (70.6)	7/8 (22.2)
-C-MN8	1/2 Male NPT	1/2 Male NPT	1.7	3.16 (80.3)	7/8 (22.2)
-C-MN12	3/4 Male NPT	3/4 Male NPT	4.5	4.08 (104)	1 1/4 (31.8)
-C-MN16	1 Male NPT	1 Male NPT	4.5	4.52 (115)	1 5/8 (41.3)
-C-FT2	1/8" Tube	1/8" Tube	0.1	2.14 (54.3)	5/8 (15.9)
-C-FT4	1/4" Tube	1/4" Tube	0.5	2.35 (59.8)	5/8 (15.9)
-C-FT6	3/8" Tube	3/8" Tube	1.5	3.17 (80.5)	7/8 (22.2)
-C-FT8	1/2" Tube	1/2" Tube	1.7	3.42 (87.0)	7/8 (22.2)
-C-FT12	3/4" Tube	3/4" Tube	4.5	4.32 (110)	1 1/4 (31.8)
-C-FT16	1" Tube	1" Tube	4.5	4.74 (120)	1 5/8 (41.3)
-C-MT6	6mm Tube	6mm Tube	0.5	2.36 (60.0)	5/8 (15.9)
-C-MT10	10mm Tube	10mm Tube	1.5	3.32 (84.3)	7/8 (22.2)
-C-MT12	12mm Tube	12mm Tube	1.7	3.42 (87.0)	7/8 (22.2)
-C-MT18	18mm Tube	18mm Tube	4.5	4.32 (110)	1 1/4 (31.8)

# CH Series Check Valves

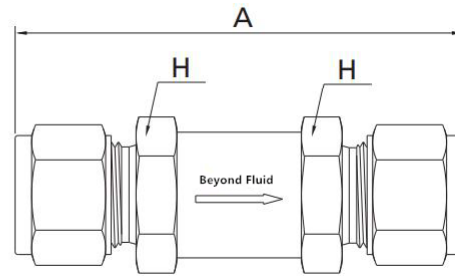
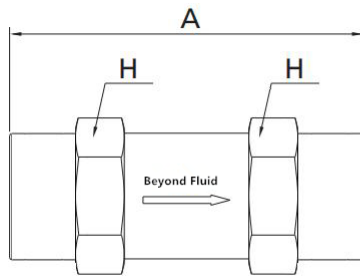
## CH Series

- Seat ring continuously cleaned by media, avoiding secondary pollution
- Variety of end connections and materials available
- Working pressure up to: 6000 psig (414 bar)
- Cracking pressure: 1/3 to 25 psig (0.02 to 1.7 bar)
- Working temperature: -10 F to 400 F (-23 C to 204 C)



NO.	Component	Material	
		316 SS	Brass
1	Inlet Body	316 SS/A479	Brass 36000/B16
2	Poppet	Fluorocarbon FKM-bonded 316 SS/A479	
3	Poppet Stop	316 SS/A479	Brass 36000/B16
4	Spring	302 SS/A313	
5	O-ring	Fluorocarbon FKM	
6	Backup ring	PTFE/D1710	
7	Outlet Body	316 SS/A479	Brass 36000/B16

## Dimensions of C Series

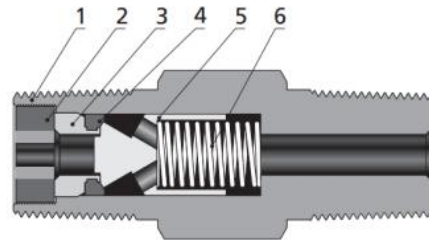


Basic Ordering Number	Connection Type and Size		CV	Dimension, in.(mm)	
	Inlet	Outlet		A	H
-CH-FN4	1/4 Female NPT	1/4 Female NPT	0.7	2.13 (54.1)	11/16 (19.1)
-CH-FN6	3/8 Female NPT	3/8 Female NPT	1.8	2.55 (64.8)	1 (25.4)
-CH-FN8	1/2 Female NPT	1/2 Female NPT	1.8	3.03 (77.0)	1 1/16 (27.0)
-CH-FN12	3/4 Female NPT	3/4 Female NPT	4.7	3.23 (82.0)	1 5/8 (41.3)
-CH-FN16	1 Female NPT	1 Female NPT	4.7	3.83 (97.3)	1 5/8 (41.3)
-CH-MN4	1/4 Male NPT	1/4 Male NPT	0.7	2.17 (55.1)	11/16 (19.1)
-CH-MN6	3/8 Male NPT	3/8 Male NPT	1.8	2.36 (60.0)	1 (25.4)
-CH-MN8	1/2 Male NPT	1/2 Male NPT	1.8	2.73 (69.3)	1 (25.4)
-CH-MN12	3/4 Male NPT	3/4 Male NPT	4.7	3.29 (83.6)	1 5/8 (41.3)
-CH-MN16	1 Male NPT	1 Male NPT	4.7	3.67 (93.2)	1 5/8 (41.3)
-CH-FT2	1/8" Tube	1/8" Tube	0.7	2.27 (57.7)	1 1/16 (27.0)
-CH-FT4	1/4" Tube	1/4" Tube	0.7	2.43 (61.7)	1 1/16 (27.0)
-CH-FT6	3/8" Tube	3/8" Tube	1.8	2.75 (70.0)	1 (25.4)
-CH-FT8	1/2" Tube	1/2" Tube	1.8	2.96 (75.2)	1 (25.4)
-CH-FT12	3/4" Tube	3/4" Tube	4.7	3.53 (89.4)	1 5/8 (41.3)
-CH-FT16	1" Tube	1" Tube	4.7	3.88 (98.6)	1 5/8 (41.3)
-CH-MT6	6mm Tube	6mm Tube	0.7	2.43 (61.7)	1 1/16 (27.0)
-CH-MT10	10mm Tube	10mm Tube	1.8	2.80 (71.0)	1 (25.4)
-CH-MT12	12mm Tube	12mm Tube	1.8	2.96 (75.2)	1 (25.4)
-CH-MT18	18mm Tube	18mm Tube	4.7	3.53 (89.4)	1 5/8 (41.3)
-CH-MT22	22mm Tube	22mm Tube	4.7	3.53 (89.4)	1 5/8 (41.3)
-CH-MT25	25mm Tube	25mm Tube	4.7	3.88 (98.6)	1 5/8 (41.3)

# CP & CPA Series Check Valves

## CP Series

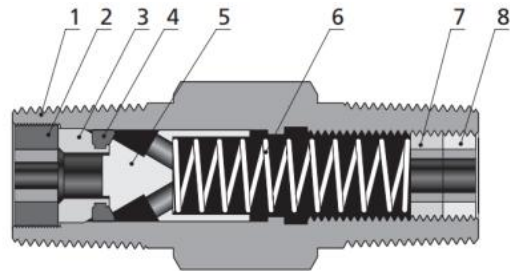
- Compact, one piece body
- Variety of end connections and materials available
- Working pressure up to: 3000 psig (207 bar)
- Cracking pressure: 1/3 to 25 psig (0.02 to 1.7 bar)
- Working temperature: -10 F to 375 F (-23 C to 190 C)



NO.	Component	Material	
		316 SS	Brass
1	Body	316 SS/A479	Brass 36000/B16
2	Insert Locking Screw	316 SS/A479	Brass 36000/B16
3	Insert	316 SS/A479	Brass 36000/B16
4	O-ring	Fluorocarbon FKM	Buna N
5	Poppet	316 SS/A479	Brass 36000/B16
6	Spring	302 SS/A313	

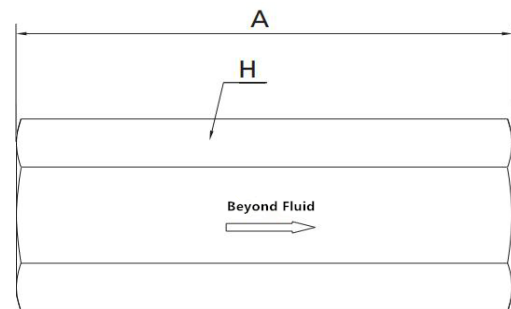
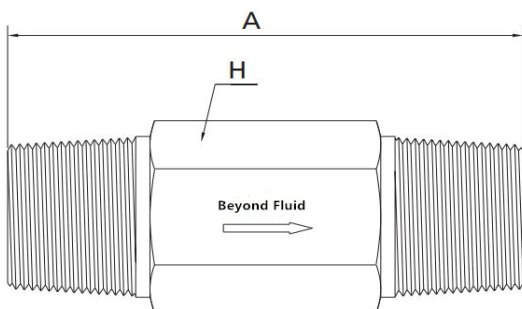
## CPA Series

- Compact, one piece body
- Variety of end connections and materials available
- Working pressure up to: 3000 psig (207 bar)
- Cracking pressure: 1/3 to 25 psig (0.02 to 1.7 bar)
- Working temperature: -10 F to 375 F (-23 C to 190 C)



NO.	Component	Material	
		316 SS	Brass
1	Body	316 SS/A479	Brass 36000/B16
2	Insert Locking Screw	316 SS/A479	Brass 36000/B16
3	Insert	316 SS/A479	Brass 36000/B16
4	O-ring	Fluorocarbon FKM	Buna N
5	Poppet	316 SS/A479	Brass 36000/B16
6	Spring	302 SS/A313	
7	Adjusting Screw	316 SS/A479	Brass 36000/B16
8	Locking Screw	316 SS/A479	Brass 36000/B16

## Dimensions of C Series

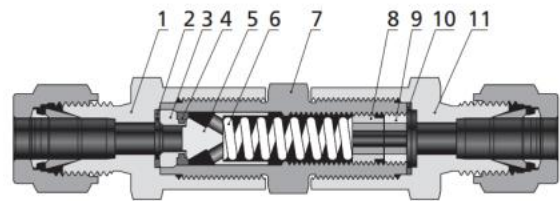


Basic Ordering Number	Connection Type and Size		CV	Dimension, in.(mm)	
	Inlet	Outlet		A	H
-CP-FN4	1/4 Female NPT	1/4 Female NPT	0.35	2.41 (61.2)	3/4 (19.1)
-CP-FN8	1/2 Female NPT	1/2 Female NPT	1.2	3.71 (94.2)	11/16 (27.0)
-CP-MN4	1/4 Male NPT	1/4 Male NPT	0.35	1.62 (41.1)	9/16 (14.3)
-CP-MN8	1/2 Male NPT	1/2 Male NPT	1.2	2.28 (58.0)	7/8 (22.2)
-CPA-FN4	1/4 Female NPT	1/4 Female NPT	0.35	2.98 (75.7)	3/4 (19.1)
-CPA-MN4	1/4 Male NPT	1/4 Male NPT	0.35	1.62 (41.1)	9/16 (14.3)
-CPA-MN8	1/2 Male NPT	1/2 Male NPT	1.2	2.56 (65.0)	7/8 (22.2)

## CA Series Check Valves

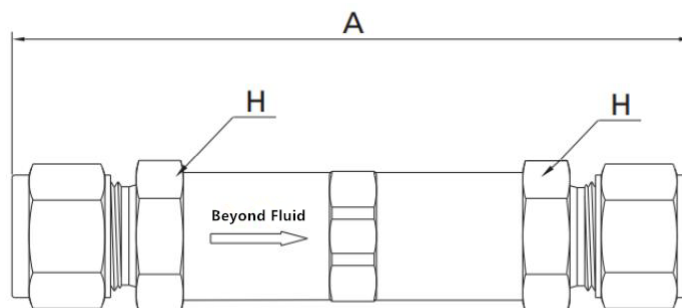
### CA Series

- Adjustable Cracking Pressures
- Variety of end connections and materials available
- Working pressure up to: 3000 psig (207 bar)
- Cracking pressure: 3 to 600 psig (0.2 to 41.4 bar)
- Working temperature: -10 F to 375 F (-23 C to 190 C)



NO.	Component	Material	
		316 SS	Brass
1	Inlet Body	316 SS/A479	Brass 36000/B16
2	Inlet Gasket	PTFE-coated 316 SS/A479	
3	Insert	316 SS/A479	Brass 36000/B16
4	O-ring	Fluorocarbon FKM	Buna N
5	Poppet	316 SS/A479	Brass 36000/B16
6	Spring	302 SS/A313	
7	Center Body	316 SS/A479	Brass 36000/B16
8	Adjusting Screw	316 SS/A479	Brass 36000/B16
9	Locking Screw	316 SS/A479	Brass 36000/B16
10	Outlet Gasket	PTFE-coated 316 SS/A479	
11	Outlet Body	316 SS/A479	Brass 36000/B16

### Dimensions of C Series

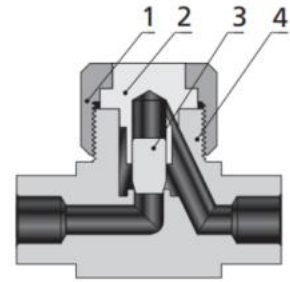


Basic Ordering Number	Connection Type and Size		CV	Dimension, in.(mm)	
	Inlet	Outlet		A	H
-CA-FT4	1/4" Tube	1/4" Tube	0.4	3.23 (82.0)	5/8 (15.9)
-CA-MT6	6mm Tube	6mm Tube	0.4	3.23 (82.0)	5/8 (15.9)
-CA-MT8	8mm Tube	8mm Tube	0.4	3.32 (84.3)	5/8 (15.9)

# CL Series Check Valves

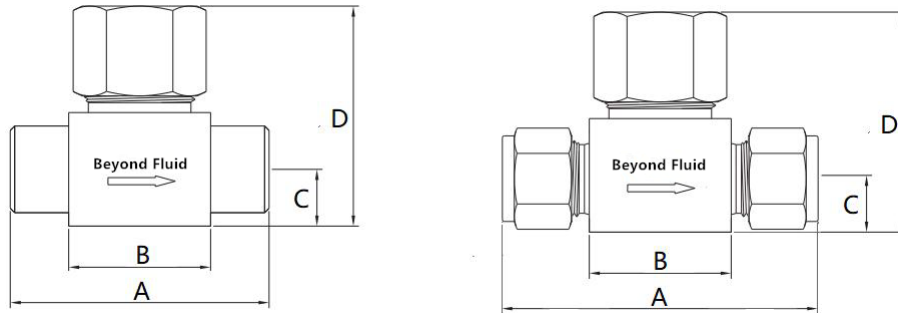
## CL Series

- Rugged, all-stainless steel construction
- Union bonnet design, all-stainless steel structure, horizontal installation with bonnet nut on top
- Reverse flow coefficient less than 0.1% of forward flow coefficient
- Working pressure up to: 6000 psig (414 bar)
- Working temperature: -65 F to 900 F (-53 C to 482 C)

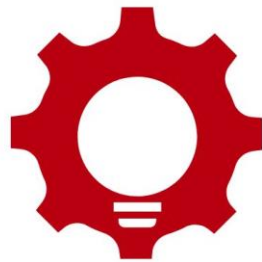


NO.	Component	Material
1	Bonnet Nuty	316 SS/A479
2	Bonnet	316 SS/A479
3	Poppet	S17400/A564
4	Outlet Body	316 SS/A479

## Dimensions of C Series



Basic Ordering Number	Connection Type and Size		CV	Dimension, in.(mm)			
	Inlet	Outlet		A	B	C	D
-CL-FN2	1/8 Female NPT	1/8 Female NPT	0.30	2.00 (50.8)	1.00 (25.4)	1.47 (37.3)	0.39 (10.0)
-CL-FN4	1/4 Female NPT	1/4 Female NPT	0.64	2.25 (57.2)	1.25 (31.8)	1.85 (47.0)	0.50 (12.7)
-CL-FN6	3/8 Female NPT	1/8 Female NPT	2.20	3.12 (79.2)	1.86 (47.2)	2.44 (62.0)	0.62 (15.7)
-CL-FN8	1/2 Female NPT	1/4 Female NPT	2.20	3.12 (79.2)	1.86 (47.2)	2.44 (62.0)	0.62 (15.7)
-CL-FT4	1/4 Tube	1/4 Tube	0.30	2.40 (61.0)	1.01 (25.7)	1.47 (37.3)	0.39 (10.0)
-CL-FT6	3/8 Tube	3/8 Tube	0.64	2.83 (71.9)	1.31 (33.3)	1.85 (47.0)	0.50 (12.7)
-CL-FT8	1/2 Tube	1/2 Tube	2.20	3.92 (99.6)	2.19 (55.6)	2.44 (62.0)	0.62 (15.7)
-CL-FT12	3/4 Tube	3/4 Tube	2.20	3.92 (99.6)	2.19 (55.6)	2.44 (62.0)	0.62 (15.7)
-CL-MT7	6mm Tube	6mm Tube	0.30	2.40 (61.0)	1.01 (25.7)	1.47 (37.3)	0.39 (10.0)
-CL-MT10	10mm Tube	10mm Tube	0.64	2.83 (71.9)	1.31 (33.3)	1.85 (47.0)	0.50 (12.7)
-CL-MT12	12mm Tube	12mm Tube	2.20	3.92 (99.6)	2.19 (55.6)	2.44 (62.0)	0.62 (15.7)
-CL-SW4	1/4 Socket Weld	1/4 Socket Weld	0.30	1.81 (46.0)	0.90 (22.9)	1.47 (37.3)	0.39 (10.0)
-CL-SW6	3/8 Socket Weld	3/8 Socket Weld	0.64	2.25 (57.2)	1.25 (31.8)	1.85 (47.0)	0.50 (12.7)
-CL-SW8	1/2 Socket Weld	1/2 Socket Weld	2.20	3.13 (79.5)	2.19 (55.6)	2.44 (62.0)	0.62 (15.7)
-CL-BW4	1/4 Butt Weld	1/4 Butt Weld	0.30	1.81 (46.0)	0.90 (22.9)	1.47 (37.3)	0.39 (10.0)
-CL-BW6	3/8 Butt Weld	3/8 Butt Weld	0.64	2.25 (57.2)	1.25 (31.8)	1.85 (47.0)	0.50 (12.7)
-CL-BW8	1/2 Butt Weld	1/2 Butt Weld	2.20	3.13 (79.5)	2.19 (55.6)	2.44 (62.0)	0.62 (15.7)



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