

Check Valves

CV, CH, CO, CA, COA, CL and CW Series



FITOK
Valves and Fittings

www.fitokgroup.com

Check Valves

CV, CH, CO, CA, COA, CL and CW Series



Features

CV, CH and CO Series

Fixed Cracking Pressures

CV Series

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

CH Series

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

CO Series

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

CA and COA Series

Adjustable Cracking Pressures, Variety of Springs Available

CA Series

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

COA Series

- ◎ Compact, one-piece body
- ◎ Working pressure up to 3000 psig (207 bar)
- ◎ Working temperature: -10°F to 375°F (-23°C to 190°C)
- ◎ Cracking pressure: 3 to 600 psig (0.2 to 41.4 bar)
- ◎ Variety of end connections and materials available

CL Series

- ◎ Working pressure up to: 6000 psig (414 bar)
- ◎ Working temperature: -65°F to 900°F (-53°C to 482°C)
- ◎ 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

CW Series

- ◎ Working pressure up to: 3000 psig (207 bar)
- ◎ Working temperature: -10°F to 400°F (-23°C to 204°C)
- ◎ Cracking pressure: less than 2 psig (0.14 bar)
- ◎ Variety of end connections and materials available
- ◎ All-welded design for safety
- ◎ Standard or fine polished wetted surface finishes optional

1. Besides CL series, other check valves are all coated with lubricants like: silicone base and molybdenum disulfide base.
2. Contact the authorized representative or FITOK Group for other materials.
3. PTFE coated spring is an option for CV, CO, CA, and COA series check valves. For more details, please contact FITOK group or authorized agent.
4. Every valve is tested with nitrogen for leak-tight performance at its maximum working pressure.

Cracking Pressure and Resealing Pressure

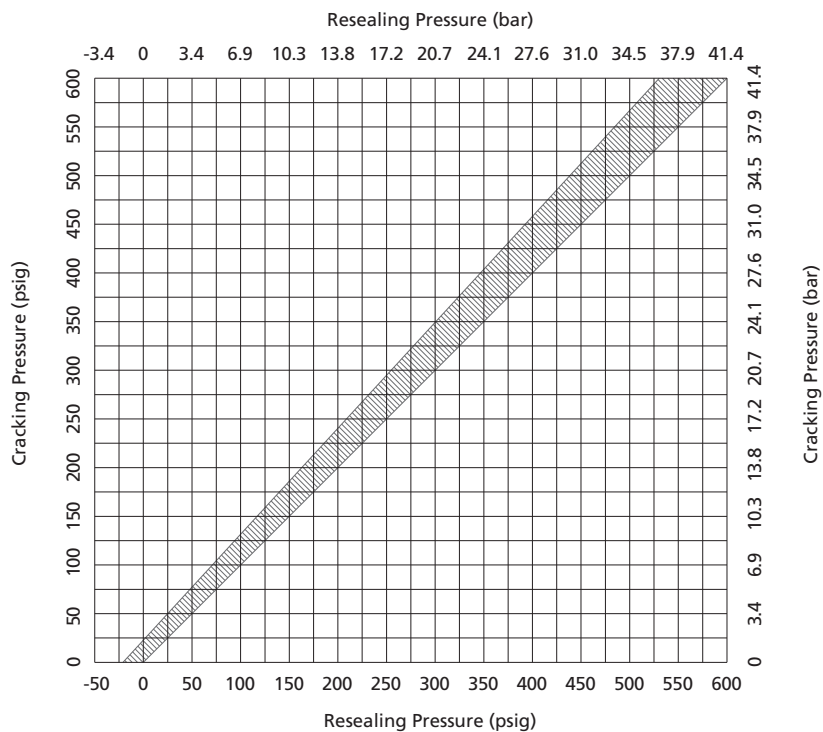
Cracking pressure - the upstream pressure at which the first indication of flow occurs.

Reseal pressure - the pressure at which there is no indication of flow.

Series	Nominal Cracking Pressure psig (bar)	Cracking Pressure Range psig (bar)	Resealing Pressure Range psig (bar)
CV	1/3 (0.02) 1 (0.06) 3 (0.21) 10 (0.68) 25 (1.7)	0 to 3 (0 to 0.21) 0 to 4 (0 to 0.28) 1 to 5 (0.06 to 0.34) 7 to 15 (0.49 to 1.1) 20 to 30 (1.4 to 2.1)	Up to 6 (0.42) downstream pressure Up to 6 (0.42) downstream pressure Up to 6 (0.42) downstream pressure 3 (0.21) or higher upstream pressure 17 (1.2) or higher upstream pressure
CH	1/3 (0.02) 1 (0.06) 3 (0.21) 10 (0.68) 25 (1.7)	0 to 3 (0 to 0.21) 0 to 4 (0 to 0.28) 1 to 5 (0.06 to 0.34) 7 to 15 (0.49 to 1.1) 20 to 30 (1.4 to 2.1)	Up to 6 (0.42) downstream pressure Up to 5 (0.35) downstream pressure Up to 2 (0.14) downstream pressure 3 (0.21) or higher upstream pressure 17 (1.2) or higher upstream pressure
CO	1/3 (0.02) 1 (0.06) 3 (0.21) 10 (0.68) 25 (1.7)	0 to 3 (0 to 0.21) 0 to 4 (0 to 0.28) 1 to 5 (0.06 to 0.34) 7 to 15 (0.49 to 1.1) 20 to 30 (1.4 to 2.1)	6 to 20 (0.42 to 1.4) downstream pressure 5 to 20 (0.35 to 1.4) downstream pressure 3 to 20 (0.21 to 1.4) downstream pressure 3 to 10 (0.21 to 0.68) downstream pressure 5 (0.35) or higher upstream pressure
CA	3 to 50 (0.21 to 3.4) 50 to 150 (3.4 to 10.3)	—————	Refer to the chart below
COA	150 to 350 (10.3 to 24.1) 350 to 600 (24.1 to 41.3)		
CW	1/3 (0.02)	0 to 2 (0 to 0.14)	Up to 2 (0.14) downstream pressure

Cracking Pressure and Resealing Pressure

CA and COA Series

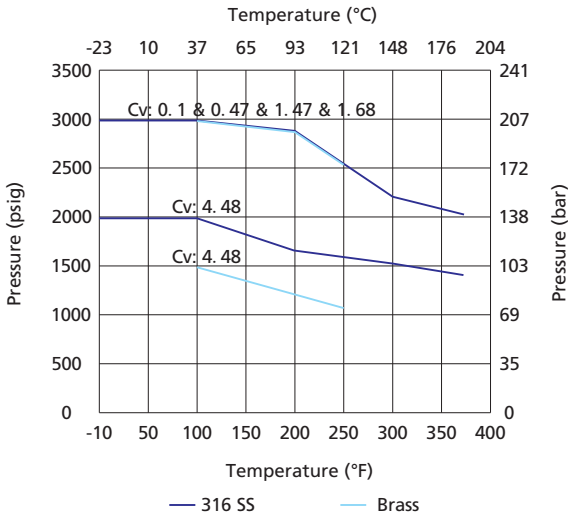


3 Check Valves

Pressure vs. Temperature

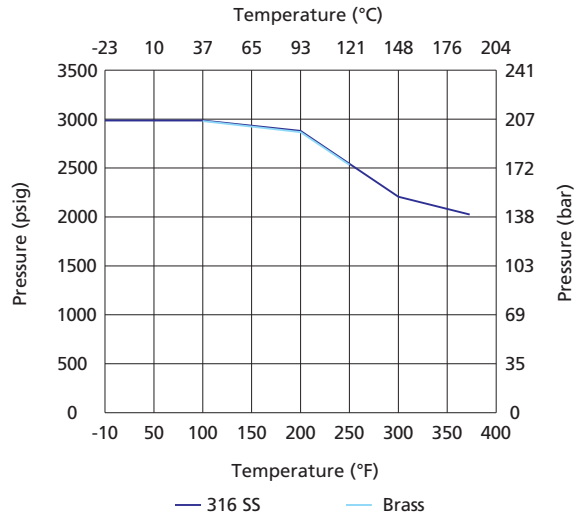
CV Series

FKM Seat in 316 SS Body and Buna N in Brass Body

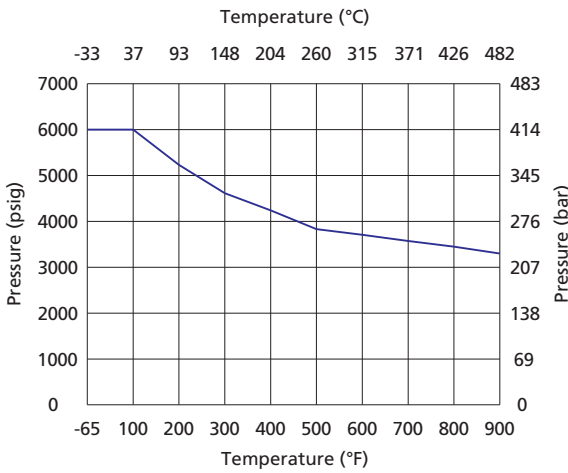


CO, CA and COA Series

FKM Seat in 316 SS Body and Buna N in Brass Body

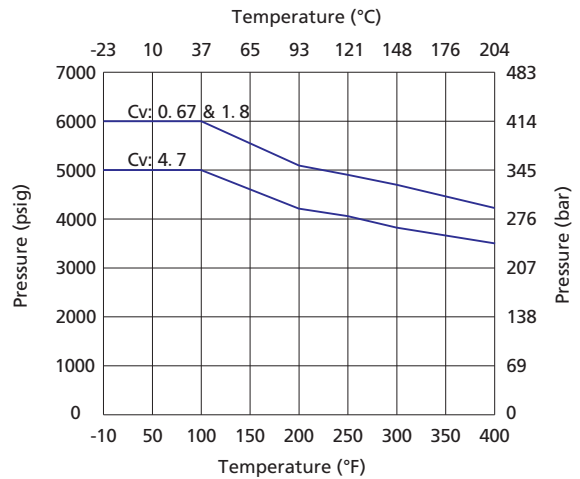


CL Series



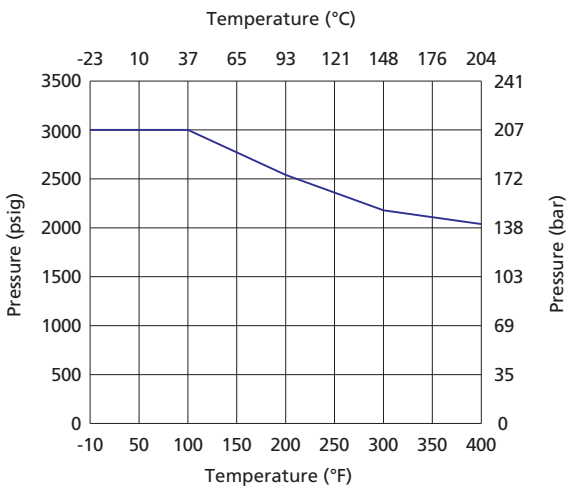
CH Series

FKM Seat in 316 SS Body



CW Series

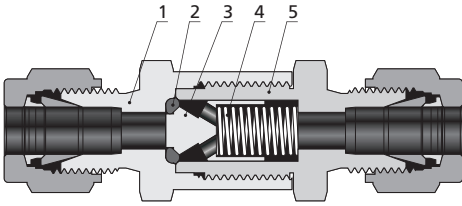
FKM Seat in 316 SS Body



The temperature rating of CH Series check valve is restricted by the connection types. For details please refer to page 8.

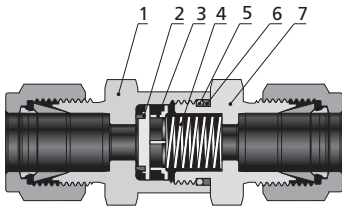
Standard Materials of Construction

CV Series



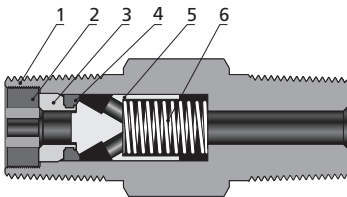
Component	Valve Material Grade/ASTM Specification	
	316 SS	Brass
1 Inlet Body	316 SS/A479	Brass C36000/B16
2 O-ring	Fluorocarbon FKM	Buna N
3 Poppet	316 SS/A479	Brass C36000/B16
4 Spring	302 SS/A313	302 SS/A313
5 Outlet Body	316 SS/A479	Brass C36000/B16

CH Series



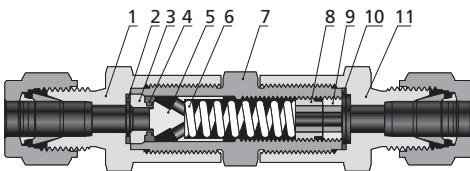
Component	Valve Material Grade/ASTM Specification
1 Inlet Body	316 SS/A479
2 Poppet	Fluorocarbon FKM - bonded 316 SS/A479
3 Poppet Stop	316 SS/A240
4 Spring	302 SS/A313
5 O-ring	Fluorocarbon FKM
6 Backup Ring	PTFE/D1710
7 Outlet Body	316 SS/A479

CO Series



Component	Valve Material Grade/ASTM Specification	
	316 SS	Brass
1 Body	316 SS/A479	Brass C36000/B16
2 Insert Locking Screw	316 SS/A276 or A479	Brass C36000/B16
3 Insert	316 SS/A479	Brass C36000/B16
4 O-ring	Fluorocarbon FKM	Buna N
5 Poppet	316 SS/A479	Brass C36000/B16
6 Spring	302 SS/A313	302 SS/A313

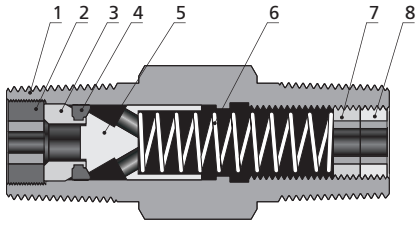
CA Series



Component	Valve Material Grade/ASTM Specification	
	316 SS	Brass
1 Inlet Body	316 SS/A479	Brass C36000/B16
2 Inlet Gasket	PTFE-coated 316 SS/A240	PTFE-coated 316 SS/A240
3 Insert	316 SS/A479	Brass C36000/B16
4 O-ring	Fluorocarbon FKM	Buna N
5 Poppet	316 SS/A479	Brass C36000/B16
6 Spring	302 SS/A313	302 SS/A313
7 Center Body	316 SS/A479	Brass C36000/B16
8 Adjusting Screw	316 SS/A276	316 SS/A276
9 Locking Screw	316 SS/A276	316 SS/A276
10 Outlet Gasket	PTFE-coated 316 SS/A240	PTFE-coated 316 SS/A240
11 Outlet Body	316 SS/A479	Brass C36000/B16

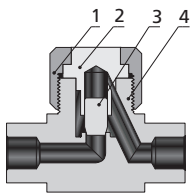
5 Check Valves

COA Series



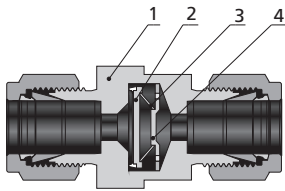
Component	Valve Material Grade/ASTM Specification	
	316 SS	Brass
1 Body	316 SS/A479	Brass C36000/B16
2 Insert Locking Screw	316 SS/A479	Brass C36000/B16
3 Insert	316 SS/A479	Brass C36000/B16
4 O-ring	Fluorocarbon FKM	Buna N
5 Poppet	316 SS/A479	Brass C36000/B16
6 Spring	302 SS/A313	302 SS/A313
7 Adjusting Screw	316 SS/A276	316 SS/A276
8 Locking Screw	316 SS/A276	316 SS/A276

CL Series



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

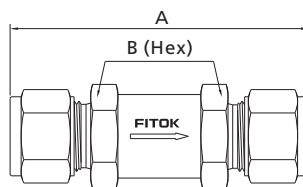
CW Series



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

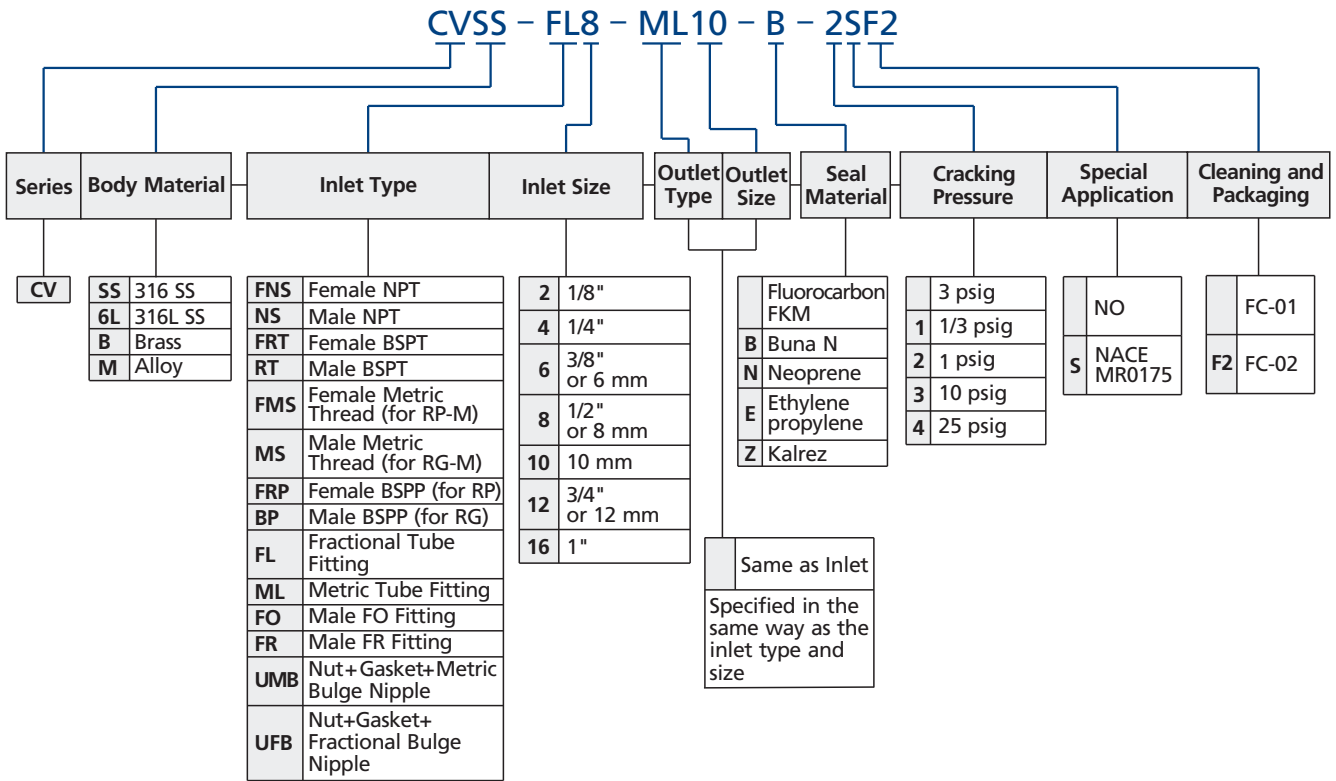
Dimensions

CV Series



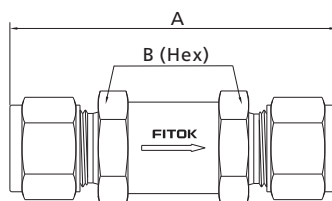
Basic Ordering Number	Connection Type and Size		Cv	Dimension, in. (mm)	
	Inlet	Outlet		A	B
CV□□-FI2-	1/8" FITOK	1/8" FITOK	0.10	2.14 (54.3)	5/8 (15.9)
CV□□-FL4-	1/4" FITOK	1/4" FITOK	0.47	2.35 (59.7)	
CV□□-FL6-	3/8" FITOK	3/8" FITOK	1.47	3.17 (80.5)	7/8 (22.2)
CV□□-FL8-	1/2" FITOK	1/2" FITOK	1.68	3.42 (86.9)	
CV□□-FL12-	3/4" FITOK	3/4" FITOK	4.48	4.32 (110.0)	1 1/4 (31.8)
CV□□-FL16-	1" FITOK	1" FITOK		4.74 (120.0)	1 3/8 (34.9)
CV□□-ML6-	6 mm FITOK	6 mm FITOK	0.47	2.36 (59.9)	5/8 (15.9)
CV□□-ML10-	10 mm FITOK	10 mm FITOK	1.68	3.32 (84.3)	7/8 (22.2)
CV□□-ML12-	12 mm FITOK	12 mm FITOK		3.42 (86.9)	
CV□□-FNS2-	1/8 Female NPT	1/8 Female NPT	0.10	1.89 (48.0)	5/8 (15.9)
CV□□-FNS4-	1/4 Female NPT	1/4 Female NPT	0.47	2.15 (54.6)	3/4 (19.1)
CV□□-FNS6-	3/8 Female NPT	3/8 Female NPT	1.47	2.98 (75.7)	7/8 (22.2)
CV□□-FNS8-	1/2 Female NPT	1/2 Female NPT	1.68	3.58 (90.9)	1 1/16 (27.0)
CV□□-FNS12-	3/4 Female NPT	3/4 Female NPT	4.48	4.08 (104.0)	1 1/4 (31.8)
CV□□-FNS16-	1 Female NPT	1 Female NPT		4.84 (123.0)	1 5/8 (41.3)
CV□□-NS2-	1/8 Male NPT	1/8 Male NPT	0.10	1.71 (43.4)	5/8 (15.9)
CV□□-NS4-	1/4 Male NPT	1/4 Male NPT	0.47	2.09 (53.1)	
CV□□-NS6-	3/8 Male NPT	3/8 Male NPT	1.47	2.78 (70.6)	7/8 (22.2)
CV□□-NS8-	1/2 Male NPT	1/2 Male NPT	1.68	3.16 (80.3)	
CV□□-NS12-	3/4 Male NPT	3/4 Male NPT	4.48	4.08 (104.0)	1 1/4 (31.8)
CV□□-NS16-	1 Male NPT	1 Male NPT		4.52 (115.0)	1 5/8 (41.3)
CV□□-FR4-	1/4" Male FR	1/4" Male FR	0.47	2.21 (56.1)	5/8 (15.9)
CV□□-FR8-	1/2" Male FR	1/2" Male FR	1.68	3.56 (90.4)	15/16 (23.8)
CV□□-FR12-	3/4" Male FR	3/4" Male FR	4.48	4.64 (118.0)	1 5/8 (41.3)
CV□□-FR16-	1" Male FR	1" Male FR		4.76 (121.0)	

Part Number Description



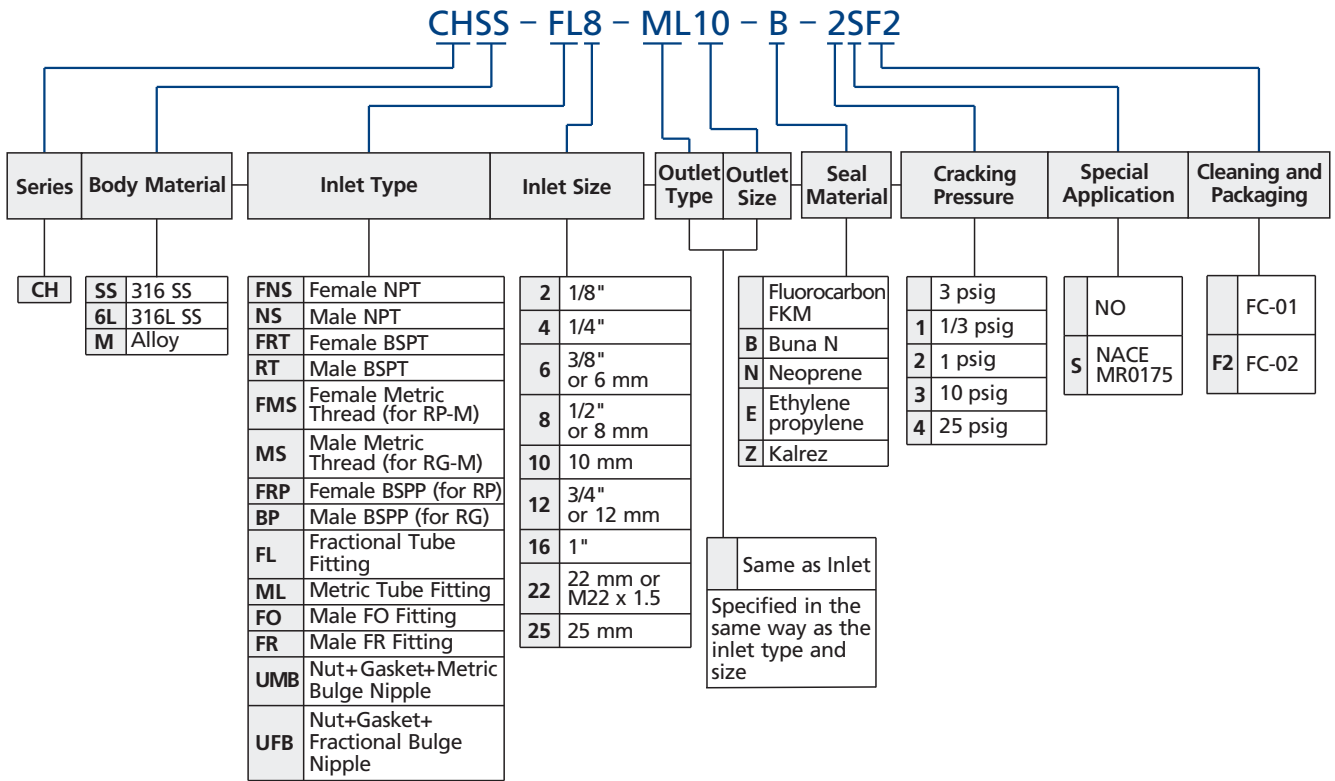
- Standard thread pitch for metric threads are as follows:
 M10 and below: 1 mm
 M12 to M24: 1.5 mm
 M27 and above: 2 mm
 Standard thread pitch should be ignored in the ordering number, others should be specified.
- For Oxygen-Riched Environment or dangerous media, please contact FITOK group or authorized agent.
- Cleaning and Packaging:
 FC-01: Standard cleaning and packaging for general industrial procedures.
 FC-02: Special cleaning and packaging for wetted system components to ensure compliance with product cleanliness requirement as stated in ASTM G93 Level C.
- The material in "Part Number Description" is general material, end connection type & size is general standard. If other end connection is needed, please contact FITOK group or authorized agent.
- PTFE coated gasket can be chosen to reduce the possibility of o-ring's moving in system caused by the pressure fluctuations, vibration or pulsating, For the details, please contact with FITOK company or authorized agents.
- Check valve is unidirectional design with flow path, it can't be used as safety relief valve.
- If the check valve is not opened during a period, its initial opening pressure may be higher than set pressure.

CH Series



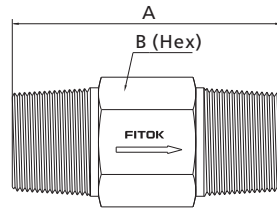
Basic Ordering Number	Connection Type and Size		Pressure Rating at 100° F (37° C) bar (psig)	CV	Dimension, in. (mm)			
	Inlet	Outlet			A	B		
CH□□-FL2-	1/8" FITOK	1/8" FITOK	414 (6000)	0.67	2.27 (57.7)	11/16 (17.5)		
CH□□-FL4-	1/4" FITOK	1/4" FITOK			2.43 (61.7)			
CH□□-FL6-	3/8" FITOK	3/8" FITOK		1.8	2.75 (69.9)	1 (25.4)		
CH□□-FL8-	1/2" FITOK	1/2" FITOK	2.96 (75.2)					
CH□□-FL12-	3/4" FITOK	3/4" FITOK	344 (5000)	4.7	3.52 (89.4)	1 5/8 (41.3)		
CH□□-FL16-	1" FITOK	1" FITOK	323 (4700)		3.88 (98.6)			
CH□□-ML6-	6 mm FITOK	6 mm FITOK	414 (6000)	0.67	2.43 (61.7)	11/16 (17.5)		
CH□□-ML8-	8 mm FITOK	8 mm FITOK			2.70 (68.6)			
CH□□-ML10-	10 mm FITOK	10 mm FITOK		1.8	2.80 (71.1)	1 (25.4)		
CH□□-ML12-	12 mm FITOK	12 mm FITOK			2.96 (75.2)			
CH□□-ML22-	22 mm FITOK	22 mm FITOK	337 (4900)	4.7	3.48 (88.4)	1 5/8 (41.3)		
CH□□-ML25-	25 mm FITOK	25 mm FITOK	316 (4600)		3.88 (98.6)			
CH□□-FNS4-	1/4 Female NPT	1/4 Female NPT	414 (6000)	0.67	2.13 (54.1)	11/16 (17.5)		
CH□□-FNS6-	3/8 Female NPT	3/8 Female NPT	365 (5300)		1.8		2.55 (64.8)	1 (25.4)
CH□□-FNS8-	1/2 Female NPT	1/2 Female NPT	337 (4900)				3.03 (77.0)	
CH□□-FNS12-	3/4 Female NPT	3/4 Female NPT	316 (4600)	4.7	3.23 (82.0)	1 5/8 (41.3)		
CH□□-FNS16-	1 Female NPT	1 Female NPT	303 (4400)		3.83 (97.3)			
CH□□-NS2-	1/8 Male NPT	1/8 Male NPT	414 (6000)	0.67	1.79 (45.4)	11/16 (17.5)		
CH□□-NS4-	1/4 Male NPT	1/4 Male NPT			2.17 (55.1)			
CH□□-NS6-	3/8 Male NPT	3/8 Male NPT		1.8	2.36 (59.9)	1 (25.4)		
CH□□-NS8-	1/2 Male NPT	1/2 Male NPT			2.73 (69.3)			
CH□□-NS12-	3/4 Male NPT	3/4 Male NPT	344 (5000)	4.7	3.29 (83.6)	1 5/8 (41.3)		
CH□□-NS16-	1 Male NPT	1 Male NPT	367 (93.2)					
CH□□-FRT4-	1/4 Female BSPT	1/4 Female BSPT	414 (6000)	0.67	2.28 (57.9)	11/16 (17.5)		
CH□□-FRT8-	1/2 Female BSPT	1/2 Female BSPT	351 (5100)	1.8	3.29 (83.6)	1 1/16 (27.0)		
CH□□-FRT12-	3/4 Female BSPT	3/4 Female BSPT	330 (4800)	4.7	3.55 (90.2)	1 5/8 (41.3)		
CH□□-FRT16-	1 Female BSPT	1 Female BSPT	303 (4400)		3.83 (97.3)			
CH□□-RT4-	1/4 Male BSPT	1/4 Male BSPT	414 (6000)	0.67	2.17 (55.1)	11/16 (17.5)		
CH□□-RT8-	1/2 Male BSPT	1/2 Male BSPT		1.8	2.73 (69.3)	1 (25.4)		
CH□□-RT12-	3/4 Male BSPT	3/4 Male BSPT	344 (5000)	4.7	3.35 (85.1)	1 5/8 (41.3)		
CH□□-RT16-	1 Male BSPT	1 Male BSPT			3.67 (93.2)			
CH□□-FR4-	1/4" Male FR	1/4" Male FR	414 (6000)	0.67	2.28 (57.9)	11/16 (17.5)		
CH□□-FR8-	1/2" Male FR	1/2" Male FR	296 (4300)	1.8	2.73 (69.3)	1 (25.4)		
CH□□-FR12-	3/4" Male FR	3/4" Male FR	254 (3700)	4.7	3.78 (96.0)	1 5/8 (41.3)		
CH□□-FO4-	1/4" Male FO	1/4" Male FO	414 (6000)	0.67	1.98 (50.3)	11/16 (17.5)		
CH□□-FO8-	1/2" Male FO	1/2" Male FO		1.8	2.35 (59.7)	1 (25.4)		
CH□□-FO12-	3/4" Male FO	3/4" Male FO	344 (5000)	4.7	2.90 (73.7)	1 5/8 (41.3)		
CH□□-FO16-	1" Male FO	1" Male FO						

Part Number Description



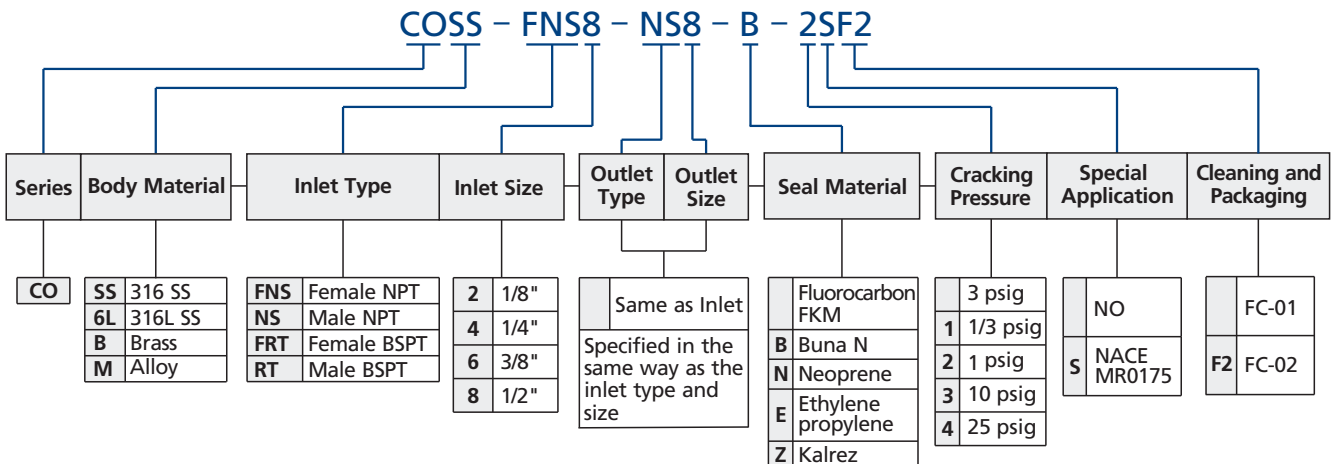
- Standard thread pitch for metric threads are as follows:
M10 and below: 1 mm
M12 to M24: 1.5 mm
M27 and above: 2 mm
Standard thread pitch should be ignored in the ordering number, others should be specified.
- For Oxygen-Riched Environment or dangerous media, please contact FITOK group or authorized agent.
- Cleaning and Packaging:
FC-01: Standard cleaning and packaging for general industrial procedures.
FC-02: Special cleaning and packaging for wetted system components to ensure compliance with product cleanliness requirement as stated in ASTM G93 Level C.
- The material in "Part Number Description" is general material, end connection type & size is general standard. If other end connection is needed, please contact FITOK group or authorized agent.
- Check valve is unidirectional design with flow path, it can't be used as safety relief valve.
- If the check valve is not opened during a period, its initial opening pressure may be higher than set pressure.

CO Series



Basic Ordering Number	Connection Type and Size		Cv	Dimension, in. (mm)	
	Inlet	Outlet		A	B
CO□□-FNS4-	1/4 Female NPT	1/4 Female NPT	0.35	2.41 (61.2)	3/4 (19.1)
CO□□-FNS8-	1/2 Female NPT	1/2 Female NPT	1.20	3.71 (94.2)	1 1/16 (27.0)
CO□□-NS4-	1/4 Male NPT	1/4 Male NPT	0.35	1.62 (41.1)	9/16 (14.3)
CO□□-NS8-	1/2 Male NPT	1/2 Male NPT	1.20	2.28 (57.9)	7/8 (22.2)
CO□□-FRT4-	1/4 Female BSPT	1/4 Female BSPT	0.35	2.54 (64.5)	3/4 (19.1)
CO□□-RT4-	1/4 Male BSPT	1/4 Male BSPT		1.62 (41.1)	9/16 (14.3)

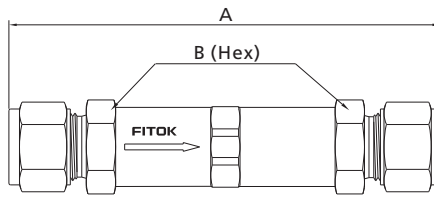
Part Number Description



1. For Oxygen-Rich Environment or dangerous media, please contact FITOK group or authorized agent.
2. Cleaning and Packaging:
 FC-01: Standard cleaning and packaging for general industrial procedures.
 FC-02: Special cleaning and packaging for wetted system components to ensure compliance with product cleanliness requirement as stated in ASTM G93 Level C.
3. The material in "Part Number Description" is general material, end connection type & size is general standard. If other end connection is needed, please contact FITOK group or authorized agent.
4. Check valve is unidirectional design with flow path, it can't be used as safety relief valve.
5. If the check valve is not opened during a period, its initial opening pressure may be higher than set pressure.

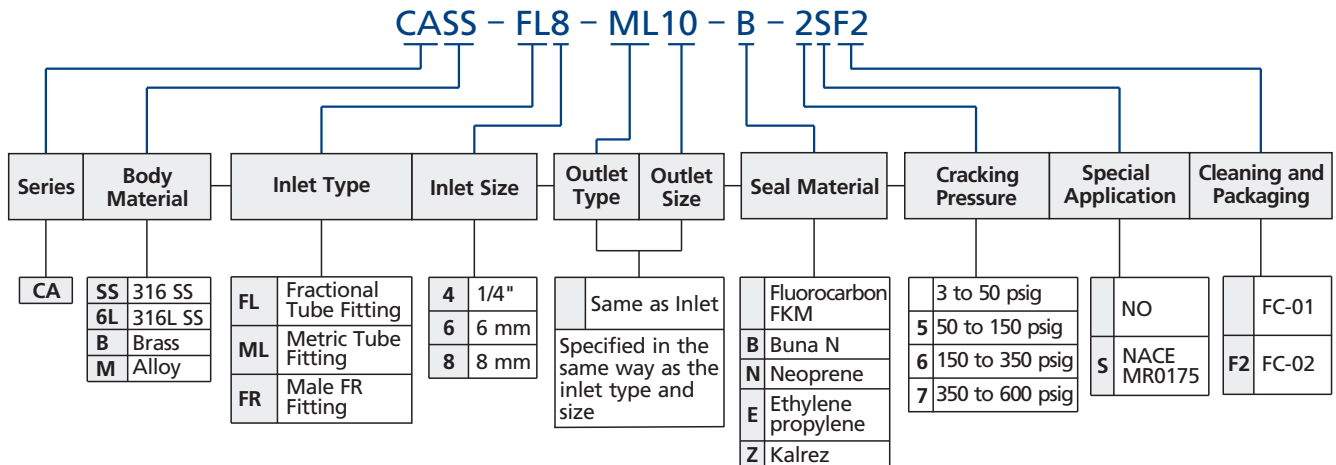
11 Check Valves

CA Series



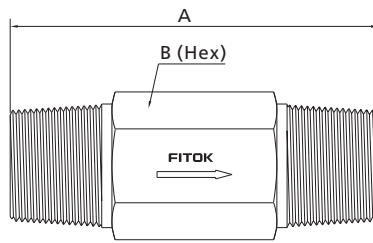
Basic Ordering Number	Connection Type and Size		Cv	Dimension, in. (mm)	
	Inlet	Outlet		A	B
CA□□-FL4-	1/4" FITOK	1/4" FITOK	0.37	3.23 (82.0)	5/8 (15.9)
CA□□-ML6-	6 mm FITOK	6 mm FITOK		3.32 (84.3)	
CA□□-ML8-	8 mm FITOK	8 mm FITOK		3.09 (78.5)	
CA□□-FR4-	1/4" Male FR	1/4" Male FR			

Part Number Description



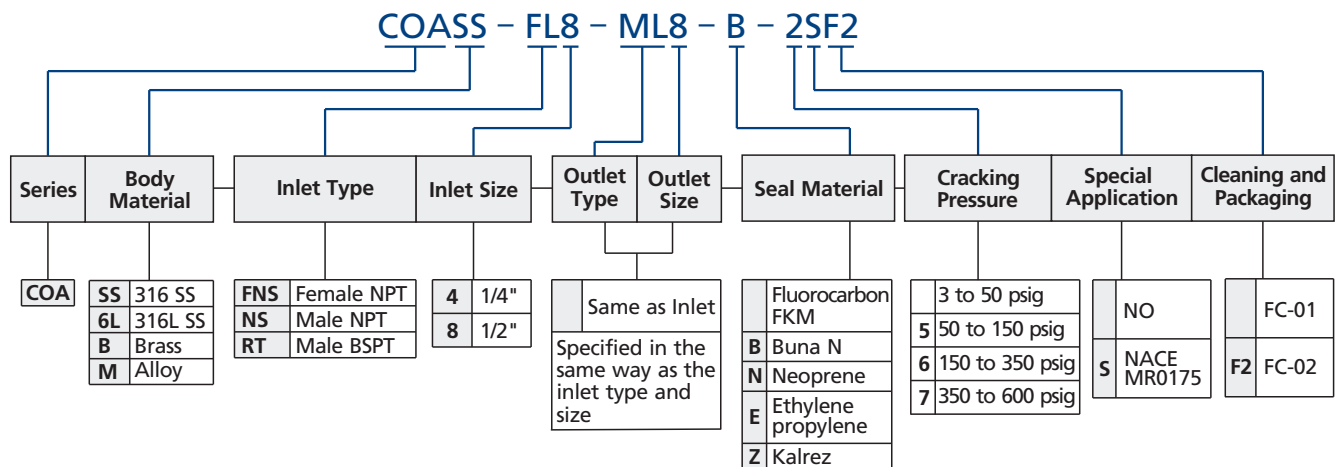
- For Oxygen-Rich Environment or dangerous media, please contact FITOK group or authorized agent.
- Cleaning and Packaging:
 - FC-01: Standard cleaning and packaging for general industrial procedures.
 - FC-02: Special cleaning and packaging for wetted system components to ensure compliance with product cleanliness requirement as stated in ASTM G93 Level C.
- The material in "Part Number Description" is general material, end connection type & size is general standard. If other end connection is needed, please contact FITOK group or authorized agent.
- Check valve is unidirectional design with flow path, it can't be used as safety relief valve.
- If the check valve is not opened during a period, its initial opening pressure may be higher than set pressure.

COA Series



Basic Ordering Number	Connection Type and Size		Cv	Dimension, in. (mm)	
	Inlet	Outlet		A	B
COA □□-FNS4-	1/4 Female NPT	1/4 Female NPT	0.35	2.98 (75.7)	3/4 (19.1)
COA □□-NS4-	1/4 Male NPT	1/4 Male NPT	0.35	1.62 (41.1)	9/16 (14.3)
COA □□-NS8-	1/2 Male NPT	1/2 Male NPT	1.20	2.56 (65.0)	7/8 (22.2)
COA □□-RT4-	1/4 Male BSPT	1/4 Male BSPT	0.35	1.62 (41.1)	9/16 (14.3)
COA □□-RT8-	1/2 Male BSPT	1/2 Male BSPT	1.20	2.56 (65.0)	7/8 (22.2)

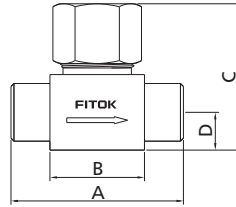
Part Number Description



1. For Oxygen-Rich Environment or dangerous media, please contact FITOK group or authorized agent.
2. Cleaning and Packaging:
FC-01: Standard cleaning and packaging for general industrial procedures.
FC-02: Special cleaning and packaging for wetted system components to ensure compliance with product cleanliness requirement as stated in ASTM G93 Level C.
3. The material in "Part Number Description" is general material, end connection type & size is general standard. If other end connection is needed, please contact FITOK group or authorized agent.
4. Check valve is unidirectional design with flow path, it can't be used as safety relief valve.
5. If the check valve is not opened during a period, its initial opening pressure may be higher than set pressure.

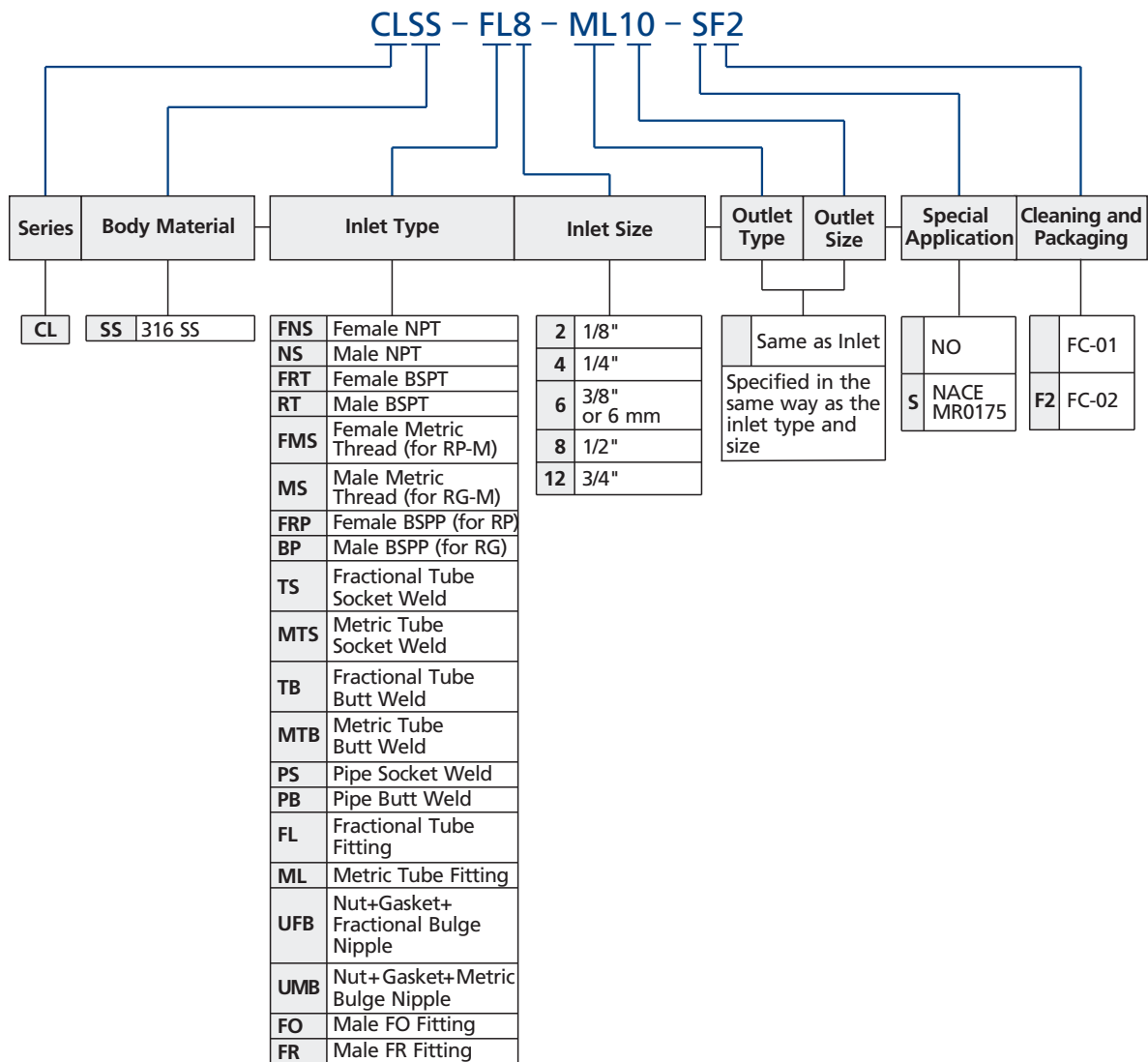
13 Check Valves

CL Series



Basic Ordering Number	Connection Type and Size		Cv	Dimension, in. (mm)			
	Inlet	Outlet		A	B	C	D
CL□□-FL4	1/4" FITOK	1/4" FITOK	0.30	2.40 (61.0)	1.01 (25.7)	1.47 (37.3)	0.39 (9.9)
CL□□-FL6	3/8" FITOK	3/8" FITOK	0.64	2.83 (71.9)	1.31 (33.3)	1.85 (47.0)	0.50 (12.7)
CL□□-FL8	1/2" FITOK	1/2" FITOK	2.20	3.92 (99.6)	2.19 (55.6)	2.44 (62.0)	0.62 (15.7)
CL□□-FL12	3/4" FITOK	3/4" FITOK					
CL□□-ML6	6 mm FITOK	6 mm FITOK	0.30	2.40 (61.0)	1.01 (25.7)	1.47 (37.3)	0.39 (9.9)
CL□□-FNS2	1/8 Female NPT	1/8 Female NPT					
CL□□-FNS4	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□□-FNS6	3/8 Female NPT	3/8 Female NPT	2.20	3.12 (79.2)	1.86 (47.2)	2.44 (62.0)	0.62 (15.7)
CL□□-FNS8	1/2 Female NPT	1/2 Female NPT					
CL□□-TS4	1/4" TS	1/4" TS	0.30	1.81 (46.0)	0.90 (22.9)	1.47 (37.3)	0.39 (9.9)
CL□□-TS6	3/8" TS	3/8" TS	0.64	2.25 (57.2)	1.25 (31.8)	1.85 (47.0)	0.50 (12.7)
CL□□-TS8	1/2" TS	1/2" TS	2.20	3.13 (79.5)	1.88 (47.8)	2.44 (47.0)	0.62 (15.7)
CL□□-PB4	1/4 PB	1/4 PB	0.30	1.81 (46.0)	0.90 (22.9)	1.47 (37.3)	0.39 (9.9)
CL□□-PB6	3/8 PB	3/8 PB	0.64	2.25 (57.2)	1.25 (31.8)	1.85 (47.0)	0.50 (12.7)
CL□□-PB8	1/2 PB	1/2 PB	2.20	3.13 (79.5)	1.88 (47.8)	2.44 (62.0)	0.62 (15.7)

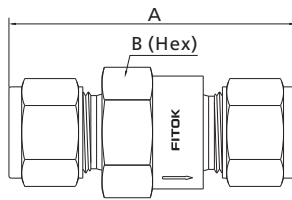
Part Number Description



- Standard thread pitch for metric threads are as follows:
 M10 and below: 1 mm
 M12 to M24: 1.5 mm
 M27 and above: 2 mm
 Standard thread pitch should be ignored in the ordering number, others should be specified.
- For Oxygen-Riched Environment or dangerous media, please contact FITOK group or authorized agent.
- Cleaning and Packaging:
 FC-01: Standard cleaning and packaging for general industrial procedures.
 FC-02: Special cleaning and packaging for wetted system components to ensure compliance with product cleanliness requirement as stated in ASTM G93 Level C.
- The material in "Part Number Description" is general material, end connection type & size is general standard. If other end connection is needed, please contact FITOK group or authorized agent.

15 Check Valves

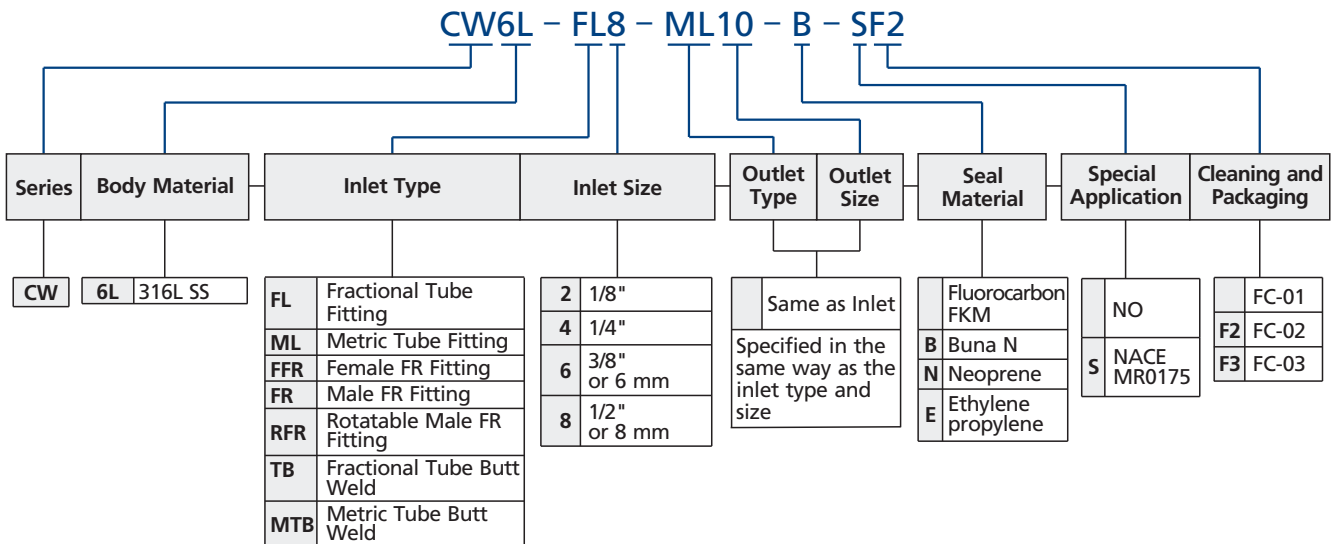
CW Series



Basic Ordering Number	Connection Type and Size		Cv	Dimension, in. (mm)	
	Inlet	Outlet		A	B
CW□□-TB4	1/4" TB	1/4" TB	0.55	1.24 (31.5)	7/8 (22.23)
CW□□-TB6	3/8" TB	3/8" TB	0.70		
CW□□-TB8	1/2" TB	1/2" TB	0.70		
CW□□-MTB6	6 mm MTB	6 mm MTB	0.55	1.80 (45.7)	1 (25.4)
CW□□-FR4	1/4" Male FR	1/4" Male FR	0.70		
CW□□-FR8	1/2" Male FR	1/2" Male FR	0.70	2.06 (52.3)	1 (25.4)
CW□□-FL4	1/4" FITOK	1/4" FITOK	0.55	1.96 (49.8)	7/8 (22.23)
CW□□-ML6	6 mm FITOK	6 mm FITOK	0.55		

1. FITOK means FITOK double ferrule tube fittings, FR means metal gasket seal fittings, TB means fractional tube butt weld, MTB means metric tube butt weld.
2. Sizes and types listed are standard. Other sizes and types are available upon request. For special sizes and types, refer to ordering information.
3. Dimensions shown with FITOK nuts finger-tightened. All dimensions are for reference only and are subject to change. For dimensions not shown above, contact the authorized representative or FITOK Group.

Part Number Description



1. For Oxygen-Rich Environment or dangerous media, please contact FITOK group or authorized agent.
2. Cleaning and Packaging:
 - FC-01: Standard cleaning and packaging for general industrial procedures.
 - FC-02: Special Cleaning and packaging is applied to wetted system assembly with its surface roughness finished to an average of Ra 0.5 μm after machine polishing to meet the requirement of ASTM G93 C.
 - FC-03: Ultrahigh-purity Cleaning and Packaging is applied to wetted system assembly with its surface roughness finished to an average of Ra 0.2 μm after machine polishing and electropolishing.
3. The material in "Part Number Description" is general material, end connection type & size is general standard. If other end connection is needed, please contact FITOK group or authorized agent.
4. Check valve is unidirectional design with flow path, it can't be used as safety relief valve.
5. If the check valve is not opened during a period, its initial opening pressure may be higher than set pressure.

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