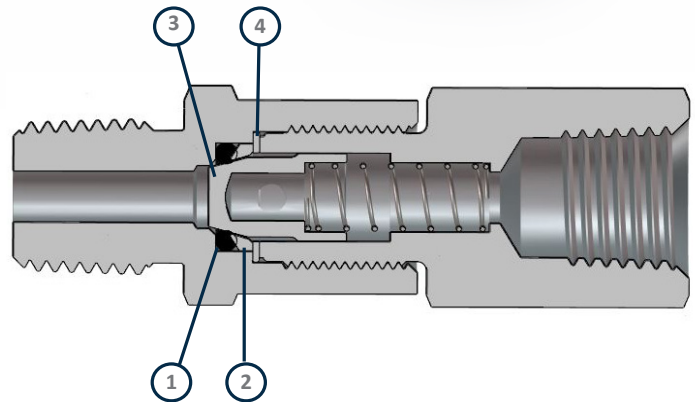


High-Pressure Check Valves

CH Series check valves are designed for high pressure, high cycle applications up to 6000 psig (413 bar). They are available with a variety of O-ring materials. Standard cracking pressures range from 1/3 to 25 psig (0.03 to 1.7 bar).

Product Design

- 1 O-ring
 - Wide variety of o-ring materials
 - Easy maintenance
- 2 O-ring Retainer
 - Fully supports the O-ring to prevent extrusion
- 3 Poppet Style Design
 - Vee shape maximizes sealing area
- 4 Gasket Seal
 - Metal to metal seal to the environment



Cracking & Reseal Pressures

Nominal Cracking Pressure psig (bar)	Cracking Pressure Range psig (bar)	Reseal Pressure psig (bar)
1/3 (0.03)	Up to 3 (0.21)	Up to 6 (0.42) back pressure
1 (0.07)	Up to 4 (0.28)	Up to 5 (0.35) back pressure
5 (0.35)	3 TO 9 (0.21 TO 0.63)	Up to 2 (0.14) back pressure
10 (0.69)	7 TO 15 (0.49 TO 1.1)	3 (0.21) or more upstream pressure
25 (1.7)	20 TO 30 (1.4 TO 2.1)	17 (1.2) or more upstream pressure

When valves remain inactive for an extended duration, the initial cracking pressure might exceed the predetermined cracking pressure.

O-rings

Material	Temperature Rating °F (°C)
Fluorocarbon FKM (STD)	-10 TO 400 (-23 to 204)
Nitrile	-20 TO 250 (-28 TO 121)
Low-Temp Nitrile	-40 TO 250 (-40 TO 121)
Ethylene Propylene	-50 TO 250 (-45 TO 121)
Kalrez	0 TO 400 (-17 TO 204)

Pressure - Temperature & Flow

Series	Maximum Flow Coefficient (Cv)	Downstream Pressure at 70°F (20°C) psig (bar)
CH4	0.60	6000 (413 bar)
CH8	2.15	
CH16	3.25	5000 (345 bar)

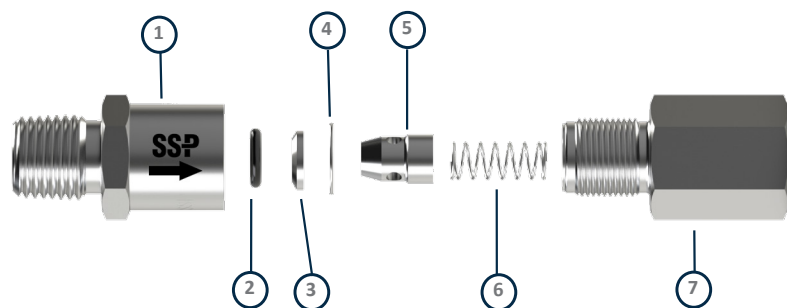
PRODUCTION TESTING

Check valves are 100% factory tested with nitrogen to confirm cracking pressure, reseal pressure, and for shell leakage at 1000 psi.

Materials of Construction

ID	Component	Material
1	Inlet Body	316 SS
2	O-ring	Fluorocarbon FKM
3	O-ring Retainer	316 SS
4	Connector Gasket	316 SS
5	Poppet	316 SS
6	Spring	302 SS
7	Outlet Body	316 SS

All components are wetted



Ordering Instructions

- 1 Select the basic part number from the Part Numbers and Dimensions table . Example: **CH4-D4**
Default tube end connections are Duolok. For Unilok or Griplok, add U or G to the basic part number.
CH4-U4 (Unilok), CH4-G4 (Griplok)
- 2 Select the cracking pressure designator, then add it to the part number. Example: **CH4-D4-1**
- 3 Select the material designator, then add it the part number. Example: **CH4-D4-1-316**
- 4 Add additional options and accessories in alphabetical order. Example: **CH4-D4-1-316-BN-XP98**

A - **B** - **C** - **D**
CH4-D4 **-1** **-316** **-BN**

Part Numbers and Dimensions

End Connections		Basic Part Number	Valve Series	Dimensions	
Type Inlet / Outlet	Size			A in. (mm)	B Hex in.
Fractional Tube Fitting	1/8	CH4-D2	CH4	2.27 (57.7)	11/16
	1/4	CH4-D4		2.44 (62.0)	11/16
	3/8	CH8-D6	CH8	2.75 (69.9)	1
	1/2	CH8-D8		2.96 (75.2)	1
	3/4	CH16-D12	CH16	3.53 (89.7)	1 - 3/4
	1	CH16-D16		3.88 (98.6)	1 - 3/4
Metric Tube Fitting	6	CH4-DM6	CH4	2.44 (62.0)	11/16
	8	CH8-DM8	CH8	2.70 (68.6)	1
	10	CH8-DM10		2.75 (69.9)	1
	12	CH8-DM12		2.96 (75.2)	1
Female NPT	1/4	CH4-4PF	CH4	2.26 (57.4)	11/16
	3/8	CH8-6PF	CH8	2.55 (67.8)	1
	1/2	CH8-8PF		3.03 (77.0)	1 - 1/16
	3/4	CH16-12PF	CH16	3.23 (82.0)	1 - 3/4
	1	CH16-16PF		3.83 (97.3)	1 - 3/4
Female ISO Tapered	1/4	CH4-4FRT	CH4	2.38 (60.5)	11/16
	3/8	CH8-6FRT	CH8	2.86 (72.6)	1
	1/2	CH8-8FRT		3.29 (83.6)	1 - 1/16
Male NPT	1/8	CH4-2PM	CH4	1.9 (48.3)	11/16
	1/4	CH4-4PM		2.17 (55.1)	11/16
	3/8	CH8-6PM	CH8	2.36 (59.9)	1
	1/2	CH8-8PM		2.73 (69.3)	1
	3/4	CH16-12PM	CH16	3.23 (82.0)	1 - 3/4
	1	CH16-16PM		3.67 (93.2)	1 - 3/4
Male ISO Tapered	1/4	CH4-4MRT	CH4	2.17 (55.1)	11/16
	1/2	CH8-8MRT	CH8	2.73 (69.3)	1
Male NPT to Female NPT	1/4	CH4-4PM4PF	CH4	2.26 (57.4)	11/16
	1/2	CH8-8PM8PF	CH8	2.89 (73.4)	1 - 1/16
Fractional Tube to Male NPT	3/8	CH8-D66PM		CH8	2.56 (65.0)
	1/2	CH8-D88PM	2.74 (69.6)		1

A BASIC PART NUMBER

See Chart

B CRACKING PRESSURE

-1/3 1/3 PSI
-1 1 PSI
-5 5 PSI
-10 10 PSI
-25 25 PSI

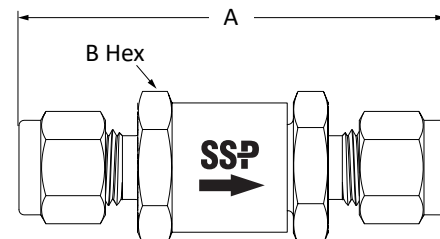
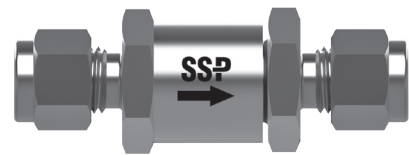
C BODY MATERIAL

-316 Stainless Steel
Other materials available upon request

D OPTIONS

O-rings
Blank Fluorocarbon FKM (Standard)
-BN Nitrile
-NBR3 Low-Temp Nitrile
-EP Ethylene Propylene
-KZ Kalrez

Special Cleaning
-XP98 ASTM G93, Level C and CGA G-4.1



! Check valves are intended solely for regulating directional flow. It is essential to avoid utilizing SSP Check Valves as a substitute for safety relief devices as per industry standards.