

HIGH PRESSURE CHECK VALVES CH SERIES

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CH SERIES

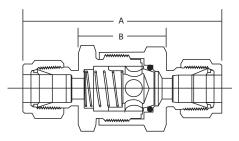
Poppet-style check valves for up to 6000 psi (413 bar) service • Compression tube fitting, NPT and ISO pipe end connections from 1/8" through 1" and 6, 8, 10 and 12mm sizes • 100% factory tested with nitrogen • Standard material: 316ss with Viton™ o-ring • Cracking pressures of 1/3, 1, 5, 10 and 25 psi (0.2 to 1.7 bar)

CRACKING AND RESEAL PRESSURES

NOMINAL CRACKING PRESSURE PSI (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 (1.8)	20 TO 30 (1.4 TO 2.1)	17 (1.2) OR MORE UPSTREAM PRESSURE

PRESSURES / TEMPERATURES & FLOW

SERIES	MAXIMUM FLOW COEFFICIENT (C _v)	NOMINAL CRACKING PRESSURE PSI (BAR)	DOWNSTREAM PRESSURE AT 70°F (20°C) PSIG (BAR)	
CH4	0.67	1/3, 1, 5, 10 and 25	6000 (412)	
CH8	1.8	(0.03, 0.07, 0.69 and 1.8)	6000 (413)	



CH SERIES CHECK VALVES

			DIMENSIONS			
END CONNECTION TYPE	FITTING SIZE	BASIC ORDERING	SERIES	Α	В	HEX SIZE
TYPE		NUMBER		In. (mm)	In. (mm)	ln.
	1/8	CH4-D2	CH4	2.27 (57.7)	1.07 (26.9)	11/16
FRACTIONAL	1/4	CH4-D4	CH4	2.44 (62.0)	1.04 (26.1)	11/16
TUBE FITTING	3/8	CH8-D6	CH8	2.75 (69.9)	1.2 (30.2)	1
	1/2	CH8-D8	CH8	2.96 (75.2)	1.24 (31.2)	1
	6	CH4-DM6	CH4	2.44 (62.0)	1.04 (26.1)	11/16
METRIC TUBE	8	CH8-DM8	CH8	2.70 (68.6)	1.24 (31.5)	1
FITTING	10	CH8-DM10	CH8	2.75 (69.9)	1.2 (30.2)	1
	12	CH8-DM12	CH8	2.96 (75.2)	1.24 (31.2)	1
	1/4	CH4-4PF	CH4	2.26 (57.4)		11/16
FEMALE NPT	3/8	CH8-6PF	CH8	2.55 (67.8)		1
	1/2	CH8-8PF	CH8	3.03 (77.0)		1-1/16
	1/4	CH4-4FRT	CH4	2.38 (60.5)		11/16
FEMALE ISO TAPERED	3/8	CH8-6FRT	CH8	2.86 (72.6)		1
IAI EILED	1/2	CH8-8FRT	CH8	3.29 (83.6)		1-1/16
	1/8	CH4-2PM	CH4	1.9 (48.3)	1.12 (28.2)	11/16
MALE NPT	1/4	CH4-4PM	CH4	2.17 (55.1)	1.03 (25.9)	11/16
IVIALE NPT	3/8	CH8-6PM	CH8	2.36 (59.9)	1.22 (30.7)	1
	1/2	CH8-8PM	CH8	2.73 (69.3)	1.21 (30.4)	1
MALE ISO	1/4	CH4-4MRT	CH4	2.17 (55.1)	1.03 (25.9)	11/16
TAPERED	1/2	CH8-8MRT	CH8	2.73 (69.3)	1.21 (30.4)	1
MALE/FEMALE	1/4	CH4-4PM4PF	CH4	2.26 (57.4)		11/16
NPT	1/2	CH8-8PM8PF	CH8	2.89 (73.4)		1-1/16
FRACTIONAL	3/8	CH8-D6PM6	CH8	2.56 (65.0)	1.234 (31.0)	1
TUBE FITTING/ MALE NPT	1/2	CH8-D8PM8	CH8	2.74 (69.6)	1.224 (30.8)	1

PART NUMBER CONFIGURATION

BASIC ORDERING NUMBER CRACKING PRESSURE DESIGNATOR

MATERIAL DESIGNATOR

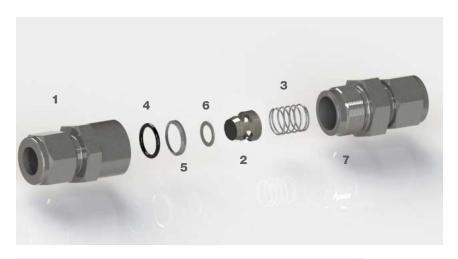
CRACKING PRESSURE DESIGNATOR		
Cracking Pressure psig	Designator	
1/3	1/3	
1	1	
5	5	

10 25 10

25

MATERIAL DESIGNATOR: Stainless Steel - 316

Example: CH4-D4-1-316



	MATERIALS OF CONSTRUCTION				
COMPONENT		316 SS			
1	INLET BODY	316 SS			
2	POPPET	316 SS			
3	SPRING	302/316 SS			
4	O-RING	VITON			
5	O-RING RETAINER	316 SS			
6	CONNECTOR GASKET	316 SS			
7	OUTLET BODY	316 SS			

O-RINGS

Viton o-ring is the standard seal material on CH check valves. No modification to the base part number is required to receive valves with a Viton o-ring. Other o-rings are available. To order, insert the desired o-ring designator into the valve ordering number.

Example: CH4-D4-316-BU

MATERIAL	DESIGNATOR	TEMPERATURE RATING °F (°C)
BUNA N	-BU	-40 TO 250 (-40 TO 121)
BUNA N756	-CNG	-65 TO 275 (-53 TO 135)
ETHYLENE PROPYLENE	-EP	-50 TO 300 (-45 TO 148)
KALREZ	-KZ	-10 TO 400 (-23 TO 204)

PRODUCTION TESTING

Check valves are 100% factory tested with nitrogen after assembly to confirm spring cracking pressure, and for seat leakage at 1000 psi.



Please consider total system design considerations when selecting products to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

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