

FEATURES

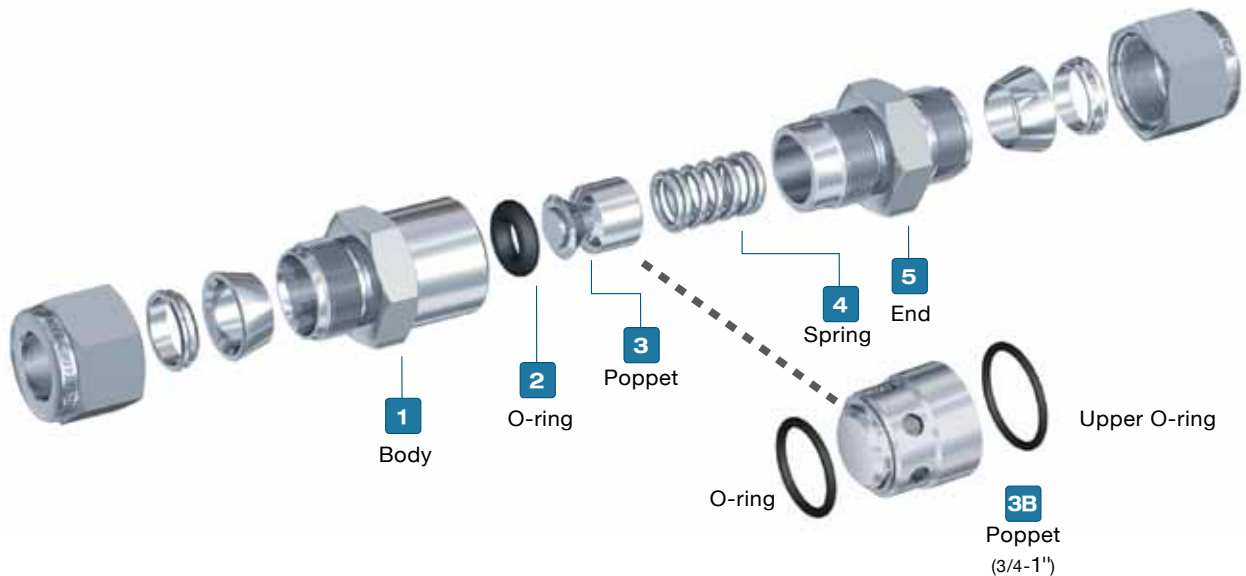
- 316 St.St. and Brass construction
- Moderate Pressure Characteristics (up to 3000 psi)
- Compact Design
- Variable fixed cracking-pressure springs
- HAM-LET LET-LOK®, Male & Female NPT, and HTC® Face-Seal Bead Ends.

GENERAL

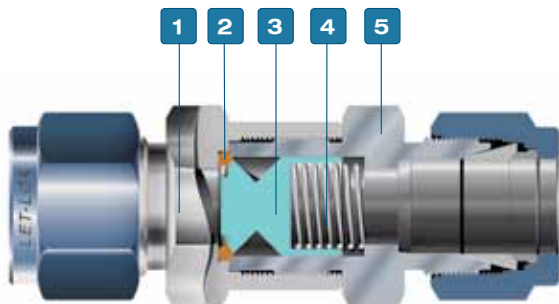
The H-400 Series is a compact design for instrumentation panels and systems, which provides an accurate operating point. H-400 valves are normally closed. When differential pressure between inlet and outlet is higher than the set pressure of the spring, the loaded poppet will move backwards and will enable a free passage of flow through the valve.

MATERIALS OF CONSTRUCTION for sizes 1/8"-1/2"				
Item No.		Components	Qty.	Valve Body Material
1		Body	1	St.St. 316
2		O-ring	1	Viton®
3		Poppet	1	St.St. 316
4	A	Spring 1/3 psi	1	St.St. 302
	B	Spring 3 psi	1	St.St. 302
	C	Spring 10 psi	1	St.St. 302
	D	Spring 25 psi	1	St.St. 302
5		End	1	St.St. 316

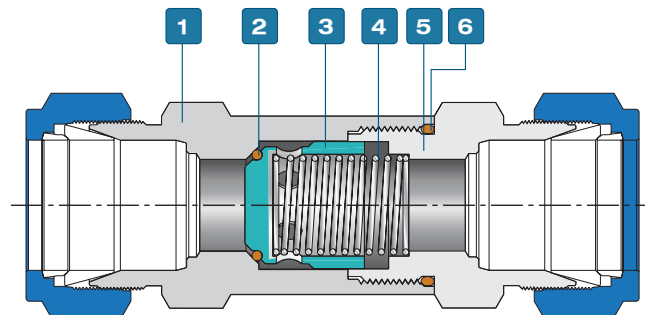
MATERIALS OF CONSTRUCTION for sizes 3/4"-1"				
Item No.		Components	Qty.	Valve Body Material
1		Body	1	St.St. 316
2		O-ring	1	Viton®
3B		Poppet	1	St.St. 316
4	A	Spring 1/3 psi	1	St.St. 302
	B	Spring 3 psi	1	St.St. 302
	C	Spring 10 psi	1	St.St. 302
	D	Spring 25 psi	1	St.St. 302
5		End	1	St.St. 316
6		Upper O-ring	1	Viton®

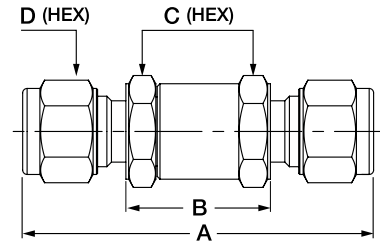


Sizes 1/8"-1/2"



Sizes 3/4"-1"





STANDARD CONFIGURATION DIMENSIONS											
Valve Type	Connection / Size		Cv	A		B		C		D	
	Inlet	Outlet		mm	in	mm	in	mm	in	mm	in
H-400	1/8" LET-LOK®	1/8" LET-LOK®	0.1	56.0	2.20	25.3	1.00	15.88	5/8	11.11	7/16
H-400	1/4" LET-LOK®	1/4" LET-LOK®	0.47	60.5	2.38	25.0	0.98	15.88	5/8	14.28	9/16
H-400	6MM LET-LOK®	6MM LET-LOK®	0.47	60.5	2.38	25.0	0.98	15.88	5/8	14.00	
H-400	3/8" LET-LOK®	3/8" LET-LOK®	1.47	63.5	2.50	24.9	0.98	17.46	11/16	17.46	11/16
H-400	10MM LET-LOK®	10MM LET-LOK®	1.68	64.0	2.52	24.9	0.98	17.46	11/16	19.00	
H-400	1/2" LET-LOK®	1/2" LET-LOK®	1.68	77.0	3.03	32.6	1.28	23.8	15/16	22.23	7/8
H-400	12MM LET-LOK®	12MM LET-LOK®	1.68	77.0	3.03	32.8	1.28	23.8	15/16	22.00	
H-400	3/4" LET-LOK®	3/4" LET-LOK®	4.48	88.5	3.48	44.4	1.75	28.6	11/8	28.60	11/8
H-400	1" LET-LOK®	1" LET-LOK®	4.48	120	4.72	67.2	2.65	34.9	13/8	38.10	11/2
H-410	1/8" Female NPT	1/8" Female NPT	0.1	44.0	1.73	25.4	1.00	15.88	5/8		
H-410	1/4" Female NPT	1/4" Female NPT	0.47	52.5	2.07	28.0	1.10	19.05	3/4		
H-410	3/8" Female NPT	3/8" Female NPT	1.47	51.5	2.03	34.1	1.34	22.23	7/8		
H-410	1/2" Female NPT	1/2" Female NPT	1.68	76.5	3.01	43.4	1.71	28.6	11/8		
H-410	3/4" Female NPT	3/4" Female NPT	4.48	86.0	3.39	56.0	2.20	34.9	13/8		
H-410	1" Female NPT	1" Female NPT	4.48	107	4.21	73.0	2.87	41.28	15/8		
H-480	1/4" Male NPT	1/4" Male NPT	0.47	53.3	2.10	25.0	0.98	19.05	3/4		
H-485	1/4" Male NPT	1/4" Female NPT	0.47	53.7	2.11	27.3	1.07	19.05	3/4		



CRACKING PRESSURE

The differential pressure between inlet and outlet, at which an initial flow is passing through the valve.

RESEAL PRESSURE

The differential pressure between outlet and inlet, at which no flow is passing through the valve.

BACK PRESSURE

Maximum allowable back pressure is rated to 1000 psi (69 bar) for 1/4, 200 psi (14 bar) for 3/8 to 1". For higher back pressure please select valve from H-400HP Series.

O-RINGS*	
O-ring Material	Temperature Rating °F (°C)
Buna N	-10 to 250 (-23 to 121)
EPDM	-50 to 300 (-45 to 148)
Viton® (Fluorocarbon)	-10 to 375 (-23 to 190)
Perfluor	-15 to 500 (-26 to 260)
Neoprene	-40 to 250 (-40 to 121)

*Different materials are available for special applications.

MAWP PRESSURE AT 21°C (70°F)		
SIZE	BRASS psi (bar)	AISI 316 psi (bar)
1/8 , 1/4, 6mm	3000 (207)	3000 (207)
3/8, 1/2, 5/8, 10mm, 12mm	3000 (207)	3000 (207)
3/4, 1", 16, 20, 22 mm	1500 (103)	2000 (138)

CRACKING AND RESEAL PRESSURE			
Nominal Cracking Pressure	Cracking Pressure Range	Reseal Pressure	
		psi (bar)	Upstream / Downstream Pressure
1/3 (0.02)	Up to 3 (0.2)	Up to 6 (0.40)	Downstream
1 (0.06)	Up to 4 (0.27)	Up to 6 (0.41)	Downstream
10 (0.68)	7 to 15 (0.48 to 1.0)	3 (0.2) or more	Upstream
25 (1.7)	20 to 30 (1.3 to 2.0)	17 (1.1) or more	Upstream

PRESSURE - TEMPERATURE RATING FOR STANDARD CONFIGURATIONS

1/8 TO 1/2 INCH, 3MM TO 12 MM		
Material Size	316St.St.	Brass
Temperature F° (C°)	Working Pressure, psi (bar)	
-10 (-23) to 100 (37)	3000 (206)	3000 (206)
200 (93)	2575 (177)	2600 (179)
250 (121)	2450 (168)	2405 (165)
300 (148)	2325 (160)	-
375 (190)	2185 (150)	-

3/4 TO 1 INCH, 18MM TO 25MM		
Material Size	316St.St.	Brass
Temperature F° (C°)	Working Pressure, psi (bar)	
-10 (-23) to 100 (37)	2000 (137)	1500 (103)
200 (93)	1715 (118)	1300 (89.5)
250 (121)	1630 (112)	1200 (82.6)
300 (148)	1545 (106)	-
375 (190)	1450 (99.9)	-

Note: Ratings based on Viton O-ring.

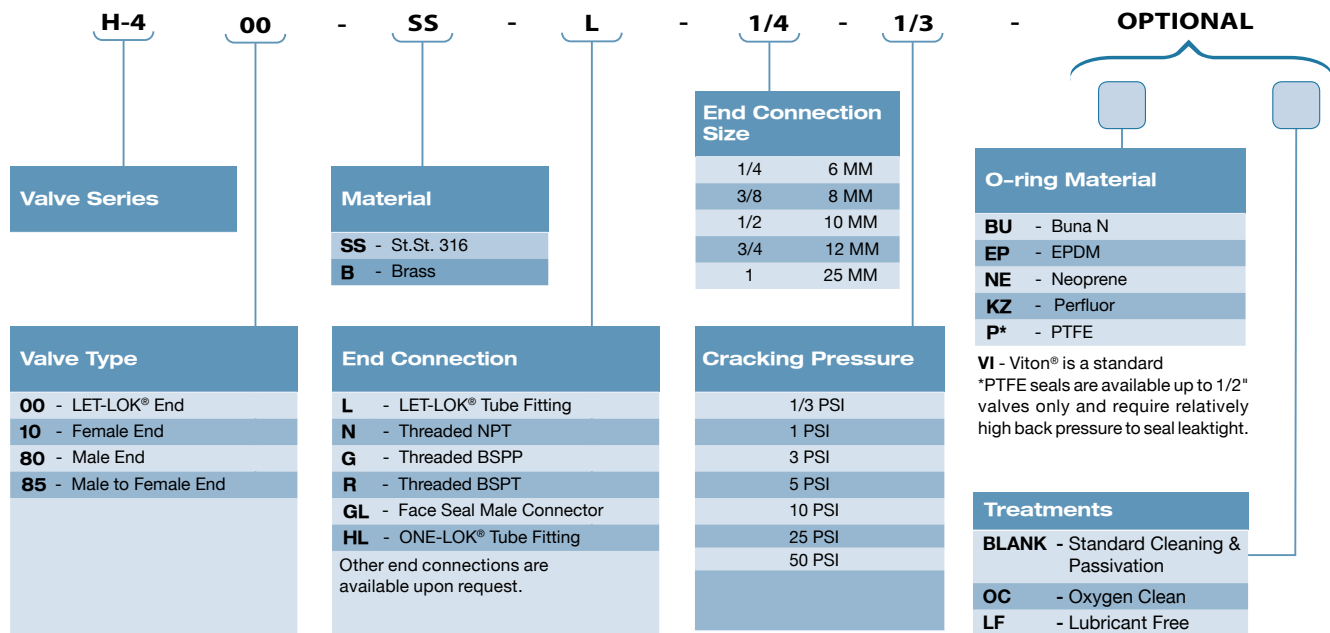
CLEANING & PACKAGING

HAM-LET H-400 valves are treated with HAM-LET Passivation, Cleaning and Packaging (Procedure 8075). HAM-LET H-400 Valves with face seal end connections are treated with HAM-LET Oxygen Cleaning and Packaging (Procedure 8055). Oxygen cleaning and packaging for other end connections are available as an option.

TESTING

The H-400 valve designs have been tested for Proof and Burst. Every H-400 valve is factory tested for proper assembly, by leakage detection at 1000 psig (68 bar) for 10 seconds. Every H-400 valve is factory tested for functionality at the relevant cracking pressure, 5 cycles each.

H-400 SERIES ORDERING INFORMATION



SPARE KITS			
Series	End Size	Spring Kit	O-Ring Kit
H-410 Female Ends H-490 Female to Let-Lok	1/8	Z-400-SPK-1/4- X PSI	Z-400-SK-1/4- □
	1/4 , 3/8	Z-400-SPK-3/8- X PSI	Z-400-SK-3/8- □
	1/2	Z-410-SPK-1/2- X PSI	Z-410-SK-1/2- □
	3/4	Z-410-SPK-3/4- X PSI	Z-410-SK-3/4- □
	1	Z-410-SPK-1"- X PSI	Z-410-SK-1"- □
H-485 Male to Female H-415 Female to Male	1/8	Z-400-SPK-1/4- X PSI	Z-400-SK-1/4- □
	1/4,3/8	Z-400-SPK-3/8- X PSI	Z-400-SK-3/8- □
	1/2	Z-410-SPK-1/2- X PSI	Z-410-SK-1/2- □
	3/4	Z-410-SPK-3/4- X PSI	Z-410-SK-3/4- □
H-400 Let-Lok H-480 Male Ends H-495 Male to Let-Lok	1/8, 1/4, 6mm	Z-400-SPK-1/4- X PSI	Z-400-SK-1/4- □
	3/8 ,8mm, 10mm	Z-400-SPK-3/8- X PSI	Z-400-SK-3/8- □
	1/2, 12mm	Z-400-SPK-1/2- X PSI	Z-400-SK-1/2- □
	3/4	Z-400-SPK-3/4- X PSI	Z-400-SK-3/4- □
	1	Z-410-SPK-3/4- X PSI	Z-410-SK-3/4- □

X =spring type per "How To Order",
□ =O-Ring material per "How To Order"

HAM-LET Check Valves should never be used as safety relief devices. These valves are not designed for pressure release.