

METERING VALVES

H-1300 SERIES



H, HF & HXF-1300 SERIES FEATURES

- Forged-body 316 St.St.or Brass Construction
- Straight and Angle Patterns and Panel Mounting
- MAWP 2000 psig - (138 bar) For HXF
- MAWP 1000 psig - (69 bar) For H, HF
- MAWT 400°F (204°C)
- Flow coefficients (Cv) from 0.004 to 0.15
- Round & Slotted Handles with Screwdriver Slots
- HAM-LET LET-LOK® Ends, Male & Female
NPT, HTC® Face Seal Bead End Connections
- 1°, 3° and 5° Stem Taper for required flow control
- Stem with Stopper Shoulder for maximum life

GENERAL

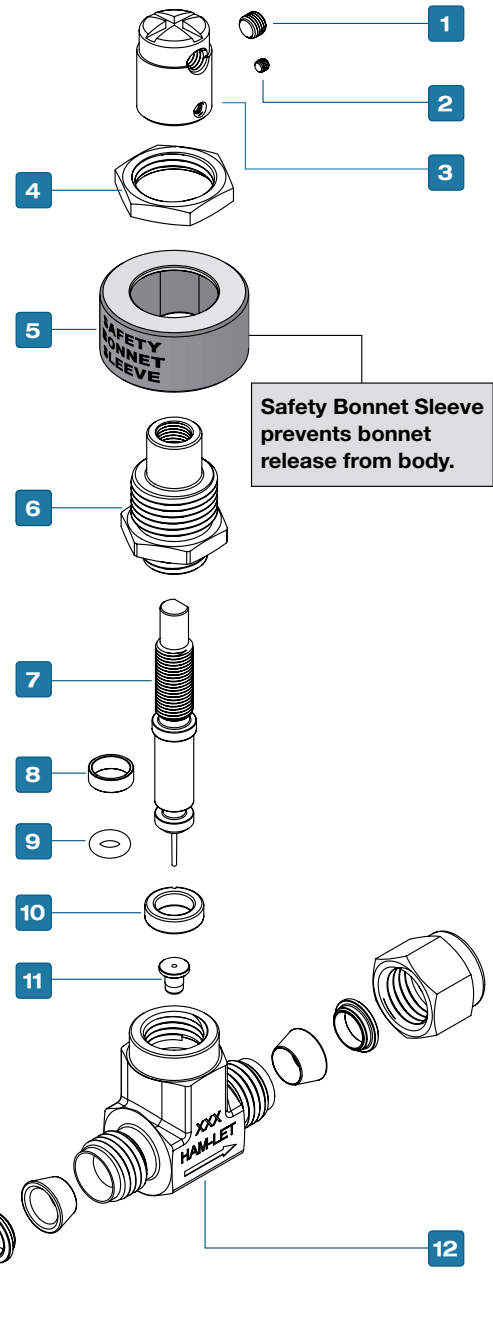
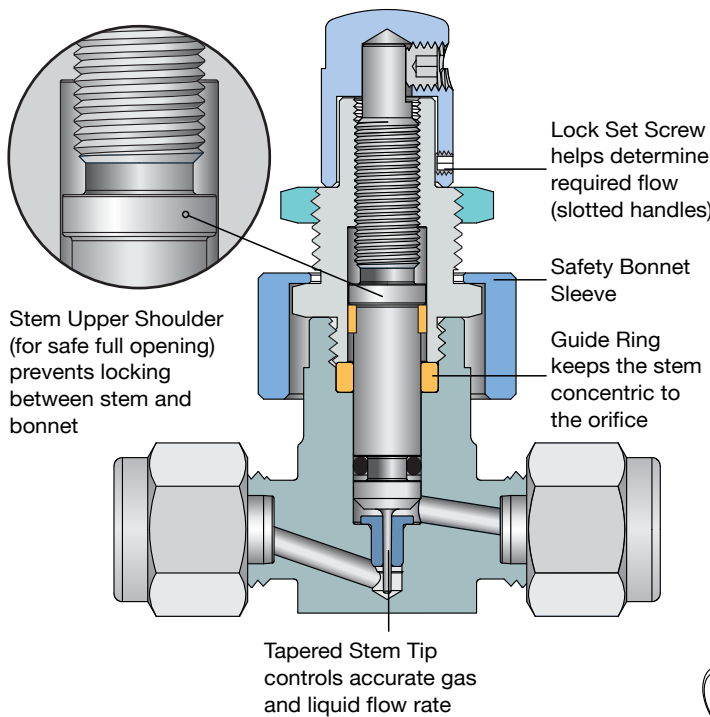
The H-1300 Series is a moderate-pressure instrumentation flow-regulating needle valve. It is generally used for instrumentation panels, sampling systems and accurate applications.

The valves are compact in size and structure and offer reliable low and moderate flow regulation with long service life.

HXF-1300 MATERIALS OF CONSTRUCTION

Item No.	Components	Qty	Valve Body Material	
			316 St.St.	Brass
1	Handle Set Screw	1	18-8 Stainless Steel	
2	Flow Fixing Screw	1	18-8 Stainless Steel	
3	Handle	1	St.St. ASTM A-276	Brass ASTM B-16
4	Panel Nut	1	St.St. ASTM A-276	Brass ASTM B-16
5	Safety Bonnet Sleeve	1	St.St. ASTM A-276	Brass ASTM B-16
6	Bonnet	1	St.St. ASTM A-276	Brass ASTM B-16
7	Stem	1	St.St. 174PH/A564	
8	Stem Ring	1	Glass-filled TFE	
9	O-ring	1	Viton® (fluorocarbon)	
10	Guide Ring	1	Glass-filled TFE	
11	Orifice	1	St.St. ASTM A-276	Brass ASTM B-16
12	Body	1	St.St. ASTM A-182	Brass ASTM B-283

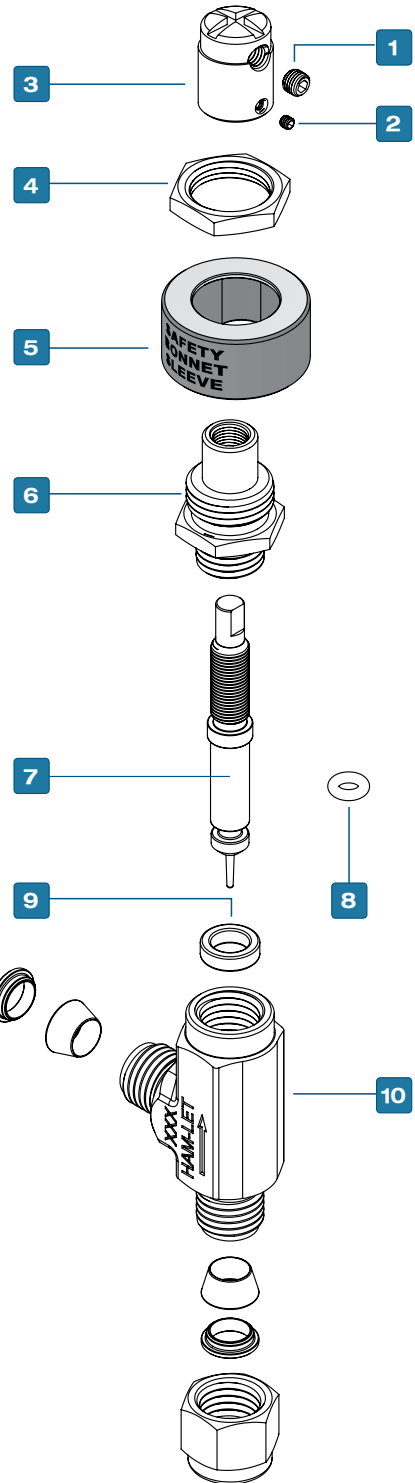
HXF SERIES STRAIGHT VALVE



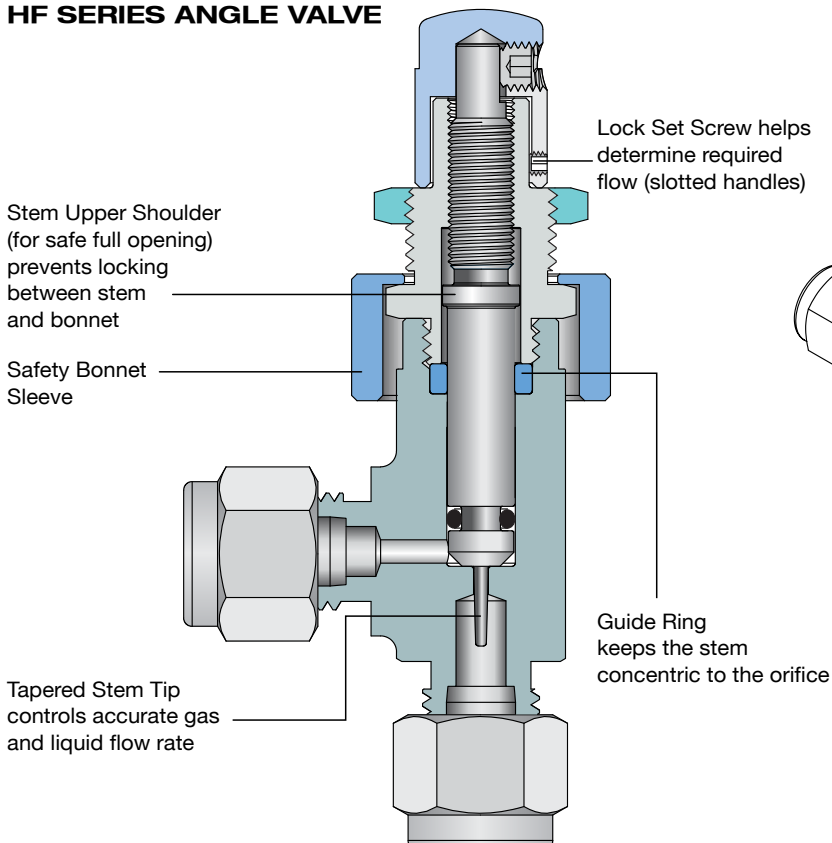
CLEANING & PACKAGING

HAM-LET H-1300 Metering Valve is treated with HAM-LET Passivation Cleaning and Packaging (Procedure 8075).
 HAM-LET H-1300 Ball valves with face-seal end connections are treated with Oxygen Cleaning and Packaging (Procedure 8075).

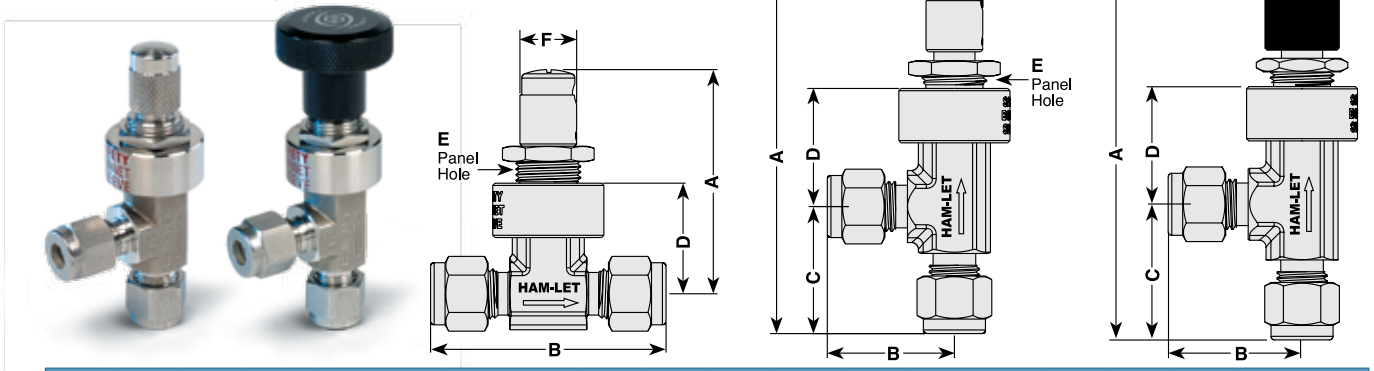
H&HF-1300 MATERIALS OF CONSTRUCTION				
Item No.	Components	Qty	Valve Body Material	
			316 St.St.	Brass
1	Handle Set Screw	1	St.St. ASTM A-276	Brass ASTM B-16
2	Flow Fixing Screw	1	18-8 Stainless Steel	
3	Handle	1	St.St. ASTM A-276	
4	Panel Nut	1	St.St. ASTM A-276	Brass ASTM B-16
5	Safety Bonnet Sleeve	1	St.St. ASTM A-276	Brass ASTM B-16
6	Bonnet	1	St.St. ASTM A-276	Brass ASTM B-16
7	Stem	1	St.St. 174PH/A564	
8	O-ring	1	Viton® (fluorocarbon)	
9	Guide Ring	1	Glass-filled TFE	
10	Body	1	St.St. ASTM A-182	Brass ASTM B-283



HF SERIES ANGLE VALVE



METERING VALVES H-1300 SERIES



STANDARD CONFIGURATION DIMENSIONS

Basic Ordering Number	Stem Taper Angle	Orifice mm/in	Cv	Inlet	Outlet	A-Open		B		C		D		E		F			
						mm	in	mm	in	mm	in	mm	in	mm	in				
H-1300 Angle	50	3.3mm 0.13"	0.13 Max	1/4" LET-LOK®	1/4" LET-LOK®	95.7	3.77	29.6	1.17	30.0	1.18	26.0	1.02	14.8	0.58	29 mm 1.14"			
6MM LET-LOK®				6MM LET-LOK®	95.7	3.77	29.6	1.17	30.0	1.18	26.0	1.02	14.8	0.58					
H-1300 Straight				1/4" LET-LOK®	1/4" LET-LOK®	71.5	2.81	29.5	2.34	-	-	32.0	1.26	14.8	0.58	29 mm 1.14"			
3/8" LET-LOK®				3/8" LET-LOK®	71.5	2.81	62.4	2.46	-	-	32.0	1.26	14.8	0.58					
HF-1300 Angle	30	1.4 mm 0.055"	0.03 Max	1/4" Male NPT	1/4" Male NPT	71.5	2.81	50.8	2.00	-	-	32.0	1.26	14.8	0.58	12.5 mm 0.5"			
				1/8" LET-LOK®	1/8" LET-LOK®	83.5	3.29	25.8	1.02	25.8	1.02	27.0	1.06	14.8	0.58				
				1/4" LET-LOK®	1/4" LET-LOK®	85.0	3.35	28.0	1.10	28.0	1.10	27.0	1.06	14.8	0.58				
				3MM LET-LOK®	3MM LET-LOK®	83.5	3.29	25.8	1.02	25.8	1.02	27.0	1.06	14.8	0.58				
				6MM LET-LOK®	6MM LET-LOK®	85.0	3.35	28.0	1.10	28.0	1.10	27.0	1.06	14.8	0.58				
				1/8" Male NPT	1/8" Male NPT	77.0	3.03	19.0	0.75	19.0	0.75	27.0	1.06	14.8	0.58				
				1/4" Male NPT	1/4" Male NPT	83.0	3.27	25.0	0.98	26.0	1.02	27.0	1.06	14.8	0.58				
				1/8" Male NPT	1/8" LET-LOK®	77.0	3.03	25.8	1.02	19.0	0.75	27.0	1.06	14.8	0.58				
				1/4" Male NPT	1/4" LET-LOK®	81.5	3.2	28.3	1.11	23.5	0.92	27.0	1.06	14.8	0.58				
				1/8" Female NPT	1/8" Female NPT	82.5	3.25	24.9	0.98	24.9	0.98	27.0	1.06	14.8	0.58				
HF-1300 Straight	30	1.4 mm 0.055"	0.03 Max	1/8" LET-LOK®	1/8" LET-LOK®	70.6	2.78	51.3	2.02	-	-	27.0	1.06	14.8	0.58	12.5 mm 0.5"			
				3MM LET-LOK®	3MM LET-LOK®	70.6	2.78	51.3	2.02	-	-	27.0	1.06	14.8	0.58				
				6MM LET-LOK®	6MM LET-LOK®	70.6	2.78	55.9	2.20	-	-	27.0	1.06	14.8	0.58				
				1/8" Male NPT	1/8" Male NPT	70.6	2.78	38.1	1.50	-	-	27.0	1.06	14.8	0.58				
				1/4" Male NPT	1/4" Male NPT	70.6	2.78	49.8	1.96	-	-	27.0	1.06	14.8	0.58				
				1/8" Female NPT	1/8" Female NPT	70.6	2.78	49.3	1.94	-	-	27.0	1.06	14.8	0.58				
				1/4" Male Face Seal	1/4" Male Face Seal	70.6	2.78	52.3	2.06	-	-	27.0	1.06	14.8	0.58				
HXF-1300 Angle	10	0.8 mm 0.03"	0.004 Max	1/8" LET-LOK®	1/8" LET-LOK®	84.0	3.31	24.8	0.98	24.8	0.98	23.4	0.92	14.8	0.58	12.5 mm 0.5"			
				1/4" LET-LOK®	1/4" LET-LOK®	85.0	3.35	25.8	1.02	25.8	1.02	23.4	0.92	14.8	0.58				
				3MM LET-LOK®	3MM LET-LOK®	84.0	3.31	24.8	0.98	25.0	0.98	23.4	0.92	14.8	0.58				
				1/8" Male NPT	1/8" LET-LOK®	77.5	3.05	24.8	0.98	24.8	0.98	23.4	0.92	14.8	0.58				
HXF-1300 Straight				10	0.8 mm 0.03"	0.004 Max	1/4" Male NPT	1/4" LET-LOK®	82	3.22	27.3	1.07	29.3	1.15	23.4	0.92	14.8	0.58	12.5 mm 0.5"
							1/8" LET-LOK®	1/8" LET-LOK®	59.6	2.34	48.0	1.89	-	-	24.4	0.96	14.8	0.58	
							1/4" LET-LOK®	1/4" LET-LOKv	59.6	2.34	51.9	2.04	-	-	24.4	0.96	14.8	0.58	
							3MM LET-LOK®	3MM LET-LOK®	59.6	2.34	48.0	1.89	-	-	24.4	0.96	14.8	0.58	
6MM LET-LOK®	6MM LET-LOK®	59.6	2.34				51.9	2.04	-	-	24.4	0.96	14.8	0.58					
1/4" Male Face Seal	1/4" Male Face Seal	59.6	2.34				52.0	2.05	-	-	24.4	0.96	14.8	0.58					

Dimensions are for reference only, and are subject to change.

MAX PANEL THICKNESS

"HXF" Series - 4.3 mm (0.17")
 "H" and "HF" - 3.3 mm (0.13")

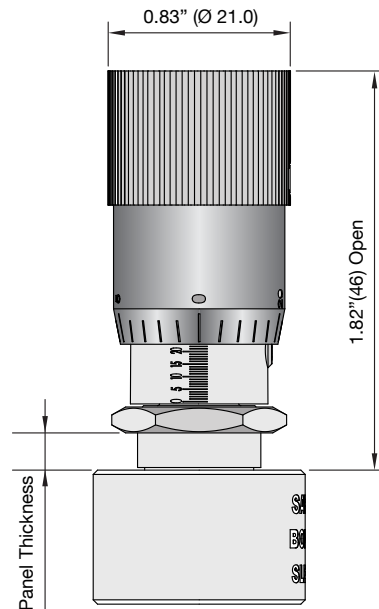
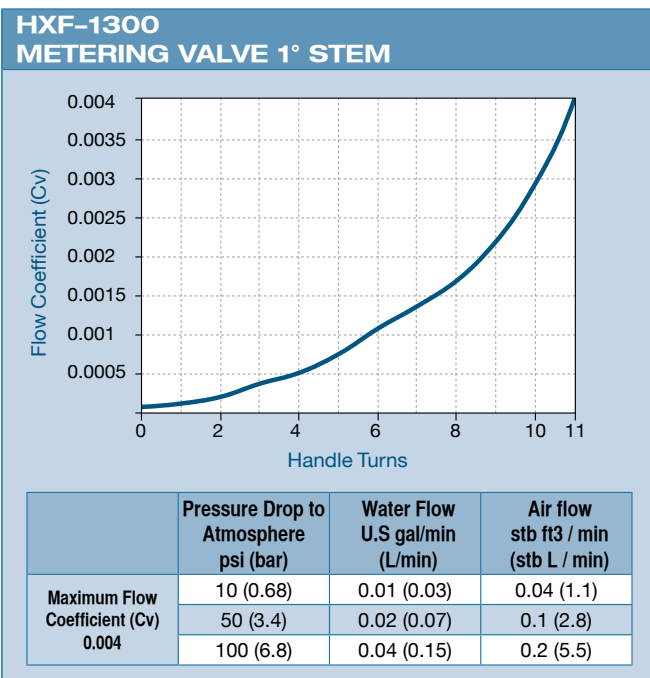
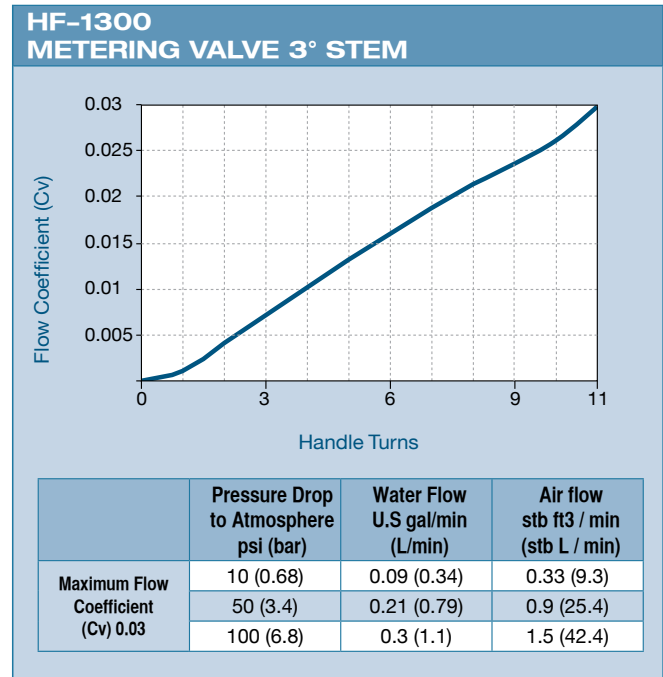
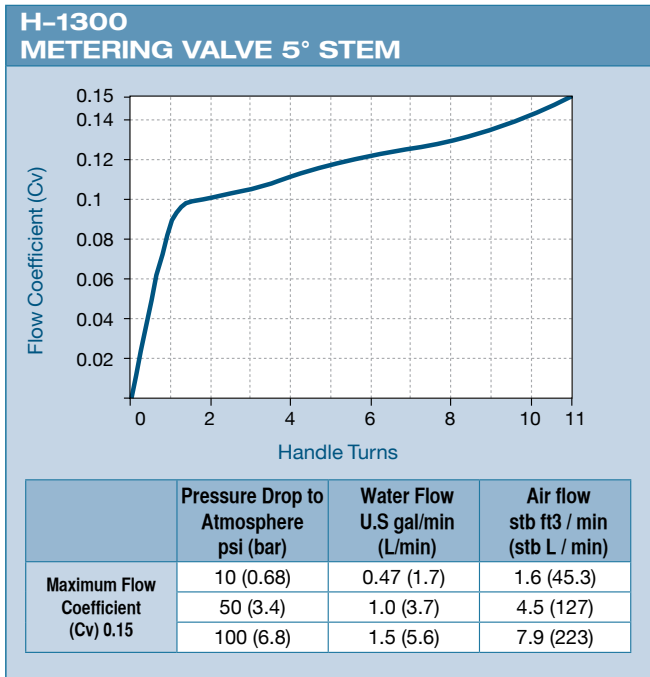
TESTING

The H, HF and HXF Series metering valve designs have been tested for Proof and Burst.
 Every H, HF & HXF-1300 metering valve is factory tested for proper assembly, using leak detection.

FLOW SETTING

H-1300 series metering valve is tested for bubble tight shutoff at 100 psig (6.8 bar) differential pressure.
HF-1300 series metering valve handle dead stop is set at 4 to 10 std cm³/min with 5 psig (0.34 bar) inlet pressure.
HXF-1300 series metering valve handle dead stop is set at 4 to 10 std cm³/min with 15 psig (1.0 bar) inlet pressure.

FLOW DATA AT 70°F (20°C)



TECHNICAL DATA							
Series	Pressure - Temperature Ratings			Orifice		Shutoff Service	Angle
	*O-ring Material	Temperature Rating °F (°C)	Pressure psig (bar)	inch	mm		
H	Buna N	-10 to 300 (-23 to 149)	1000 (68.9)	0.13	3.3	*Yes	5°
	Ethylene Propylene	-10 to 300 (-23 to 149)					
HF	Viton® (Fluorocarbon)	-15 to 400 (-26 to 204)	1000 (68.9)	0.055	1.4	No	3°
HXF	Perfluor	-0 to 300 (-18 to 149)	2000 (138)	0.03	0.8	No	1°
	Neoprene	-10 to 250 (-23 to 121)					

Viton® (Fluorocarbon) is a standard O-ring for H, HF, HXF-1300

***Shutoff Service:** In Stainless Steel constructions only.
 H-1300 Series valves are not recommended for shutoff in vacuum or gas service or for repetitive shutoff in liquid service.

HANDLE OPTIONS

Round Aluminum Handle*

Vernier Handle



Optional for H, HF & HXF



Standard for H
 * Black is Standard.
 Colored Handles are available upon request, see "Ordering Information"

Metal Slotted Handle



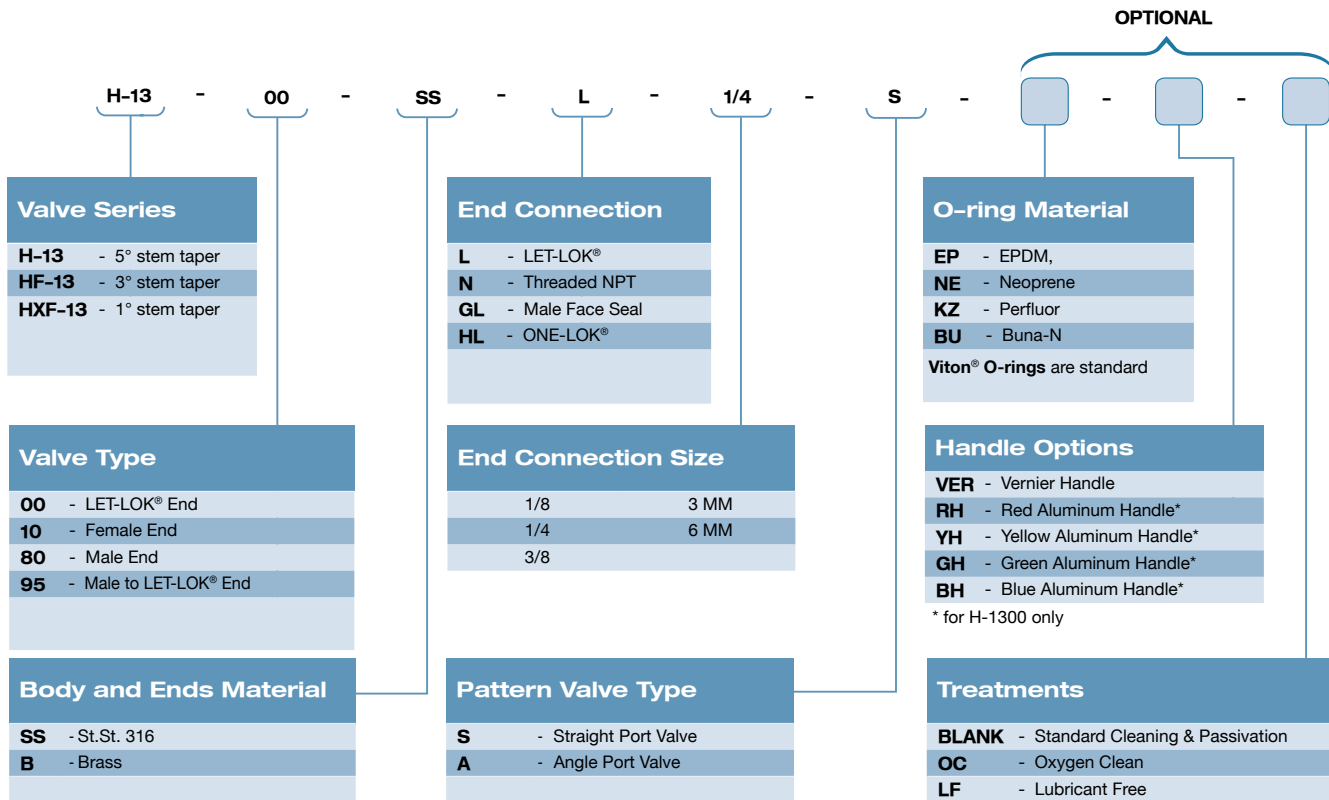
Standard for HF

Metal Slotted Handle



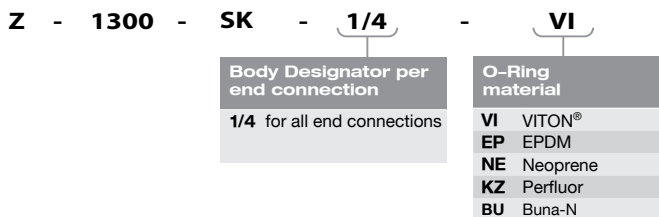
Standard for HXF

H-1300 ORDERING INFORMATION



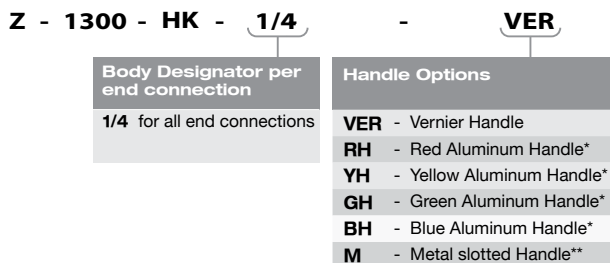
SEAL KIT

Seal Kit contains O-ring



HANDLE KIT

Handle Kit contains handle + set screw.



* for H-1300 only
**for HF & HXF-1300 only

Warning Select the right component for safety's sake: The total design of the system must be taken into consideration when selecting components in order to ensure that your HAM-LET products provide safe, trouble-free operation. It is the responsibility of the system designer and the user to consider the compatibility of the materials, of the components and system, the function of the component, appropriate ratings and to ensure proper installation, operation and maintenance. Improper selection or use of products can cause property damage or personal injury, in respect of which the system designer and/or the user shall be solely liable and responsible.

