TWO-PIECE BALL VALVES
H-700 SERIES





HAM-LET®
ADVANCED CONTROL TECHNOLOGY

FEATURES

- Blow-out Proof Stem
- Stainless Steel and Brass Constructions
- One-piece ball valve with female configurations
- Locking Handle in On and Off positions
- MAWP 2000 psi (135 Bar)
- MAWT 400ºF (204ºC)
- Flow coefficient (Cv) 1.25 to 17.35
- Size range: 1/4” to 1” or 6mm to 25mm

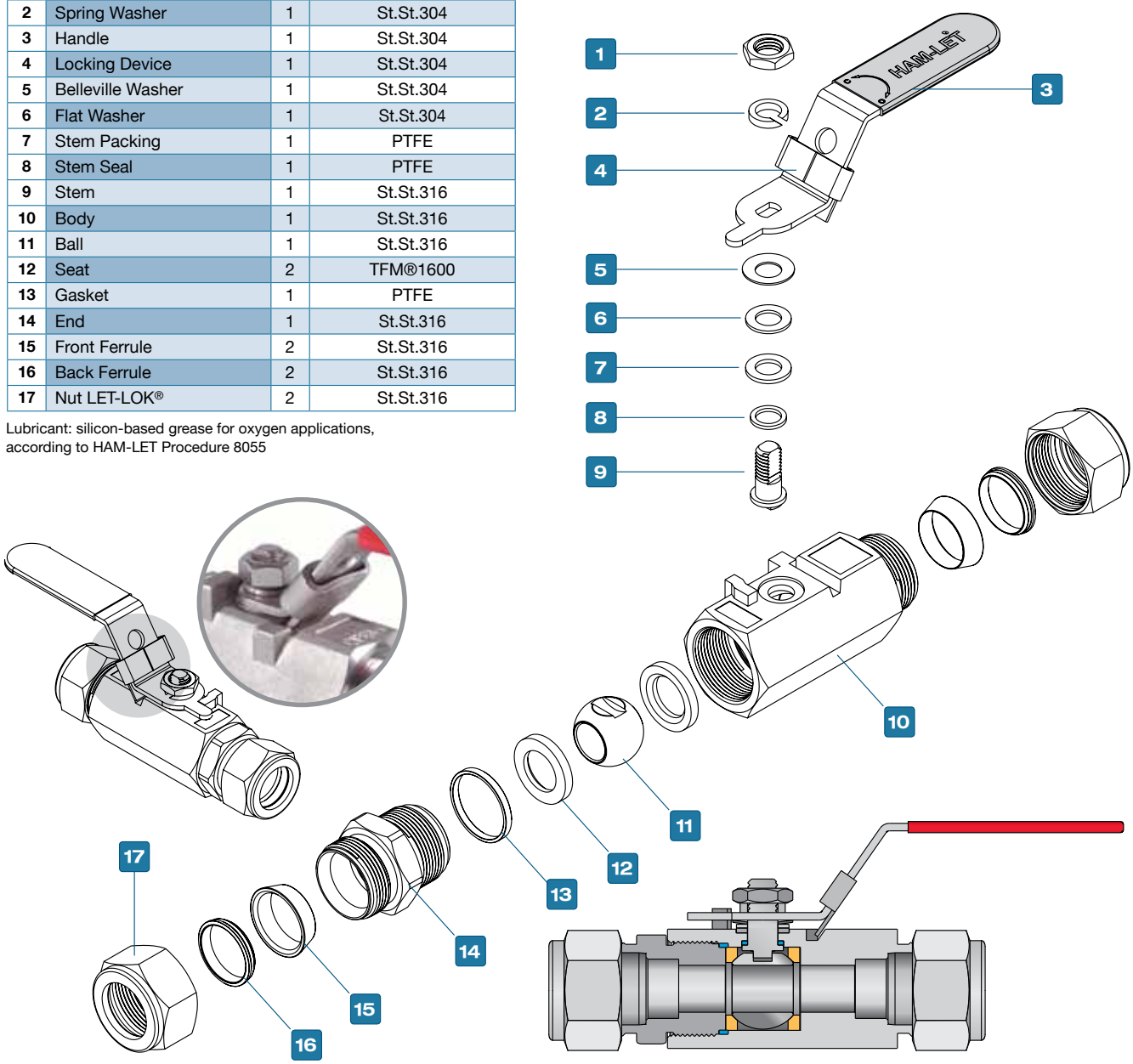
GENERAL

The H-700 Series is a moderate-pressure ball valve for general service. These valves are compact in size and structure.
They have relatively large ports for high flow, tight shutoff, long-life service and low operating torque.
The H-700 Series can be used for bi-directional flow in fully open or fully closed position only.
The series is rated to max. 2000 psig (135 bar) and performs on/off service.

MATERIALS OF CONSTRUCTION

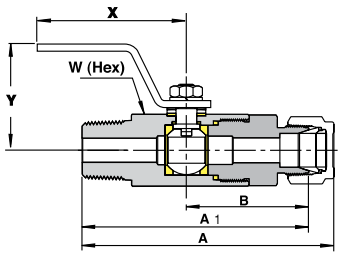
No.	Components	Qty	Material
1	Nut	1	St.St.304
2	Spring Washer	1	St.St.304
3	Handle	1	St.St.304
4	Locking Device	1	St.St.304
5	Belleville Washer	1	St.St.304
6	Flat Washer	1	St.St.304
7	Stem Packing	1	PTFE
8	Stem Seal	1	PTFE
9	Stem	1	St.St.316
10	Body	1	St.St.316
11	Ball	1	St.St.316
12	Seat	2	TFM®1600
13	Gasket	1	PTFE
14	End	1	St.St.316
15	Front Ferrule	2	St.St.316
16	Back Ferrule	2	St.St.316
17	Nut LET-LOK®	2	St.St.316

Lubricant: silicon-based grease for oxygen applications, according to HAM-LET Procedure 8055

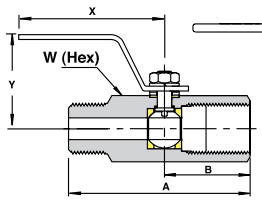


HAM-LET ADVANCED CONTROL TECHNOLOGY

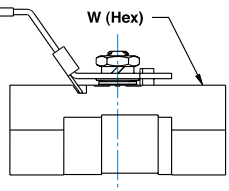
H-795



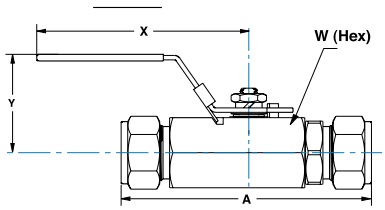
H-785



H-710



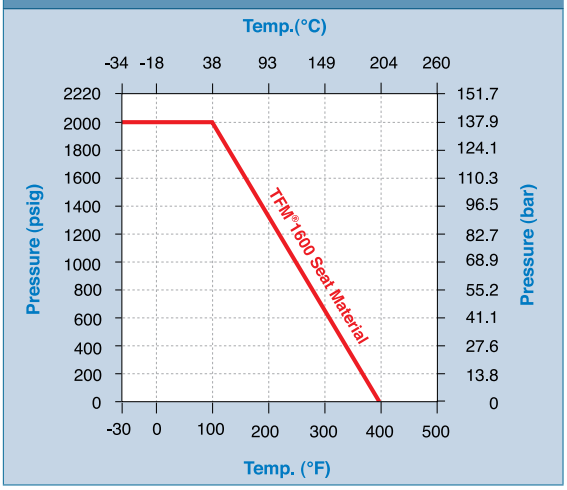
H-700



STANDARD CONFIGURATION DIMENSIONS

End Connection		Order Type	Body Material	Cv	Orifice		A		A1		B		X		Y		W (HEX)	
Type	Size				mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
Fractional Let-Lok® Tube Fittings	1/4	H-700	ASTM A276 Gr.316	1.25	5.0	0.2	90.0	3.54	-	-	-	-	82.0	3.23	38.0	1.50	17	
	3/8		ASTM A276 Gr.316	2.50	7.0	0.28	90.0	3.54	-	-	-	-	82.0	3.23	40.0	1.57	21	
	1/2		ASTM A351 Gr.CF8M	9.25	9.2	0.36	95.3	3.75	-	-	-	-	82.0	3.23	40.7	1.60	25	
	3/4		ASTM A351 Gr.CF8M	12.65	12.5	0.49	113.4	4.46	-	-	-	-	82.0	3.23	44.5	1.75	32	
	1		ASTM A351 Gr.CF8M	17.35	15	0.59	129.6	5.10	-	-	-	-	102.0	4.02	50.0	1.97	38	
Metric Let-Lok® Tube Fittings	6MM		ASTM A276 Gr.316	1.25	5.0	0.20	90.0	3.54	-	-	-	-	82.0	3.23	38.0	1.50	17	
	8MM		ASTM A276 Gr.316	1.35	7.0	0.28	90.0	3.54	-	-	-	-	82.0	3.23	40.0	1.57	21	
	10MM		ASTM A276 Gr.316	2.6	9.2	0.36	95.3	3.75	-	-	-	-	82.0	3.23	40.7	1.60	25	
	12MM		ASTM A351 Gr.CF8M	9.25	12.5	0.49	113.4	4.46	-	-	-	-	82.0	3.23	44.5	1.75	32	
	25MM		ASTM A351 Gr.CF8M	17.35	15	0.59	129.6	5.10	-	-	-	-	102.0	4.02	50.0	1.97	38	
Female NPT	1/4	H-710	ASTM A351 Gr.CF8M	1.35	5.0	0.20	50.0	1.97	-	-	-	-	67.0	2.64	47.0	1.85	16.5	
	3/8		ASTM A351 Gr.CF8M	2.6	7.0	0.28	60.0	2.36	-	-	-	-	67.0	2.64	49.0	1.93	20.7	
	1/2		ASTM A351 Gr.CF8M	9.25	9.0	0.35	75.0	2.95	-	-	-	-	90.0	3.54	57.0	2.24	25	
Male NPT	1/4	H-780	ASTM A276 Gr.316	1.35	5.0	0.20	50.3	1.98	-	-	-	-	82.0	3.23	38.0	1.50	17	
	3/8		ASTM A276 Gr.316	2.5	7.0	0.28	62.2	2.45	-	-	-	-	82.0	3.23	40.0	1.57	21	
	1/2		ASTM A351 Gr.CF8M	9.25	9.2	0.36	74.9	2.95	-	-	-	-	82.0	3.23	40.7	1.60	25	
Male NPT to Let-Lok® Tube Fittings	1/4 to 1/4	H-795	ASTM A351 Gr.CF8M	1.25	5.0	0.20	70.15	2.76	62.8	2.47	37.5	1.47	82.0	3.23	38.0	1.49	17	
	3/8 to 3/8		ASTM A351 Gr.CF8M	2.5	7.0	0.28	82.3	2.99	75.0	2.95	37.5	1.47	82.0	3.23	40.0	1.57	21	
	1/2 to 1/2		ASTM A351 Gr.CF8M	9.25	9.2	0.36	85.1	3.35	75.0	2.95	37.5	1.47	82.0	3.23	40.7	1.60	25	
Male to Female NPT	1/4	H-785	ASTM A276 Gr.316	1.35	5.0	0.2	50.0	1.97	-	-	24.85	0.98	60.0	2.36	40.0	1.57	19.05	3/4
	1/2		ASTM A351 Gr.CF8M	9.25	9.0	0.35	75.0	2.95	-	-	37.5	1.47	82.0	3.23	56.6	2.23	27.0	
Male to Female BSPP	1/4		ASTM A276 Gr.316	1.35	5.0	0.2	50.0	1.97	-	-	24.85	0.98	60.0	2.36	39.0	1.54	17.0	
	1/2		ASTM A351 Gr.CF8M	9.25	9.0	0.35	75.0	2.95	-	-	37.5	1.47	82.0	3.23	56.6	2.23	27.0	
Female NPT to Let-Lok® Tube Fittings	1/2	H-790	ASTM A351 Gr.CF8M		9.2	0.36	85.1	3.35	75.0	2.95	37.5	1.47	82.0	3.23	40.7	1.60	25.0	
	3/4		ASTM A351 Gr.CF8M		10.5	0.41	106.1	4.18	96.0	3.78	48.0	1.89	82.0	3.23	46.0	1.81	25.0	

H–700 PRESSURE TEMPERATURE RATING



CLEANING & PACKAGING

H-700 Ball Valve is treated with HAM-LET Passivation Cleaning and Packaging (Procedure 8075).
HAM-LET H-700 Ball Valves with face seal end connections are treated with Oxygen Cleaning and Packaging (Procedure 8055).

TESTING

The H-700 Series Ball Valve designs have been tested for Proof and Burst. Every H-700 Ball Valve is factory tested with nitrogen at 1000 psi (69 bar). Maximum allowable leakage across seat is 0.1 std cc/min.

SEAT MATERIAL CHARACTERISTICS

TFM®1600 - (PFA and PTFE composite) - Color: Bright White.
Excellent seat material for purity applications, very low residual material during operation. It has lower deformation ratio than PTFE, but higher pressure and temperature rating.
Chemical resistance is equal to PTFE material.

PACKING ADJUSTMENT

Due to the varied service applications of the valve, packing adjustment may be occasionally necessary. Packing is factory adjusted to 1000 psig service. Initial packing adjustment is recommended after installation and prior to start-up. Please find more information on H-700 under installation instruction.
HAM-LET Ball Valves are designed to be operated in the fully closed or fully open position.

H-700 SERIES ORDERING INFORMATION

OPTIONAL

H-7 - 00 - SS - L - 1/4 - T - LD

Valve Series

Valve Type

00 -	LET-LOK® End
10 -	Female End
80	Male End
85 -	Male to Female End
90	Female to LET-LOK® End
95 -	Male to LET-LOK® End

Body and Ends Material

SS	-	St.St. 316

End Connection Type

L	- LET-LOK® Tube Fitting
N	- Threaded NPT
HL	- One-Lok Tube Fittings
R	- ISO Tapered
G	- ISO Parallel

Other end connections are available upon request.

End Connection Size

1/4	**6** MM
3/8	**8** MM
1/2	**10** MM
3/4	**12** MM
1	**25** MM

Seat Material

T	- TFM®1600

Operation Type

LD	Locking Device*
BH	Butterfly handle

* **Note:** LD is standard for Lever Handle

Treatments

BLANK	- Standard Cleaning & Passivation
OC	- Oxygen Clean
LF	- Lubricant Free

ORDERING INFORMATION FOR SPARE KITS

SEAL KIT

Z - 700 - SK - 1/4 - T

Body Designator per End Connection

1/4	For	1/4, 6MM
3/8	For	3/8, 8MM
1/2	For	1/2, 10MM
3/4	For	3/4, 12MM
1"	For	1", 25MM

Seal Material

T	TFM®1600
P	PTFE

HANDLE KIT

Z - 700 - HK - 1/4 - LH

Body Designator per End Connection

1/4	For	1/4, 6MM
3/8	For	3/8, 8MM
1/2	For	1/2, 10MM
3/4	For	3/4, 12MM
1"	For	1", 25MM

Operation Type

LH	Lever Handle
BH	Butterfly handle

The kit includes gaskets, seats, stem packing and stem seal.

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.

TFM® - TM DuPont