



INDUSTRIAL  
ANCILLARIES LTD

distributors of air and fluid  
control equipment



**HAM-LET**<sup>®</sup>  
ADVANCED CONTROL TECHNOLOGY

# H700 SERIES

BALL VALVE WITH LOCKING DEVICE



## FEATURES:

Compliance with OSHA LOTO Standard 29 CFR Part 1910.147- Control of Hazardous Energy.

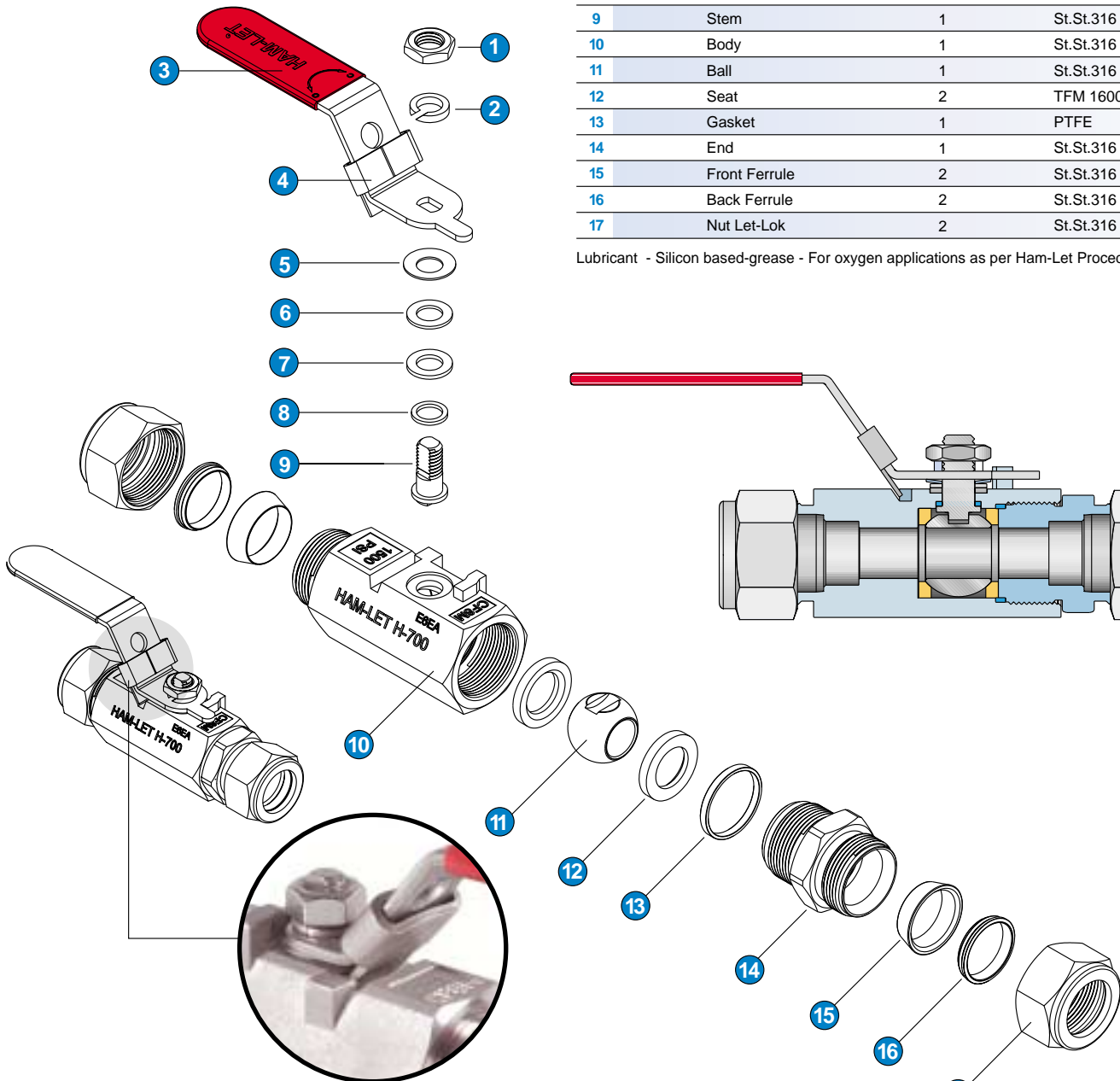
- Explosion Proof Stem \*
- Vented Ball \*
- Stainless Steel and Brass Construction. A351 or 316 Bar
- Welded end \* (One piece body)
- Locking Handle in On and Off positions.
- MAWP 2000 psi (135Bar)
- MAWT 400°F (204°C)
- Flow coefficient (Cv) 1.25 to 17.35
- Size range: 1/4" to 1" or 6mm to 25mm.

\* Optional

## GENERAL

The H700 Series is a moderate pressure instrumentation ball valve for general service and instrumentation panels.

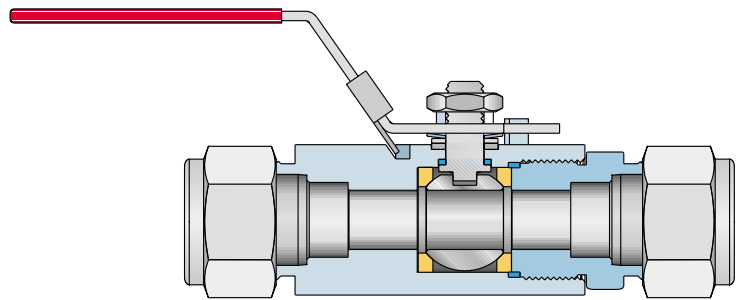
The valves offer compact size of structure with relatively large ports, for high flow, tight shut-off, long life service and low operating torque. The H700 Series can be used for bi-directional flow and is rated to max. 2000 psig (135 Bar) and performs on-off service.



## MATERIAL OF CONSTRUCTION

No.	Part No.	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 as per Ham-Let Procedure 8055



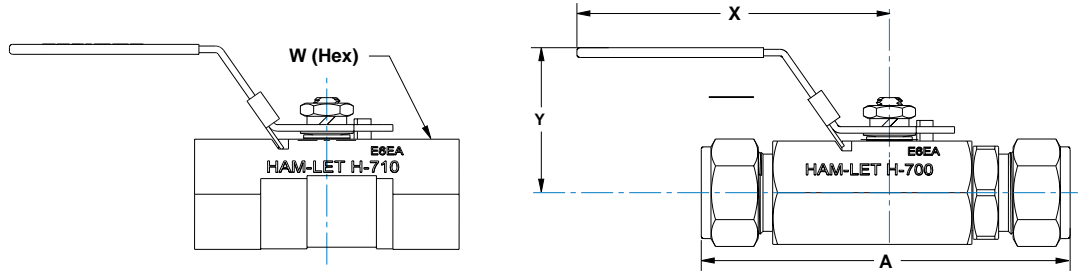
## TESTING:

The H700 series Ball Valve designs have been tested for Proof, Burst and Leakage.

Every H700 Ball Valve is factory tested with nitrogen at 1000psi (69 bar). Maximum allowable leak across seats is 0.1 std cc/min. No leakage is allowed for shell testing.

## CLEANING & PACKAGING

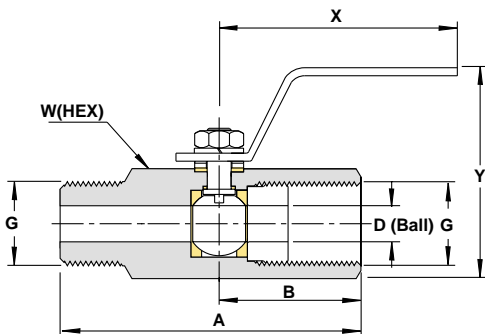
Ham-Let's H700 Ball valve is treated with Ham-Let Passivation Cleaning and Packaging (Procedure 8075). Ham-Let H700 Ball valves with face seal end connections are treated with Oxygen Cleaning and Packaging (Procedure 8055). Oxygen Cleaning and Packaging (Procedure 8055) is available as an option.



H700 SERIES DIMENSIONS

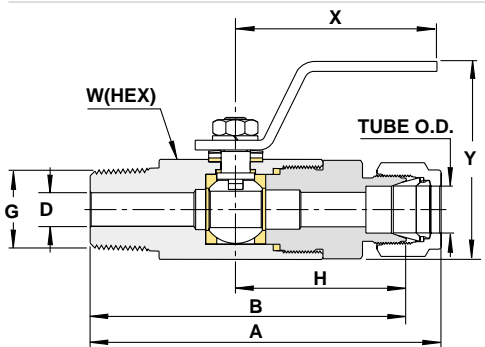
Type	End Connection Size	Order Type	Cv	Orifice		A		X		Y		W (HEX)
				mm	inch	mm	inch	mm	inch	mm	inch	
Fractional Let-Lok Tube Fittings	1/4	H-700	1.25	5.0	0.2	90.0	3.54	82.0	3.23	38.0	1.50	17mm
	3/8	H-700	2.50	7.0	0.28	90.0	3.54	82.0	3.23	40.0	1.57	21mm
	1/2	H-700	9.25	9.2	0.36	95.3	3.75	82.0	3.23	40.7	1.60	25mm
	3/4	H-700	12.65	12.5	0.49	113.4	4.46	82.0	3.23	44.5	1.75	32mm
	1"	H-700	17.35	15	0.59	129.6	5.10	102.0	4.02	50.0	1.97	38mm
Metric Let-Lok Tube Fittings	6mm	H-700	1.25	5.0	0.20	90.0	3.54	82.0	3.23	38.0	1.50	17mm
	8mm	H-700	1.35	7.0	0.28	90.0	3.54	82.0	3.23	40.0	1.57	21mm
	10mm	H-700	2.6	9.2	0.36	95.3	3.75	82.0	3.23	40.7	1.60	25mm
	12mm	H-700	9.25	12.5	0.49	113.4	4.46	82.0	3.23	44.5	1.75	32mm
	25mm	H-700	17.35	15	0.59	129.6	5.10	102.0	4.02	50.0	1.97	38mm
Female NPT	1/4	H-710	1.35	5.0	0.20	50.0	1.97	67.0	2.64	47.0	1.85	16.5mm
	3/8	H-710	2.6	7.0	0.28	60.0	2.36	67.0	2.64	49.0	1.93	20.7mm
	1/2	H-710	9.25	9.0	0.35	75.0	2.95	90.0	3.54	57.0	2.24	25mm
Male NPT	1/4	H-780	1.35	5.0	0.20	50.3	1.98	82.0	3.23	38.0	1.50	17mm
	3/8	H-780	2.5	7.0	0.28	62.2	2.45	82.0	3.23	40.0	1.57	21mm
	1/2	H-780	9.25	9.2	0.36	74.9	2.95	82.0	3.23	40.7	1.60	25mm
Male NPT to Let-Lok Tube Fittings	1/4 to 1/4	H-795	1.25	5.0	0.20	70.15	2.76	82.0	3.23	38.0	1.50	17mm
	3/8 to 3/8	H-795	2.5	7.0	0.28	76.10	2.99	82.0	3.23	40.0	1.57	21mm
	1/2 to 1/2	H-795	9.25	9.2	0.36	85.10	3.35	82.0	3.23	40.7	1.5	25mm

Dimensions are for reference only, and are subject to change



H785

G (THREAD)	Cv	D (Minimum Orifice)		A	B	W (HEX)		X		Y		
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
1/4"-19BSPP						17.0	0.67					
	1.35	5.0	0.2	50.0	1.97	24.85	0.98			60.0	2.36	39.0 1.54
1/4-18NPT						19.05	3/4			40.0	1.57	
1/2"-14BSPP	9.25	9.0	0.35	75.0	29.5	37.55	1.48	27.0	1-1/16	82.0	3.23	56.6 2.23
1/2"-14NPT												



H795

TUBE O.D.	G (THREAD)	Cv	D (Minimum Orifice)		A	B	H	W (HEX)		X		Y		
			mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
3/8"	1/4-18NPT	2.50	7.10	0.28	76.7	3.02	69.35	2.73	38.25	1.505	20.6	13/16	82	3.23 50.8 2

**ORDERING INFORMATION**

Your safety is important to us, please ensure proper reference to our latest catalog

Valve Description Example:

**H7**

**00**

**SS**

**L**

**1/4**

**R**

**LD**

OPTIONAL:

**Valve Series**

**Valve Type**

- 00 - Let-Lok End Connection
- 10 - Female End Connection
- 80 - Male End Connection
- 85 - Male to Female End Connection
- 95 - Male to Let-Lok End Connection

**Body**

- SS - Stainless steel
- B - Brass

Up to 3/8" - 316SS bar stock  
 1/2" to 1" - 316 CF8M casting per ASTM A351  
 Brass - Bar for all sizes

**End Connection**

- L - Let-Lok Tube Fitting
- N - NPT Thread
- HL - One-Lok Tube Fitting
- R - BSPT
- G - BSPP

Other end connections are available upon request

**Seat Material**

- R - RPTFE- 1500 PSI
- T - TFM1600 - 2000 PSI

Other seat material is available upon request

**End Connection Size**

1/4 inch	6 mm
3/8 inch	8 mm
1/2 inch	10 mm
3/4 inch	12 mm
1 inch	25 mm

**Locking Device**

**Treatments**

- OC - Oxygen Clean
- LF - Lubricant Free

**Spare Parts Kit - Repair Kit**

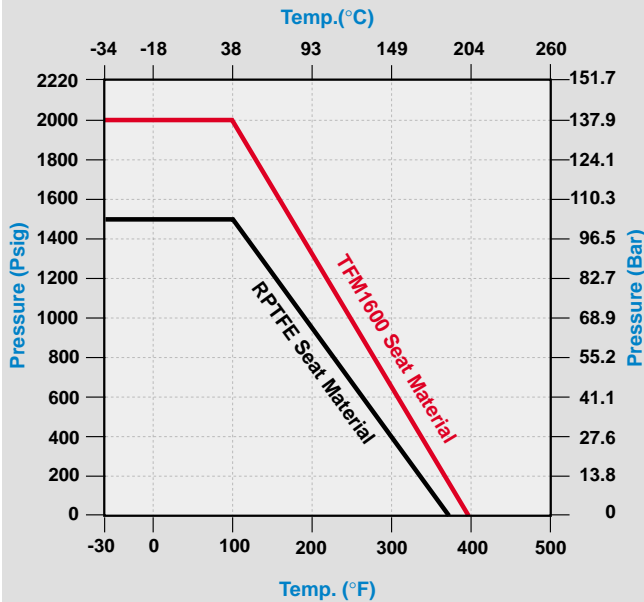
Spare parts kit is available for each valve. The kit includes: Gasket, Seats, Stem Packing, Stem Seal. To order a spare parts kit, use the following format:

**H700 - KIT - 1/4 - C**

End Connection Size	Seat Material
6mm 1/4"	R - RPTFE®
8mm 3/8"	T - TFM1600
10mm 1/2"	
12mm 3/4"	
25mm 1"	

**TFM 1600 SEAT PRESSURE VS. TEMPERATURE CHART**

H-700 Valve 1/4" to 1" for valves rated to 2000 psig



**SEAT MATERIAL CHARACTERISTICS**

**RPTFE (15% Glass Fiber Filled PTFE) - Color (Of White)**  
 Short stand glass fibers are used as a reinforcement in valve seats. Adding reinforcements increases the pressure containing properties of PTFE by reducing its tendency to cold flow.

**TFM1600 - (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 than PTFE. Chemical resistance is equal to PTFE material.

**PACKING ADJUSTMENT**

Due to the varied service applications of the valve, packing adjustment may be occasionally necessary. Initial adjustment is recommended after installation and prior to start-up. Please find more information at installation instruction chapter. Ham-Let Ball Valves designed to be operated in fully closed or fully open position.

**Warning - for your safety:**

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.

For more information on Ham-let Fittings visit the Industrial Ancillaries Ltd website - [www.indanc.com](http://www.indanc.com)