

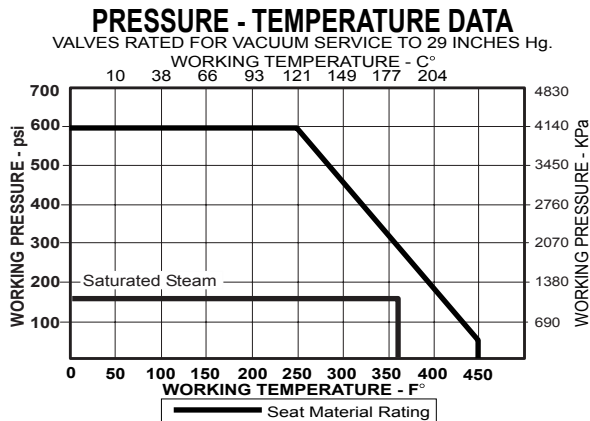
# BA-400/400S\* 1/4"-2"

**Bronze Ball Valve  
Two Piece  
Full Port  
600 WOG/150 SWP (1)  
Threaded Ends  
Blow-Out Proof Stem  
MSS SP-110**

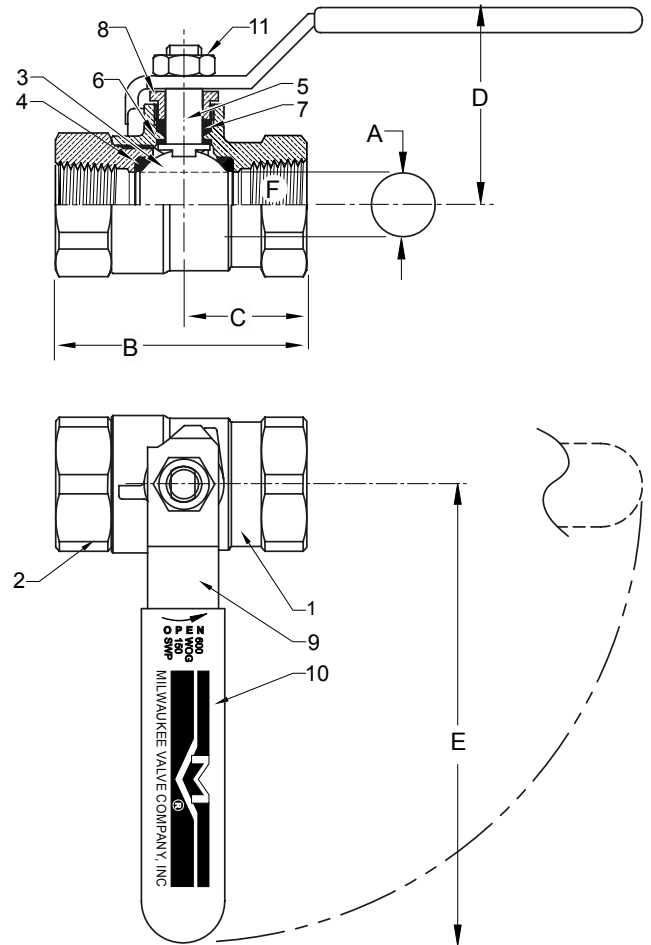
## MATERIALS LIST

ITEM	PART	MATERIALS	ASTM SPEC.
1	Body	Cast Bronze	B584
2	Tailpiece	Brass	B283
		Cast Bronze (1 1/4" & up)	B584
3	Ball	Brass w/Hard Chrome Plating	B16
		316 Stainless Steel (BA-400S)	A276
4	Seat	RPTFE, 15% Glass Filled	
5	Stem	Brass	B16
		316 Stainless Steel (BA-400S)	A276
6	Thrust Washer	RPTFE, 25% Glass Filled	
7	Packing	PTFE	
8	Packing Nut	Brass	B16
9	Handle	Steel w/Zinc Plating	Commercial
10	Hand Grip	Vinyl	
11	Handle Nut	Steel w/Zinc Plating	Commercial

(1) For steam service please specify see BA400S3.



\*Not intended for use in potable water.



## DIMENSIONS

	UNITS	1/4" DN10	3/8" DN10	1/2" DN15	3/4" DN20	1" DN25	1-1/4" DN32	1-1/2" DN40	2" DN50
A (DIA)	INCHES	0.38	0.38	0.50	0.76	1.06	1.31	1.56	2.00
	mm	10	10	13	19	27	33	40	51
B	INCHES	1.86	1.86	2.19	2.59	3.32	3.77	4.28	5.10
	mm	46	46	54	66	84	96	109	130
C	INCHES	1.00	1.00	1.10	1.30	1.59	1.81	2.06	2.37
	mm	25	25	27	33	40	46	52	60
D	INCHES	1.78	1.81	1.91	2.32	2.68	2.82	3.00	3.36
	mm	44	44	47	59	68	72	76	85
E	INCHES	3.82	3.82	3.82	4.55	6.33	6.33	6.33	7.19
	mm	94	94	94	116	161	161	161	183
F	THREAD SIZE	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT	1-1/4" NPT	1-1/2" NPT	2" NPT
Cv		7	7	13	30	61	110	185	360

Note: DN (Diameter Nominal) = Metric equivalent size.

The information presented on this sheet is correct at time of publication. Milwaukee Valve reserves the right to change design and/or materials without notice. For our Installation, Operation and Maintenance Manual and the most current product information go to [www.milwaukeevalve.com](http://www.milwaukeevalve.com).  
⚠ State of California Prop 65 **WARNING:** Cancer and Reproductive Harm. For more information visit [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).

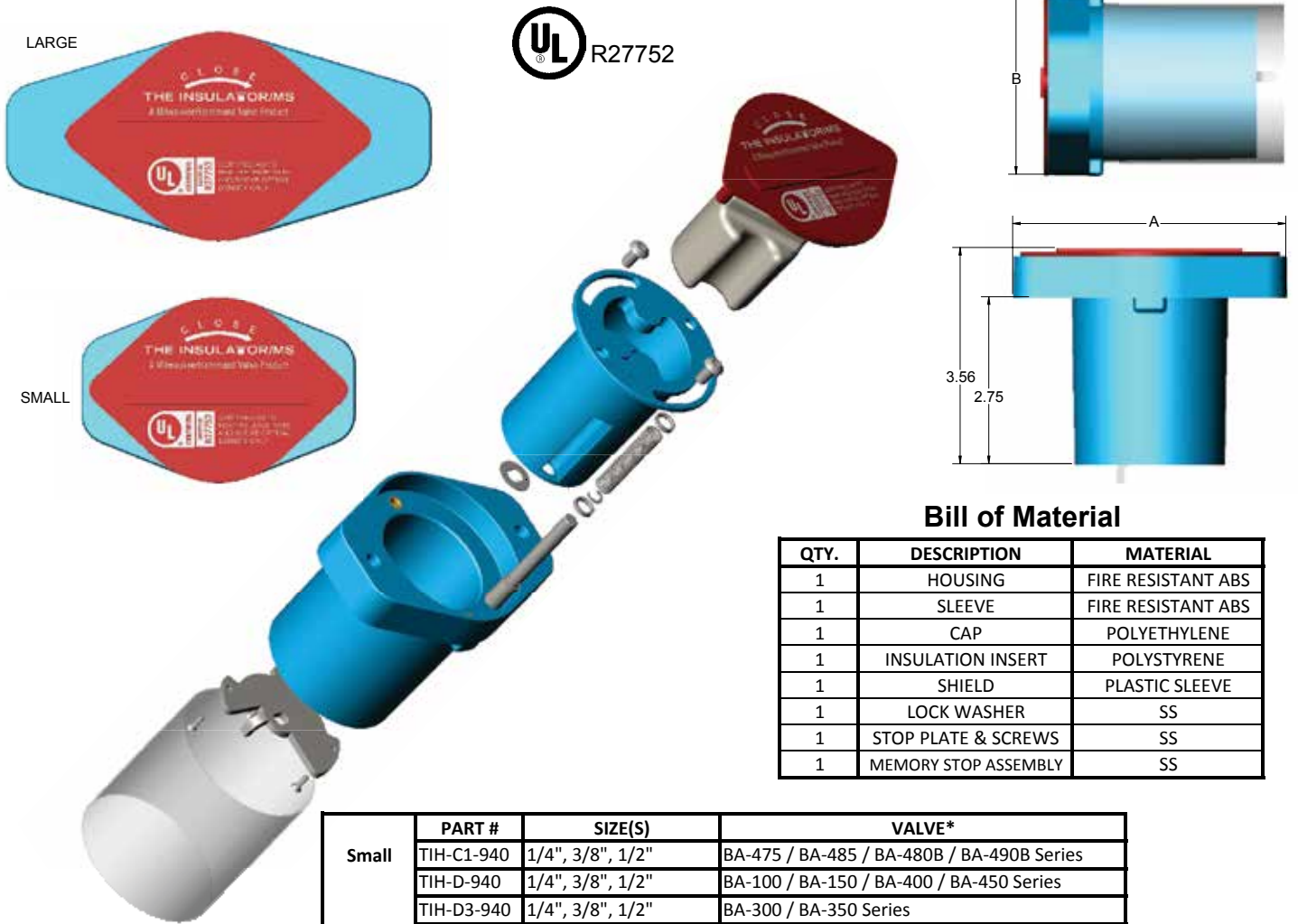


# THE INSULATOR/MS

## Bronze & Brass Ball Valves

Milwaukee Valve's insulated extension handle is designed to prevent condensation and other extraneous moisture from entering your insulated piping system, while also minimizing thermal energy loss from the system via metal extension tubes, levers, and similar parts.

Our handle design incorporates a unique memory stop feature that requires no disassembly or removal of the handle to engage and make adjustments.



### Bill of Material

QTY.	DESCRIPTION	MATERIAL
1	HOUSING	FIRE RESISTANT ABS
1	SLEEVE	FIRE RESISTANT ABS
1	CAP	POLYETHYLENE
1	INSULATION INSERT	POLYSTYRENE
1	SHIELD	PLASTIC SLEEVE
1	LOCK WASHER	SS
1	STOP PLATE & SCREWS	SS
1	MEMORY STOP ASSEMBLY	SS

	PART #	SIZE(S)	VALVE*
Small	TIH-C1-940	1/4", 3/8", 1/2"	BA-475 / BA-485 / BA-480B / BA-490B Series
	TIH-D-940	1/4", 3/8", 1/2"	BA-100 / BA-150 / BA-400 / BA-450 Series
	TIH-D3-940	1/4", 3/8", 1/2"	BA-300 / BA-350 Series
A - 4.50	TIH-F-940	1"	BA-100 / BA-150 Series
		3/4"	BA-100 / BA-150 / BA-400 / BA-450 Series
	TIH-F3-940	3/4"	BA-300 / BA-350 Series
B - 3.06	TIH-H1-940	3/4", 1", 1 1/4", 1 1/2"	BA-475 / BA-485 / BA-480B / BA-490B Series
Large	TIH-J-940	2"	BA-100 / BA-150 Series
		1 1/4", 1 1/2"	BA-100 / BA-150/BA-400 / BA-450 Series
		1"	BA-400 / BA-450 Series
A - 7.00	TIH-J1-940	2"	BA-475 / BA-485 / BA-480B / BA-490B Series
	TIH-J3-940	1", 1 1/4", 1 1/2"	BA-300 / BA-350 Series
	TIH-K-940	2"	BA-400 / BA-450 Series
B - 3.44	TIH-K3-940	2"	BA-300 / BA-350 Series

To order factory assembled to the valve use suffix TIH  
 TIH handle is rated to 275°F. Installation of Solder end valves with the TIH installed: slide the plastic sleeve up to avoid contact with the valve body, wrap the TIH handle with a damp cloth to protect and draw heat away while directing the flame away from the center of the valve during heating.  
 \*Will fit our equivalent Ultrapure Low Lead Valves.

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