

# UPBA-490S\* 1/2"-2"

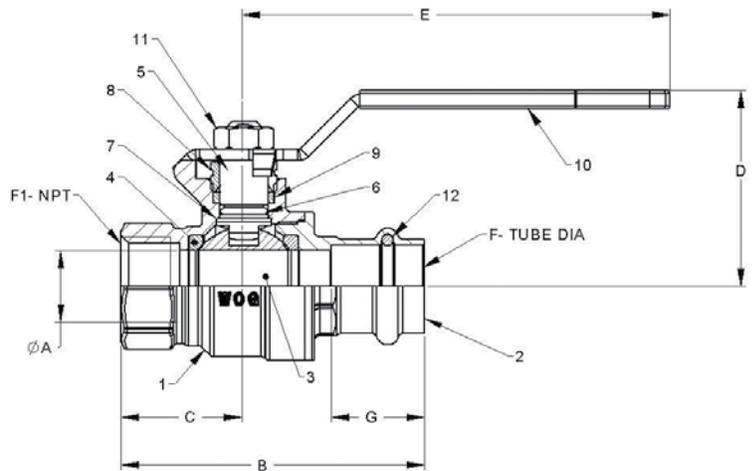


**Brass Ball Valve For Potable Water**  
**Two Piece**  
**Full Port**  
**200 psig @ 250°F†**  
**Press x Threaded Ends**  
**Blow-Out Proof Stem**

## MATERIALS LIST

| ITEM | PART          | MATERIALS           | ASTM SPEC.  |
|------|---------------|---------------------|-------------|
| 1    | Body          | Brass, Forged       | B283 C27450 |
| 2    | Tailpiece     | Brass, Forged       | B283 C27450 |
| 3    | Ball          | 316 Stainless Steel | A276 S31600 |
| 4    | Ball Seat     | PTFE                | Commercial  |
| 5    | Stem          | 316 Stainless Steel | A276 S31600 |
| 6    | Stem O-Ring   | Buna-N              | D2000       |
| 7    | Thrust Washer | PTFE                | Commercial  |
| 8    | Gland Nut     | Brass               | B124        |
| 9    | Packing       | PTFE                | Commercial  |
| 10   | Handle        | Zinc Plated Steel   | Commercial  |
| 11   | Handle Nut    | Zinc Plated Steel   | Commercial  |
| 12   | Tube O-Ring   | EPDM                | D2000       |

\*Ultra Press Valves are designed and qualified for use in copper tubing systems only, Types K, L, & M per ASTM B88.



## DIMENSIONS

|               | UNITS  | 1/2"<br>DN15 | 3/4"<br>DN20 | 1"<br>DN25 | 1-1/4"<br>DN32 | 1-1/2"<br>DN40 | 2"<br>DN50 |
|---------------|--------|--------------|--------------|------------|----------------|----------------|------------|
| A-PORT<br>DIA | INCHES | 0.51         | 0.76         | 0.98       | 1.26           | 1.50           | 2.00       |
|               | mm     | 13           | 19           | 25         | 32             | 38             | 51         |
| B             | INCHES | 2.77         | 3.23         | 3.71       | 4.12           | 4.86           | 6.14       |
|               | mm     | 70           | 82           | 94         | 105            | 123            | 156        |
| C             | INCHES | 1.14         | 1.31         | 1.53       | 1.71           | 1.88           | 2.19       |
|               | mm     | 29           | 33           | 39         | 43             | 48             | 56         |
| D             | INCHES | 1.46         | 1.93         | 2.10       | 2.33           | 2.52           | 2.96       |
|               | mm     | 37           | 49           | 53         | 59             | 64             | 75         |
| E             | INCHES | 3.14         | 4.35         | 4.35       | 5.00           | 5.00           | 6.90       |
|               | mm     | 80           | 110          | 110        | 127            | 127            | 175        |
| F-TUBE<br>DIA | INCHES | 0.63         | 0.88         | 1.13       | 1.38           | 1.63           | 2.13       |
|               | mm     | 15           | 20           | 25         | 32             | 40             | 50         |
| F1 NPT        |        | 1/2"-14      | 3/4"-14      | 1"-11.5    | 1 1/4"-11.5    | 1 1/2"-11.5    | 2"-11.5    |
| G             | INCHES | 0.83         | 1.00         | 1.00       | 1.02           | 1.42           | 1.57       |
|               | mm     | 21           | 25           | 25         | 26             | 36             | 40         |
| Cv            |        | 18           | 40           | 72         | 112            | 161            | 287        |

†Non-Shock

**Note:** Lead free refers to the wetted surface of the pipe, fittings and fixtures in potable water systems that have a weighted average lead content  $\leq 0.25\%$ . Source: California Health and Safety Code (116875).

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).

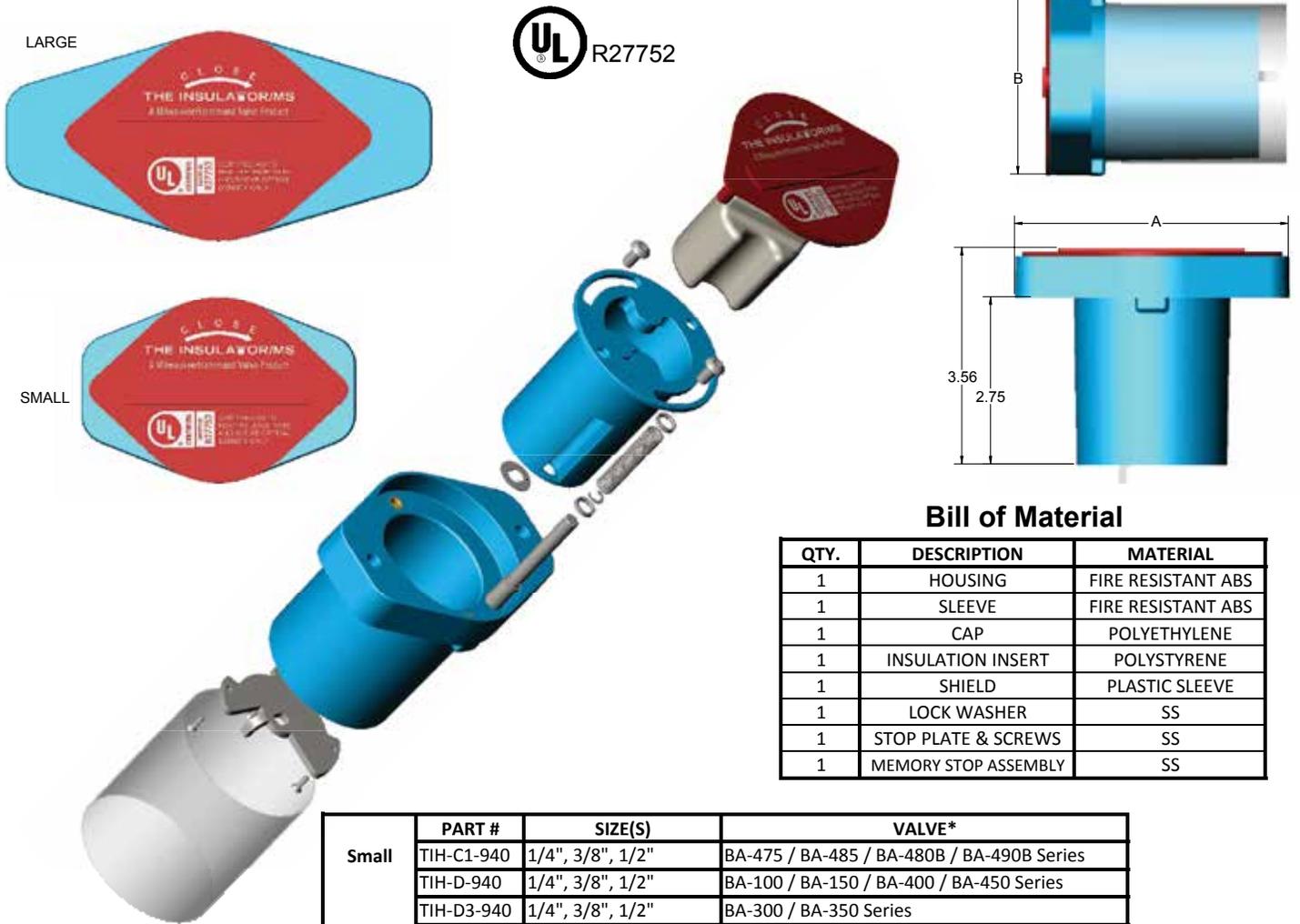


# THE INSULATOR/MS

## 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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