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# CopperPress®

By Merit Brass Co.

## Innovative Solutions

Driven to Provide Value to Your System



**MERIT  
BRASS**  
DIRECTING THE FLOW OF *Quality*

[www.meritbrass.com](http://www.meritbrass.com)  
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# Streamlining Project Planning & Execution

Save **up to 30%** in project planning, cost & execution



Supporting Distribution Growth Strategies Through Vertical Market Relationship Building



Training at Every Stage of the Process with Your Success in Mind



Saves Time, Money & Labor

No Soldering or Burn Permit Needed. Shorter Lay Lengths for Those Tighter Spaces

# FEATURES & BENEFITS

## EPDM

**50-Year Limited Warranty.** Available in Sizes 1/2"-4" Copper Tube Size (CTS). Fully Captured Grab Ring on 2-1/2" & above. VIPR® facilitates immediate identification of unpressed connection as well as application



Box, Bag and Ring are color-coordinated for ease of identifying the sealing element

**Leak Before Press (LBP) System** Designed to leak before they are pressed, giving a visual indication of a connection that has not been pressed. 1/2" has a 3-Path LBP, 3/4" – 2" have a 4-Path LBP System. 2.5" – 4" also have LBP.



Water Application Stamped on the fitting as H2O in green

NSF 61 on fittings

# APPROVED APPLICATIONS

| Types Of Service         |                          | System Operating Conditions                            |              |              | CopperPress® Seal |
|--------------------------|--------------------------|--|--------------|--------------|-------------------|
|                          |                          | Notes  | Pressure     | Temperature  | EPDM              |
| Fluids/<br>Water         | Chilled Water            | Ethylene Glycol/Propylene Glycol                       | 300 psi      | 32°F - 250°F | ✓                 |
|                          | Cooling Water            | Up to 50% Ethylene Glycol or Propylene Glycol Solution | 300 psi      | 32°F - 250°F | ✓                 |
|                          | Hot & Cold Potable Water |  | 300 psi      | 32°F - 250°F | ✓                 |
|                          | Hydronic Heating         | Ethylene Glycol/Propylene Glycol                       | 300 psi      | 32°F - 250°F | ✓                 |
|                          | Low-Pressure Steam       |  | Up to 15 psi | 248°F        | ✓                 |
|                          | Rainwater/Gray Water     |  | 300 psi      | 32°F - 250°F | ✓                 |
| Fuel, Oil &<br>Lubricant | Ethanol                  | Pure Grain Alcohol                                     | 300 psi      | 32°F - 250°F | ✓                 |
| Gas                      | Argon                    | Welding Use  | 300 psi      | Ambient      | ✓                 |
|                          | Carbon Dioxide - CO2     | Dry  | 300 psi      | 32°F - 250°F | ✓                 |
|                          | Compressed Air           | Less Than 25mg/m3 Oil Content                          | 300 psi      | 32°F - 250°F | ✓                 |
|                          | Hydrogen - H2            |  | 125 psi      | 0°F - 250°F  | ✓                 |
|                          | Nitrogen - N2            |  | 300 psi      | 32°F - 250°F | ✓                 |
|                          | Oxygen - O2 (Non-Med)    | Keep Oil and Fat Free/Non-Liquid O2                    | 140 psi      | Up to 140°F  | ✓                 |
|                          | Vacuum                   |  | 29.2 in Hg   | Call         | ✓                 |

\*Contact Merit Brass for information regarding specific applications



## SYSTEM DATA

### CopperPress® Fitting Codes & Standards

- ASME B31.1 Power Piping, B31.3 Process Piping, B31.9 Building Services Piping
- IPC, IMC, IRC, UPC, UMC
- CPC & CMC (California Plumbing and Mechanical Codes)
- City of Los Angeles Plumbing and Mechanical Codes
- Massachusetts Regulation 248 CMR 10.00: Uniform State Plumbing Code
- Massachusetts State Building Code 780 CMR Ninth Edition: Chapter 28

### CopperPress® Fitting Certifications

- ICC-ES LC 1002 Press Connection Fittings for Potable Water Tube and Radiant Heating Systems
- IAPMO/ANSI/CAN Z1117 Press Connections
- NSF/ANSI/CAN 61 Drinking Water System Components – Health Effects
- NSF/ANSI/CAN 372 Drinking Water System Components – Lead Content

### CopperPress® Fitting Pressures & Temperatures

- **Temperature Range:** 0°F to 250°F
- **Operating Pressure:** 300 psi.




## TOOLING REFERENCE GUIDE

### CopperPress® Tools, Kits, Jaws and Rings


| Size      | Milwaukee Part # | Tooling Name                                  | Adapter    | Ridgid Part # | Tooling Name                          | Adapter | Press Profile   |
|-----------|------------------|---|------------|---------------|---------------------------------------|---------|-----------------|
| 0.5" - 4" | 2773-20          | M18 Force Logic Press Tool                    |            | 67063         | RP 350 Press Tool                     |         |                 |
| 0.5" - 2" | 2773-22          | M18 Force Logic Press Tool w/Jaws (0.5" - 2") |            | 67053         | RP 350 Press Tool w/Jaws (0.5" - 2")  |         |                 |
| 0.5"      | 49-16-2650       | 0.5" M18 Jaw                                  |            | 76652         | 0.5" Press Jaw                        |         | CTS - V         |
| 0.75"     | 49-16-2651       | 0.75" M18 Jaw                                 |            | 76657         | 0.75" Press Jaw                       |         | CTS - V         |
| 1"        | 49-16-2652       | 1" M18 Jaw                                    |            | 76662         | 1" Press Jaw                          |         | CTS - V         |
| 1.25"     | 49-16-2653       | 1.25" M18 Jaw                                 |            | 76667         | 1.25" Press Jaw                       |         | CTS - V         |
| 1.5"      | 49-16-2654       | 1.5" M18 Jaw                                  |            | 76672         | 1.5" Press Jaw                        |         | CTS - V         |
| 2"        | 49-16-2655       | 2" M18 Jaw                                    |            | 76677         | 2" Press Jaw                          |         | CTS - V         |
| 2.5"      | 49-16-2656       | 2.5" M18 Ring                                 | 49-16-2659 | 20543         | 2.5" Press Ring                       | 21878   | CTS - Grab Ring |
| 3"        | 49-16-2657       | 3" M18 Ring                                   | 49-16-2659 | 20548         | 3" Press Ring                         | 21878   | CTS - Grab Ring |
| 4"        | 49-16-2658       | 4" M18 Ring                                   | 49-16-2659 | 20553         | 4" Press Ring                         | 21878   | CTS - Grab Ring |
| 2.5" - 4" | 49-16-2659       | Ring Jaw 1                                    |            | 21878         | V2 Press Ring Actuator                |         |                 |
| 2.5" - 4" | 49-16-2690       | M18 Press Ring Kit (2.5" - 4")                |            | 20483         | 2.5" - 4" Press Rings and V2 Actuator |         |                 |

CopperPress®, by Merit Brass Co., products can be used with Milwaukee, REMS, Ridgid, and Rothenberger tools with the associated Jaws for K, L, and M Copper Tube. Please contact Merit Brass Co. for additional information.

# PRODUCT OFFERING

| EPDM (Potable Water)  |  |                                       |             |
|---|--|---------------------------------------|-------------|
|   | Description                                  | Diameter Range CTS (Copper Tube Size) |             |
|   |  | Small Diameter                        | XL Diameter |
|  | CopperPress® Coupling with Stop              | 1/2" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® Coupling without Stop           | 1/2" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® Extended Coupling without Stop  | 1/2" – 2"                             |             |
|   | CopperPress® Coupling Reducer                | 3/4" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® Bushing Reducer                 | 3/4" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® 90° Elbow                       | 1/2" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® 90° Reducing Elbow              | 3/4" – 1"                             |             |
|   | CopperPress® 90° Street Elbow                | 1/2" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® 90° Drop Ear Elbow              | 3/8" – 3/4"                           |             |
|   | CopperPress® 90° Male Elbow P x MPT          | 1/2" – 2"                             |             |
|   | CopperPress® 90° Female Elbow P x FPT        | 1/2" – 2"                             |             |
|   | CopperPress® 45° Elbow                       | 1/2" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® 45° Street Elbow                | 1/2" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® Equal Tee                       | 1/2" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® Unequal Tee                     | 3/4" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® Reducing Tee                    | 1/2" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® Female Tee P x P x FPT          | 1/2" – 3/4"                           |             |
|   | CopperPress® Female Reducing Tee P x P x FPT | 3/4" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® Cap                             | 1/2" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® Cross Over                      | 1/2" – 3/4"                           |             |
|   | CopperPress® Street Cross Over               | 1/2" – 3/4"                           |             |
|   | CopperPress® Male Adapter                    | 1/2" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® Male Street Adapter             | 1/2" – 2"                             |             |
|   | CopperPress® Female Adapter                  | 1/2" – 2"                             | 2 1/2" – 4" |
|   | CopperPress® Female Street Adapter           | 1/2" – 2"                             |             |
|   | CopperPress® Union                           | 1/2" – 2"                             |             |
|   | CopperPress® Male Union                      | 1/2" – 2"                             |             |
|   | CopperPress® Female Union                    | 1/2" – 2"                             |             |
|   | CopperPress® Dielectric Female Union         | 1/2" – 2"                             |             |
|   | CopperPress® Pex (B) Adapter                 | 1/2" – 1"                             |             |
|   | CopperPress® Flange Adapter                  | 1" – 2"                               | 2 1/2" – 4" |
|   | CopperPress® Ball Valve                      | 1/2" – 2"                             |             |

# SEALING ELEMENTS

| EPDM SEALING ELEMENT        |   |   |
|-----------------------------|---|---|
| EPDM                        | Ethylene-propylene-diene monomer            |  |
| Color                       | Black                                       |   |
| Temperature                 | 0°F to 250°F                                |   |
| Common Applications         | Potable Water                               |   |
|                             | Hydronic Heating (W/ Glycol)                |   |
|                             | Chilled Water                               |   |
| Manufacturing Process       | Synthetically manufactured & peroxide-cured |   |
| Benefits of Sealing Element | Excellent oxidation resistance              |   |

# SMALL DIAMETER COPPER END PRESS BALL VALVE — SIZES: ½" – 2"

## CopperPress® Ball Valve Codes & Standards

- ASME B31.1 Power Piping, B31.3 Process Piping, B31.9 Building Services Piping
- ASME A112.4.14/CSA B125.14 Manually and Automatically Operated Valves for Use in Plumbing Systems
- IPC, IMC, IRC, UPC, UMC
- CPC & CMC (California Plumbing and Mechanical Codes)
- City of Los Angeles Plumbing and Mechanical Codes
- Massachusetts Regulation 248 CMR 10.00: Uniform State Plumbing Code
- Massachusetts State Building Code 780 CMR Ninth Edition: Chapter 28

## CopperPress® Ball Valve Certifications

- ICC-ES LC 1002 Press Connection Fittings for Potable Water Tube and Radiant Heating Systems
- IAPMO/ANSI/CAN Z1157 Ball Valves
- NSF/ANSI/CAN 61 Drinking Water System Components – Health Effects
- NSF/ANSI/CAN 372 Drinking Water System Components – Lead Content

## Design Features

Designed to be used with ASTM B88 Type K, L and M ½" – 2" copper tubing in the hard-drawn condition and soft copper tubing in sizes ½" – 1¼".

### VIPR® (Visual Indicator Press Ring®)

facilitates immediate identification of un-pressed connections

Suitable for installation in most plumbing and heating systems including hydronic heating, low pressure steam (15 psi max), and potable water

**Lead-Free Construction** - Cast C89836 Bronze Body with Copper Retainers

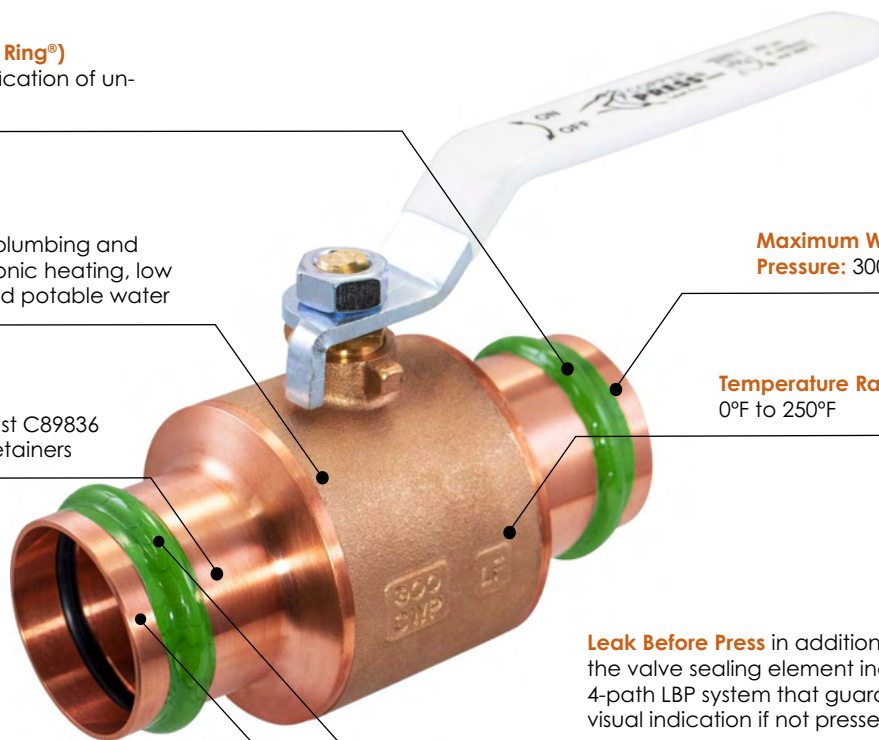


**Maximum Working Pressure:** 300 psi

**Temperature Range:** 0°F to 250°F

**Leak Before Press** in addition to the VIPR®, the valve sealing element includes a 4-path LBP system that guarantees a visual indication if not pressed

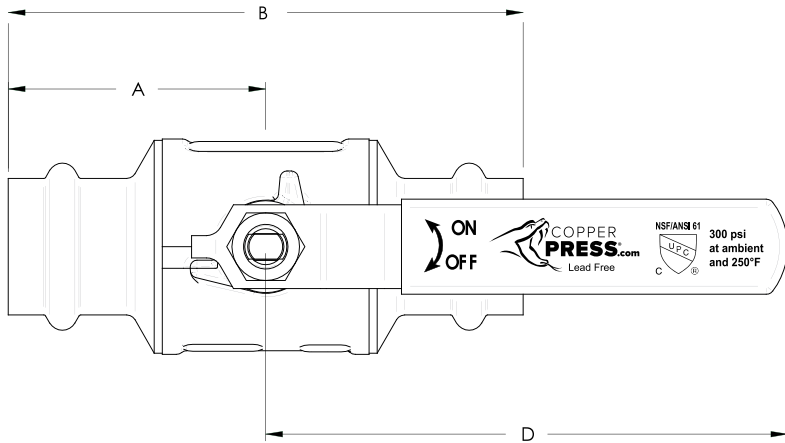
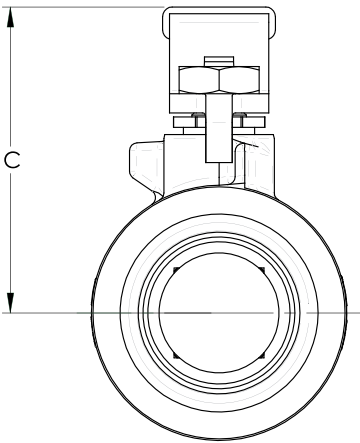
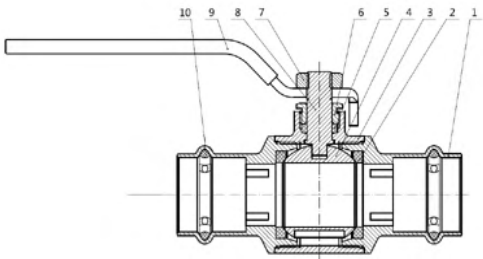
**Copper Ends** - protect against dezincification and stress corrosion cracking



# Small Diameter Copper End Press Ball Valve

Sizes: 1/2" – 2"

| Item | Description              | Material            | QTY | Specification |
|------|--------------------------|---------------------|-----|---------------|
| 1    | Retainer                 | Copper              | 2   | C12200        |
| 2    | Seat                     | PTFE                | 2   |               |
| 3    | Body                     | Bronze              | 1   | C89836        |
| 4    | Ball (Sizes 1/2" – 1")   | Chrome Plated Brass | 1   | C46500        |
| 4    | Ball (Sizes 1 1/4" – 2") | Stainless Steel     | 1   | 304           |
| 5    | Stem Packing             | PTFE                | 1   |               |
| 6    | Packing Gland            | Brass               | 1   | HPb59-3P      |
| 7    | Stem Nut                 | Zinc Plated Steel   | 1   | Q235          |
| 8    | Stem                     | Brass               | 1   | C46500        |
| 9    | Handle                   | Zinc Plated Steel   | 1   | Q235          |
| 10   | Sealing Element          | EPDM                | 2   |               |



| Part Number | Size (In) | A    | B    | C    | D    | Weight (lbs) |
|-------------|-----------|------|------|------|------|--------------|
| MB70000     | 1/2"      | 1.56 | 3.11 | 1.70 | 3.94 | 0.54         |
| MB70010     | 3/4"      | 1.89 | 3.78 | 1.84 | 3.94 | 0.79         |
| MB70020     | 1"        | 2.24 | 4.49 | 2.37 | 4.92 | 1.39         |
| MB70030     | 1 1/4"    | 2.56 | 5.12 | 3.02 | 5.84 | 2.74         |
| MB70040     | 1 1/2"    | 2.83 | 5.67 | 3.16 | 6.30 | 4.30         |
| MB70050     | 2"        | 3.44 | 6.89 | 4.21 | 7.87 | 7.30         |



**CarbonPress®**  
By Merit Brass Co.

**CopperPress®**  
By Merit Brass Co.

**StainlessPress®**  
Isotubi-USA, By Merit Brass Co.

**MeritPress™**  
By Merit Brass Co.



## LOCATIONS

**SPARKS DISTRIBUTION CENTER**  
200 Vista Boulevard Suite #106  
Sparks, NV 89434

**LONG BEACH PIPE DEPOT**  
2396 E. Artesia Blvd  
Long Beach, CA 90805

**DALLAS DISTRIBUTION CENTER**  
10614 King William Drive  
Dallas, TX 75220

**CLEVELAND HEADQUARTERS**  
One Merit Drive/PO Box 43127  
Cleveland, OH 44143

**BIRMINGHAM DISTRIBUTION CENTER**  
220 Oxmoor Court  
Birmingham, AL 35209

**HOUSTON DISTRIBUTION CENTER**  
4680 S. Sam Houston Pkwy W, Suite 120  
Houston, TX 77053

## CONTACT US



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