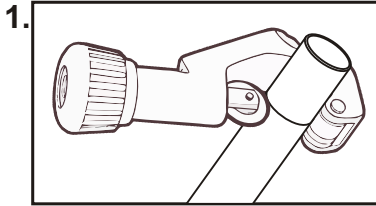
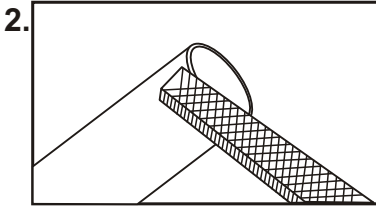


# INSTALLATION INSTRUCTIONS

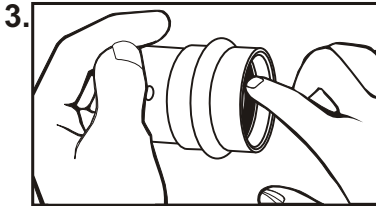
For Types K, L and M Hard Copper Tubing in 1/2" to 2" and Soft Copper Tubing in 1/2" to 1 1/4"



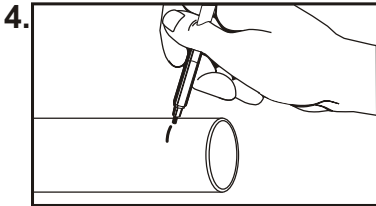
Step 1: Cut the copper tubing at a square angle using a rotary pipe cutter or fine-toothed metal handsaw.



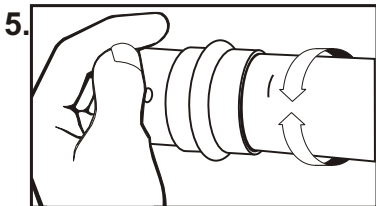
Step 2: Remove any burr from inside and outside of the tubing to prevent damage to the sealing rubber o-ring.



Step 3: Check the seal for correct fit. Do not use any oils or lubricants. The manufacturer recommends to dip the fitting end into a soap and water solution before insertion.



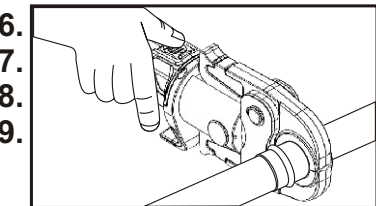
Step 4: Mark the proper insertion depth on the tube as indicated by the depth chart below. It's important to reach the recommended depth mark to get a properly sealed joint.



Step 5: While turning slightly left & right, insert the tube up to the mark.

*Note: The depth mark should be near the edge of the fitting when the tube hits the stop inside the fitting.*

*You must use appropriate pressing tool and follow the user manual's instructions supplied with the tool.*



Step 6: On the tool, insert and fix the appropriate jaw for the size of fitting you want to press.

Step 7: Open the jaw and place at a right angle on the fitting, centered on the o-ring.

Step 8: Start the pressing process and hold the trigger until the jaw has engaged and pressed the fitting completely.

Step 9: When the pressing is done, open the jaw to release the fitting.

Nominal Tube Size	Tube Insertion Depth	
	Inches	mm
1/2"	3/4	19
3/4"	7/8	22
1"	7/8	22
1 1/4"	1	25
1 1/2"	1 7/16	37
2"	1 9/16	40

**Applications**

All tubing must comply with the ASTM B88 standard.

Working pressure: 200 psi max.

Test pressure: 600 psi max.

Steam pressure: 15 psi max.

Vacuum: 29.2" mercury max. @ 68 °F

Working temperature: 0 °F ~ 250 °F

**Application usages**

- Potable water
- Hydronic heating (w/ glycol)
- Chilled water
- Compressed air (200 psi max.)
- Non-medical gases (140 psi max.)
- Fire sprinkler (175 psi max.)
- Low pressure steam (15 psi max.)

**Complies with:**

Materials: ASME/ASTM B42  
C12200 (99.9% cu)

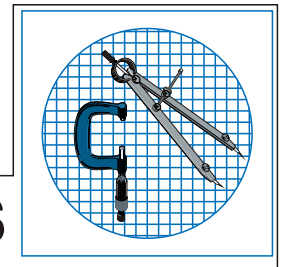
Dimensions: IAPMO PS 117-2016

Threads: ASME/ASTM B1.20.1

Drinking water: NSF/ANSI STANDARD  
61 - 372 (lead free)

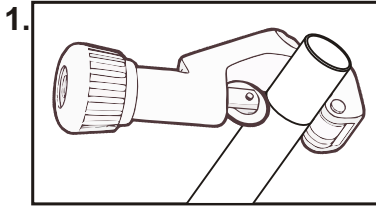
Other: ISO 9001, ISO 14001



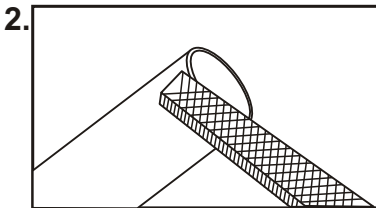


# INSTALLATION INSTRUCTIONS

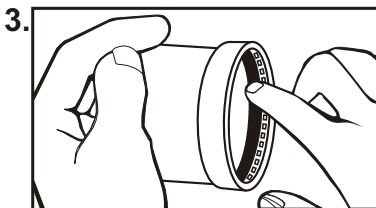
## For Types K, L and M Hard Copper Tubing in 2 1/2" to 4"



Step 1: Cut the copper tubing at a square angle using a rotary pipe cutter or fine-toothed metal handsaw.

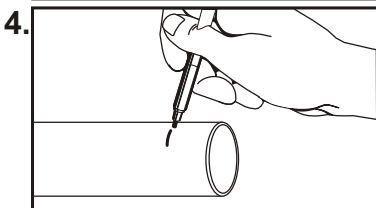


Step 2: Remove any burr from inside and outside of the tubing to prevent damage to the sealing rubber o-ring.



Step 3: Check the seal for correct fit. Do not use any oils or lubricants. The manufacturer recommends to dip the fitting end into a soap and water solution before insertion.

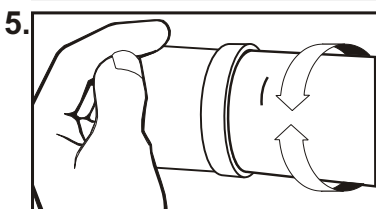
Step 4: Mark the proper insertion depth on the tube as indicated by the depth chart below. It's important to reach the recommended depth mark to get a properly sealed joint.



Step 5: While turning slightly left & right, insert the tube up to the mark.

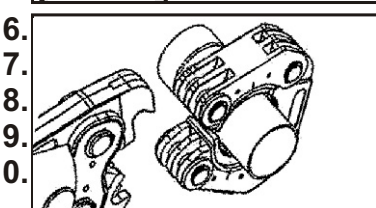
*Note: The depth mark should be near the edge of the fitting when the tube hits the stop inside the fitting.*

*You must use appropriate pressing tool and follow the user manual's instructions supplied with the tool.*



Step 6: Select the appropriate press saddle ring for your fitting size.

Step 7: Open the saddle ring and place at a right angle on the fitting.



Step 8: Select the pinching jaw and install it on the press tool.

Step 9: Start the pressing process and hold the trigger until the jaw has completely closed the press ring around the fitting.

Step 10: When the pressing is done, open the jaw to release the ring from the fitting.

Nominal Tube Size	Tube Insertion Depth	
	Inches	mm
2 1/2"	1 3/4	44
3"	1 7/8	48
4"	2 1/8	54

### Applications

All tubing must comply with the ASTM B88 standard.

Working pressure: 200 psi max.

Test pressure: 600 psi max.

Steam pressure: 15 psi max.

Vacuum: 29.2" mercury max. @ 68 °F

Working temperature: 0 °F ~ 250 °F

### Complies with:

Materials: ASME/ASTM B42  
C12200 (99.9% cu)

Dimensions: IAPMO PS 117-2016

Threads: ASME/ASTM B1.20.1

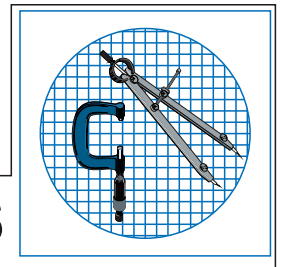
Drinking water: NSF/ANSI STANDARD  
61 - 372 (lead free)

Other: ISO 9001, ISO 14001

### Application usages

- Potable water
- Hydronic heating (w/ glycol)
- Chilled water
- Compressed air (200 psi max.)
- Non-medical gases (140 psi max.)
- Fire sprinkler (175 psi max.)
- Low pressure steam (15 psi max.)





# INSTALLATION INSTRUCTIONS

## Installation Recommendations

BMI Press fittings are packed in bulk or individually in polybags to keep them clean and free from debris. This will also prevent the possible separation of the fittings and the o-rings in the handling. It's the installer's responsibility to make the final visual inspection of the fittings prior to installation. All fittings should be handled with care and removed from the bag just prior to use to ensure their cleanliness.

To prevent leaks, minimum distances between pressed joints should be as per the adjacent table.

Pressing Near Another Pressed Connection		
Nominal Tube Size	Minimum Distance	
	Inches	mm
1/2 ~ 1 1/4"	1/2	13
1 1/2"	5/8	16
2 ~ 4"	3/4	20

## Pressing a Fitting Near a Soldered or Brazed Joint

To ensure proper sealing of both the soldered and press connections, a minimum spacing between connections must be maintained. Also, make sure there is no residual solder or other debris on the tubing to be inserted into the press fitting.

Minimum clearance requirement when pressing connections near an existing soldered or brazed connection should be as per the adjacent table.

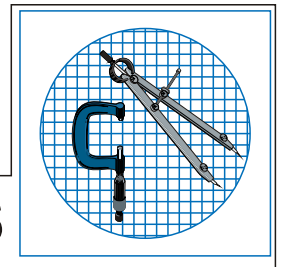
Pressing Near a Soldered Connection		
Nominal Tube Size	Minimum Distance	
	Inches	mm
1/2 ~ 3/4"	1/4	7
1 ~ 1 1/4"	7/16	11
1 1/2"	5/8	16
2"	3/4	19
2 1/2 ~ 4"	1/4	7

## Make a Soldered or Brazed Joint Near a Pressed Fitting

To ensure proper sealing of both the soldered/brazed and press connections, a minimum spacing between connections must be maintained. The installer should take the proper precautions to keep the press connection at a cool temperature by wrapping the connection with a cold wet rag while soldering.

Minimum clearance requirement when soldering or brazing near an existing pressed connection should be as per the adjacent table.

Soldering Near a Pressed Connection		
Nominal Tube Size	Minimum Distance	
	Inches	mm
1/2"	1 1/2	39
3/4"	2 1/4	58
1"	3	77
1 1/4"	3 3/4	96
1 1/2"	4 1/2	115
2"	6	153
2 1/2"	7 1/2	191
3"	9	229
4"	12	305



# INSTALLATION INSTRUCTIONS

## Leak Detection Design

BMI Press fittings are made with a leak detection design, providing fast and easy identification of unpressed connections during the pressure testing process at any installation angle possible.

The design feature provides a path for liquids and/or gases from inside the system past the sealing element of an unpressed connection.

When pressed according to instructions, the leak detection design feature is neutralized, creating a leak proof, permanent connection.

Unpressed connections are located by pressurizing the system with air or water. When testing with water, the suggested pressure is 15 to 85 psi maximum. (Testing with air can be dangerous, the manufacturer recommends testing compressed air at ½ to 45 psi maximum).

Following a successful test, the system may be pressure tested up to 600 psi maximum for water and 200 psi maximum for air, depending on local code requirements.

## Material Expansion

BMI Press fitting installation must allow for expansion and contraction which may occur in a piping installation depending on the temperature. Expansion joints or mechanical expansion compensators may be used to reduce the stress on the pressed connections.

## Temperature During Installation

The EPDM sealing o-ring used in BMI Press fittings can be installed in as low as 0 °F (-18 °C). Any joint pressed in lower temperature conditions could be improperly sealed.

## Corrosion Protection

BMI Press fittings exposed to corrosive solutions, such as soil conditions or moisture, must be protected in accordance with UMC Chapter 13 section 1312.1.3, NFPA 54 section 404.8, 2009 UPC Chapter 6 section 609.3.1, NACE Standard RP0169-2002 section 5 and also in accordance with local code requirements.

## Underground Installations

BMI Press fittings combined with copper tubing, are approved for underground installations. However, they must meet all state and local codes, including those for underground installations. Proper authorization must be obtained from the local authority prior to installation.

## Dielectric Effect

The companion flanges are made from a combination of copper and steel. Although it is highly unlikely, it is possible that premature corrosion on the steel parts could appear due to a dielectric effect. For this reason, all flanges are supplied with a rubber insulator to insulate both materials.

## Recommended Tools

BMI Press fittings can be pressed with following pressing tool brands:

Milwaukee® ½" to 4"  
Nibco® ½" to 2"  
REMS® ½" to 4"  
Ridgid® ½" to 4"  
Rothenberger® ½" to 2"  
Stanley® Virax ½" to 2"

BMI Press fittings technical specifications can be found here:

[https://www.bmicanada.com/products/bmi\\_specs\\_wrot\\_copper\\_press\\_fit\\_fittings.pdf](https://www.bmicanada.com/products/bmi_specs_wrot_copper_press_fit_fittings.pdf)