

# QUARTER-TURN BALL VALVE – sweat connections INSTALLATION, OPERATION, & MAINTENANCE MANUAL

## INSTALLATION

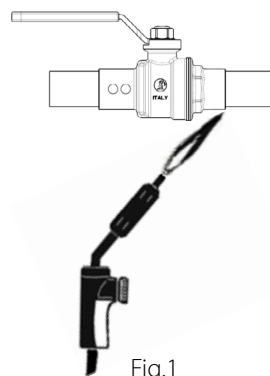
Particular care must be given to pipe line expansions and contractions as well as expansions and contractions of the media used in the piping system. These models of ball valves are bi-directional. They may be installed in either vertical or horizontal pipe runs without any regard to flow direction or stem orientation. These valves are made of lead free (LF) alloy, in compliance with potable water service national regulations.

For the installation procedure, calibration, cleaning and soldering process, refer to ASTM B828 "Standard Practice for Making Capillary Joints by Soldering of Copper Tube and Fittings".

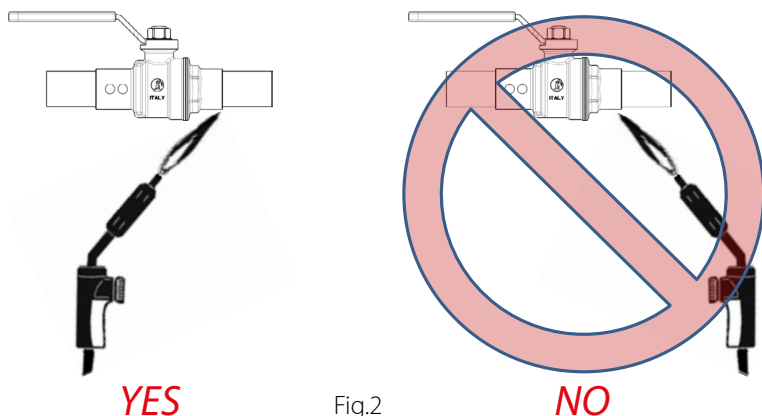
Soldering process must be performed in compliance with the procedure shown in this document and carefully referring to indicated positions. Installation must be performed by skilled persons, in order to avoid damages to involved products.

During soldering process, the valve must be in open position.

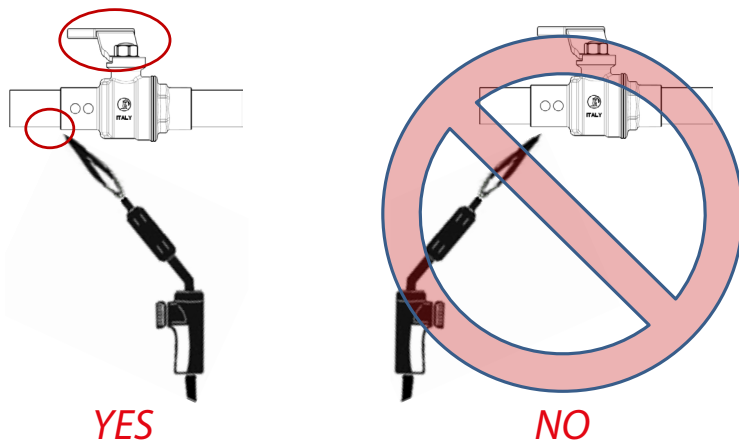
Preheat for soldering, by concentrating the heat on the pipe or tube first; then the valve solder cup, always directing the heat away from joint of the body. See figure 1.



The duration of this preheating depends on the size of pipe. After preheating direct the heat on the valve cup area (avoiding the joint of the body) to aid capillary action in drawing the molten filler metal into the cup. See figure 2.



A – Soldering the end part connection, direct the heat as per the below figure, tilting the torch on the final part of the end piece, just before the pipe.

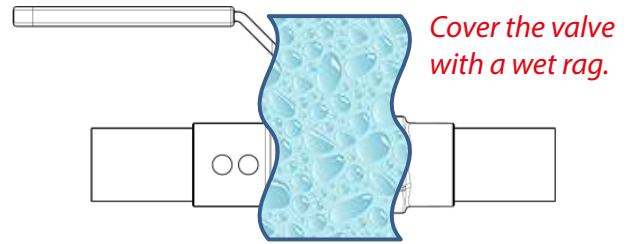
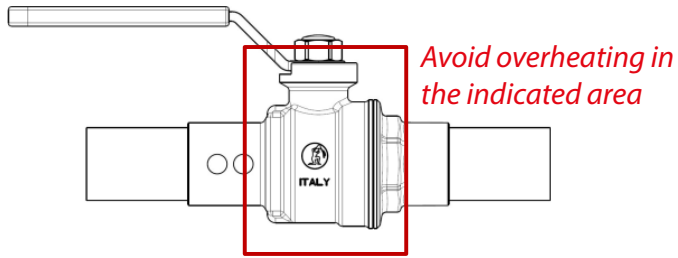


B – Soldering the body of the valve, slightly move the lever handle in OFF direction.

IMPORTANT: Do not completely close the valve.

Direct the head as per the above figures, tilting the torch on the final part of body, just before the pipe.

- Horizontal installation – start applying the filler metal at the bottom of the joint then upward allowing bottoming portion to dam up upper portion.
- Allow completed joints to cool in a natural way. Cooling with water will cause unnecessary stress on the valve.
- It is strongly suggested to wrap the valve body with wet rags or employ other heat absorbing techniques to avoid damaging valve seats and thread sealant.



### **OPERATION**

The valve handle is marked showing proper rotation direction for "ON" and "OFF" positions. Standard rotation is clockwise for "OFF" (closed) and counterclockwise for "ON" (open).

### **MAINTENANCE**

This valve has been designed with double O-Ring technology on the stem and therefore it doesn't require any maintenance.