

# FLEXIBLE AXIS METER (FAM)

## INSTALLATION INSTRUCTIONS



NoTE: The user and the installer should be aware that changes and modifications to the equipment not expressly approved by Master Meter could void warranty and the user's authority to operate the equipment. Professionally trained personnel should install the equipment.

## A. COMPONENTS:



**FAM Measuring Unit** 



FAM Flow Tube with Locking Nut

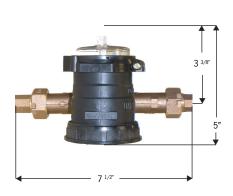


Reversible Plug



**FAM Wrench** 

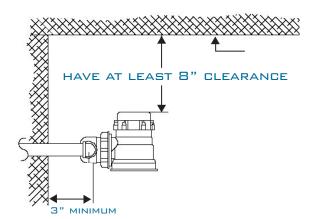
## **B. OVERALL DIMENSIONS:**

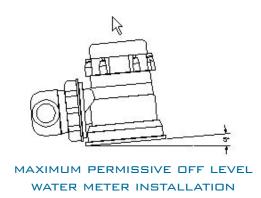




#### C. RECOMMENDATIONS:

1. Consider the over all dimensions of the assembled unit (Ref. B) before installation. Allow adequate clearance for the meter and any associated electronics. The Measuring Unit should always be positioned away from the wall with the register top horizontal and facing up.





- 2. The installation should include a high quality, low pressure loss shutoff valve upstream of the meter. To prevent water damage to customer property when service is required, a downstream shutoff valve is likewise recommended.
- 3. The installation should be leak-tight, with properly sized gaskets. When meter couplings are ordered from Master Meter, gaskets are provided. Appropriate gaskets and couplings are also available from qualified waterworks distributors. Whenever a meter is pulled from the line, discard and replace old gaskets.
- 4. The Flexible Axis Meter can be installed using either meter couplings or solder-joint connections. When soldering, take care not to apply heat to the polymer components of the meter. Any resulting damage will not be covered under warranty.
- 5. Although AWWA opposes the grounding of electrical systems to potable water delivery lines, such practices do exist. To prevent accidental harm to service personnel and residents, make certain that an electrical grounding strap is installed around the meter.

## D. AT THE TIME OF INSTALLATION:

The FAM Flow Tube will be shipped with either a Plug or Measuring Element in Place. The Plug allows full flow through the tube for system pressure testing and line flushing. If the plug is in place when received, do not remove it until the Measuring Unit is to be installed (after pressure testing and line flushing). Removing the plug can damage the o-ring seal, causing leaks to occur. A new set of o-rings is shipped with the FAM Measuring Unit, for use when the Measuring Unit is connected to the Flow Tube.



Flow Tube with Plug

#### E. INSTALLING THE FAM FLOW TUBE WITH PLUG

1. Install the FAM Flow Tube with Plug in the line; make sure the arrow on the Flow tube is pointing in the direction of water flow.

Arrow on Tube pointing towards direction of water flow.



2. When installing the FAM Flow Tube with Plug, be sure to vertically level the Plug for future replacement with FAM Measuring Unit. Turn tap on to release any trapped air in line to the house/apartment. After air is released spot check for leaks around the installation.



#### F. INSTALLING THE FAM FLOW TUBE WITH MEASURING UNIT

1. Install the FAM Tube with Measuring Unit in the line; make sure the arrow on the Flow tube is pointing in the direction of water flow. Before completely tightening the couplings or soldering, make sure the Measuring unit is vertically level.



To loosen the locking nut, loosen clockwise.



2. After Installing and leveling the meter vertically, check to see if the Measuring unit is level horizontally. Level the Measuring Unit by loosening the locking nut clockwise, adjusting the Measuring Unit and tighten nut counter clockwise.



To tighten the locking nut, tighten counter clockwise.



### G. REPLACING THE PLUG WITH MEASURING UNIT

1. Loosen the Locking Nut with FAM wrench and take plug out.



2. Replace both O-rings that are in the Flow Tube with new ones that were shipped with the FAM measuring Units. Apply a little lubricant on o-rings during this procedure.



3. Position FAM Measuring Unit to Flow Tube; be sure the Measuring Unit is seated properly when mated with Flow Tube and that it is vertically level.



4. Hand-tighten Locking Nut by keeping the Measuring Unit vertically in position.



5. Tighten Locking Nut with FAM wrench until snug; do not over tighten. For leveling with level refer to F1 and F2.







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