## Installation Guide – DAE Water Meters

- DAE AS, MJ series (like <u>AS200U-75P</u>, <u>MJ-75</u>) water meters should only be installed in a horizontal position with the dial facing upwards. For installing vertically with the dial facing upwards and water flowing upwards, please refer to DAE V Series (like <u>V-75P</u>). You can also refer to DAE Positive Displacement Water Meter VM Series (like <u>VM-75P</u>) or PD Series (like <u>PD-75</u>) will be able to be installed in any position, vertically or horizontally, dial facing upwards or downwards or side-way, water flowing downwards or upwards.
- 2. Install meter in a location with at least 10 diameters of straight pipe at the inlet and 5 diameters at the outlet to assure proper flow profile to the meter.
- 3. The installation should include a high quality, low pressure loss shutoff valve upstream of the meter. A downstream shutoff valve is likewise recommended.
- 4. Thoroughly flush the service line upstream of the meter to remove dirt and debris. For new construction projects, install a spacer pipe in the designated meter location, until the water system is thoroughly flushed.
- 5. Set the meter in the line. Arrows on the side of the meter indicate the direction of flow.
- 6. Do not over-tighten coupling connections; tighten only as required to seal. Use Pipe sealant or Teflon tape as appropriate in the threaded mail end of the coupling pipe. The meter to the coupling will be sealed by the gasket. Therefore, do not use pipe sealant or Teflon tape on meter threads. Always start the meter connections by hand to make sure that the connections are not cross threaded. Typically, all that is needed after hand tightening is an additional quarter turn to seal the gaskets.
- 7. Close the outlet (downstream) shutoff valve.
- 8. Slowly open the shutoff valve (upstream) to remove air from the meter and service line.
- 9. Slowly open the faucet to allow entrapped air to escape from the service line and close the faucet.

- 10. Carefully observe the meter installation to ensure it is properly sealed with no leaks. Clean all connections with a dry cloth and re-check for any visible moisture.
- 11. The meter should be installed in a location that is accessible for reading, service and inspection. We recommend a minimum of 8" of clearance from the register, 3" of clearance from all other sides of the meter.
- 12. For the meters to be connected to Electronic Pulse Counter (like DAE CO-10 KIT) or DAE AMR/AMR130 for DAE Cloud Metering System to read the meters remotely with cell phone, PC, please pay special attention to the following.

You must have back-flow-prevention valve in your piping system, or the reading of CO-10, Cell phone/PC may be more than the reading of water meter due to the backflow. Most of US piping system have back-flow-prevention valve. If not, please install one or refer to Non-Return-Valve (like NRVAS-75 for AS200U-75P) in DAE Controls Website, an in-expensive backflow prevention valve to be installed at the outlet of water meter. To securely transfer metering data for DAE Cloud Metering Solutions on Water, please use UL2464 cable to extend connection between water meters (with about 4 ft pulse cable) and AMR130/AMR, or reading of Cell phone/PC may be more than reading of meter due to exterior interference. With UL2464 cable, connection between meter, AMR130/AMR can be extended at least 328 ft, and at least 2000 ft between CC2030, AMR130/AMR.