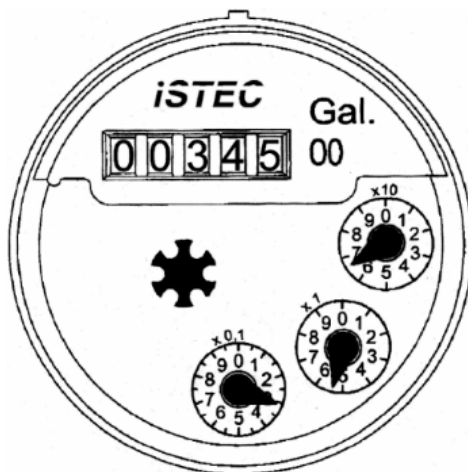


1. Before beginning the installation, verify that the system temperature, pressure and flow rate **do not** exceed the ratings indicated on the meter.
2. The meter is designed to operate at a sustained flow of  $\frac{1}{2}$  the Maximum Flow Rating (indicated as the Continuous Flow Rating). The meter **should not** be operated at the Maximum Flow Rating for more than one hour per day as excessive wear and/or failure will result.
3. Flush the pipeline thoroughly after any plumbing changes to eliminate the possibility of foreign materials reaching the meter.
4. The  $\frac{1}{2}$ " and  $\frac{3}{4}$ " meters may be installed in horizontal or vertical pipelines (either up or down flow). To achieve the rated accuracy, the meter should be the same diameter as the pipe **and** there should be at least five (5) pipe diameters of straight pipe before and after the meter. Meters 1" and larger must be installed on horizontal pipelines **only**. There is no straight pipe requirement before or after the 1' and larger meters. In horizontal installations, the flow counter should be facing straight upward.
5. Pay careful attention to the flow direction as indicated by the arrow cast into the meter body.
6. It is highly recommended that a strainer be installed upstream of the meter inlet. It is also recommended that a shutoff valve be located before and after the meter to facilitate service.
7. Care should be taken to protect the meter from water hammer as well as freezing temperatures.
8. The counter is calibrated in U.S. gallons and can not be reset. It will roll around to zero after reaching its maximum reading. See page 2 for additional information on the counter.
9. Meters with a pulse output contain a magnetically driven "dry contact type" reed switch. Each contact closure is equal to one (1) or ten (10) gallons of water as indicated on the meter. The electrical rating of the switch is 0.2 amp at 24 volt.

**HOW TO READ A 1700 SERIES WATER METER**

The 1700 Series counter consists of a row of numbers (roller counter) and one or more circular dials with rotating pointers. There is also a star shaped wheel that rotates whenever flow is present (trickle indicator).

The roller counter is calibrated in U.S. gallons and cannot be reset. It indicates the total flow through the meter in gallons, hundreds of gallons or thousands of gallons. The correct multiplier is indicated on the face adjacent to the roller counter. In the example above, the total indicated is  $345 \times 100$  or 34,500.

The circular dials indicate tenths of gallons, gallons and tens of gallons. The respective multiplier is marked adjacent to the dial. For example, on the dial marked “x10”, each number represents increments of ten gallons (i.e. 3 = 30 gallons, etc.) and one full rotation equals 100 gallons. On the dial marked “x0.1”, each increment is one tenth (1/10) of a gallon (4 = 0.4) and a full rotation of the dial represents a total of 1 gallon. Note that if the pointer is between two numbers, the lower number is read.

The reading represented by the counter displayed above is  $345 \times 100$  plus  $6 \times 10$  plus  $5 \times 1$  plus  $3 \times 0.1$  or 34,565.3 gallons.

The counter will roll around to zero and restart once it reaches its maximum reading.