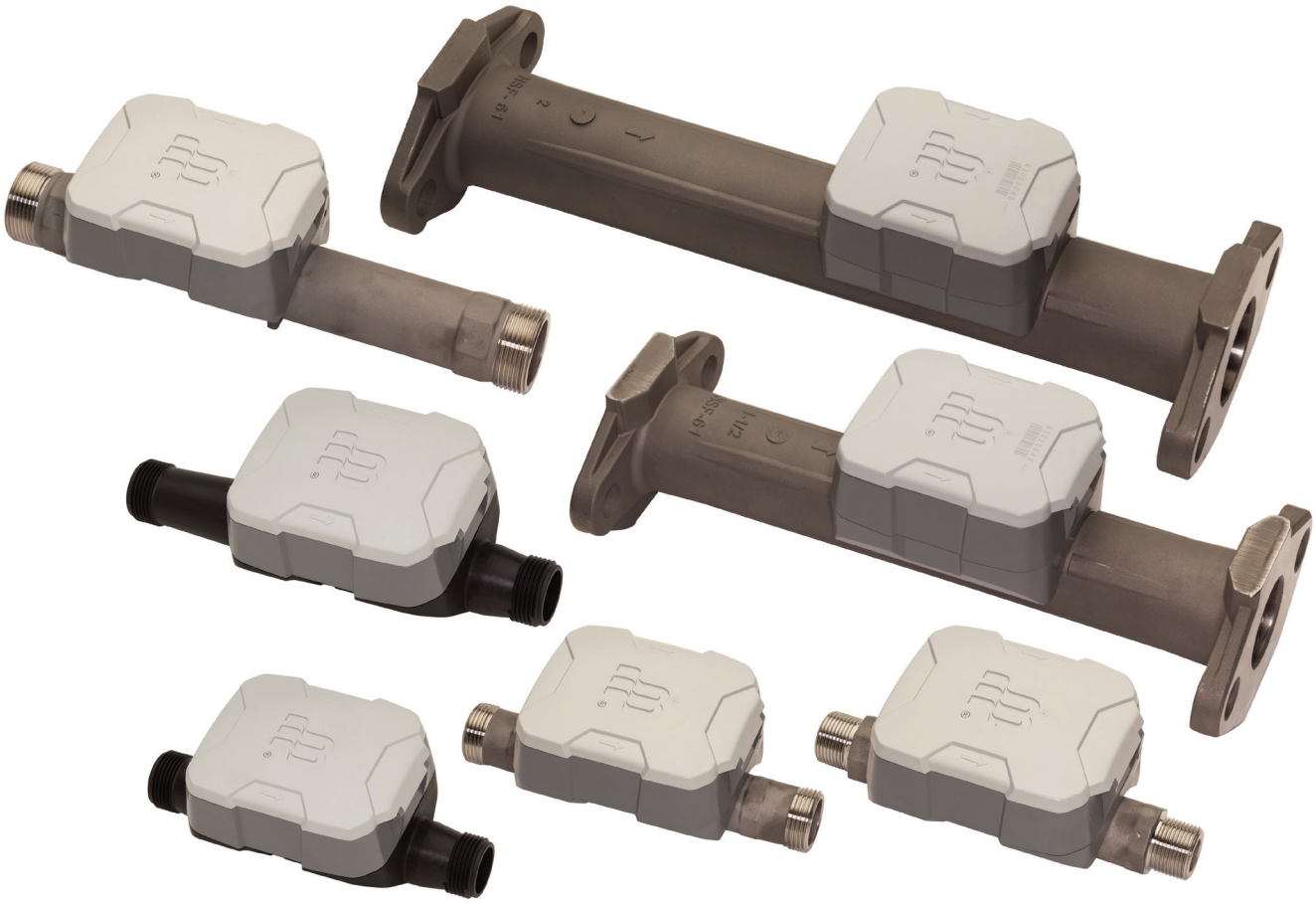
Badger Meter

E-Series® Ultrasonic Meters

Cold Water Meters



ESM-UM-00623-EN-14 (February 2018)

User Manual

Protect Against Leakage

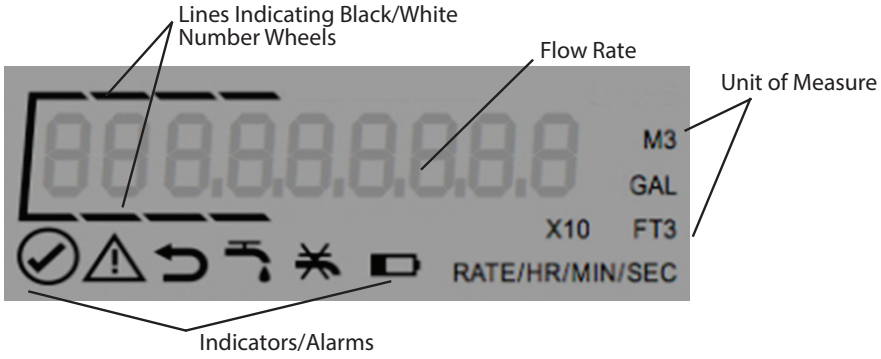
Before turning on the service water, use care to protect against potential leakage.

1. Shut off the valves on both the inlet and outlet sides of the meter.
2. Open the curb (shutoff) valve slowly to pressurize the service line to the meter.
3. Slowly open the meter's inlet-side valve to fill the meter.
4. Check for leaks around the meter and its connections.
5. Slowly open the meter's outlet-side valve to pressurize the consumer side of the system.
6. Open a faucet to allow entrapped air to escape.
7. Once water is flowing normally, turn off the faucet.

E-SERIES ULTRASONIC METER OPERATIONS

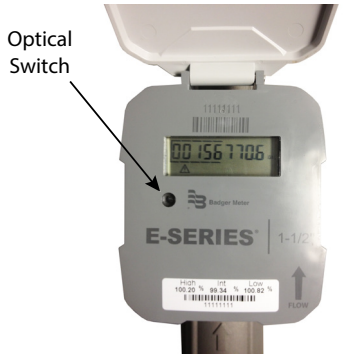
Meter Display

The Badger Meter E-Series Ultrasonic meters use a nine-digit Liquid Crystal Display (LCD) to show consumption, flow rate and alarm information. See the Status Indicators chart on *page 10* for detailed descriptions.



Activating the Display

The Ultrasonic meter's display illuminates when the register cover is opened. After a period of time, the display will revert to sleep mode. You can alternate the display between total flow and rate of flow mode by touching the optical display switch or by closing and opening the meter's lid. The optical switch is located just below the LCD on the left side of the register's face.



Unit of Measure

The unit of measure and resolution are factory programmed and options include gallons, cubic feet and cubic meters.

For 5/8…1 in. meters, totalized flow displays up to 10 million gallons with a resolution of 0.01 gallons, one million cubic feet with a resolution of 0.001 cubic feet or 100 thousand cubic meters with a resolution of 0.0001 cubic meters.

For the 1-1/2 in. and 2 in. meters, totalized flow displays up to 100 million gallons with a resolution of 0.1 gallons, 10 million cubic feet with a resolution of 0.01 cubic feet or one million cubic meters with a resolution of 0.001.

Rate of Flow

The rate of flow is factory programmed for either gallons per minute or meters cubed per hour, depending on the unit of measure selected. The LCD displays both the unit of measure and rate of flow. The rate of flow display also serves as the flow finder indicator. The rate of flow display is shown without leading zeros. When rate of flow is displayed it is updated every two seconds.

Flow Direction

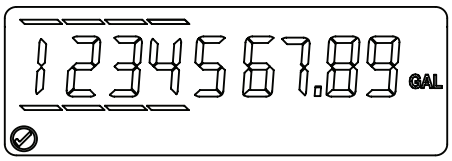
The direction of water flow is noted on the face of the electronics housing and cast into the meter housing.

Consumption

The consumption display includes all nine digits, including leading zeroes and a decimal point. The displayed value is the sum of the forward flow minus the reverse flow. This display also includes indicator lines above and below the digits to provide the electronic equivalent of white and black number wheels on mechanical registers. The following examples show typical displays for three different units of measure:

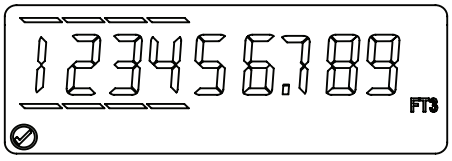
5/8 in., 3/4 in. and 1 in. Meters

Gallons



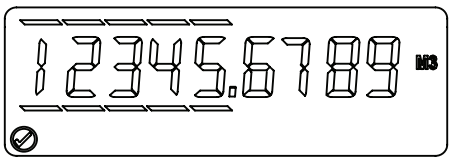
Meter reading to the nearest?	100th gallon =	1234567.89
	10th gallon =	1234567.8
	1 gallon =	1234567
	10 gallons =	123456
	100 gallons =	12345
Typical Billing Units →	1000 gallons =	1234

Cubic Feet



Meter reading to the nearest?	1000th ft³ =	123456.789
	100th ft³ =	123456.78
	10th ft³ =	123456.7
	1 ft³ =	123456
	10 ft³ =	12345
Typical Billing Units →	100 ft³ =	1234

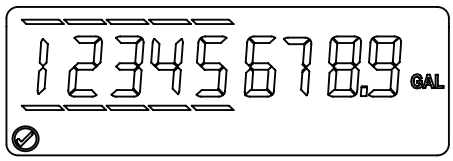
Cubic Meters



Meter reading to the nearest?	10000th m³ =	12345.6789
	1000th m³ =	12345.678
	100th m³ =	12345.67
	10th m³ =	12345.6
	1 m³ =	12345
Typical Billing Units →	10 m³ =	1234

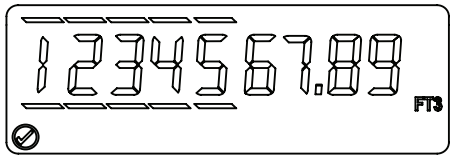
1-1/2 in. and 2 in. Meters

Gallons



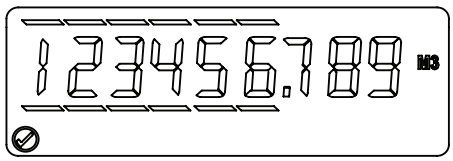
Meter reading to the nearest?	10th gallon =	12345678.9
	1 gallon =	12345678
	10 gallons =	1234567
	100 gallons =	123456
Typical Billing Units →	1000 gallons =	12345

Cubic Feet



Meter reading to the nearest?	100th ft³ =	1234567.89
	10th ft³ =	1234567.8
	1 ft³ =	1234567
	10 ft³ =	123456
Typical Billing Units →	100 ft³ =	12345

Cubic Meters



Meter reading to the nearest?	1000th m³ =	1234567.89
	100th m³ =	1234567.8
	10th m³ =	1234567
	1 m³ =	123456
Typical Billing Units →	10 m³ =	12345