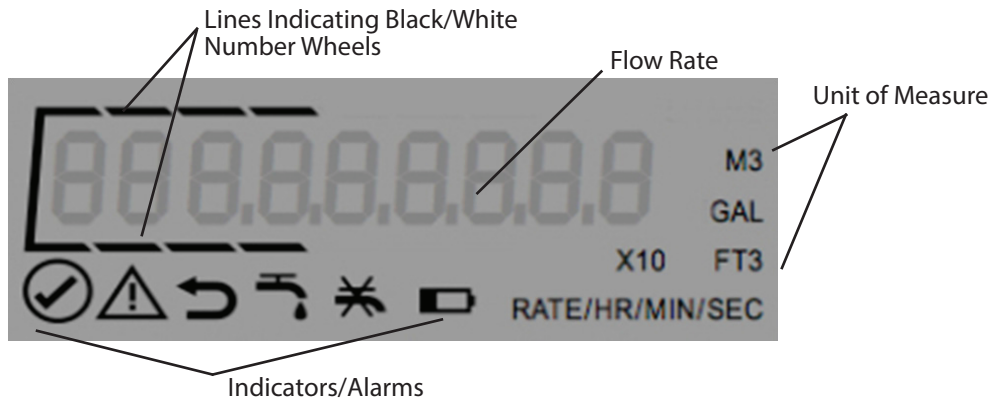


## E-SERIES ULTRASONIC METER OPERATIONS

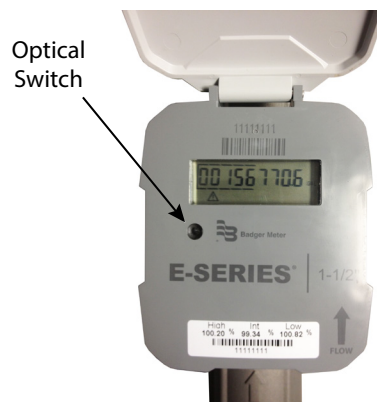
### Meter Display

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 13 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" through 1" 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" and 2" 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", 3/4" and 1" Meters

|   |   |   |   |   |   |    |   |   |
|---|---|---|---|---|---|----|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7. | 8 | 9 |
|---|---|---|---|---|---|----|---|---|

- Visual reading for typical consumption/billing purposes: 1234 thousands of gallons.
- Detailed meter reading with full display resolution: 1234567.89 gallons.

### 1-1/2" and 2" Meters

#### Gallons

|   |   |   |   |   |   |   |    |   |
|---|---|---|---|---|---|---|----|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8. | 9 |
|---|---|---|---|---|---|---|----|---|

- Visual reading for typical consumption/billing purposes: 12345 thousands of gallons.
- Detailed meter reading with full display resolution: 12345678.9 gallons.

#### Cubic Feet

|   |   |   |   |   |    |   |   |   |
|---|---|---|---|---|----|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6. | 7 | 8 | 9 |
|---|---|---|---|---|----|---|---|---|

- Visual reading for typical consumption/billing purposes: 1234 hundreds of cubic feet.
- Detailed meter reading with full display resolution: 123456.789 cubic feet.

|   |   |   |   |   |   |    |   |   |
|---|---|---|---|---|---|----|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7. | 8 | 9 |
|---|---|---|---|---|---|----|---|---|

- Visual reading for typical consumption/billing purposes: 12345 hundreds of cubic feet.
- Detailed meter reading with full display resolution: 1234567.89 cubic feet.

#### Cubic Meters

|   |   |   |   |    |   |   |   |   |
|---|---|---|---|----|---|---|---|---|
| 1 | 2 | 3 | 4 | 5. | 6 | 7 | 8 | 9 |
|---|---|---|---|----|---|---|---|---|

- Visual reading for typical consumption/billing purposes: 12345 cubic meters.
- Detailed meter reading with full display resolution: 12345.6789 cubic meters.

|   |   |   |   |   |    |   |   |   |
|---|---|---|---|---|----|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6. | 7 | 8 | 9 |
|---|---|---|---|---|----|---|---|---|

- Visual reading for typical consumption/billing purposes: 12345 cubic meters.
- Detailed meter reading with full display resolution: 123456.789 cubic meters.