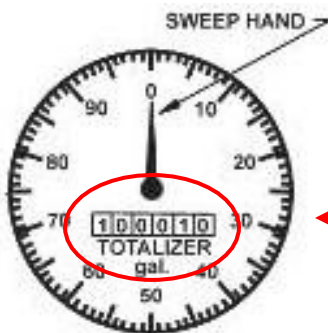


## The Basics: How to Read Your Meter (For mechanical meters)

### SWEEP HANDS VS. FLOW RATE INDICATOR:

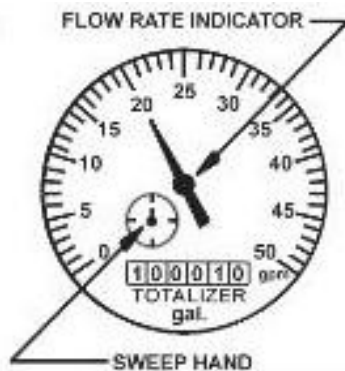
Not all meters have a flow rate indicator. Some meters only display the volume of water, while others display both the flow rate and the volume.

1. A meter may have a sweep hand. This is similar to the minute hand of a clock. In the example below, once the sweep hand has made one full revolution around the dial, it indicates that 100 gallons have passed through the meter. The numbers in the register, also known as the totalizer, will turn accordingly. In this case, the meter only shows the volume of water in gallons.



This is called a register or totalizer.

2. A meter may have a flow rate indicator hand. This works like a speedometer in a car. In the example below, 20 gallons per minute (gpm) are flowing through the meter. The register (totalizer) is displaying the volume in gallons. You will notice that this particular meter face also has a smaller sweep hand, which works just as described in the first example.



### REGISTER OR TOTALIZER:

Here are some examples of meters which show various register (totalizer) displays. This is much like the odometer in a car. As water passes through the meter, the numbers will spin on the dial.



Again, this is called the register or totalizer.

This meter has a flow rate indicator hand, which reads in gallons per minute. The register reads in "gallons X 100." The reading on this meter is: 916,026 gallons X 100 or 91,602,600 gallons.



This meter has a flow rate indicator hand, which also reads in gallons per minute. The register reads in "acre feet X .001." The reading on this meter is: 679,675 acre feet X .001 or 679.675 acre feet.



For those meters with a sweep arm, sometimes the last number(s) of the odometer are non-rotating or printed on the dial face. The fixed zero number(s) are represented by the rotating sweep hand.

In the meter shown above, there is one fixed number in the register (in blue). This meter has a 10 gallon sweep, so one rotation of the hand represents 10 gallons. The fixed number (and the black tile to the left of it) represents units of 10.

In this example, the sweep hand is 3 tick marks past 8. This meter's register shows a reading of 8.3 gallons. Notice the black "1" on the odometer has not yet fully turned over, so the red hand is read in its place.

Register or Totalizer shows:

1	2	3	4	5	6	0
---	---	---	---	---	---	---

Gallons

Readings (Gallons)

1,234,560

1	2	3	4	5	6
---	---	---	---	---	---

Gallons X 100

123,456 x 100 or 12,345,600

1	2	3	4	5	6
---	---	---	---	---	---

X 100 Gallons

123,456 x 100 or 12,345,600

Here is a link to examples of other registers and how to read them:

[http://www.mastermeter.com/images/documents/How\\_to\\_Read\\_a\\_Meter\\_Register\\_3\\_8687.pdf](http://www.mastermeter.com/images/documents/How_to_Read_a_Meter_Register_3_8687.pdf)

There are many types of meters on the market. Each one may have different designs, units of measure, or multipliers. If you have questions about how to read your meter, contact your regional metering coordinator. You may need to provide a picture of the face of the meter or additional information about the meter.