

Reading and Interpreting Your Water Meter



A General Guideline

Water meters are typically installed indoors as they are subject to freezing in cooler temperatures. There are several models of water meters so you will need to determine what meter you have to read the information.

Activating and Reading the MACH 10)R900i

The water meter display is activated by light. If the water meter is in a dark area you will need to shine a light on the meter to activate it. If the display remains blank contact the RDEK Utilities Department.



The LCD display will flash between the total consumption, temperature and the flow rate per minute.

This is the most common display of the total consumption on a residential meter, note that some meters may have fewer or more digits.



Table 9 – MACH 10® Icons and Displays

Icon	Description	Status	Explanation
Leak 	Icon used to indicate a period of continuous flow. Continuous flow status is determined by keeping track of the number of 15-minute intervals where the volume consumption exceeds Vmin in the previous 24-hour period. Vmin is factory programmed depending on meter size. It is defined as a change of the ninth digit on the LCD.	OFF	Water use has occurred in less than 50 15-minute intervals during the last 24-hour period.
		Flashing	Intermittent flow indicates that water has been used in at least 50 of the 96 15-minute intervals during the previous 24-hour period.
		ON	Indicates water use for all 96 of the 15-minute intervals during the previous 24-hour period.
Reverse and forward flow 	Icons used to indicate the reverse and forward direction of flow.	OFF	No flow is detected.
		ON	The meter has detected flow in either direction.
Excessive flow warning 	Icons used to indicate higher than normal flow conditions where the meter is incapable of measuring water use.	OFF	Flow is operating below maximum flow rate within normal flow range specifications
		ON	Flow has exceeded the maximum flow rate specification for at least 60 seconds.
Empty pipe 	Icon used to indicate a condition where the meter is incapable of measuring water use.	OFF	Meter condition is acceptable for typical operation.
		ON	Indicates less than full pipe or the presence of air in the meter for at least 60 seconds.
Battery status 	Icon used to indicate battery life of the meter.	OFF	Battery life normal.
		ON	Battery life has less than one year remaining.
		FLASHING	Battery beyond expected life; replace meter immediately.

Activating and Reading the E-Coder)R900i

The water meter display is activated by light. If the water meter is in a dark area you will need to shine a light on the meter to activate it. If the display remains blank contact the RDEK Utilities Department.

The light sensor is recessed under the small round hole near the center of the dial face. The hole is marked with a flashlight graphic.



If your water meter does not have the light fixture as shown above and has a stem coming off the face of the meter shine a light on the stem like below:



E-Coder)R900i Icons and Displays



Light Sensor, recessed under the small hole near the center of the faceplate.



Flow Indicator, shows the direction of the water flow through the meter.

- ON** Water in use.
- OFF** Water not in use.
- Flashing** Water is running slowly/flow indication.



Leak Indicator, displays a possible leak.

OFF No leak indicated.

Flashing Intermittent leak indicated. Water used during at least ½ of the 15-minute intervals in the last 24 hours (96 15-minute intervals in a 24-hour period).

Continuous ON Continuous leak indicated. Water used all 15-minute intervals in the last 24 hours.



Nine-digit LCD Display, displays the meters total consumption. In cubic meters (m³).

- Last three digits are the testing units used for meter testing.
- Fifth and sixth digits are reading units.
- First four digits are typically the billing digits.

***If your LCD has a decimal place the digits to the left of the decimal are the billing digits.*

Common Causes of Leaks

The most common causes of leaks are toilets and faucets although any device that uses water can eventually leak.

Possible Leaks

Possible Cause of Leak	Intermittent Leak	Continuous Leak
Indoor Faucet	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Toilet Flapper Stuck Open (Toilet Running)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Toilet Valve Not Sealed Properly	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Outside Faucet, Garden or Sprinkler System	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ice Maker	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Soaker Hose In Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Leak Between the Water Meter and the House	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Washing Machine	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dishwasher	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hot Water Heater	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Watering For More Than 8 hrs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Continuous Pet Dish	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water Cooled Air Conditioner or Heat Pump	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Filling a Swimming Pool	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Any Continuous Use of Water for 24 hrs	<input type="checkbox"/>	<input checked="" type="checkbox"/>

How to Check for Leaks

It is important to keep in mind that many leaks go undetected as there is no evidence like a large puddle of water or sound of running water.

Checking for a Leak Using Your Water Meter

Put a couple drops of food coloring into the toilet tank. Wait 15 min and then look in the bowl of the toilet. If the water in the toilet bowl has changed colour you have a leak.

Using Your Water Meter to Check for a Leak

1. Turn off all taps and appliances that use water ie) dishwashers, washing machines, ice makers etc.
2. Check the LCD display of the water meter. If the meter is still registering flow you have a leak.