

evoQ₄ Electromagnetic meter

Sizes: 2" - 8"



Size:	2"	3"	4"	6"	8"
<u>Performance:</u>					
Starting flow GPM	0.2	0.4	0.6	2.4	4
Low flow GPM > 95%	0.25	0.6	0.88	3.3	5.2
Low flow GPM ± 0.75%	1	1	2	4	6
Max. continuous flow GPM ± 0.75%	220	550	880	1400	3500
Max. flow GPM ± 0.75%	220	550	880	1400	3500
Max. operating pressure psi	230	230	230	230	230

Materials

Body	Stainless steel grade 304
Flow tube	Stainless steel grade 316
Electrodes	Stainless steel grade 316
Flanges	Epoxy coated cast iron
Register	Stainless steel with glass cover
Register housing/lid	UV resistant plastic
Environmental class	IP68 hermetically sealed unit Waterproof to 30 ft depth

Features

10 year continuous life
No moving parts
0.5 second sampling rate
Wide measuring range
Simple installation
Pulse connectivity
AWWA lay lengths
IP68 sealed

Benefits

No need for costly, time consuming battery replacements
Maintenance free
Highest accuracy
Suitable for all commercial applications
No additional training required, no programming
Pre-equipped or retro-fitted for your AMR and telemetry needs
Simple changeout
Provides long, trouble-free life

The evoQ₄ is a single meter that meets the needs of traditional turbine, compound, single jet and mag meters.

Operation. The evoQ₄ is a battery powered electromagnetic water meter that is suitable for a wide range of metering applications. Using Faraday's law of Electromagnetic Induction, two magnets provide a magnetic field within the pipe that measures the flow of the conductive water. The evoQ₄ does not contain any moving parts so regular maintenance is not required. It is designed for 10 years of continuous operation with no battery changes necessary, and with a sampling rate of 0.5 sec, the evoQ₄ has excellent accuracy over a wide flow range, allowing the utility to use a single meter for turbine, compound, single jet and mag meter applications.

Application. The evoQ₄ is designed to work in both potable cold water and wastewater applications up to 120°F (50°C). The meter will register at ± 0.75% accuracy at normal and high flows and better than 95% accuracy at low flows. Wastewater applications include primary, secondary and tertiary applications. Accuracy tests are made before shipment, so no adjustments need to be made before installation.

Pulse output. The evoQ₄ can be fitted with a pulse output device that can be attached to an AMR device, data logger or SCADA system. The pulse output unit can be programmed in the factory to meet the needs of the utility.



Additionally, the pulse output device can be easily retro-fitted in the field if the evoQ₄ is not initially ordered with the pulse output feature.

Remote display. The evoQ₄ can be attached to a remote display. A two channelled output can provide both forward and reverse totals and be configured to display all 6 digits or only the billable units.

Connections. The evoQ₄ comes standard with AWWA C701 Class II Turbine meter lay lengths. The flanges are epoxy coated cast iron to reduce weight and prevent corrosion. The 2" evoQ₄ uses an oval flange and the 3"- 8" use a round flange. All flanges conform to ANSI B16.1 Class 125 standards. Allow for 5 pipe diameters of straight pipe upstream and 3 pipe diameters of straight pipe downstream for maximum performance.

LCD display. Bright, large and easy-to-read LCD display incorporating integrating volume and flow-rate for real-time network control and water management. Alarm functions provide real-time status ensuring no loss in measuring continuity. An IP68 seal ensures the meter electronics are safely protected thus ensuring long-term reliability.

Display functions. A low-battery indicator will appear when the battery voltage requirement is closing towards the end of its useful life. A no-water indicator will blink indicating an empty pipe, or when there is no water within the meter. The flow rate will be displayed in forward and reverse; if water is flowing in the reverse direction a minus sign will be displayed. The net volume of water measured will be displayed at all times.

2" - 4"
USG



2" - 4"
CuFt



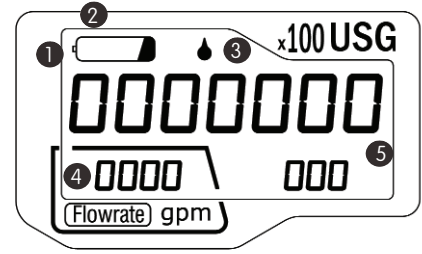
6" - 8"
USG



6" - 8"
CuFt

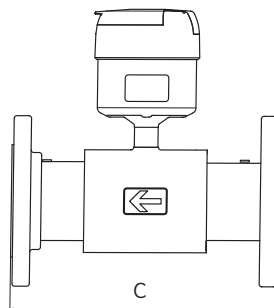
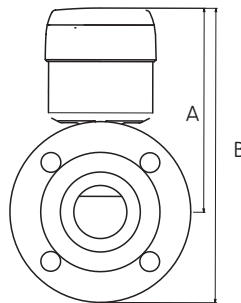


- 1 Low-battery. The indicator will blink when the meter has approximately 3 months working life remaining.
- 2 End-of-life-battery. Measurement stopped. The indicator will appear permanently when the meter life has expired. Data is stored for up to 9 months.
- 3 No-water. The indicator will blink when there is an empty pipe or no water in the meter.
- 4 Flow rate. If water is flowing in reverse direction a minus sign is displayed to the left of the values.
- 5 Net volume. Any reverse flow will be subtracted from the volume display. The decimal places are shown below the main billable units.



Dimensions & Net Weights

Meter Size	Dimensions (Inches)			Weight (lbs.)
	A	B	C	
2"	8.12	11.24	10	11
3"	8.52	12.27	12	22.5
4"	8.72	13.22	14	35.5
6"	9.82	15.32	18	55.5
8"	10.41	17.16	20	81.5



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evoQ₄/08-08