

evoQ₄™ Electromagnetic Meter - AL



Sizes 1.5" & 2" - AL

	Size	1.5"	2"
Performance			
Low flow GPM > 95%		0.5	0.5
Normal flow GPM ± 1.5%		2	2
Max. continuous flow GPM ± 1.5%		176	176
Max. flow GPM ± 1.5%		220	220
Max. operating pressure psi		150	150

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

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 hermitically sealed unit waterproof to 30 ft water depth

Features

- 10 year continuous life
- No moving parts
- 0.5 second sampling rate
- Wide measuring range
- Simple installation
- Pulse connectivity
- Compact design
- AWWA C700 lay lengths
- IP68 sealed

Benefits

- No need for costly and 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
- fits tight installation conditions
- Simple change out
- Provides long, trouble-free life

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 create a magnetic field within the pipe. The stainless steel electrodes sense the voltage change induced by the movement of conductive water through the meter.

The meter does not contain any moving parts, so regular maintenance is not required. The meter is designed for 10 years of continuous operation with no battery changes necessary. With the sampling rate of 0.5 sec, the evoQ₄ has excellent accuracy over a wide flow range.

Application

The meter is for use with potable cold water up to 120°F. The meter will typically register at 0.75% accuracy at normal and high flows and better than 95% accuracy at low flows. Accuracy tests are made before shipment, so no adjustments need to be made before installation.

Pulse or encoder output

The meter can be fitted with a pulse output device that can be attached to an AMR device or data logger. The pulse output can be programmed in the factory to meet the needs of the utility.



For utilities preferring encoded output technologies, an encoder module is available for interface with AMR systems.

Remote display

The meter can be attached to a remote display. A two-channelled output can provide both forward and reverse pulses.

Connections

The evoQ4 AL comes in AWWA C700 lay lengths to facilitate replacement of mid-size meters in a utilities network. The flanges are epoxy coated cast iron to reduce weight and prevent corrosion.

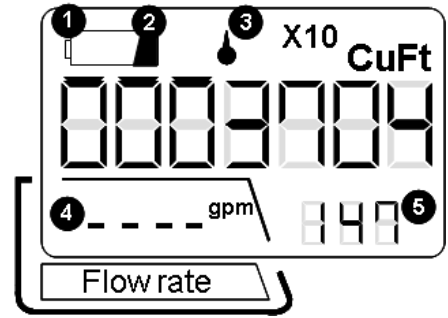
The AL version meters come with 2 bolt oval flanges. All flanges conform to ANSI B16.1 Class 125 standards. Allow for 5 pipe diameters of straight pipe upstream and 3 pipe diameters of straight pipe downstream for optimum performance. Deviations from optimal installation will still typically result in performance better than comparable mechanical meters.

LCD

Bright, large and easy-to-read LCD incorporating totalized volume and a reference flow-rate indicator. Alarm functions provide in-situ status ensuring no loss in measuring continuity. An IP68 seal ensures the meter electronics are safely protected thus ensuring long term reliability.

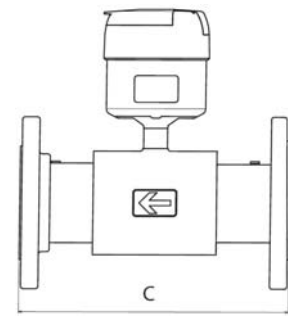
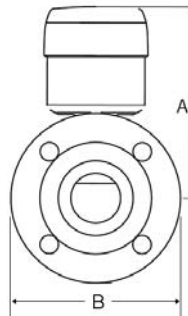
Display functions

- 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 value.
- 5 Net volume. Any reverse flow will be subtracted from the volume display. The decimal place is not shown.



X10 is shown in the upper right of the display for US Gallons registration.

Meter Size	Dimensions (inches)			Weight (lbs)
	A	B	C	
1.5" AL	8	6 1/4	13	9 1/2
2" AL1	8	6 1/4	15 1/4	10.0
2" AL2	8	6 1/4	17	10 1/2



Elster AMCO Water, Inc.
1100 SW 38th Avenue
Ocala, FL 34474 USA

T +1 800 874 0890 (US)
T +1 866 703 7582 (Canada)
T +1 787 872 2006 (Caribbean)
F +1 352 368 1950

evolution@us.elster.com
www.elsteramcowater.com

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