

evoQ₄ Electromagnetic Meter - AL Alternative Length

Size $1^{1}/_{2}''$ to 2''



The $evoQ_4$ is a single meter that meets the needs of traditional turbine, compound, single jet and electromagnetic meters.

Performance		(DN 40mm)		(DN 50mm)
> 95% Accuracy GPM (m3/hr)	0.5	(0.11)	0.5	(0.11)
98.5%-101.5% Accuracy GPM (m3/hr)	2	(0.5)	2	(0.5)
Maximum Flow GPM (m3/hr)	220	(50)	220	(50)
Max. Operating Pressure psi (kPa)	150	(10)	150	(10)

Materials

Body Stainless steel grade 304
Flow tube Stainless steel grade 316
Liner Polyethylene epoxy
Electrodes Stainless steel grade 316
Flanges Epoxy coated cast iron
Register Stainless steel with glass lens

Register housing/lid UV-resistant plastic

Environmental class IP68 hermetically sealed unit waterproof to 30 ft depth

Features Benefits

10 year continuous life No need for costly and time-consuming replacement

No moving parts Maintenance free 0.5 second sampling rate Highest accuracy

Wide measuring range Suitable for all commercial billing applications
Simple installation No additional training required, no programming

Pulse or encoder connectivity Pre-equipped or retrofitted for your AMR and telemetry needs

AWWA lay lengths Simple changeout

Provides long, trouble-free life NSF61 Annex G listed Zero lead contaminants

Operation

The $evoQ_4$ 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; two electrodes measure the induced voltage that is proportional to the flow of conductive water through the field in the pipe. Every 0.5 seconds the measurement is taken and the totalized volume is calculated and updated on the LCD display.

The meter is designed for 10 years of continuous operation with no battery changes necessary.

Application

The meter is for general 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 extended low flows. The ${\rm evoQ_4}$ product line is suited for metering utility customer services for potable water. With the addition of outputs described below, the meter can fulfill a number of distribution management roles as well.

Pulse or encoder output

The meter can be fitted with a pulse output device that can be attached to a radio transceiver module or a 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.







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Remote display

The meter can be fitted with a remote display. A two channeled output can provide both forward and reverse pulses.

Connections

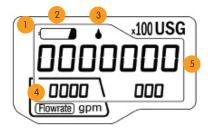
The evoQ4 AL comes in AWWA C700/C712 meter lay lengths. The oval flanges are epoxy coated cast iron to reduce weight and prevent corrosion and conform to ANSI B16.1 Class 125 standards. Allow for 5 pipe diameters of straight pipe upstream and 3 pipe diameters of straight pipe downstream for optimum performance.

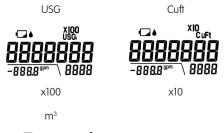
LCD

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 providing long term reliability.

Display functions

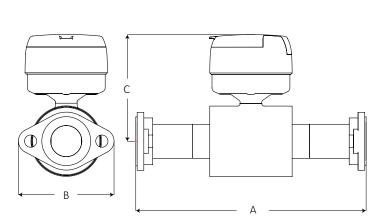
- **Low-Battery** The indicator blinks when the meter has approximately 3 months working life remaining.
- 2 End of Life Battery Measurement stopped. The indicator appears permanently when the meter life expires. Data is displayed for up to 9 months.
- 3 **No-Water** The indicator blinks when there is an empty pipe condition.
- 4 Flow Rate If water is flowing in the reverse direction a minus sign is displayed to the left of the value.
- 5 **Net Volume** Any reverse flow is subtracted from the volume display. The top line displays billable units with the multiplier shown in upper right corner. Measurement resolution is provided in the lower right for testing.





Dimensions and net weight

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	Meter Size	А		В		С		Weight		
		in	(mm)	in	(mm)	in	(mm)	lbs	(kg)	
	1 1/2"	13	330	6 1/4	158.8	8	203.2	10	4.5	
	2" AL3	10	250	6 1/4	158.8	8	203.2	10	4.0	
	2" AL1	15 ¹ / ₄	400	6 1/4	158.8	8	203.2	10	4.5	
	2" AL2	17	431	6 1/4	158.8	8	203.2	11	5	







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The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with applicable AWWA Standards.

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