

# evoQ<sub>4</sub> Electromagnetic Meter - AL Alternative Length

Size 1 1/2" to 2"

# **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  $120^{\circ}$ 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 evoQ<sub>4</sub> 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.

# Remote display

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

## Connections

The evoQ $_4$  AL comes in AWWA C700/C712 meterlay 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.



The evoQ<sub>4</sub> is a single meter that meets the needs of traditional turbine, compound, single jet and electromagnetic meters.

# FEATURES AND BENEFITS

10 year continuous life: No need for costly and timeconsuming 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.

IP68 sealed: Provides long, trouble-free life.

NSF61 Annex G listed: Zero lead contaminants.

### **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.

#### **Materials**

**Body:** Stainless steel grade 304 **Flow tube:** Stainless steel grade 316

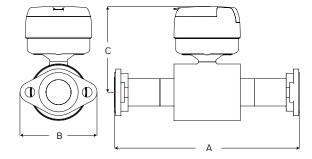
**Liner:** Polyethylene epoxy

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

# Dimensions and net weight

Meter Size	А		В		С		Weight	
	in	(mm)	in	(mm)	in	(mm)	lbs.	(kg.)
1 1/2"	13	(330)	6 1/4	(158.8)	6	(152)	10	(4.5)
2" AL3	10	(250)	6 1/4	(158.8)	6	(152)	10	(4.0)
2" AL1	15 1/4	(400)	6 1/4	(158.8)	6	(152)	10	(4.5)
2" AL2	17	(431)	6 1/4	(158.8)	6	(152)	11.5	(5.2)



# x100 USG 000000 Flowrate) gpm

#### Low-Battery

The indicator blinks when the meter has approximately 3 months working life remaining.

### **End of Life Battery**

Measurement stopped. The indicator appears permanently when the meter life expires. Data is displayed for up to 9 months.

#### No-Water

The indicator blinks when there is an empty pipe condition.

#### Flow Rate

If water is flowing in the reverse direction a minus sign is displayed to the left of the value.

#### **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.



Performance	1 1/2"	(DN 40mm)	2"	(DN 50mm)
> 95% Accuracy GPM (m³/h)	0.5	(0.11)	0.5	(0.11)
98.5%-101.5% Accuracy GPM (m³/h)	2	(0.5)	2	(0.5)
Maximum flow GPM (m <sup>3</sup> /h)	220	(50)	220	(50)
Max. Operating Pressure psi (kPa)	150	(10)	150	(10)

### **Find Out More**

WaterMeters@honeywell.com www.elsteramcowater.com

# **Honeywell Smart Energy**

10 SW 49th Avenue, Bldg. 100 Ocala, FL 34474 T+1 800 874 0890 F+1 352 368 1950

1100 Walker's Line, Suite 302 Burlington, Ontario L7N 2G3 T 866 703 7582 F 905 634 6705 www.HoneywellSmartEnergy.com



