

RotoFlo

Electromechanical irrigation flow meter

- Low cost of ownership
- Single moving part design
- Irrigation rotor meter



Low cost
groundwater
meter



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Water Monitoring Solutions

RotoFlo

Electromechanical Flow Meter

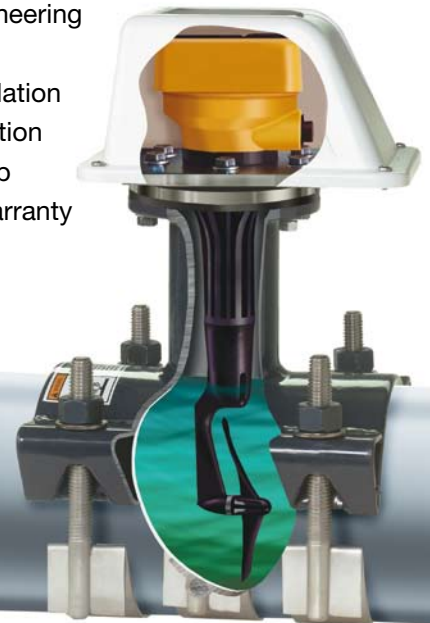
The MACE RotoFlo has been developed specifically for irrigation applications where a flow meter with low-cost of ownership is desirable. The RotoFlo provides accurate, repeatable data with a simple, single moving part design. Whether you're measuring water flow for enhanced management capabilities or to ensure regulatory compliance, the MACE RotoFlo gives you the advanced accuracy you need, without the headaches of conventional propeller flow meters.

As the rotor passes the base of the unit, an electromagnetic signal is transmitted from the rotor tip directly to the sealed pickup within the sensor. Based on this data the RotoFlo calculates and displays, flow rate and total flow.

The RotoFlo features innovative rotor design, snap-on rotor replacement (no special tools required!), tamper-proof mounting, pulse output and only a single moving part that all combine to create the RotoFlo's remarkably low cost of ownership.

Features and benefits:

- Patented, innovative ceramic bearing
- Advanced digital engineering
- Field-friendly design
- Fast and simple installation
- Ready, reliable calibration
- Low-cost of ownership
- Exclusive two-year warranty



ROTOFLO SPECIFICATIONS

TOTALIZER SPECIFICATION

Outer Enclosure:

Dimensions: 217 x 179 x 110 mm
Case material: Acrylic/PVC and cold-roll steel galvanised.

Totaliser Enclosure:

Dimensions: 96.5 x 96.5 x 50.8 mm
Environmental rating: IP65
Enclosure material: PBT resin
Keypad material: Sealed 4-key silicon rubber

Weight: 1.6 kg

Environmental:

Operating temperature: -5 to +65 degrees Celsius
Storage temperature: -15 to +80 degrees Celsius

Caution: Do not exceed storage temperature to prevent battery failure

Display:

LCD type: 4-digit upper line: hours accumulation
8-digit lower line: volume totalizer count
Contrast: Automatic
Low battery indication: Battery symbol appears on LCD display

Power:

Two AA 3.6 volt Lithium thionyl chloride batteries
Power output for sensor: +3.6 VDC @ 20 uA
Battery life: 2 years

Fluid Conditions:

Agriculture sensor maximum pressure/temperature ratings:
1034 kPa max @ 20 degrees Celsius
220 kPa max @ 60 degrees Celsius

SENSOR SPECIFICATION

Rotor diameter: 125 mm diameter

Weight: 1.4 kg

Wetted materials:

Sensor body: PC/PBT alloy
Prop assembly: PC/PBT alloy and acetal
Sensor flange: A-36 cold roll steel with galvanized coating
Sensor gasket: Poron cellular urethane
Rotor bearing and face seal: Ceramic/316 SS

Electrical:

Supply voltage: 3.5 to 27 VDC
Supply current: <20 uA with sensor powered with 3.5-5 VDC
<3 mA with sensor powered with 5-27 VDC
Signal Output: Open collector transistor, sink, max. pullup voltage 27 VDC (transistor normally off)

Max. Open-collector current out: 20 mA
Output pulse width: 3 msec. nominal

Operating velocity range: 0.3 to 6 m/s

Typical flow rates:

150 mm: 0.005 to 0.10 kl/s
200 mm: 0.01 to 0.20 kl/s
250 mm: 0.015 to 0.30 kl/s
300 mm: 0.02 to 0.45 kl/s

Accuracy: +/-2% of reading

Repeatability: +/-0.5% of max. range

Pipe size range: 150, 200, 250, and 300 mm

Cable: 2-conductor shielded twisted pair up to 30 m long

NOTE TO END USERS:

THESE SPECIFICATIONS ARE SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTICE. MACE TAKES NO RESPONSIBILITY FOR THE USE OF THESE FIGURES. PLEASE CONSULT MACE FOR THE LATEST SPECIFICATIONS BEFORE USING THEM IN TENDER SUBMISSIONS OR THIRD PARTY QUOTES ETC. MACE RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT PRIOR WARNING. ALL QUOTED FIGURES ARE BASED ON TEST CONDITIONS AND ARE SUBJECT TO VARIATION DUE TO SITE CONDITIONS.

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