Proline Promag W 10 electromagnetic flowmeter

Flowmeter for basic water and wastewater applications with easy-to-use operation concept



More information and current pricing: www.endress.com/5WBB

Benefits:

- Reliable measurement at constant accuracy with 0 x DN inlet run without pressure loss
- Flexible engineering sensor with fixed or lap-joint process connections
- Application fitness EN ISO 12944 corrosion protection for underground or underwater installation
- Improved plant availability sensor compliant with industry-specific requirements
- Optimum usability operation with mobile devices and SmartBlue app or display with touch screen
- Simple, time-saving commissioning guided parameterization in advance and in the field
- Integrated verification Heartbeat Technology

Specs at a glance

- Max. measurement error Volume flow (standard): ±0.5 % o.r. ± 1 mm/s (0.04 in/s)
- Measuring range 9 dm³/min to 162 000 m³/h (2.5 gal/min to 100 000 gal/min)
- **Medium temperature range** Liner material hard rubber: 0 to +80 $^{\circ}$ C (+32 to +176 $^{\circ}$ F) Liner material polyurethane: –20 to +50 $^{\circ}$ C (– 4 to +122 °F) Liner material PTFE: -20 to +90 °C (-4 to +160°F)
- Max. process pressure PN 40, Class 300, 20K
- Wetted materials Liner material hard rubber: 0 to +80 °C (+32 to +176 °F) Liner material polyurethane: -20 to +50 °C (-4 to +122 m

°F) Liner material PTFE: -20 to +90 °C (-4 to +160 °F) Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022)

Field of application: Thanks to its international approvals (e.g. for drinking water), Promag W serves a wide variety of applications. It is available as both compact or remote version. With its straightforward hard- and software design, Promag W 10 simplifies every step in its life cycle from engineering to servicing at usual Endress+Hauser quality. Heartbeat Technology ensures measurement reliability and compliant verification.

Features and specifications

Liquids

Measuring principle

Electromagnetic

Product headline

Flowmeter for basic water and wastewater applications with easy-to-use operation concept.

Reliable measurement at constant accuracy with $0 \times DN$ inlet run without pressure loss.

Suitable for elementary measurement tasks such as raw water intake.

Sensor features

Flexible engineering – sensor with fixed or lap-joint process connections. Application fitness – EN ISO 12944 corrosion protection for underground or underwater installation. Improved plant availability – sensor compliant with industry-specific requirements.

International drinking water approvals. Degree of protection IP68 (Type 6P enclosure). International drinking water approvals. Installation length: DVGW/ISO conform.

Liquids

Transmitter features

Optimum usability – operation with mobile devices and SmartBlue app or display with touch screen. Simple, time-saving commissioning – guided parameterization in advance and in the field. Integrated verification – Heartbeat Technology.

System integration with HART, Modbus RS485. Flexible operation with app and optional display.

Nominal diameter range

DN 25 to 2400 (1 to 90")

Wetted materials

Liner material hard rubber: 0 to $+80 \,^{\circ}\text{C}$ (+32 to +176 $^{\circ}\text{F}$) Liner material polyurethane: $-20 \, \text{to} +50 \,^{\circ}\text{C}$ ($-4 \, \text{to} +122 \,^{\circ}\text{F}$)

Liner material PTFE: $-20 \text{ to } +90 \,^{\circ}\text{C} \, (-4 \text{ to } +160 \,^{\circ}\text{F})$

Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022)

Measured variables

Volume flow, conductivity, mass flow

Max. measurement error

Volume flow (standard): ± 0.5 % o.r. ± 1 mm/s (0.04 in/s)

Measuring range

9 dm³/min to 162 000 m³/h (2.5 gal/min to 100 000 gal/min)

Max. process pressure

PN 40, Class 300, 20K

Medium temperature range

Liner material hard rubber: 0 to +80 $^{\circ}$ C (+32 to +176 $^{\circ}$ F) Liner material polyurethane: -20 to +50 $^{\circ}$ C (-4 to +122 $^{\circ}$ F)

Liner material PTFE: $-20 \text{ to } +90 \,^{\circ}\text{C} (-4 \text{ to } +160 \,^{\circ}\text{F})$

Ambient temperature range

-40 to 60°C (-40 to 140°F)

Liquids

Sensor housing material

DN 25 to 300 (1 to 12"): AlSi10Mg, coated

DN 350 to 2000 (14 to 78"): Carbon steel with protective varnish

Transmitter housing material

Polycarbonat; AlSi10Mq, coated

Degree of protection

Compact version: IP66/67, type 4X enclosure

Sensor remote version (standard): IP66/67, type 4X enclosure

Sensor remote version (option): IP68, type 6P enclosure, with protective

varnish according to EN ISO 12944 C5-M/Im1/Im2/Im3

Display/Operation

LCD display with touch & auto rotate

Outputs

4-20 mA HART (active/passive), Pulse/frequency/switch output Modbus RS485, 4-20 mA

Digital communication

HART, MODBUS RS485

Power supply

DC 24 V

AC 100 to 230 V

AC 100 to 230 V / DC 24 V (non-hazardous area)

Hazardous area approvals

CSA, GP

Metrological approvals and certificates

Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025)

Heartbeat Technology complies with the requirements for measurement traceability according to ISO 9001:2015 – Section 7.1.5.2 a (TÜV SÜD attestation)

Liquids

Pressure approvals and certificates

CRN, PED

Material certificates

3.1 material

Hygienic approvals and certificates

Drinking water approvals: ACS, KTW/W270, NSF 61, WRAS BS 6920

More information www.endress.com/5WBB