# 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** 0.5 m3/h to 263000 m3/h (2.5gal/min to 1665 Mgal/d)
- **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 3000(1 to 120")

#### 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):  $\pm 0.5$  % o.r.  $\pm 1$  mm/s (0.04 in/s)

#### Measuring range

0.5 m<sup>3</sup>/h to 263000 m<sup>3</sup>/h (2.5gal/min to 1665 Mgal/d)

# Max. process pressure

PN 40, Class 300, 20K

### Medium temperature range

Liner material hard rubber: 0 to +80 °C (+32 to +176 °F) Liner material polyurethane: -20 to +50 °C (-4 to +122 °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