## Proline Promag P 10 electromagnetic flowmeter

# Flowmeter for basic process applications with easy-to-use operation concept

## **Benefits:**

- Diverse applications wide variety of wetted materials
- Energy-saving flow measurement no pressure loss due to cross section constriction
- Maintenance-free no moving parts
- 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 4 dm<sup>3</sup>/min to 9600 m<sup>3</sup>/h (1 gal/min to 44 000 gal/min)
- Medium temperature range Liner material PFA: -20 to +150 °C (-4 to +302 °F) Liner material PTFE: -40 to +130 °C (-40 to +266 °F)
- Max. process pressure PN 40, Class 300, 20K
- Wetted materials Liner: PFA; PTFE Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022); Tantalum; Platinum; Titanium

**Field of application:** Promag P is dedicated to chemical and process applications with corrosive liquids and high medium temperatures. With its straightforward hard- and software design, Promag P 10 simplifies every step in its life cycle from engineering to servicing at usual Endress+Hauser quality. Heartbeat Technology ensures safe processes.





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

## Features and specifications

Measuring principle

Electromagnetic

#### **Product headline**

Flowmeter for basic process applications with easy-to-use operation concept.

Dedicated to chemical and process applications with corrosive liquids.

#### Sensor features

Diverse applications – wide variety of wetted materials. Energy-saving flow measurement – no pressure loss due to cross section constriction. Maintenance-free – no moving parts.

Nominal diameter: max. DN 600 (24"). All common Ex approvals. Liner made of PTFE or PFA.

#### **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 15 to 600 (1/2 to 24")

#### Wetted materials

Liner: PFA; PTFE Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022); Tantalum; Platinum; Titanium

#### 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)

## Liquids

#### Measuring range

4 dm<sup>3</sup>/min to 9600 m<sup>3</sup>/h (1 gal/min to 44 000 gal/min)

#### Max. process pressure

PN 40, Class 300, 20K

#### Medium temperature range

Liner material PFA: -20 to +150 °C (-4 to +302 °F) Liner material PTFE: -40 to +130 °C (-40 to +266 °F)

#### Ambient temperature range

Flange material carbon steel: -10 to +60 °C (+14 to +140 °F) Flange material stainless steel: -40 to +60 °C (-40 to +140 °F)

#### Sensor housing material

DN 15 to 300 (1/2 to 12"): AlSi10Mg, coated DN 350 to 600 (14 to 24"): Carbon steel with protective varnish

#### Transmitter housing material

AlSi10Mg, coated

#### Degree of protection

Standard: IP66/67, Type 4X enclosure

#### **Display/Operation**

2.4" LCD display with touch & auto rotate; Configuration and operation via SmartBlue App (Bluetooth) possible

#### 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)

## Liquids

#### Hazardous area approvals

ATEX, IECEx, cCSAus, EAC, NEPSI, INMETRO, JPN, UK Ex

#### 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)

Pressure approvals and certificates PED, CRN

## Material certificates

3.1 material

#### Hygienic approvals and certificates

Driking water approvals: ACS; NSF61, WRAS

More information www.endress.com/5PBB

