

# Proline Promag H 200 electromagnetic flowmeter

## Flowmeter for smallest flow rates with genuine loop-powered technology



More information and current pricing:

[www.de.endress.com/5H2B](http://www.de.endress.com/5H2B)

### Benefits:

- Flexible installation concept – numerous hygienic process connections
- Energy-saving flow measurement – no pressure loss due to cross-section constriction
- Maintenance-free – no moving parts
- Convenient device wiring – separate connection compartment
- Safe operation – no need to open the device due to display with touch control, background lighting
- Integrated verification – Heartbeat Technology

### Specs at a glance

- **Max. measurement error** Volume flow:  $\pm 0.5\%$  o.r.  $\pm 2$  mm/s (0.08 in/s)
- **Measuring range** 0.06 dm<sup>3</sup>/min to 300 m<sup>3</sup>/h (0.015 to 80 gal/min)
- **Medium temperature range**  $-20$  to  $+150$  °C ( $-4$  to  $+302$  °F)
- **Max. process pressure** PN 40, Class 150, 20K
- **Wetted materials** Liner: PFA Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022); Tantalum; Platinum Process Connections: stainless steel, 1.4404 (F316L); PVDF; PVC adhesive sleeve Seals: O-ring seal (EPDM, FKM, Kalrez), aseptic molded seal (EPDM, FKM, silicone) Grounding Rings: stainless steel, 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022); tantalum

**Field of application:** Promag H is the preferred sensor for applications with highest requirements in the chemical and life sciences industries. With its genuine loop-powered technology, Promag H 200 enables cost-effective and seamless integration into existing infrastructures. It offers highest operational safety in hazardous areas thanks to its intrinsically

safe design (Ex ia). Heartbeat Technology ensures process safety at all times.

## Features and specifications

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### Liquids

#### **Measuring principle**

Electromagnetic

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#### **Product headline**

Flowmeter for smallest flow rates with genuine loop-powered technology.

Dedicated to the measurement of the smallest flow quantities.

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#### **Sensor features**

Flexible installation concept – numerous process connections. Energy-saving flow measurement – no pressure loss due to cross section constriction. Maintenance-free – no moving parts.

Liner made of PFA. Sensor housing made of stainless steel. Various electrode materials available.

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#### **Transmitter features**

Convenient device wiring – separate connection compartment. Safe operation – no need to open the device due to display with touch control, background lighting. Integrated verification – Heartbeat Technology. Loop-powered technology. Robust dual-compartment housing. Plant safety: worldwide approvals (SIL, Haz. area).

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#### **Nominal diameter range**

DN 2 to 25 ( $\frac{1}{12}$  to 1")

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## Liquids

### Wetted materials

Liner: PFA

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

Tantalum; Platinum

Process Connections: stainless steel, 1.4404 (F316L); PVDF; PVC adhesive sleeve

Seals: O-ring seal (EPDM, FKM, Kalrez), aseptic molded seal (EPDM, FKM, silicone)

Grounding Rings: stainless steel, 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022); tantalum

### Measured variables

Volume flow, mass flow

### Max. measurement error

Volume flow:  $\pm 0.5\%$  o.r.  $\pm 2$  mm/s (0.08 in/s)

### Measuring range

0.06 dm<sup>3</sup>/min to 300 m<sup>3</sup>/h (0.015 to 80 gal/min)

### Max. process pressure

PN 40, Class 150, 20K

### Medium temperature range

-20 to +150 °C (-4 to +302 °F)

### Ambient temperature range

-40 to +60 °C (-40 to +140 °F)

### Sensor housing material

1.4301 (304), corrosion resistant

### Transmitter housing material

AlSi10Mg, coated

### Degree of protection

IP66/67, type 4X enclosure

## Liquids

### Display/Operation

4-line backlit display with touch control (operation from outside)  
Configuration via local display and operating tools possible  
Remote display available

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### Outputs

4-20 mA HART (passive)  
Pulse/frequency/switch output (passive)

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### Inputs

None

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### Digital communication

HART, PROFIBUS PA, FOUNDATION Fieldbus

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### Power supply

DC 18 to 35 V (4-20 mA HART with/without pulse/frequency/switch output)

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### Hazardous area approvals

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

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### Product safety

CE, C-Tick

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### Functional safety

Functional safety according to IEC 61508, applicable in safety-relevant applications in accordance with IEC 61511

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### 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)

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### Pressure approvals and certificates

CRN

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Liquids

**Material certificates**

3.1 material

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