

Proline Promag P 200 electromagnetic flowmeter

The flowmeter for highest medium temperatures with genuine loop-powered technology



Benefits:

- Versatile applications – wide variety of wetted materials
- 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. ± 2 mm/s (0.08 in/s)
- **Measuring range** 4 dm³/min to 1100 m³/h (1 to 4850 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

Field of application: Promag P is dedicated to chemical and process applications with corrosive liquids and high medium temperatures. With genuine loop-powered technology, Promag P 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 enables process safety at all times.

Features and specifications

Liquids

Measuring principle

Electromagnetic

Product headline

The flowmeter for highest medium temperatures with genuine loop-powered technology.

Dedicated to chemical and process applications with corrosive liquids and high medium temperatures.

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 200 (8"). All common Ex approvals. Liner made of PTFE or PFA.

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).

Nominal diameter range

DN 15 to 200 (½ to 8")

Wetted materials

Liner: PFA; PTFE

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

Measured variables

Volume flow, mass flow

Max. measurement error

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

Liquids

Measuring range

4 dm³/min to 1100 m³/h (1 to 4850 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

AlSi10Mg, coated

Transmitter housing material

AlSi10Mg, coated

Degree of protection

IP66/67, type 4X enclosure

Display/Operation

4-line backlit display with touch control (operation from outside)

Configuration via local display and operating tools possible

Remote display available

Outputs

4-20 mA HART (passive)

Pulse/frequency/switch output (passive)

Inputs

None

Digital communication

HART, PROFIBUS PA, FOUNDATION Fieldbus

Liquids

Power supply

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

Hazardous area approvals

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

Other approvals and certificates

Product safety

CE, C-Tick

Functional safety

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

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

CRN, PED

Material certificates

3.1 material

Hygienic approvals and certificates

Drinking water approvals: ACS, NSF 61



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