Proline Promag P 100 electromagnetic flowmeter

The flowmeter for highest medium temperatures with an ultra-compact transmitter

More information and current pricing:
www.au.endress.com/5P1B

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
- Space-saving transmitter – full functionality on the smallest footprint
- Time-saving local operation without additional software and hardware – integrated web server
- 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) Volume flow (option): ±0.2 % o.r. ± 2 mm/s (0.08 in/s
- **Measuring range** 4 dm³/min to 9600 m³/h (1 to 44 000 gal/min)
- **Medium temperature range** Liner material PFA: –20 to +150 °C (–4 to +302 °F) Liner material PFA high - temperature: –20 to +180 °C (–4 to +356 °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 Duplex 1.4462 (UNS S31803)

Field of application: Promag P is dedicated to chemical and process applications with corrosive liquids and high medium temperatures. Its ultra-compact transmitter delivers full performance on the smallest

footprint and enables seamless system integration, making Promag P 100 the preferred choice for skid builders, equipment manufacturers and system integrators. Heartbeat Technology ensures compliance and process safety at all times.

Features and specifications

Liquids

Measuring principle
Electromagnetic

Product headline
The flowmeter for highest medium temperatures with an ultra-compact transmitter.
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 600 (24"). All common Ex approvals. Liner made of PTFE or PFA.

Transmitter features
Space - saving transmitter – full functionality on the smallest footprint. Time - saving local operation without additional software and hardware – integrated web server. Integrated verification – Heartbeat Technology. Robust, ultra-compact transmitter housing. Local display available.

Nominal diameter range
DN 15 to 600 (½ to 24")

Wetted materials
Liner: PFA, PTFE
Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022); Tantalum; Platinum; Titanium
Duplex 1.4462 (UNS S31803)

Liquids

Measured variables
Volume flow, conductivity, mass flow, corrected volume flow, corrected conductivity

Max. measurement error
Volume flow (standard): ±0.5 % o.r.± 1 mm/s (0.04 in/s)
Volume flow (option): ±0.2 % o.r. ± 2 mm/s (0.08 in/s

Measuring range
4 dm^3/min to 9600 m^3/h (1 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 PFA high - temperature: –20 to +180 °C (–4 to +356 °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 (½ to 12"): AlSi10Mg, coated
DN 350 to 600 (14 to 24"): Carbon steel with protective varnish

Transmitter housing material
AlSi10Mg, coated

Degree of protection
IP66/67, type 4X enclosure

Display/Operation
4 - line backlit display available (no local operation)
Configuration via web browser and operating tools possible

Liquids

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

Inputs
None

Digital communication
HART, PROFIBUS DP, Modbus RS485, EtherNet/IP, PROFINET

Power supply
DC 20 to 30 V

Hazardous area approvals
ATEX, IECEx, cCSAus, INMETRO

Other approvals and certificates

Product safety
CE, C-Tick

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)

Marine approvals and certificates
LR approval, DNV GL approval, ABS approval, BV approval

Pressure approvals and certificates
PED, CRN

Material certificates
3.1 material

Hygienic approvals and certificates
Drinking water approval: ACS, NSF 61, WRAS

More information **www.au.endress.com/5P1B**

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