Proline Promag H 100 electromagnetic flowmeter

The specialist for hygienic applications with an ultra-compact transmitter

More information and current pricing:
www.endress.com/5H1B

Benefits:

- Multivariable measurement for flow, temperature and conductivity
- Flexible installation concept – numerous hygienic process connections
- Energy-saving flow measurement – no pressure loss due to cross-section constriction
- 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
- Maintenance-free – no moving parts

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** 0.06 dm³/min to 600 m³/h (0.015 to 2650 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 hygienic applications with highest requirements in the food and beverage and life sciences industries. The ultra-compact transmitter provides full

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

Features and specifications

Liquids

Measuring principle

Electromagnetic

Product headline

Specialist for hygienic applications with an ultra-compact transmitter. Multivariable measurement of flow, temperature and conductivity. Dedicated to demanding applications in the food and beverage as well as in life sciences industries.

Sensor features

Flexible installation concept – numerous hygienic process connections. Energy-saving flow measurement – no pressure loss due to cross section constriction. Maintenance-free – no moving parts.
Integrated temperature measurement. Sensor housing made of stainless steel (3-A, EHEDG). Wetted materials CIP, SIP cleanable.

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. High degree of protection: IP69. Local display available.

Nominal diameter range

DN 2 to 150 (1/12 to 6")

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, temperature, 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

0.06 dm^3/min to 600 m^3/h (0.015 to 2650 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

Compact: AlSi10Mg, coated
Compact/ultra-compact: 1.4301 (304)

Liquids

Degree of protection
Standard: IP66/67, type 4X enclosure
Option: IP69

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

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, EAC

Product safety
CE, C-tick

Metrological approvals and certificates
Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025)
Heartbeat Verification: Heartbeat Technology complies with requirements for traceable verification according to ISO 9001:2008, chapter 7.6. a (TUV attestation)

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

Pressure approvals and certificates
PED, CRN

Liquids

Material certificates

3.1 material

Hygienic approvals and certificates

Sanitary approval: EHEDG, 3-A, liner and seals acc. to FDA, cGMP

More information **www.endress.com/5H1B**

Endress+Hauser AG
Switzerland

addresses.endress.com
info@endress.com