Proline Promag H 100 electromagnetic flowmeter

The specialist for hygienic applications with an ultra-compact transmitter

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

More information and current pricing: [www.endress.com/5H1B](http://www.endress.com/5H1B)
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 ensures 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**

**Transmitter features**

**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 dm³/min to 600 m³/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  
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| **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