Proline Promag H 300
electromagnetic flowmeter

Specialist for hygienic applications with a compact, easily accessible transmitter

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
- Full access to process and diagnostic information – numerous, freely combinable I/Os and Ethernet
- Reduced complexity and variety – freely configurable I/O functionality
- 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** 0.06 dm³/min to 600 m³/h (0.015 gal/min to 2 650 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. With its compact transmitter Promag H 300 offers a high flexibility in terms of operation and system integration: access from
one side, remote display and improved connectivity options. Heartbeat Technology ensures compliance and process safety at all times.

Features and specifications

**Liquids**

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**Product headline**

Specialist for hygienic applications with a compact, easily accessible transmitter.
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.
Liner made of PFA. Sensor housing made of stainless steel (3-A, EHEDG).

**Transmitter features**

Full access to process and diagnostic information – numerous, freely combinable I/Os and fieldbuses. Reduced complexity and variety – freely configurable I/O functionality. Integrated verification – Heartbeat Technology.
Wetted materials CIP, SIP cleanable. Compact hygienic dual-compartment housing with IP69 and up to 3 I/Os. Backlit display with touch control and WLAN access.

**Nominal diameter range**

DN 2 to 150 (¹⁄₁₂ to 6"
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 gal/min to 2 650 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; 1.4409 (CF3M) similar to 316L; stainless steel for hygenic transmitter design
### Liquids

#### Degree of protection
- IP66/67, type 4X enclosure
- IP69

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

#### Inputs
- Status input
- 4-20 mA input

#### Digital communication
- HART, PROFIBUS DP, PROFIBUS PA, FOUNDATION Fieldbus, Modbus
- RS485, PROFINET, PROFINET over Ethernet-APL, Ethernet/IP, OPC-UA

#### Power supply
- DC 24 V
- AC 100 to 230 V
- AC 100 to 230 V / DC 24 V (non-hazardous area)

#### Hazardous area approvals
- ATEX, IECEx, cCSAus, INMETRO, NEPSI, EAC, UK Ex

#### Product safety
- CE, C-tick, EAC marking

#### 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)
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More information [www.endress.com/5H3B](http://www.endress.com/5H3B)