Proline Promag H 300 electromagnetic flowmeter

Specialist for hygienic applications with a compact, easily accessible transmitter

More information and current pricing:
www.endress.com/5H3B

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 enables compliance and process safety at all times.

Features and specifications

Liquids

Measuring principle

Electromagnetic

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. Energy-saving flow measurement – no pressure loss due to cross section constriction. Maintenance-free – no moving parts.
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")

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 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; JPN, UK Ex, KC

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)

Liquids

Marine approvals and certificates

LR approval, DNV approval, ABS approval, BV approval

Pressure approvals and certificates

PED, CRN

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/5H3B**

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