

Proline Promag H 500

Medidor de vazão eletromagnético

O especialista para aplicações higiênicas, como versão remota com até 4 E/Ss



Mais informações e preço atual:

www.br.endress.com/5H5B

Benefícios:

- Medição multivariável para vazão, temperatura e condutividade
- Conceito de instalação flexível – diversas conexões de processo higiênicas
- Medição de vazão que economiza energia – sem perda de pressão devido à restrição da seção transversal
- Sem manutenção - sem peças móveis
- Acesso total a informações de processo e diagnóstico - diversas E/Ss livremente combináveis e fieldbus
- Reduzida complexidade e variedade - E/S com funcionalidade livremente configurável
- Verificação integrada - Heartbeat Technology

Especificações resumidas

- **Max. measurement error** Volume flow (standard): $\pm 0.5\%$ o.r. ± 1 mm/s (0.04 in/s) Volume flow (option) $\pm 0.2\%$ 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

Campo de aplicação: O Promag H é o sensor recomendado para aplicações higiênicas com altas especificações nas indústrias de alimentos e bebidas e life and sciences. Com seu inovador transmissor remoto, o Promag H 500 maximiza a flexibilidade de instalação e a segurança da operação em ambientes exigentes. A Heartbeat Technology assegura a conformidade e a segurança do processo em todos os momentos.

Características e especificações

Liquids

Measuring principle

Electromagnetic

Product headline

Specialist for hygienic applications, as remote version with up to 4 I/Os. 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). Wetted materials CIP, SIP cleanable.

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.

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): $\pm 0.5\%$ o.r. ± 1 mm/s (0.04 in/s)

Volume flow (option) $\pm 0.2\%$ 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

Sensor connection housing (standard): AlSi10Mg, coated

Sensor connection housing (option): 1.4301 (304); 1.4409 (CF3M),
similar to 316L

Transmitter housing material

AlSi10Mg, coated; 1.4409 (CF3M) similar to 316L; Polycarbonat

Liquids

Degree of protection

Sensor remote version (standard): IP66/67, type 4X enclosure
Sensor remote version (option): IP69. Transmitter remote version:
IP66/67, Type 4X enclosure

Display/Operation

4-line backlit display with touch control (operation from outside)
Configuration via local display and operating tools possible

Outputs

4 outputs:
4-20 mA HART (active/passive)
4-20 mA (active/passive)
Pulse/frequency/switch output (active/passive)
Relay output

Inputs

Status input
4-20 mA input

Digital communication

HART, PROFIBUS DP, PROFIBUS PA, FOUNDATION Fieldbus, Modbus
RS485, Profinet, 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

Liquids

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

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

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