Proline Promag P 500
Elektromagnetische flowmeter

Flowmeter voor hoge temperaturen voor procestoepassingen als versie met toegang op afstand met maximaal 4 I/O's

Meer informatie en actuele prijzen:
www.be.endress.com/5P5B

Voordelen:

- Diverse toepassingen – grote selectie aan materialen die in contact komen met het medium
- Energiebesparende flowmeting – geen drukverlies door vernauwing van de doorsnede
- Onderhoudsvrij – geen bewegende onderdelen
- Volledige toegang tot proces- en diagnose-informatie – talrijke, vrij te combineren I/O's en veldbussen
- Verminderde complexiteit en verscheidenheid – vrij configureerbare I/O-functionaliteit
- Geïntegreerde verificatie – Heartbeat Technology

Overzicht specificaties

- **Max. meetfout** 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** 4 dm³/min to 9600 m³/h (1 gal/min to 44 000 gal/min)
- **Medium temperature range** Liner material PFA: –20 to +150 °C (–4 to +302 °F) Liner material PFA high-temperature: –20 to +180 °C (–4 to +356 °F) Liner material PTFE: –40 to +130 °C (–40 to +266 °F)
- **Max. process pressure** PN 40, Class 300, 20K
- **Wetted materials** Liner: PFA; PTFE Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022); Tantalum; Platinum; Titanium; Duplex 1.4462 (UNS S31803)

Toepassingsgebied: De Promag P is bedoeld voor chemische en procestoepassingen met corrosieve vloeistoffen en zeer hoge mediumtemperaturen. Met zijn innovatieve transmitter op afstand optimaliseert de Promag P 500 installatieflexibiliteit en operationele veiligheid in veeleisende omgevingen. Heartbeat Technology waarborgt de compatibiliteit en de procesveiligheid.

Kenmerken en specificaties

Liquids

Meetprincipe

Electromagnetic

Product headline

High-temperature flowmeter for process applications as remote version with up to 4 I/Os.
Dedicated to chemical and process applications with corrosive liquids and high medium temperatures.

Sensor features

Diverse applications – wide variety of wetted materials. Energy - saving flow measurement – no pressure loss due to cross section constriction. Maintenance - free – no moving parts.
Nominal diameter: max. DN 600 (24"). All common Ex approvals. Liner made of PTFE or PFA.

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.
Remote version with up to 4 I/Os. Backlit display with touch control and WLAN access. Standard cable between sensor and transmitter.

Nominal diameter range

DN 15 to 600 (½ to 24")

Liquids

Wetted materials

Liner: PFA; PTFE
Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022); Tantalum; Platinum;
Titanium; Duplex 1.4462 (UNS S31803)

Measured variables

Volume flow, conductivity, mass flow

Max. meetfout

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

4 dm^3/min to 9600 m^3/h (1 gal/min to 44 000 gal/min)

Max. process pressure

PN 40, Class 300, 20K

Medium temperature range

Liner material PFA: −20 to +150 °C (−4 to +302 °F)
Liner material PFA high-temperature: −20 to +180 °C (−4 to +356 °F)
Liner material PTFE: −40 to +130 °C (−40 to +266 °F)

Ambient temperature range

Flange material carbon steel: −10 to +60 °C (+14 to +140 °F)
Flange material stainless steel: −40 to +60 °C (−40 to +140 °F)

Sensor housing material

DN 15 to 300 (½ to 12"): AlSi10Mg, coated
DN 350 to 600 (14 to 24"): Carbon steel with protective varnish
Sensor connection housing (standard): AlSi10Mg, coated
Sensor connection housing (option): 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
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 WirelessHART
4-20 mA (active/passive)
Pulse/frequency/switch output (active/passive)
Double pulse 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; JPN, 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

ACS, NSF 61, WRAS

Meer informatie **www.be.endress.com/5P5B**