

전자 유량계

Proline Promag P 300

컴팩트하고 접근이 용이한 트랜스미터가 장착된 프로세스 어플리케이션용 고온 유량계



추가 정보 및 현재 가격:

www.kr.endress.com/5P3B

장점:

- 다양한 용도 - 다양한 접액부 재질
- 에너지 절약형 유량 측정 - 교차부 수축으로 압력 손실이 없음
- 유지보수 불필요 - 구동부가 없음
- 완전한 프로세스 및 진단 정보 액세스 - I/O와 Fieldbus를 자유롭게 결합
- 복잡성 및 변동성 최소화 - I/O 기능의 자유로운 구성
- 통합/자가 검증 - 하트비트(Heartbeat) 기술

사양 정보

- **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** 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 (F316L); Alloy C22, 2.4602 (UNS N06022); Tantalum; Platinum; Titanium

적용 분야: Promag P는 부식성 액체와 고온 유체를 사용하는 화학 및 프로세스 어플리케이션을 위한 유량계입니다. 컴팩트한 트랜스미터가 장착된 Promag P 300은 한쪽 액세스, 원격 디스플레이, 향상된 연결 옵션 등 작동과 시스템 통합 측면에서 매우 유연합니다. 또한 하트비트(Heartbeat) 기술을 통해 지속적으로 규정 준수와 프로세스 안전을 보장합니다.

특징 및 사양

Liquids

측정 원리

Electromagnetic

Product headline

High-temperature flowmeter for process applications with a compact, easily accessible transmitter.

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.

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.

Liner made of PTFE or PFA. Compact dual-compartment housing with up to 3 I/Os. Backlit display with touch control and WLAN access. Remote display available.

Nominal diameter range

DN 15 to 600 (½ to 24")

Wetted materials

Liner: PFA; PTFE

Electrodes: 1.4435 (F316L); Alloy C22, 2.4602 (UNS N06022);

Tantalum; Platinum; Titanium

Measured variables

Volume flow, conductivity, mass flow

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)

Liquids

Measuring range

4 dm³/min to 9600 m³/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

Transmitter housing material

AlSi10Mg, coated; 1.4409 (CF3M) similar to 316L; stainless steel for hygienic transmitter design

Degree of protection

Standard: 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

Remote display available

Outputs

3 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

Liquids

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

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

Liquids

Hygienic approvals and certificates

ACS, NSF 61, WRAS

추가 정보 www.kr.endress.com/5P3B