

Proline Promass P 100 coriolis-flowmeter

De specialist voor life sciences met een ultra-compacte transmitter



Meer informatie en actuele prijzen:

www.be.endress.com/8P1B

Voordelen:

- Optimale proceskwaliteit – voldoet aan de eisen van de industrie
- Minder procesmeetpunten – multivariabele meting (flow, dichtheid, temperatuur)
- Ruimtebesparende installatie – geen in-/uitlaatlengtes
- Ruimtebesparende transmitter – volledige functionaliteit in een zeer kleine ruimte
- Tijdbesparende lokale bediening zonder aanvullende software en hardware – geïntegreerde webserver
- Geïntegreerde verificatie – Heartbeat Technology

Overzicht specificaties

- **Max. measurement error** Mass flow (liquid): $\pm 0.1\%$ Volume flow (liquid): $\pm 0.1\%$ Mass flow (gas): $\pm 0.5\%$ Density (liquid): $\pm 0.0005 \text{ g/cm}^3$
- **Measuring range** 0 to 70 000 kg/h (0 to 2570 lb/min)
- **Medium temperature range** Standard: -50 to $+150$ °C (-58 to $+302$ °F) Option: -50 to $+205$ °C (-58 to $+401$ °F)
- **Max. process pressure** PN 63, Class 300, 40K
- **Wetted materials** Measuring tube: 1.4435 (316L) Connection: 1.4435 (316L); 1.4404 (316/316L)

Toepassingsgebied: De Promass P 100 biedt de betere prestaties van een gebogen meetbuis en het leeglopen van een rechte meetbuis zonder compromissen. Samen met de kleinste transmitter die op dit moment verkrijgbaar is, levert het instrument uitstekende prestaties in een zeer kleine ruimte. De Promass p 100 is speciaal ontworpen voor toepassingen in steriele omgevingen waar de ruimte beperkt is, waardoor

deze boven aan het lijstje van systeemintegrators, skidbouwers en productfabrikanten zal komen te staan.

Kenmerken en specificaties

Density/Concentration

Meetprincipe

Coriolis

Product headline

Specialist for life sciences with an ultra-compact transmitter. Dedicated to applications under sterile conditions in the life sciences industry.

Sensor features

Highest process quality – fully compliant to industry requirements. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space - saving installation – no in-/outlet run needs. ASME BPE, 3 - A and EHEDG conform & low delta ferrite. Electropolished measuring tube in 1.4435 (316L). Fast recovery from CIP/SIP.

Transmitter features

Space - saving transmitter – full functionality on the smallest footprint. Time - saving local operation without additional software and hardware – integrated web server. Integrated verification – Heartbeat Technology. Robust, ultra-compact transmitter housing. Highest degree of protection: IP69. Local display available.

Nominal diameter range

DN 8 to 50 ($\frac{3}{8}$ to 2")

Wetted materials

Measuring tube: 1.4435 (316L)
Connection: 1.4435 (316L); 1.4404 (316/316L)

Measured variables

Mass flow, density, temperature, volume flow, corrected volume flow, reference density, concentration

Density/Concentration**Max. measurement error**Mass flow (liquid): ± 0.1 %Volume flow (liquid): ± 0.1 %Mass flow (gas): ± 0.5 %Density (liquid): ± 0.0005 g/cm³

Measuring range0 to 70 000 kg/h (0 to 2570 lb/min)

Max. process pressurePN 63, Class 300, 40K

Medium temperature rangeStandard: -50 to $+150$ °C (-58 to $+302$ °F)Option: -50 to $+205$ °C (-58 to $+401$ °F)

Ambient temperature rangeStandard: -40 to $+60$ °C (-40 to $+140$ °F)Option: -50 to $+60$ °C (-58 to $+140$ °F)

Sensor housing material1.4301 (304), corrosion resistant

Transmitter housing material

Compact: AlSi10Mg, coated

Compact/ultra - compact: 1.4301 (304)

Degree of protection

Standard: IP66/67, type 4X enclosure

Option: IP69

Display/Operation

4 - line backlit display available (no local operation)

Configuration via web browser and operating tools possible

Outputs

4 - 20 mA HART (active)

Pulse/frequency/switch output (passive)

Density/Concentration**Inputs**

None

Digital communication

HART, Modbus RS485, EtherNet/IP, PROFIBUS DP, PROFINET

Power supply

DC 20 to 30 V

Hazardous area approvals

ATEX, IECEx, cCSAus, INMETRO, NEPSI, EAC

Product safety

CE, C-Tick, EAC marking

Metrological approvals and certificates

Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025)

Heartbeat Verification: Heartbeat Technology complies with requirements for traceable verification according to ISO 9001:2008, chapter 7.6. a (TUV attestation)

Pressure approvals and certificates

PED, CRN

Material certificates

3.1 material

Hygienic approvals and certificates

3-A, EHEDG, ASME BPE, ISPE, cGMP

Gas**Meetprincipe**

Coriolis

Hygienic approvals and certificates

cGMP

Liquids

Meetprincipe

Coriolis

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