

# Proline Promass A 100 coriolis-flowmeter

De enkelbuis flowmeter voor het meten van zeer kleine flows met een ultracompacte transmitter



Meer informatie en actuele prijzen:

[www.be.endress.com/8A1B](http://www.be.endress.com/8A1B)

## Voordelen:

- Maximale procesveiligheid - zelflozende meetbuis
- Minder procesmeetpunten – multivariabele meting (flow, dichtheid, temperatuur)
- Ruimtebesparende installatie – geen in-/uitlaatlengten
- 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. meetfout** Mass flow (liquid):  $\pm 0.1$  % Volume flow (liquid):  $\pm 0.1$  % Mass flow (gas):  $\pm 0.5$  % Density (liquid):  $\pm 0.0005$  g/cm<sup>3</sup>
- **Measuring range** 0 to 450 kg/h (0 to 16.5 lb/min)
- **Medium temperature range**  $-50$  to  $+205$  °C ( $-58$  to  $+401$  °F)
- **Max. process pressure** PN 40, Class 300, 20K, 400 bar (5800 psi)
- **Wetted materials** Measuring tube: 1.4539 (904L); Alloy C22, 2.4602 (UNS N06022) Connection: 1.4539 (904L); Alloy C22, 2.4602 (UNS N06022); 1.4404 (316/316L)

**Toepassingsgebied:** De Promass A staat bekend om zijn zeer nauwkeurige metingen van kleine hoeveelheden vloeistoffen en gassen onder hoge en lage druk. Samen met de kleinste transmitter die op dit moment verkrijgbaar is, levert het instrument uitstekende prestaties in een zeer kleine ruimte. De Promass A 100 heeft de voorkeur van systeemintegrators, skidbouwers en productfabrikanten. Het instrument

is leverbaar met een ultracompacte hygiënische roestvrijstalen behuizing, waardoor het zelfs in de meest compacte installaties kan worden geplaatst.

## Kenmerken en specificaties

### Gas

#### Meetprincipe

Coriolis

#### Product headline

The single-tube flowmeter for smallest flow quantities with an ultra-compact transmitter.

Measuring accurately smallest quantities of liquids and gases for continuous process control.

#### Sensor features

Highest process safety – self - drainable measuring tube design. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space - saving installation – no in-/outlet run needs. Nominal diameter: DN 1 to 4 ( $\frac{1}{2}$  to  $\frac{1}{8}$ " ). Process pressure up to 400 bar (5800 psi). Medium temperature up to +205 °C (+401 °F).

#### 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 1 to 4 ( $\frac{1}{2}$  to  $\frac{1}{8}$ " )

#### Wetted materials

Measuring tube: 1.4539 (904L); Alloy C22, 2.4602 (UNS N06022)

Connection: 1.4539 (904L); Alloy C22, 2.4602 (UNS N06022); 1.4404 (316/316L)

## Gas

**Measured variables**

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

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**Max. meetfout**

Mass flow (liquid):  $\pm 0.1$  %

Volume flow (liquid):  $\pm 0.1$  %

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Density (liquid):  $\pm 0.0005$  g/cm<sup>3</sup>

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**Measuring range**

0 to 450 kg/h (0 to 16.5 lb/min)

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**Max. process pressure**

PN 40, Class 300, 20K, 400 bar (5800 psi)

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**Medium temperature range**

-50 to +205 °C (-58 to +401 °F)

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**Ambient temperature range**

Standard: -40 to +60 °C (-40 to +140 °F)

Option: -50 to +60 °C (-58 to +140 °F)

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**Sensor housing material**

1.4301 (304), corrosion resistant

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**Transmitter housing material**

Compact: AlSi10Mg, coated

Compact/ultra - compact: 1.4301 (304)

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**Degree of protection**

Standard: IP66/67, type 4X enclosure

Option: IP69

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**Display/Operation**

4 - line backlit display available (no local operation)

Configuration via web browser and operating tools possible

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## Gas

**Outputs**

4 - 20 mA HART (active)

Pulse/frequency/switch output (passive)

**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

**Other approvals and certificates****Product safety**

CE, C-Tick, EAC marking

**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)

**Pressure approvals and certificates**

CRN

**Material certificates**

3.1 material

**Hygienic approvals and certificates**

3-A, EHEDG, cGMP

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## Density/Concentration

### Meetprincipe

Coriolis

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### Nominal diameter range

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

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**Density/Concentration****Max. meetfout**Mass flow (liquid):  $\pm 0.1$  %Volume flow (liquid):  $\pm 0.1$  %Mass flow (gas):  $\pm 0.5$  %Density (liquid):  $\pm 0.0005$  g/cm<sup>3</sup>

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**Max. process pressure**PN 40, Class 300, 20K, 400 bar (5800 psi)

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**Outputs**

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**Density/Concentration****Inputs**

None

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

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**Power supply**

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**Hazardous area approvals**

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**Liquids****Meetprincipe**

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**Inputs**

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## Liquids

### **Power supply**

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CRN

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### **Material certificates**

3.1 material

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