

# Proline Promass F 100 Coriolis-flowmeter

Robuuste, uiterst nauwkeurig metende  
flowmeter met ultracompacte transmitter



Meer informatie en actuele prijzen:

[www.be.endress.com/8F1B](http://www.be.endress.com/8F1B)

## Voordelen:

- Maximale procesveiligheid – ongevoelig voor wisselende en zware omstandigheden
- 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):  $\pm 0.1\%$  (standard),  $0.05\%$  (option) Volume flow (liquid):  $\pm 0.1\%$  Mass flow (gas):  $\pm 0.25\%$  Density (liquid):  $\pm 0.0005\text{ g/cm}^3$
- **Measuring range** 0 to 2 200 000 kg/h (0 to 80 840 lb/min)
- **Medium temperature range** Standard:  $-50$  to  $+150\text{ }^\circ\text{C}$  ( $-58$  to  $+302\text{ }^\circ\text{F}$ ) Option:  $-50$  to  $+240\text{ }^\circ\text{C}$  ( $-58\text{...}+464\text{ }^\circ\text{F}$ )
- **Max. process pressure** PN 100, Class 600, 63K
- **Wetted materials** Measuring tube: 1.4539 (904L); 1.4404 (316/316L); Alloy C22, 2.4602 (UNS N06022) Connection: 1.4404 (316/316L); Alloy C22, 2.4602 (UNS N06022)

**Toepassingsgebied:** De Promass F staat al lang bekend als een zeer nauwkeurig instrument onder de meest uiteenlopende procesomstandigheden. Het instrument is geschikt voor een breed scala aan toepassingen. Samen met de kleinste transmitter die op dit moment verkrijgbaar is, levert het instrument uitstekende prestaties in een zeer

kleine ruimte. De Promass F 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

Flowmeter with premium accuracy, robustness and an ultra-compact transmitter.

Highest measurement performance for liquids and gases under varying, demanding process conditions.

#### Sensor features

Highest process safety – immune to fluctuating and harsh environments. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space - saving installation – no in-/outlet run needs.

Mass flow: measurement error  $\pm 0.05$  % (PremiumCal). Medium temperature up to  $+240$  °C ( $+464$  °F). Nominal diameter: DN 8 to 250 ( $\frac{3}{8}$  to 10").

#### 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 250 ( $\frac{3}{8}$  to 10")

## Gas

**Wetted materials**

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

**Measured variables**

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

**Max. meetfout**

Mass flow (liquid):  $\pm 0.1$  % (standard), 0.05 % (option)

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

Mass flow (gas):  $\pm 0.25$  %

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

**Measuring range**

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

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

**Sensor housing material**

1.4301/1.4307 (304L), corrosion resistant

**Transmitter housing material**

Compact: AlSi10Mg, coated

Compact/ultra - compact: 1.4301 (304), 1.4404 (316L)

**Degree of protection**

Standard: IP66/67, type 4X enclosure

Option: IP69

## Gas

**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)

**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, NEPSI, INMETRO, EAC

**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)

**Marine approvals and certificates**

ABS (American Bureau of Shipping)  
BV (Bureau Veritas)  
LR (Lloyds Register)  
BV approval

**Pressure approvals and certificates**

PED, CRN, AD 2000

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**Gas****Material certificates**

3.1 material

NACE MR0175/MR0103, PMI; welding test acc. to EN ISO, ASME, NORSOK

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**Hygienic approvals and certificates**3-A, EHEDG, cGMP

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**Density/Concentration****Meetprinciple**Coriolis

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**Density/Concentration****Wetted materials**

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**Steam**

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**Display/Operation**

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## Steam

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3-A, EHEDG, cGMP

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