

Proline Promass E 500 coriolis-flowmeter

Mid-range coriolis-flowmeter als versie met toegang op afstand met maximaal 4 I/O's



Meer informatie en actuele prijzen:

www.be.endress.com/8E5B

Voordelen:

- Kostenefficiënt – multifunctioneel instrument; een alternatief voor conventionele volumetrische flowmeters
- Minder procesmeetpunten – multivariabele meting (flow, dichtheid, temperatuur)
- Ruimtebesparende installatie – geen in-/uitlaatlengten
- Volledige toegang tot proces- en diagnose-informatie – talrijke, vrij te combineren I/O's en procesbussen
- Verminderde complexiteit en verscheidenheid – vrij configureerbare I/O-functionaliteit
- Geïntegreerde verificatie – Heartbeat Technology

Overzicht specificaties

- **Max. meetfout** Mass flow (liquid): $\pm 0.15\%$ (standard), $\pm 0.10\%$ (option) Volume flow (liquid): $\pm 0.15\%$ Mass flow (gas): $\pm 0.50\%$ Density (liquid): $\pm 0.0005\text{ g/cm}^3$
- **Measuring range** 0 to 180 000 kg/h (0 to 6615 lb/min)
- **Medium temperature range** -40 to $+150\text{ }^\circ\text{C}$ (-40 to $+302\text{ }^\circ\text{F}$)
- **Max. process pressure** PN 100, Class 600, 63K
- **Wetted materials** Measuring tube: 1.4539 (904L) Connection: 1.4404 (316/316L)

Toepassingsgebied: De robuuste Promass E heeft een gevestigde reputatie als een betrouwbare oplossing voor het nauwkeurig meten van vloeistoffen en gassen in een groot aantal standaardtoepassingen in diverse industrieën. Met zijn innovatieve transmitter op afstand optimaliseert de Promass E 500 installatieflexibiliteit en operationele veiligheid in veeleisende omgevingen. Heartbeat Technology garandeert

betrouwbare metingen en maakt verlenging van herkalibratiecycli mogelijk.

Kenmerken en specificaties

Liquids

Meetprincipe

Coriolis

Product headline

Flowmeter with minimized total cost of ownership, as remote version with up to 4 I/Os.
Accurate measurement of liquids and gases for a wide range of standard applications.

Sensor features

Cost - effective – multi - purpose device; an alternative to conventional volumetric flowmeters. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space - saving installation – no in-/outlet run needs.

Compact dual-tube sensor. Medium temperature up to +150 °C (+302 °F). Process pressure up to 100 bar (1450 psi).

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 8 to 80 ($\frac{3}{8}$ to 3")

Wetted materials

Measuring tube: 1.4539 (904L)

Connection: 1.4404 (316/316L)

Liquids

Measured variables

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

Max. meetfout

Mass flow (liquid): ± 0.15 % (standard), ± 0.10 % (option)

Volume flow (liquid): ± 0.15 %

Mass flow (gas): ± 0.50 %

Density (liquid): ± 0.0005 g/cm³

Measuring range

0 to 180 000 kg/h (0 to 6615 lb/min)

Max. process pressure

PN 100, Class 600, 63K

Medium temperature range

-40 to +150 °C (-40 to +302 °F)

Ambient temperature range

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

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

Sensor housing material

1.4301 (304), corrosion resistant

Sensor connection housing (standard): AlSi10Mg, coated

Sensor connection housing (option): 1.4301 (304); 1.4404 (316L)

Transmitter housing material

AlSi10Mg, coated; 1.4409 (CF3M) similar to 316L; Polycarbonat

Degree of protection

Sensor remote version (standard): IP66/67, type 4X enclosure

Sensor remote version (option): IP69. 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

Liquids

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, NEPSI, INMETRO, EAC

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)

Liquids**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

3-A, EHEDG, cGMP

Steam**Meetprincipe**

Coriolis

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Gas**Meetprincipe**

Coriolis

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Gas**Sensor features**

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Density/Concentration

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Density**Meetprincipe**

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