

Proline Promass X 300 Coriolis-flowmeter

Hoogwaardige 4-buis flowmeter met een compacte, gemakkelijk toegankelijke transmitter



Meer informatie en actuele prijzen:

www.be.endress.com/8X3B

Voordelen:

- Hogere opbrengst – enkelvoudig installatiepunt met eerste klas nauwkeurigheid voor grote hoeveelheden
- 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 veldbussen
- Verminderde complexiteit en verscheidenheid – vrij configureerbare I/O-functionaliteit
- Geïntegreerde verificatie – Heartbeat Technology

Overzicht specificaties

- **Max. meetfout** Mass flow (liquid): $\pm 0.10\%$ (standard), 0.05% (option) Volume flow (liquid): $\pm 0.10\%$ Mass flow (gas): $\pm 0.35\%$ Density (liquid): $\pm 0.0005\text{ g/cm}^3$
- **Measuring range** 0 to 4100 t/h (0 to 4520 tn. sh./h)
- **Medium temperature range** -50 to $+180\text{ }^\circ\text{C}$ (-58 to $+356\text{ }^\circ\text{F}$)
- **Max. process pressure** PN 100, Class 600
- **Wetted materials** Measuring tube: 1.4404 (316/316L)
Connection: 1.4404 (316/316L)

Toepassingsgebied: De gepatenteerde 4-buis Promass X levert eerste klas nauwkeurigheid (0,05%) bij de hoogste capaciteit en biedt uitstekende prestaties in on- en offshore-toepassingen in de olie- & gasindustrie. Met zijn compacte transmitter biedt de Promass X 300 een hoge flexibiliteit wat betreft bediening en systeemintegratie: toegang

vanaf één zijde, weergave op afstand en verbeterde connectiviteitsopties. Heartbeat Technology waarborgt te allen tijde de procesveiligheid.

Kenmerken en specificaties

Gas

Meetprincipe

Coriolis

Product headline

Highest capacity four-tube flowmeter with a compact, easily accessible transmitter.

For highest flow rates and outstanding performance in on/offshore oil and gas applications.

Sensor features

Increased profit – single installation point providing premium accuracy for large quantities. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space - saving installation – no in-/outlet run needs.

Nominal diameter: DN 300 to 400 (12 to 16"). Four-tube system with low pressure drop. Complete exterior design made of 1.4435 (316L).

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.

Compact dual-compartment housing with up to 3 I/Os.

Nominal diameter range

DN 300 to 400 (12 to 16")

Wetted materials

Measuring tube: 1.4404 (316/316L)

Connection: 1.4404 (316/316L)

Gas

Measured variables

Mass flow, density, temperature, volume flow, corrected volume flow (API tables), reference density, concentration

Max. meetfout

Mass flow (liquid): ± 0.10 % (standard), 0.05 % (option)

Volume flow (liquid): ± 0.10 %

Mass flow (gas): ± 0.35 %

Density (liquid): ± 0.0005 g/cm³

Measuring range

0 to 4100 t/h (0 to 4520 tn. sh./h)

Max. process pressure

PN 100, Class 600

Medium temperature range

-50 to +180 °C (-58 to +356 °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

1.4404 (316L), highest corrosion resistance

Transmitter housing material

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

Degree of protection

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

Gas**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

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, 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

Gas

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)

MI-005 Liquids other than water (Hydrocarbons), LPG, cryogenic
MI-002, PTB

Marine approvals and certificates

LR approval, DNV GL approval, ABS approval, BV approval, CCS approval

Pressure approvals and certificates

PED, CRN

Material certificates

3.1 material

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

Liquids

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For highest flow rates and outstanding performance in on/offshore oil and gas applications.

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Nominal diameter: DN 300 to 400 (12 to 16"). Four-tube system with low pressure drop. Complete exterior design made of 1.4435 (316L).

Liquids

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.

Compact dual-compartment housing with up to 3 I/Os.

Nominal diameter range

DN 300 to 400 (12 to 16")

Wetted materials

Measuring tube: 1.4404 (316/316L)

Connection: 1.4404 (316/316L)

Measured variables

Mass flow, density, temperature, volume flow, corrected volume flow (API tables), reference density, concentration

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0 to 4100 t/h (0 to 4520 tn. sh./h)

Max. process pressure

PN 100, Class 600

Medium temperature range

-50 to +180 °C (-58 to +356 °F)

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

Sensor housing material

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Liquids

Transmitter housing material

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IP66/67, type 4X enclosure

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4-line backlit display with touch control (operation from outside)
Configuration via local display and operating tools possible
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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, UK Ex

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Liquids

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Density/Concentration

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Status input

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Density/Concentration**Power supply**

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