

Proline Promass E 200 / 8E2B



More information and current pricing:

www.fi.endress.com/8E2B

Benefits:

- 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
- Convenient device wiring – separate connection compartment
- Safe operation – no need to open the device due to display with touch control, background lighting
- Integrated verification – Heartbeat Technology™

Specs at a glance

- **Max. measurement error** Mass flow (liquid): $\pm 0.25\%$ Volume flow (liquid): $\pm 0.25\%$ Mass flow (gas): $\pm 0.75\%$ 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** -40 to $+140 \text{ }^\circ\text{C}$ (-40 to $+284 \text{ }^\circ\text{F}$)
- **Max. process pressure** PN 100, Class 600, 63K
- **Wetted materials** Measuring tube: 1.4539 (904L) Connection: 1.4404 (316/316L)

Field of application: In the chemical and petrochemical industries, 2-wire loop-powered (4-20 mA) measuring devices are in high demand, as intrinsic safety is extremely important especially in hazardous areas. Without any compromises, Promass E 200 meets all of the relevant standards in the process industry such as NAMUR, HART, and SIL. This guarantees a high degree of safety in operation and optimal system availability.

Features and specifications

Gas

Measuring principle

Coriolis

Product headline

Genuine loop-powered flowmeter for minimized cost of ownership. 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

Convenient device wiring – separate connection compartment. Safe operation – no need to open the device due to display with touch control, background lighting. Integrated verification – Heartbeat Technology. Loop-powered technology. Robust dual-compartment housing. Plant safety: worldwide approvals (SIL, Haz. area).

Nominal diameter range

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

Wetted materials

Measuring tube: 1.4539 (904L)

Connection: 1.4404 (316/316L)

Measured variables

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

Gas

Max. measurement errorMass flow (liquid): $\pm 0.25\%$ Volume flow (liquid): $\pm 0.25\%$ Mass flow (gas): $\pm 0.75\%$ Density (liquid): $\pm 0.0005 \text{ g/cm}^3$ **Measuring range**

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

Max. process pressure

PN 100, Class 600, 63K

Medium temperature range -40 to $+140$ °C (-40 to $+284$ °F)**Ambient temperature range** -40 to $+60$ °C (-40 to $+140$ °F)**Sensor housing material**

1.4301 (304), corrosion resistant

Transmitter housing material

AlSi10Mg, coated, 1.4404 (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

Outputs

4 - 20 mA HART (passive)

4 - 20 mA (passive)

Pulse/frequency/switch output (passive)

Gas

Inputs

None

Digital communication

HART, PROFIBUS PA, FOUNDATION Fieldbus

Power supply

DC 18 to 35 V (4 - 20 mA HART with/without pulse/frequency/switch)

DC 18 to 30 V (20 mA HART, 4 - 20 mA)

DC 9 to 32 V (PROFIBUS PA)

Hazardous area approvals

ATEX, IECEx, cCSAus, NEPSI, INMETRO

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)

Pressure approvals and certificates

PED, CRN

Hygienic approvals and certificates

3-A

Liquids

Measuring principle

Coriolis

Liquids

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

Transmitter features

Convenient device wiring – separate connection compartment. Safe operation – no need to open the device due to display with touch control, background lighting. Integrated verification – Heartbeat Technology. Loop-powered technology. Robust dual-compartment housing. Plant safety: worldwide approvals (SIL, Haz. area).

Nominal diameter range

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

Wetted materials

Measuring tube: 1.4539 (904L)

Connection: 1.4404 (316/316L)

Measured variables

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

Max. measurement error

Mass flow (liquid): ± 0.25 %

Volume flow (liquid): ± 0.25 %

Mass flow (gas): ± 0.75 %

Density (liquid): ± 0.0005 g/cm³

Liquids

Measuring range

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

Max. process pressure

PN 100, Class 600, 63K

Medium temperature range

-40 to +140 °C (-40 to +284 °F)

Ambient temperature range

-40 to +60 °C (-40 to +140 °F)

Sensor housing material

1.4301 (304), corrosion resistant

Transmitter housing material

AlSi10Mg, coated

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Hazardous area approvals

ATEX, IECEx, cCSAus, NEPSI, INMETRO

Other approvals and certificates

3.1 material, calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), NAMUR, SIL, PED, CRN, 3-A

Product 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)

Pressure approvals and certificates

PED, CRN

Material certificates

3.1 material

Hygienic approvals and certificates

3-A

More information www.fi.endress.com/8E2B