

Proline Promass K 10 Coriolis flowmeter

Flowmeter with minimized total cost of ownership with easy-to-use operation concept



Benefits:

- Easy integration into your plant infrastructure with IO-link
- Cost effective device for basic process and hygienic applications (3-A and cGMP, EHEDG)
- Fewer process measuring points – multivariable measurement (flow, density, temperature)
- Space-saving installation – no in-/outlet run needs
- Optimum usability – display with touch screen (HART and MODBUS RS485 communication only) or operation with mobile devices and SmartBlue app
- Simple, time-saving commissioning – guided parameterization in advance and in the field
- Integrated verification – Heartbeat Technology

Specs at a glance

- **Max. measurement error** Mass flow (liquid): $\pm 0.5\%$ (standard), $\pm 0.15\%$ (option) Mass flow (gas): $\pm 0.75\%$
- **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 40, Class 300, 40K
- **Wetted materials** Measuring tube: 1.4539 (904L) Connection: 1.4404 (316/316L)

Field of application: Promass K is the cost-efficient Coriolis solution for elementary mass flow measuring tasks. It provides dependable measurement in basic applications featuring air, gas, fuel and water. With its straightforward hard- and software design, Promass K 10 simplifies every step in its life cycle from engineering to servicing at usual

Endress+Hauser quality. Heartbeat Technology enables measurement reliability and extension of recalibration cycles.

Features and specifications

Liquids

Measuring principle

Coriolis

Product headline

Flowmeter with minimized total cost of ownership with easy-to-use operation concept.

Measurement of liquids and gases in utility processes and basic applications.

Sensor features

Cost-effective general-purpose device – alternative to mechanical 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

Optimum usability – display with touch screen (HART and Modbus RS485 communication only) or operation with mobile devices and SmartBlue app. Simple, time-saving commissioning – guided parameterization in advance and in the field. Integrated verification – Heartbeat Technology.

System integration with HART, Modbus RS485, IO-Link. Flexible operation with app and optional display.

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, temperature, Density (option), volume flow, corrected volume flow

Max. measurement error

Mass flow (liquid): ± 0.5 % (standard), ± 0.15 % (option)

Mass flow (gas): ± 0.75 %

Measuring range

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

Max. process pressure

PN 40, Class 300, 40K

Medium temperature range

-40 to $+150$ °C (-40 to $+302$ °F)

Ambient temperature range

Standard: -20 to $+60$ °C (-4 to $+140$ °F)

Sensor housing material

Stainless steel 1.4301 (304)

Transmitter housing material

AlSi10Mg, coated

Degree of protection

Standard: IP66/67, Type 4X enclosure

Display/Operation

2.4" LCD display with touch & auto rotate; Configuration and operation via SmartBlue App (Bluetooth) possible

Outputs

4-20 mA HART (active/passive), Pulse/frequency/switch output

Modbus RS485, 4-20 mA

Digital communication

HART, MODBUS RS485, IO-Link

Liquids

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

EAC

NEPSI

INMETRO

IND Ex

JPN

UK Ex

KC

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, PED

Material certificates

3.1 material

Hygienic approvals and certificates

EC 1935, FDA, GB4806, cGMP, 3-A

Gas

Measuring principle

Coriolis

Gas

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