

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

More information and current pricing:

www.endress.com/8KBB

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 Bluetooth technology 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

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 (¾ to 3")

Wetted materials

Measuring tube: 1.4539 (904L)

Connection: 1.4404 (316/316L)

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 %

Gas

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 Bluetooth technology possible

Outputs4-20 mA HART (active/passive), Pulse/frequency/switch output
Modbus RS485, 4-20 mA**Digital communication**

HART, MODBUS RS485, IO-Link

Power supplyDC 24 V
AC 100 to 230 V
AC 100 to 230 V / DC 24 V (non-hazardous area)

Gas

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

More information www.endress.com/8KBB