Proline Promass A 500
Coriolis flowmeter

Accurate single-tube flowmeter for lowest flow rates, as remote version with up to 4 I/Os

Benefits:
- Space-saving installation – compact, lightweight sensor
- Highest product quality – self-drainable measuring tube in all line sizes
- Optimum process safety – resistant to corrosive ambient conditions and internal clogging
- Full access to process and diagnostic information – numerous, freely combinable I/Os and Ethernet
- Reduced complexity and variety – freely configurable I/O functionality
- Integrated verification – Heartbeat Technology

Specs at a glance
- **Max. measurement error**
  - Mass flow (liquid): ±0.1 %
  - Volume flow (liquid): ±0.1 %
  - Mass flow (gas): ±0.35 %
  - Density (liquid): ±0.0005 g/cm³

- **Measuring range**
  - 0 to 450 kg/h (0 to 16.54 lb/min)

- **Medium temperature range**
  - -50 to 205 °C (-58 to 401 °F)

- **Max. process pressure**
  - 430.9 bar (6250 psi)

- **Wetted materials**
  - Measuring tube: stainless steel, 1.4435 (316/316L); Alloy C22

Field of application: The compact Promass A is ideal for continuous process control in very demanding applications. Its unique self-drainable single-tube system enables accurate measurement of liquids and gases at lowest flow rates and high pressure. With its innovative remote transmitter Promass A 500 maximizes installation flexibility and operational safety in demanding environments. Heartbeat Technology ensures measurement reliability and compliant verification.

More information and current pricing:
[www.endress.com/8A5C](http://www.endress.com/8A5C)
**Liquids**

**Measuring principle**
Coriolis

**Product headline**
Accurate single-tube flowmeter for lowest flow rates, as remote version with up to 4 I/Os. Suitable for applications with smallest flow quantities in all industries.

**Sensor features**
Space-saving installation – compact, lightweight sensor. Highest product quality – self-drainable measuring tube design in all line sizes. Optimum process safety – resistant to corrosive ambient conditions and internal clogging.
Nominal diameter: DN 1 to 4 (1/4 to 1/8”). Process pressure up to 430.9 bar (6250 psi). Medium temperature up to +205 °C (+401 °F).

**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 1 to 4 (1/4 to 1/8”)

**Wetted materials**
Measuring tube: stainless steel, 1.4435 (316/316L); Alloy C22

**Measured variables**
Mass flow, density, temperature, volume flow, corrected volume flow, reference density

**Max. measurement error**
Mass flow (liquid): ±0.1 %
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0 to 450 kg/h (0 to 16.54 lb/min)

**Max. process pressure**
430.9 bar (6250 psi)

**Medium temperature range**
-50 to 205 °C (-58 to 401 °F)

**Ambient temperature range**
-40 to 60 °C (-40 to +140 °F)

**Sensor housing material**
Stainless steel, 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

**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
### Liquids

**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, INMETRO, NEPSI

**Product safety**
- CE, C-TICK

**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)

**Pressure approvals and certificates**
- CRN

**Material certificates**
- 3.1 material

**Hygienic approvals and certificates**
- 3-A, cGMP

### Gas

**Measuring principle**
Coriolis
Gas

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**Measured variables**
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### Gas

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Density/Concentration

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Density/Concentration

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