Proline Promass S 100
Coriolis flowmeter

Easy-to-clean flowmeter with self-drainable single-tube system and an ultra-compact transmitter

More information and current pricing:
www.endress.com/8S1C

Benefits:

- Reduced installation costs – fully self-drainable tube design enables compact horizontal mounting
- Fewer process measuring points – multivariable measurement (flow, density, temperature)
- Space-saving installation – no in/outlet run needs
- Space-saving transmitter – full functionality on smallest footprint
- Time-saving local operation without additional software and hardware – integrated web server
- Integrated verification – Heartbeat Technology

Specs at a glance

- **Max. measurement error** Mass flow (liquid): ±0.10 % Volume flow (liquid): ±0.10 % Mass flow (gas): ±0.50 % Density (liquid): ±0.0005 g/cm³
- **Measuring range** 0 to 70 000 kg/h (0 to 2570 lb/min)
- **Medium temperature range** −50 to +150 °C (−58 to +302 °F)
- **Max. process pressure** PN 40, Class 150, 20K
- **Wetted materials** Measuring tube: 1.4435 (316L) Connection: 1.4435 (316L); 1.4404 (316/316L)

Field of application: Promass S is at the forefront in hygienic design – Endress+Hauser's industry-optimized measurement solution meets all the hygienic requirements for installation in the Food and Beverage industry. Combined with the smallest transmitter housing available today it delivers full performance on the smallest footprint. Designed for applications where space is a premium, Promass S 100 will be the

preferred choice for system integrators, skid builders and equipment manufacturer.

Features and specifications

Liquids

Measuring principle
Coriolis

Product headline
Easy-to-clean flowmeter with self-drainable single-tube system and an ultra-compact transmitter.
Dedicated to applications requiring optimal cleanability under hygienic conditions.

Sensor features
Increased process safety – easily cleanable and fully self-drainable tube design. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space - saving installation – no in-/outlet run needs.
Large range of hygienic process connections. 3-A and EHEDG conform. Fast recovery from CIP/SIP.

Transmitter features
Space - saving transmitter – full functionality on the smallest footprint. Time - saving local operation without additional software and hardware – integrated web server. Integrated verification – Heartbeat Technology. Robust, ultra-compact transmitter housing. Highest degree of protection: IP69. Local display available.

Nominal diameter range
DN 8 to 50 (⅜ to 2")

Wetted materials
Measuring tube: 1.4435 (316L)
Connection: 1.4435 (316L); 1.4404 (316/316L)

Liquids

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

Max. measurement error
Mass flow (liquid): ±0.10 %
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Mass flow (gas): ±0.50 %
Density (liquid): ±0.0005 g/cm³

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

Max. process pressure
PN 40, Class 150, 20K

Medium temperature range
–50 to +150 °C (–58 to +302 °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
1.4301 (304), corrosion resistant

Transmitter housing material
Compact: AlSi10Mg, coated
Compact/ultra - compact: 1.4301 (304)

Degree of protection
Standard: IP66/67, type 4X enclosure
Option: IP69

Display/Operation
4 - line backlit display available (no local operation)
Configuration via web browser and operating tools possible

Liquids

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

Inputs
None

Digital communication
HART, Modbus RS485, EtherNet/IP, PROFIBUS DP, PROFINET

Power supply
DC 20 to 30 V

Hazardous area approvals
ATEX, IECEx, cCSAus, INMETRO, NEPSI, EAC

Product safety
CE, C-Tick, EAC marking

Metrological approvals and certificates
Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), NAMUR
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
PED, CRN

Material certificates
3.1 material

Hygienic approvals and certificates
3 - A, EHEDG, cGMP

Gas

Measuring principle
Coriolis

Gas

Hygienic approvals and certificates
cGMP

Density/Concentration

Measuring principle
Coriolis

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