

# Proline Promass P 300 Coriolis flowmeter

Specialist for life sciences with a compact,  
easily accessible transmitter



Mais informações e preço atual:

[www.br.endress.com/8P3B](http://www.br.endress.com/8P3B)

## Benefícios:

- Highest process quality – fully compliant to industry requirements
- Fewer process measuring points – multivariable measurement (flow, density, temperature)
- Space-saving installation – no in/outlet run needs
- 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

## Especificações resumidas

- **Max. measurement error** Mass flow (liquid):  $\pm 0.10\%$  Volume flow (liquid):  $\pm 0.10\%$  Mass flow (gas):  $\pm 0.50\%$  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** Standard:  $-50$  to  $+150$  °C ( $-58$  to  $+302$  °F) Option:  $-50$  to  $+205$  °C ( $-58$  to  $+401$  °F)
- **Max. process pressure** PN 40, Class 150, 20K
- **Wetted materials** Measuring tube: 1.4435 (316L) Connection: 1.4435 (316L); 1.4404 (316/316L)

**Campo de aplicação:** Promass P is the specialist for sterile processes in the life sciences industry. It is dedicated to biotech applications requiring highest compliance with guidelines and regulations. With its compact transmitter Promass P 300 offers high flexibility in terms of operation and system integration: access from one side, remote display and improved connectivity options. Heartbeat Technology ensures compliance and process safety at all times.

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## Características e especificações

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### Density

**Measuring principle**

Coriolis

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**Product Headline**

Specialist for life sciences with a compact, easily accessible transmitter. Dedicated to applications under sterile conditions in the life sciences industry.

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**Sensor features**

Highest process quality – fully compliant to industry requirements. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space - saving installation – no in-/outlet run needs. ASME BPE, 3 - A and EHEDG conform & low delta ferrite. Electropolished measuring tube in 1.4435 (316L). Fast recovery from CIP/SIP.

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**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. Compact hygienic dual-compartment housing with IP69 and up to 3 I/Os. Backlit display with touch control and WLAN access. Remote display available.

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### Density/Concentration

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### Nominal diameter range

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

### Wetted materials

Measuring tube: 1.4435 (316L)

Connection: 1.4435 (316L); 1.4404 (316/316L)

### Measured variables

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

### Max. measurement error

Mass flow (liquid):  $\pm 0.10$  %

Volume flow (liquid):  $\pm 0.10$  %

Mass flow (gas):  $\pm 0.50$  %

Density (liquid):  $\pm 0.0005$  g/cm<sup>3</sup>

### Measuring range

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

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**Density/Concentration****Max. process pressure**PN 40, Class 150, 20K

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**Medium temperature range**

Standard: -50 to +150 °C (-58 to +302 °F)

Option: -50 to +205 °C (-58 to +401 °F)

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**Ambient temperature range**

Standard: -40 to +60 °C (-40 to +140 °F)

Option: -50 to +60 °C (-58 to +140 °F)

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**Sensor housing material**1.4301 (304), corrosion resistant

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**Transmitter housing material**AlSi10Mg, coated; stainless steel for hygienic transmitter design

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**Degree of protection**

IP66/67, type 4X enclosure

IP69

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**Display/Operation**

4-line backlit display with touch control (operation from outside)

Configuration via local display and operating tools possible

Remote display available"

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**Outputs**

3 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

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**Inputs**

Status input

4-20 mA input

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## Density/Concentration

### Digital communication

HART, PROFIBUS DP, PROFIBUS PA, FOUNDATION Fieldbus, Modbus RS485, Profinet, Ethernet/IP, OPC-UA

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### Power supply

DC 24 V

AC 100 to 230 V

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

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### Hazardous area approvals

ATEX, IECEx, cCSAus, NEPSI, INMETRO, EAC, UK Ex

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### Product safety

CE, C-tick, EAC marking

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### Functional safety

Functional safety according to IEC 61508, applicable in safety-relevant applications in accordance with IEC 61511

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### 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)

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### Pressure approvals and certificates

PED, CRN

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### Material certificates

3.1 material

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### Hygienic approvals and certificates

3-A, EHEDG, ASME BPE, ISPE, cGMP

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## Liquids

### Measuring principle

Coriolis

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## Liquids

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Gas

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**Hygienic approvals and certificates**

cGMP

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