Proline Promass E 300
Coriolis flowmeter

Mid-range Coriolis flowmeter with a compact, easily accessible transmitter

Mais informações e preço atual:
www.br.endress.com/8E3B

Benefícios:

- Cost-effective – multipurpose device; an alternative to conventional volumetric flowmeters
- 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): ±0.15 % (standard), ±0.10 % (option) Volume flow (liquid): ±0.15 % Mass flow (gas): ±0.50 % Density (liquid): ±0.0005 g/cm³
- **Measuring range** 0 to 180 000 kg/h (0 to 6615 lb/min)
- **Medium temperature range** –40 to +150 °C (–40 to +302 °F)
- **Max. process pressure** PN 100, Class 600, 63K
- **Wetted materials** Measuring tube: 1.4539 (904L) Connection: 1.4404 (316/316L)

Campo de aplicação: The robust Promass E has a long-standing reputation as a reliable solution accurately measuring liquids and gases in a wide range of standard applications in various industries. With its compact transmitter Promass E 300 offers high flexibility in terms of operation and system integration: access from one side, remote display, improved connectivity options. Heartbeat Technology ensures measurement reliability and enables extension of recalibration cycles.

Características e especificações

Gas

Measuring principle
Coriolis

Product headline
Flowmeter with minimized total cost of ownership and a compact, easily accessible transmitter.
Accurate measurement of liquids and gases for a wide range of standard applications.

Sensor features
Cost - effective – multi - purpose device; an alternative to conventional volumetric 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).

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.
Process pressure up to 100 bar (1450 psi). Compact dual-compartment housing with up to 3 I/Os. Backlit display with touch control and WLAN access.

Nominal diameter range
DN 8 to 80 (⅜ to 3")

Wetted materials
Measuring tube: 1.4539 (904L)
Connection: 1.4404 (316/316L)

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

Gas

Max. measurement error

Mass flow (liquid): ±0.15 % (standard), ±0.10 % (option)
Volume flow (liquid): ±0.15 %
Mass flow (gas): ±0.50 %
Density (liquid): ±0.0005 g/cm³

Measuring range

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

Max. process pressure

PN 100, Class 600, 63K

Medium temperature range

–40 to +150 °C (–40 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

AlSi10Mg, coated; stainless steel for hygenic transmitter design

Degree of protection

Standard: IP66/67, Type 4X enclosure
IP69

Display/Operation

4-line backlit display with touch control (operation from outside)
Configuration via local display and operating tools possible
Remote display available"

Gas

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

Inputs

Status input
4-20 mA input

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, NEPSI, INMETRO, EAC, UK Ex

Product safety

CE, C-tick, EAC marking

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)

Gas

Marine approvals and certificates
LR approval, DNV GL approval, ABS approval, BV approval

Pressure approvals and certificates
PED, CRN

Material certificates
3.1 material

Hygienic approvals and certificates
3-A, EHEDG, cGMP

Density/Concentration

Measuring principle
Coriolis

Product headline
Flowmeter with minimized total cost of ownership and a compact, easily accessible transmitter.
Accurate measurement of liquids and gases for a wide range of standard applications.

Sensor features
Cost - effective – multi - purpose device; an alternative to conventional volumetric 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).

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.
Process pressure up to 100 bar (1450 psi). Compact dual-compartment housing with up to 3 I/Os. Backlit display with touch control and WLAN access.

Density/Concentration

Nominal diameter range
DN 8 to 80 (⅜ to 3")

Wetted materials
Measuring tube: 1.4539 (904L)
Connection: 1.4404 (316/316L)

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

Max. measurement error
Mass flow (liquid): ±0.15 % (standard), ±0.10 % (option)
Volume flow (liquid): ±0.15 %
Mass flow (gas): ±0.50 %
Density (liquid): ±0.0005 g/cm³

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

Max. process pressure
PN 100, Class 600, 63K

Medium temperature range
–40 to +150 °C (–40 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
AlSi10Mg, coated; stainless steel for hygenic transmitter design

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

Density/Concentration

Display/Operation

4-line backlit display with touch control (operation from outside)
Configuration via local display and operating tools possible
Remote display available"

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

Inputs

Status input
4-20 mA input

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, NEPSI, INMETRO, EAC, UK Ex

Product safety

CE, C-tick, EAC marking

Functional safety

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

Density/Concentration

Metrological approvals and certificates
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Marine approvals and certificates
LR approval, DNV GL approval, ABS approval, BV approval

Pressure approvals and certificates
PED, CRN

Material certificates
3.1 material

Hygienic approvals and certificates
3-A, EHEDG, cGMP

Density

Measuring principle
Coriolis

Product Headline
Flowmeter with minimized total cost of ownership and a compact, easily accessible transmitter.
Accurate measurement of liquids and gases for a wide range of standard applications.

Steam

Measuring principle
Coriolis

Steam

Product headline

Flowmeter with minimized total cost of ownership and a compact, easily accessible transmitter.
Accurate measurement of liquids and gases for a wide range of standard applications.

Marine approvals and certificates

LR approval, DNV GL approval, ABS approval, BV approval

Liquids

Measuring principle

Coriolis

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Flowmeter with minimized total cost of ownership and a compact, easily accessible transmitter.
Accurate measurement of liquids and gases for a wide range of standard applications.

Sensor features

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Compact dual-tube sensor. Medium temperature up to +150 °C (+302 °F).

Transmitter features

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Process pressure up to 100 bar (1450 psi). Compact dual-compartment housing with up to 3 I/Os. Backlit display with touch control and WLAN access.

Liquids

Nominal diameter range
DN 8 to 80 (⅜ to 3")

Wetted materials
Measuring tube: 1.4539 (904L)
Connection: 1.4404 (316/316L)

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

Max. measurement error
Mass flow (liquid): ±0.15 % (standard), ±0.10 % (option)
Volume flow (liquid): ±0.15 %
Mass flow (gas): ±0.50 %
Density (liquid): ±0.0005 g/cm³

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

Max. process pressure
PN 100, Class 600, 63K

Medium temperature range
–40 to +150 °C (–40 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
AlSi10Mg, coated; stainless steel for hygenic transmitter design

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

Liquids

Display/Operation

4-line backlit display with touch control (operation from outside)
Configuration via local display and operating tools possible
Remote display available"

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

Inputs

Status input
4-20 mA input

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, NEPSI, INMETRO, EAC, UK Ex

Product safety

CE, C-tick, EAC marking

Functional safety

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

Liquids

Metrological approvals and certificates

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Marine approvals and certificates

LR approval, DNV GL approval, ABS approval, BV approval

Pressure approvals and certificates

PED, CRN

Material certificates

3.1 material

Hygienic approvals and certificates

3-A, EHEDG, cGMP

Mais informações **www.br.endress.com/8E3B**

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