

Proline Promass E 300 Przepływomierz masowy Coriolisa

Ekonomiczny przepływomierz masowy o niskich kosztach eksploatacji, z kompaktowym, łatwym w obsłudze przetwornikiem



Korzyści:

- Atrakcyjna cena – przyrząd wielofunkcyjny; doskonała alternatywa dla tradycyjnych przepływomierzy objętościowych
- Mniej procesowych punktów pomiarowych – jednoczesny pomiar wielu parametrów (przepływu, gęstości, temperatury)
- Minimalna długość montażowa – nie są wymagane proste odcinki rurociągu przed i za przepływomierzem
- Pełny dostęp do informacji o procesie oraz diagnostyki - liczne, swobodnie konfigurowalne kombinacje wejść/wyjść oraz protokołów komunikacyjnych
- Funkcjonalność i różnorodność – swoboda w konfiguracji i funkcjonalności modułów We/Wy
- Wbudowane funkcje weryfikacji i diagnostyki – Heartbeat Technology

Więcej informacji i aktualne ceny:

www.pl.endress.com/8E3B

Kluczowe parametry

- **Maksymalny błąd pomiaru** Mass flow (liquid): $\pm 0.15\%$ (standard), $\pm 0.10\%$ (option) Volume flow (liquid): $\pm 0.15\%$ Mass flow (gas): $\pm 0.50\%$ Density (liquid): $\pm 0.0005\text{ g/cm}^3$
- **Zakres pomiarowy** 0 to 180 000 kg/h (0 to 6615 lb/min)
- **Zakres temperatury medium** -40 to $+150\text{ }^\circ\text{C}$ (-40 to $+302\text{ }^\circ\text{F}$)
- **Maks. ciśnienie procesu** PN 100, Class 600, 63K
- **Materiały w kontakcie z medium** Measuring tube: 1.4539 (904L) Connection: 1.4404 (316/316L)

Zastosowanie: Promass E to solidny, atrakcyjny cenowo czujnik, który jest idealnym rozwiązaniem do pomiaru przepływu cieczy i gazów w szerokim zakresie zastosowań w wielu gałęziach przemysłu. Promass E w

połączeniu z kompaktowym przetwornikiem serii 300 oferuje wysoką elastyczność obsługi oraz możliwości integracji w systemach sterowania: wygodne opcje dostępu, zdalny wyświetlacz, ulepszone możliwości komunikacyjne. Heartbeat Technology gwarantuje ciągłą oraz weryfikowalną jakość pomiaru i bezpieczeństwo procesu produkcji.

Funkcje i specyfikacja

Para	Zasada pomiaru Coriolis <hr/> 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. <hr/> Marine approvals and certificates LR approval, DNV GL approval, ABS approval, BV approval <hr/>
Gaz	Zasada pomiaru Coriolis <hr/> 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. <hr/> 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). <hr/>

Gaz

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 dual-compartment housing with up to 3 I/Os. Backlit display with touch control and WLAN access.

Średnica nominalna

DN 8 to 80 ($\frac{3}{8}$ to 3")

Materiały w kontakcie z medium

Measuring tube: 1.4539 (904L)

Connection: 1.4404 (316/316L)

Wielkości mierzone

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

Maksymalny błąd pomiaru

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

Zakres pomiarowy

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

Maks. ciśnienie procesu

PN 100, Class 600, 63K

Zakres temperatury medium

-40 to +150 °C (-40 to +302 °F)

Temperatura otoczenia

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

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

Materiał obudowy czujnika

1.4301 (304), corrosion resistant

Gaz

Materiał obudowy przetwornika

AlSi10Mg, coated; stainless steel for hygenic transmitter design

Stopień ochrony

Standard: IP66/67, Type 4X enclosure

IP69

Wyświetlacz

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

Configuration via local display and operating tools possible

Remote display available"

Wyjścia

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

Wejścia

Status input

4-20 mA input

Komunikacja cyfrowa

HART, PROFIBUS DP, PROFIBUS PA, FOUNDATION Fieldbus, Modbus

RS485, Profinet, Ethernet/IP, OPC-UA

Zasilacz

DC 24 V

AC 100 to 230 V

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

Dopuszczenia do stosowania w strefach zagrożonych wybuchem

ATEX, IECEx, cCSAus, NEPSI, INMETRO, EAC

Gaz

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)

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

Zasada pomiaru

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.

Density/Concentration

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

Średnica nominalna

DN 8 to 80 ($\frac{3}{8}$ to 3")

Materiały w kontakcie z medium

Measuring tube: 1.4539 (904L)

Connection: 1.4404 (316/316L)

Wielkości mierzone

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

Maksymalny błąd pomiaru

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

Zakres pomiarowy

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

Maks. ciśnienie procesu

PN 100, Class 600, 63K

Zakres temperatury medium

-40 to +150 °C (-40 to +302 °F)

Density/Concentration

Temperatura otoczenia

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

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

Materiał obudowy czujnika

1.4301 (304), corrosion resistant

Materiał obudowy przetwornika

AlSi10Mg, coated; stainless steel for hygenic transmitter design

Stopień ochrony

Standard: IP66/67, Type 4X enclosure

IP69

Wyświetlacz

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

Configuration via local display and operating tools possible

Remote display available"

Wyjścia

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

Wejścia

Status input

4-20 mA input

Komunikacja cyfrowa

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

Density/Concentration**Zasilacz**

DC 24 V

AC 100 to 230 V

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

Dopuszczenia do stosowania w strefach zagrożonych wybuchem

ATEX, IECEx, cCSAus, NEPSI, INMETRO, EAC

Product safety

CE, C-tick, EAC marking

Functional safety

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Pressure approvals and certificates

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Material certificates

3.1 material

Hygienic approvals and certificates

3-A, EHEDG, cGMP

Ciecze**Zasada pomiaru**

Coriolis

Ciecze

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).

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Średnica nominalna

DN 8 to 80 ($\frac{3}{8}$ to 3")

Materiały w kontakcie z medium

Measuring tube: 1.4539 (904L)

Connection: 1.4404 (316/316L)

Wielkości mierzone

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

Maksymalny błąd pomiaru

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

Zakres pomiarowy

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

Ciecze**Maks. ciśnienie procesu**PN 100, Class 600, 63K

Zakres temperatury medium-40 to +150 °C (-40 to +302 °F)

Temperatura otoczenia

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

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

Materiał obudowy czujnika1.4301 (304), corrosion resistant

Materiał obudowy przetwornikaAlSi10Mg, coated; stainless steel for hygenic transmitter design

Stopień ochrony

Standard: IP66/67, Type 4X enclosure

IP69

Wyświetlacz

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

Configuration via local display and operating tools possible

Remote display available"

Wyjścia

3 outputs:

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4-20 mA WirelessHART

4-20 mA (active/passive)

Pulse/frequency/switch output (active/passive)

Double pulse output (active/passive)

Relay output

Wejścia

Status input

4-20 mA input

Ciecze**Komunikacja cyfrowa**

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

Zasilacz

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Dopuszczenia do stosowania w strefach zagrożonych wybuchem

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PED, CRN

Material certificates

3.1 material

Hygienic approvals and certificates

3-A, EHEDG, cGMP

Gęstość

Zasada pomiaru

Coriolis

Product Headline

The 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.

Więcej informacji www.pl.endress.com/8E3B