

Proline Promass F 200

Przepływomierz masowy Coriolisa

Najwyższa dokładność pomiarów z kompaktowym przetwornikiem i zasilaniem z pętli prądowej.



Więcej informacji i aktualne ceny:

www.pl.endress.com/8F2B

Korzyści:

- Odporność na oddziaływania pochodzące od instalacji rurociąkowej i drgania
- Brak konieczności stosowania prostych odcinków rurociągu przed i za przepływomierzem
- Łatwa instalacja elektryczna dzięki technologii dwuprzewodowej
- Pomiar wieloparametrowy: przepływ i gęstość
- Oporność na oddziaływania procesowe
- Zintegrowana kontrola - Technologia Heartbeat

Kluczowe parametry

- **Maksymalny błąd pomiaru** Mass flow (liquid): ± 0.1 % Volume flow (liquid): ± 0.1 % Mass flow (gas): ± 0.25 % Density (liquid): ± 0.0005 g/cm³
- **Zakres pomiarowy** 0 to 70 000 kg/h (0 to 2570 lb/min)
- **Zakres temperatury medium** Standard: -50 to $+150$ °C (-58 to $+302$ °F) Option: -50 to $+205$ °C (-58 to $+401$ °F)
- **Maks. ciśnienie procesu** PN 100, Class 600, 63K
- **Materiały w kontakcie z medium** Measuring tube: 1.4539 (904L); 1.4404 ; Alloy C22, 2.4602 (UNS N06022) Connection: 1.4404 (316/316L); Alloy C22, 2.4602 (UNS N06022)

Zastosowanie: Seria przepływomierzy Promass F znana jest z wyjątkowej dokładności. Jest przeznaczona do wielu różnych zastosowań. Dwuprzewodowe zasilanie pozwala na bezproblemową integrację urządzenia z istniejącą infrastrukturą i systemami sterowania. Dodatkowymi zaletami tego rozwiązania jest wysoki poziom bezpieczeństwa pracy na obszarach niebezpiecznych dzięki konstrukcji

iskrobezpiecznej (Ex ia) oraz bezpieczeństwo procesu zapewnione dzięki Heartbeat Technology.

Funkcje i specyfikacja

Gaz

Zasada pomiaru

Coriolis

Product headline

Robust flowmeter with genuine loop-powered technology. Highest measurement performance for liquids and gases in a wide range of applications.

Sensor features

Highest process safety – immune to fluctuating and harsh environments. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space - saving installation – no in/outlet run needs. Mass flow: measurement error ± 0.1 %. Medium temperature up to 205 °C (401 °F).

Transmitter features

Convenient device wiring – separate connection compartment. Safe operation – no need to open the device due to display with touch control, background lighting. Integrated verification – Heartbeat Technology. Loop - powered technology. Robust dual- compartment housing.

Średnica nominalna

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

Materiały w kontakcie z medium

Measuring tube: 1.4539 (904L); 1.4404 ; Alloy C22, 2.4602 (UNS N06022)

Connection: 1.4404 (316/316L); Alloy C22, 2.4602 (UNS N06022)

Wielkości mierzone

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

Gaz

Maksymalny błąd pomiaruMass flow (liquid): $\pm 0.1\%$ Volume flow (liquid): $\pm 0.1\%$ Mass flow (gas): $\pm 0.25\%$ Density (liquid): $\pm 0.0005\text{ g/cm}^3$ **Zakres pomiarowy**

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

Maks. ciśnienie procesu

PN 100, Class 600, 63K

Zakres temperatury mediumStandard: -50 to $+150\text{ }^\circ\text{C}$ (-58 to $+302\text{ }^\circ\text{F}$)Option: -50 to $+205\text{ }^\circ\text{C}$ (-58 to $+401\text{ }^\circ\text{F}$)**Temperatura otoczenia** -40 to $+60\text{ }^\circ\text{C}$ (-40 to $+140\text{ }^\circ\text{F}$)**Materiał obudowy czujnika**

1.4301/1.4307 (304L), corrosion resistant

Materiał obudowy przetwornika

AlSi10Mg, coated, 1.4404 (316L)

Stopień ochrony

IP66/67, type 4X enclosure

Wyświetlacz

4 - line backlit display with touch control

(operation from outside)

Configuration via local display and operating tools possible

Remote display available

Wyjścia

4 - 20 mA HART (passive)

4 - 20 mA (passive)

Pulse/frequency/switch output (passive)

Gaz

Wejścia

None

Komunikacja cyfrowa

HART, PROFIBUS PA, FOUNDATION Fieldbus

Zasilacz

DC 18 to 35 V (4 - 20 mA HART with/without pulse/frequency/switch)

DC 18 to 30 V (20 mA HART, 4 - 20 mA)

DC 9 to 32 V (PROFIBUS PA)

Dopuszczenia do stosowania w strefach zagrożonych wybuchem

ATEX, IECEx, cCSAus, INMETRO, NEPSI, JPN

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)

Pressure approvals and certificates

PED, CRN, AD 2000

Material certificates

3.1 material

NACE MR0175/MR0103, PMI; welding test acc. to EN ISO, ASME, NORSOK

Gaz

Hygienic approvals and certificates

3-A, EHEDG, cGMP

Ciecze

Zasada pomiaru

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Ciecze**Maksymalny błąd pomiaru**Mass flow (liquid): ± 0.1 %Volume flow (liquid): ± 0.1 %Mass flow (gas): ± 0.25 % Density (liquid): ± 0.0005 g/cm³

Zakres pomiarowy0 to 70 000 kg/h (0 to 2570 lb/min)

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Temperatura otoczenia -40 to $+60$ °C (-40 to $+140$ °F)

Materiał obudowy czujnika1.4301/1.4307 (304L), corrosion resistant

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Ciecze**Wejścia**

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Komunikacja cyfrowa

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