

Proline Prowirl D 200

Przepływomierz wirowy

Przepływomierz wirowy o konstrukcji międzykołnierzowej, dostępny w wersji kompaktowej i rozdzielnej.



Korzyści:

- Wbudowany czujnik temperatury dla pomiaru przepływu masy / energii pary nasyconej
- Łatwe centrowanie czujnika w osi rurociągu - pierścienie centrujące w zakresie dostawy
- Wysoka dyspozycyjność - sprawdzona wytrzymałość, odporność na drgania, szoki temperaturowe i uderzenia hydrauliczne
- Stabilność długoterminowa – zerowy dryft czujnika, trwała konstrukcja
- Wygodne podłączenie elektryczne - oddzielny przedział podłączeniowy
- Bezpieczna obsługa za pomocą przycisków "Touch control" - brak konieczności otwierania obudowy, podświetlany wyświetlacz
- Funkcje zaawansowanej autodiagnostyki i weryfikacji poprawności działania - Technologia Heartbeat

More information and current pricing:

www.pl.endress.com/7D2C

Kluczowe parametry

- **Maksymalny błąd pomiaru** Volume flow (liquid): $\pm 0.75\%$
Volume flow (steam, gas): $\pm 1.00\%$ Mass flow (liquid): $\pm 0.85\%$
Mass flow (steam, gas): $\pm 1.7\%$
- **Zakres pomiarowy** Liquid: 0.16 to 625 m³/h (0.09 to 368 ft³/min) depending on medium: water with 1 bar a, 20 °C (14.5 psi a, 68 °F) Steam, gas: 2 to 8342 m³/h (1.18 to 4910 ft³/min) depending on medium: steam with 180 °C, 10 bar a (356 °F, 145 psi a); air with 25 °C, 4.4 bar a (77 °F, 63.8 psi a)
- **Zakres temperatury medium** Standard: -40 to +260 °C (-40 to +500 °F) High/low temperature (option): -200 to +400 °C (-328 to +752 °F) High/low temperature (on request): -200 to +450 °C (-328 to +842 °F)

- **Maks. ciśnienie procesu** PN 40, Class 300, 20K
- **Materiały w kontakcie z medium** Measuring tube: 1.4408 (C3FM) DSC sensor: 1.4435 (316/316L)

Zastosowanie: Prowirl D jest przeznaczony do zabudowy międzykołnierzowej jako bezpośredni zamiennik kryzy pomiarowej. Jest w pełni funkcjonalnym przyrządem do stosowania w procesach pomocniczych, cechującym się niskimi kosztami instalacji. Przepływomierz Prowirl D 200 jest zasilany z pętli sygnałowej, co pozwala na pełną integrację z istniejącą infrastrukturą. Zapewnia najwyższe bezpieczeństwo pracy w obszarach zagrożonych wybuchem. Heartbeat Technology zapewnia bezpieczeństwo procesu przez cały cykl życia.

Funkcje i specyfikacja

Ciecze

Zasada pomiaru

Vortex

Product headline

Cost-effective wafer flowmeter, available as compact or remote version. Integrated temperature measurement for mass/energy flow of saturated steam. For all basic applications and for 1-to-1 replacement of orifice plates.

Sensor features

Easy alignment of the sensor – included centering rings. High availability – proven robustness, resistance to vibrations, temperature shocks & water hammer. Long-term stability – robust drift-free capacitive sensor. Face-to-face length of 65 mm (2.56 in). No flanges.

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. Display module with data transfer function. Robust dual-compartment housing.

Ciecze**Średnica nominalna**DN 15 to 150 (½ to 6")

Materiały w kontakcie z medium

Measuring tube: 1.4408 (C3FM)

DSC sensor: 1.4435 (316/316L)

Wielkości mierzoneVolume flow, mass flow, corrected volume flow, energy flow, heat flow difference, temperature

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Temperatura otoczenia

Compact version (standard): -40 to +80 °C (-40 to +176 °F)

Compact version (option): -50 to +80 °C (-58 to +176 °F)

Remote version (standard): -40 to +85 °C (-40 to +185 °F)

Remote version (option): -50 to +85 °C (-58 to +185 °F)

Ciecze**Materiał obudowy czujnika**

Sensor connection housing: AlSi10Mg, coated; 1.4408 (CF3M)

Materiał obudowy przetwornika

AlSi10Mg, coated; 1.4404 (316L)

Stopień ochrony

Compact version: IP66/67, type 4X enclosure

Sensor remote version: IP66/67, type 4X enclosure

Transmitter remote version: 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)

Wejścia

Current input 4 - 20 mA (passive)

Komunikacja cyfrowa

HART, PROFIBUS PA, FOUNDATION Fieldbus

Zasilacz

DC 12 to 35 V (4 - 20 mA HART with/without pulse/frequency/switch output)

DC 12 to 30 V (4 - 20 mA HART, 4 - 20 mA)

DC 12 to 35 V (4 - 20 mA HART, pulse/frequency/switch output, 4 - 20 mA input)

DC 9 to 32 V (PROFIBUS PA, pulse/frequency/switch output)

Dopuszczenia do stosowania w strefach zagrożonych wybuchem

ATEX, IECEx, cCSAus, JPN, EAC

Ciecze**Product safety**

CE, C-TICK, EAC

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

ABS, LR, BV

Pressure approvals and certificates

PED, CRN

Material certificates

3.1 material

NACE MR0175/MR0103, PMI (on request)

Gaz**Zasada pomiaru**

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