

초음파 유량계

Proline Prosonic Flow B 200

루프 전력 기술이 탑재된 정확하고 신뢰할 수 있는
바이오가스 측정 계기



추가 정보 및 현재 가격:

www.kr.endress.com/9B2B

장점:

- 통합 실시간 메탄 성분 측정
- 저압 기체에 최적화 - 특수한 센서 설계
- 추가적인 압력 손실 없음 - 풀 보어 설계
- 프로세스 투명성 - 진단 기능
- 편리한 계기 배선 - 분리된 연결 구역
- 안전한 작동 - 터치 동작과 배경 조명 표시로 계기 개폐가 불필요
- 통합/자가 검증 - 하트비트(Heartbeat) 기술

사양 정보

- **Max. measurement error** Volume flow (standard): - ± 1.5 % o.r. for 3 to 30 m/s (9.84 to 98.4 ft/s) - ± 3 % o.r. for 1 to 3 m/s (3.28 to 9.84 ft/s) Volume flow (option): - ± 0.1 % o.f.s. for 0.3 to 1 m/s (0.98 to 3.28 ft/s) - ± 1.5 % o.r. for 1 to 30 m/s (3.28 to 98.4 ft/s)
- **Measuring range** Standard: 1 to 30 m/s (3.28 to 98.4 ft/s) Option: 0.3 to 30 m/s (0.98 to 98.4 ft/s)
- **Medium temperature range** 0 to +80 °C (+32 to +176 °F)
- **Max. process pressure** 11 bar a (159 psi a)
- **Wetted materials** Sensor: 1.4404/1.4435 (316L) Transducer: HNBR Temperature sensor (option): AFM 34

적용 분야: Prosonic Flow B 200은 고난도 프로세스 조건에서도 습식 바이오가스와 소화조 가스를 정확하게 측정하는 고성능 유량계입니다. 실시간 메탄 성분 분석 기능이 통합된 Prosonic Flow B 200은 기체 유량과 기체 품질의 연속 측정 및 모니터링을 지원합니다. 또한 효율적인 프로세스 제어와 에너지 균형에 더해 하트비트(Heartbeat) 기술을 통해 규정 준수와 프로세스 안정성을 보장합니다.

특징 및 사양

Gas

측정 원리

Ultrasonic flow

Product headline

The device for accurate, reliable biogas measurement with loop-powered technology.

Inline flowmeter designed for measurement of wet biogas and digester gas under fluctuating process conditions.

Sensor features

Optimized for low pressure gas – specialized sensor design. No additional pressure loss – full-bore design. Process transparency – diagnostic capability.

Multivariable device: flow, temperature and methane. Medium temperature: 0 to 80 °C (32 to 176 °F). Process pressure: 0.7 to 11 bar a (10.2 to 159 psi a).

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. Plant safety: worldwide approvals.

Nominal diameter range

Single - path version: DN 50 (2"), DN 80 (3")

Two - path version: DN 100 to 200 (4 to 8")

Wetted materials

Sensor: 1.4404/1.4435 (316L)

Transducer: HNBR

Temperature sensor (option): AFM 34

Measured variables

Volume flow, corrected volume flow, corrected methane volume flow, energy flow, methane fraction, calorific value, temperature

Gas

Max. measurement error

Volume flow (standard):

- ± 1.5 % o.r. for 3 to 30 m/s (9.84 to 98.4 ft/s)
- ± 3 % o.r. for 1 to 3 m/s (3.28 to 9.84 ft/s)

Volume flow (option):

- ± 0.1 % o.f.s. for 0.3 to 1 m/s (0.98 to 3.28 ft/s)
- ± 1.5 % o.r. for 1 to 30 m/s (3.28 to 98.4 ft/s)

Measuring range

Standard: 1 to 30 m/s (3.28 to 98.4 ft/s)

Option: 0.3 to 30 m/s (0.98 to 98.4 ft/s)

Max. process pressure

11 bar a (159 psi a)

Medium temperature range

0 to +80 °C (+32 to +176 °F)

Ambient temperature range

Flange material carbon steel: -10 to +60 °C (+14 to +140 °F)

Flange material stainless steel: -40 to +60 °C (-40 to +140 °F)

Transmitter housing material

AlSi10Mg, coated; 1.4404 (316L)

Degree of protection

IP66/67, type 4X enclosure

Display/Operation

4 - line backlit display with touch control

(operation from outside)

Configuration via local display and operating tools possible

Outputs

4 - 20 mA HART (passive)

4 - 20 mA (passive)

Pulse/frequency/switch output (passive)

Gas

Inputs

Current input 4 - 20 mA (passive)

Digital communication

HART

Power supply

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)

Hazardous area approvals

ATEX, IECEx, cCSAus, NEPSI, INMETRO, JPN

Metrological approvals and certificates

Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025)

Pressure approvals and certificates

PED

Material certificates

3.1 material (wetted parts)

추가 정보 www.kr.endress.com/9B2B