Nanomass Gas Density

The device for continuous gas density measurement in the process

More information and current pricing:
www.th.endress.com/DCEB

Benefits:

- High process safety and product quality – permanente process monitoring in real time
- Increased process efficiency – continuous measurement and fast response time
- High availability – maintenance-free
- Complete data transparency – integrated data logger
- Excellent price/performance ratio – multivariable measurement (temperature, pressure, concentration)
- Reliable – insensitive to vibrations

Field of application: Nanomass Gas Density is the first device for precise gas density measurement based on the revolutionary MEMS-Coriolis technology – a combination of innovative micro-technology and Endress+Hauser's long experience. For the first time, under economically attractive conditions parameters such as gas density or quality can be monitored continuously in the process. Nanomass Gas Density can be easily integrated into any existing process infrastructure.

Features and specifications

Density/Concentration

Measuring principle
MEMS coriolis

Density/Concentration

Product headline

The device for continuous gas density measurement in the process. Highly accurate density and concentration measurement of non - corrosive, inflammable, non - inflammable gases and gas mixtures.

Sensor features

High process safety and product quality – permanent process monitoring in real time. Increased process efficiency – continuous measurement and fast response time. High availability – maintenance - free. Integrated pressure and temperature measurement. Different hazardous area approvals available.

Transmitter features

Complete data transparency – integrated data logger. Excellent price/ performance ratio – multivariable measurement (temperature, pressure, concentration). Reliable – insensitive to vibrations. 2 - line backlit display with push buttons.

Nominal diameter range

DN 0.7 (1/36")

Wetted materials

Micro channel:
Silicon; Schott Borofloat 33

Manifold
1.4542 (17 - 4 PH)

Connection:
Swagelok, 1.4404 (316L)

Pressure sensor:
1.4404 (316L)
O - ring: Viton
Process membrane: Ceramics (AI2 O3)

Density/Concentration

Measured variables
Density, temperature, pressure, reference density, average molar mass,concentration

Max. measurement error
Density (gas): ±0.1 kg/m³
Temperature: ± 0.5°C
Pressure: ± 0.02 bar

Measuring range
0 to 30 kg/m³ (0 to 0.03 g/cm3, 0 to 0.03 SGU)

Max. process pressure
20 bar (290 psi)

Medium temperature range
–20 to +60 °C (–4 to +140 °F)

Ambient temperature range
–20 to +60 °C (–4 to +140 °F)

Transmitter housing material
Powder - coated aluminium

Degree of protection
Standard: IP65/67

Display/Operation
2 - line backlit display with push buttons
Configuration via local display and operating tools possible
USB or RS232 interface

Outputs
2 outputs:
4 - 20 mA (passive)

Inputs
None

Density/Concentration

Power supply
DC 8 to 28 V

Hazardous area approvals
ATEX, IECEx, UL C/US Cl. I

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Other approvals and certificates
Calibration
NAMUR

More information **www.th.endress.com/DCEB**

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