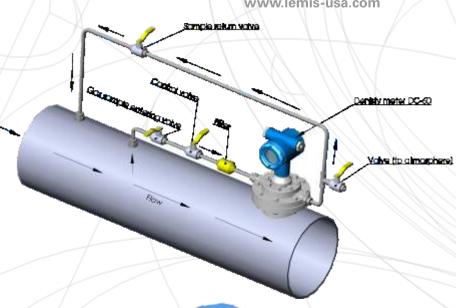


IN PROCESS TO EXCELLENCE

Key application

DC-60 Density Meter is designed for accurate, continuous monitoring of the technological process. High-accuracy density data for natural gas mixtures are required in entire range of pressure, temperature and compositions encountered in custody transfer. DC-60 provides a continuous monitoring of density and temperature of natural gas in flow.

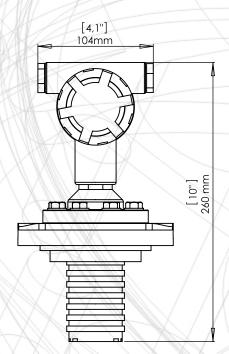


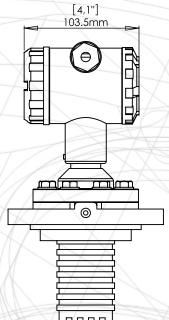
Operating principle

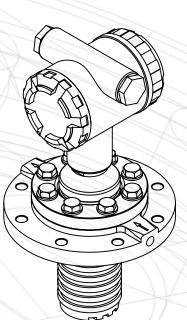
The gas passed over the cylinder tube resonance sensor vibrating at its natural frequency. The mass of gas in contact with the vibrating walls vibrates with the cylinder. Depends upon the gas density and, since increasing the vibrating mass decreases the natural frequency of vibration, the gas density is simply determinated by measuring the change in sensor resonant frequency. This measurement method provides precise gas density values in seconds.



Dimensions







Specifications

Measuring range:

Density 1... 400 kg/m³
Density Standard Calibration 1...30 kg/m³
10...100 kg/m³

25...250 kg/m³ 40...400 kg/m³

Temperature -40°C to $+85^{\circ}\text{C}$ (-40°F to $+185^{\circ}\text{F}$)

Accuracy:

Density $\pm 0.15\%$ of reading

Temperature $\pm 0.2^{\circ}\text{C} (\pm 0.4^{\circ}\text{F}) \text{ or } \pm 0.3^{\circ}\text{C} (\pm 0.6^{\circ}\text{F})$

Repeatability:

Density $\pm 0.02\%$ of reading $\pm 0.1^{\circ}\text{C}$ ($\pm 0.2^{\circ}\text{F}$)

Resolution:

Density 0.1 kg/m³ Temperature 0.01°C (0.02°F)

Operating pressure Up to 150 Bar (up to 2175 psi)

Ambient temperature -50... +50°C (-58... +122°F)

Sensor:

Type Vibrating element (Resonance principle)
Material Stainless steel SS 316 L, NiSpan C, Teflon

Power supply From 6.5 to 15 VDC

Dimensions, weight

Height 260 mm (10 in)
Width 140 mm (5.5 in)
Weight approx. 4.3 kg (approx. 9.5 lb)

Weight approx.4.3 kg (approx
Process connection NPT Thread 1/8"

Weather rating IP68

Digital output Standard: RS485, Modbus

or user choice of signals and protocols

Analog output 4-20 mA, up to 3 channels

Implosion protection marking ATEX II 1G Ex ia IIC T4

Quality Assurance ISO 9001:2000

ADVANTAGES

- Direct gas density measurement in pipeline
- Automatic temperature compensation
- Increased safety level
- ATEX Hazardous area certification
- Easy installation, low maintenance

APPLICATIONS

- Natural gas custody transfer
- Gas blending
- Gas quality checking

SOFTWARE:



Multifunctional software allows to proceed the measurements results in use-convenient form; Compatible for a Windows 7/8/10*





Combine of Gas Density Meter DC-60 and Flow Meter FM-50

* optional

For more information please visit www.lemis-usa.com



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