

Hoentzsch Vortex Bio Gas Flow

marginally low flow – resistant in rough work environments

Flow measurement of Bio Gas has faced huge problems due to high humidity, condensation, particles, varying compositions, aggressive and explosive media and marginally low air flow.

The Hoentzsch Vortex VA Flowmeter offers an accurate measurement solution for the Bio Gas environment:

- starting from very low gas flow velocity (0.4 m/s)
- measuring dynamics (turndown) 1:100
- largely insensitive to condensation and particle deposits
- almost no cleaning and servicing necessary
- accurate measurement with variable gas compositions
- low pressure drop, no moving parts
- SIL and Ex-proof certifications available



Working Principle of a Hoentzsch Vortex Flowmeter:

The measurement is based on ultrasonic scanning of the Karman Vortex Street. Vortices occur intermittently around the element in the sensor head and (different to most other Vortex technologies) are scanned ultrasonically. This allows low flow measurement starting from 0.4m/s of air/gases. The sensor has no moving parts, a recalibration is not necessary: "simply install and forget about it!"



suitable in extremely difficult service conditions

ultrasonic measurement of vortices - from 0.4m/s for low flow applications

easy config, data transfer, display, transport, HART

Design Options and Features:

- insertion probes (in pipelines from 80 mm) or measuring tubes (from 25 mm)
- combined sensors for flow (velocity and rate) and temperature
- working temperature -25 to 250°C, pressure up to 10 bar
- range from 0.5 to 80 m/s
- time constant 65 ms
- SIL2/SC3 certification / Performance Level
- for application in explosive atmospheres (ATEX, CSA)
- corrosion-resistant designs, easy to clean
- fixed evaluation units or handheld devices

