

Magnetic-Inductive Flow Meter FMQ

Application/Specific usage

- Magnetic-inductive flowmeter for the measurement of flow rate and volume in food and pharmaceutical applications
- Suitable for liquids, wash and gases with a minimum conductivity of 2 µS/cm
- Flow rate measurement of media containing solids (± 2 % with pipe line covered)
- Measurement range from 20 l/h to 640 000 l/h
- Suitable for dosing and filling applications

Hygienic design/Process connection

- Sensors available to conform to 3-A Standard 20
- All wetted materials are FDA-compliant
- Sensor meets sanitary 3F stainless steel
- Flange tube in compliance with 3F coating
- Turned right and pigtail
- Electrodes made of titanium steel (3.16L) or 316 L (316)
- Sensor available with or without process connections

Special features/Advantages

- CEMP clearing up to 130 °C / 266 °F for meat, 30 minutes
- High measurement accuracy even at low flow rates
- Simple and user-friendly parameterisation
- Serial input for recording the quantity (volume counter optional)
- Automatic empty pipe detection avoids undefined readings for empty pipes
- PIA lining for treatment resistance to aggressive substances such as acids
- Turned-right, right-angle tube fitting, even at high temperatures
- Protecting housing head with built-in digital display
- Operation of device via smartphone without opening the housing
- Minimal maintenance and care requirements
- Pharmaceutical version available with all necessary certificates
- IO-Link digital communication

Options/Accessories

- IO-Link Power (IOV 1)
- All IO-Link accessories are available at www.anderson-hesse.com/iot

Technical principle

The principle behind this measurement method is Faraday's law of induction. This law states that a voltage is induced in a conductor that moves in a magnetic field. In the magnetic-inductive measurement method, the flowing, conductive medium acts as the conductor. Two vertically positioned field coils generate a constant magnetic field. The voltage induced in the flowing medium is measured by two stainless steel electrodes that are arranged horizontally. The voltage is directly proportional to the flow rate and can be expressed as the flow volume using the internal tube width. The measured measurement values are made available as a current signal and a 20 mA standard signal or as an optional IO-Link digital communication.

Communication

- IO-Link
- 4...20 mA

FMQ features



Magnetic-inductive measurement

