Dosimass Coriolis flowmeter

Mass flowmeter with hygienic design, highest repeatability and a compact transmitter

Benefits:

- High and stable filling performance – high measuring accuracy and repeatability in shortest filling times
- IO-Link allows real-time digital communication for easier commissioning and continuous data availability
- Fewer process measuring points – multivariable measurement (flow, density, temperature)
- Compact design for optimized machine footprint
- Integrated batching functionality – filling process management solved by the flowmeter
- Global compliance with industry standards – EHEDG, 3-A, FCM, cGMP
- SIP and CIP cleanable

Specs at a glance

- **Max. measurement error** Mass flow (liquid): ±0.15 % Density (liquid): ±0.0005 g/cm³
- **Measuring range** 0 to 45 000 kg/h (0 to 1654 lb/min)
- **Medium temperature range** –40 to +130 °C (–40 to +266 °F) 150 °C allowed for 1 h
- **Max. process pressure** PN 40
- **Wetted materials** Measuring tube: 1.4435 (316/316L) (DN 1 to 4 mm (1/24 to 1/8") 1.4539 (904L) (DN 8 to 40 mm (3/8 to 1 1/2") Process connection 1.4435 (316/316L) (DN 1 to 4 mm (1/24 to 1/8") 1.4539 (904L) (DN 8 to 40 mm (3/8 to 1 1/2")

Field of application: Dosimass is designed for filling and bottling applications in Food & Beverage and Life Sciences. In applications with limited space, Dosimass is the preferred choice for system integrators, skid builders and equipment manufacturers. Dosimass measures volume and mass flow directly with temperature and density compensation to ensure maximum repeatability, independent of physical fluid properties

such as viscosity or density. This enables the measurement of liquids with the most diverse properties.

Features and specifications

Liquids

Measuring principle
Coriolis

Product headline
The compact sensor with an ultra-compact transmitter.
Measurement of liquids with the most diverse properties in continuous process control & batching applications.

Sensor features
High process safety – high measuring accuracy for different media in shortest filling time. Fewer process measuring points – multivariable measurement (flow, density, temperature). Space-saving installation – no in-/outlet run needs.
Nominal diameter: DN 1 to 40 (1/24 to 1½"). Various hygienic process connections, 3-A conform. CIP, SIP cleanable sensor.

Transmitter features
Versatile and time-saving wiring – plug connector. Fast commissioning – pre-configured devices. Automatic recovery of data for servicing. Robust, ultra-compact transmitter housing. Pulse/frequency/switch output, Modbus RS485. Excellent and easily cleanable transmitter.

Nominal diameter range
DN 1 to 40 (1/24 to 1½")

Wetted materials
Measuring tube:
1.4435 (316/316L) (DN 1 to 4 mm (1/24 to 1/8"))
1.4539 (904L) (DN 8 to 40 mm (3/8 to 1 ½")
Process connection
1.4435 (316/316L) (DN 1 to 4 mm (1/24 to 1/8"))
1.4539 (904L) (DN 8 to 40 mm (3/8 to 1 ½")

Liquids

Measured variables
Mass flow, density, temperature, volume flow

Max. measurement error
Mass flow (liquid): ±0.15 %
Density (liquid): ±0.0005 g/cm³

Measuring range
0 to 45 000 kg/h (0 to 1654 lb/min)

Max. process pressure
PN 40

Medium temperature range
–40 to +130 °C (–40 to +266 °F)
150 °C allowed for 1 h

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

Sensor housing material
Stainless steel, 1.4404 (316/316L) (DN 1 to 4 mm (1/24 to 1/8"))
Stainless steel, 1.4301 (304) (DN 8 to 40 mm (3/8 to 1 1/2"))

Transmitter housing material
Stainless steel, 1.4409 (CF3M)

Degree of protection
IP67, type 4X enclosure

Display/Operation
No local operation
Configuration via operating tools possible

Outputs
Pulse/frequency/switch output (passive)

Inputs
None

Liquids

Digital communication
Modbus RS485, IO-Link

Power supply
DC 20 to 30 V

Hazardous area approvals
ATEX, IECEx, UL, UK Ex

Other approvals and certificates
3.1 material, calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), NAMUR
3-A

Product safety
CE