

CNGmass Coriolis flowmeter

Refueling application flowmeter with easy system integration



More information and current pricing:

www.at.endress.com/8FF

Benefits:

- Excellent operational safety – reliable under extreme process conditions
- Fewer process measuring points – multivariable measurement (flow, density, temperature)
- Space-saving installation – no in/outlet run needs
- Easy operation – reduced to application needs
- Fast commissioning – pre-configured devices
- Automatic recovery of data for servicing

Specs at a glance

- **Max. measurement error** Mass flow: ± 0.5 % of batch
- **Measuring range** 0 to 150 kg/min (0 to 330 lb/min)
- **Medium temperature range** -50 to $+125$ °C (-58 to $+257$ °F)
- **Max. process pressure** 350 bar (5080 psi)
- **Wetted materials** Measuring tube: 1.4435 (316L) Connection: 1.4404 (316)

Field of application: When it comes to billing and paying for the amount of CNG actually pumped, the measuring accuracy at the dispenser is just as important as with any other fuel. Therefore, the “brain” in every CNG dispenser is a flowmeter that measures the quantity of fuel transferred from dispenser to vehicle with the absolute highest accuracy – reliability day in, day out, round the clock. These are some of the benefits of CNGmass, which has been specifically designed for such applications.

Features and specifications

Liquids

Measuring principle

Coriolis

Product headline

The refueling application flowmeter with easy system integration. Accurate measurement of compressed natural gas (CNG) in high pressure refueling applications.

Sensor features

Excellent operational safety – reliable under extreme process conditions. Fewer process measuring points – multivariable measurement (flow, density, temp). Spacesaving installation – no in/outlet run needs. Flow rates up to 150 kg/min (330 lb/min). Process pressure up to 350 bar (5080 psi).

Transmitter features

Easy operation – reduced to application needs. Fast commissioning – pre - configured devices. Automatic recovery of data for servicing. Robust, ultra - compact transmitter housing. Pulse output and Modbus RS485.

Nominal diameter range

DN 8 to 25 ($\frac{3}{8}$ to 1")

Wetted materials

Measuring tube: 1.4435 (316L)

Connection: 1.4404 (316)

Measured variables

Mass flow, density, temperature, volume flow

Max. measurement error

Mass flow: ± 0.5 % of batch

Measuring range

0 to 150 kg/min (0 to 330 lb/min)

Max. process pressure

350 bar (5080 psi)

Liquids

Medium temperature range

–50 to +125 °C (–58 to +257 °F)

Ambient temperature range

–40 to +60 °C (–40 to +140 °F)

Sensor housing material

1.4301 (304), corrosion resistant

Transmitter housing material

Powder - coated die - cast aluminium

Degree of protection

IP67, type 4X enclosure

Display/Operation

No local operation

Configuration via operating tools possible

Outputs

Pulse/frequency/switch output (passive), phase - shifted pulse

Inputs

None

Digital communication

Modbus RS485

Power supply

DC 10 to 30 V AC 20 to 28 V

Hazardous area approvals

ATEX, IECEx, NEC/CEC, FM, CSA, NEPSI, UL

Metrological approvals and certificates

Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025)

PTB, BEW, LNE, Rosstandart, NTEP approvals

Liquids

Pressure approvals and certificates

CRN

Material certificates

3.1 material

Gas

Measuring principle

Coriolis

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Measuring tube: 1.4435 (316L)

Connection: 1.4404 (316)

Measured variables

Mass flow, density, temperature, volume flow

Gas

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Mass flow: ± 0.5 % of batch

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Max. process pressure

350 bar (5080 psi)

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