

Sanitary and Hygienic CORIOLIS MASS FLOWMETER

L-Straight tube Series

ETRANS – CMASS008 Datasheet

Precise Measurement,
Ultimate Control

www.enelean.com



Coriolis mass flowmeter

MODEL CMASS008



Application Areas

- Food and Beverage Processing
- Pharmaceutical Manufacturing
- Biotechnology and Life Sciences
- Dairy Processing and Pasteurization
- Cosmetics and Personal Care Production
- Semiconductor Manufacturing
- Edible Oil Refining
- Alcohol and Spirit Distillation

Features

- High-Precision Accuracy: Delivers stable measurement accuracy of $\pm 0.1\%$ for mass flow.
- Sanitary Design: Fully compliant with 3-A sanitary standards for hygienic applications.
- Premium Materials: Constructed with 316L stainless steel wetted parts (Titanium/Hastelloy optional).
- CIP/SIP Compatible: Designed to withstand rigorous Clean-in-Place and Steam-in-Place procedures.
- Multi-Parameter Monitoring: Simultaneously measures mass flow, density, and temperature.
- Viscosity Independence: Maintains accuracy regardless of medium viscosity or density changes.
- Low Maintenance: Non-intrusive design with no moving parts ensures long-term reliability.
- Digital Connectivity: Supports Modbus RS-485 and 4-20mA output for seamless system integration.

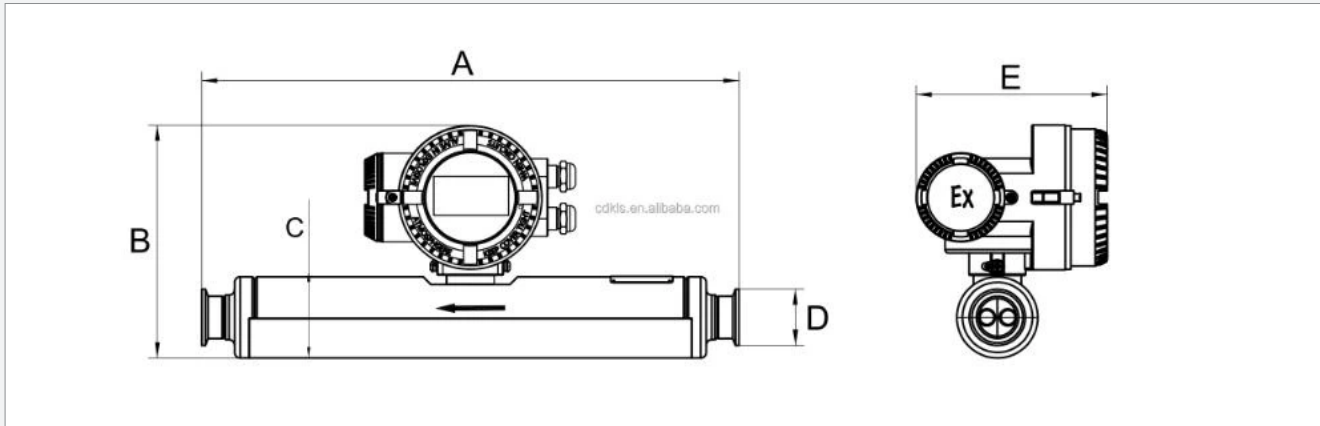
Description

The Enelsan Sanitary Coriolis Mass Flow Meter is engineered specifically to meet the rigorous hygiene and precision standards of the food, beverage, and pharmaceutical industries. Constructed with high-grade 316L stainless steel wetted parts and featuring a polishable surface finish, this meter complies with 3-A sanitary standards to ensure absolute sterility. Its crevice-free design allows for effective CIP (Clean-in-Place) and SIP (Steam-in-Place) processes, eliminating the risk of bacterial growth and cross-contamination while maintaining the integrity of sensitive media.

Beyond its hygienic construction, the Enelsan Coriolis meter delivers exceptional performance with a mass flow accuracy of up to $\pm 0.1\%$, remaining stable even under extreme working conditions such as high viscosity or density fluctuations. The device utilizes advanced digital signal processing to provide direct measurement of mass flow, density, and temperature simultaneously. With a robust housing and no moving parts, it offers a maintenance-free service life significantly longer than industry averages, making it a reliable solution for critical process control in sanitary environments.



Diameters



Model and diameter

MODEL	A	B	C	D	E	Nominal diameter
RM-CMASS08	382	207	73	50.8	172	1/4"
RM-CMASS15	382	207	73	50.8	172	1/2"
RM-CMASS25	483	209	73	50.8	172	1"
RM-CMASS40	764	258	Ø124	Ø106	172	1-1/2"
RM-CMASS50	764	258	Ø124	Ø106	172	2"

As a high-precision flow measurement device based on the Coriolis effect, the Coriolis mass flow meter, with its characteristic of directly measuring mass flow, is widely used in numerous industrial fields such as petrochemicals, pharmaceuticals, food and beverage, and semiconductors.

- (1)Integrated design,small size,easy installation.
- (2)Measurement independent of medium characteristics.
- (3)Hygienic design in accordance with 3A certification.
- (4)CIP/SIP cleaning available to ensure product quality.
- (5)Robust housing(aluminium or stainless steel).

As a high-precision flow measurement device based on the Coriolis effect, the Coriolis mass flow meter, with its characteristic of directly measuring mass flow, is widely used in numerous industrial fields such as petrochemicals, pharmaceuticals, food and beverage, and semiconductors. Its core functions are not only reflected in accurate metering but also integrate stability to adapt to complex working conditions and multi-parameter monitoring capabilities:

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Transmitter Specifications

Nominal Diameter (DN)	DN04, DN08, DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100
Certification: Transmitter & Sensor Assembly	CCS Certification, CPA, Explosion proof certificate(ex)
Power Supply	220VAC/24VDC
Output;Input1	Modbus RTU/RS-485, Pulse,4-20mA Current loop
Display;Operate	3-line backlight; Touch key control
Protection grade	IP67
Housing material	304 stainless steel, ZL401 (Transmitter)
Electrical connection	4-20mA Current loop
Measuring Tube Material; Wetted Parts Surface Finish	316L (default), titanium/Ha C alloy/ tantalum (optional); polishable.
Process connection	Thread
Accuracy class	0.15 level, 0.2 level, 0.5 level (default), 1.0 level
Transmitter software	CLS100 (default), optional CLS200, CLS300
>>Other certifications	Explosion proof certificate, SIL, CCS, 3-A, EAC

Compared with similar products, our Coriolis mass flowmeters have significant advantages: under extreme working conditions (high viscosity, multiphase flow, density fluctuation), the accuracy remains stable at $\pm 0.1\%$, far exceeding the industry average of $\pm 0.5\%$, and the maintenance cycle is tripled; Equipped with military-grade anti-interference design and gradient alloy coating, the anti-electromagnetic interference capability is improved by 40%, and the service life reaches 8 years (industry average is 3-5 years).



- 1.Direct measurement of mass flow, without being interfered by medium characteristics
- 2.Synchronous monitoring of multiple parameters to enhance process control
- 3.Adaptation to extreme working conditions to ensure stable operation
- 4.Low pressure loss and compact design to optimize system energy efficiency
- 5.Intelligent functions and convenient maintenance

Contact us

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