

CORIOLIS MASS FLOWMETERS

CM / CORIO-MASS FLOWMETERS



FEATURES

- Coriolis mass flow meters are the most accurate measurement system in the world. Measurement precision; Standard is $\pm 0.2\%$, $\pm 0.1\%$, option is $\pm 0.05\%$,
- There are 3 different pipe bending versions as "U", "V", "Tri-Angle" types according to the application to be used.
- They have the same measuring principle for liquid, gas and steam measurement,
- They can measure density and temperature simultaneously as well as mass flow,
- They measure independently of physical fluid properties and flow profile,
- Straight pipe distance is not required for installation,
- Periodic recalibration is not required.

APPLICATIONS

- Mass flow meters can measure almost any liquid; cleaning agents, solvents, fuels, crude oil, vegetable oils, animal fats, latex, silicone oils, alcohol, fruit solutions, toothpaste, vinegar, ketchup, mayonnaise, gases or liquefied gases.
- Especially in applications where high temperature, high pressure and high corrosive liquid / gas and steam measurement are required,
- In control applications with automation system with RS-485 connection protocol and HART feature,
- It is especially preferred in industrial applications that require 24 hours continuous use.

CORIO-MASS FLOWMETERS

Mass flow meters consist of a sensor and a display unit. Mass flow meter, the digital signal processor and digital closed loop vibration control integrate signal processing, sensor calculation and diagnostic functions, and have high measurement accuracy and comprehensive features.

On-line Node-configuration feature, fault diagnosis and data recording, with automation system communication can be done directly via Modbus, via HART or PC. The flow meter can not only calculate process volume flow, cumulative volume and component ratio, but can also measure mass flow, density and temperature online in real time.

CORIO-MASS FLOWMETER TYPES



Corio-Mass "U" Type Flowmeters

S-Meters Corio-Mass "U" Type flow meters are the standard high performance mass flow meters for the process industry.

The "U" bent measuring tube offers superior performance and high accuracy in virtually any application. From process control in (petro) chemical applications, to concentration measurements in the food and beverage industry, to storage transfer filling and shipping measurements in the oil and gas industry.



Corio-Mass "V" Type Flowmeters

S-Meter Corio-Mass "V" type mass flow meters like "U" types, they can be used in cryogenic environments such as Liquefied Natural Gas (LNG) with temperatures up to -200°C and in systems under harsh conditions such as high operating temperatures (up to 350°C) and pressures (up to 1000 bar).

Larger pipe diameters than DN80, less pressure loss and because it takes up less space, it is the most suitable model especially for high viscosity liquids.



Corio-Mass "Tri-Angle" Type Flowmeters

S-Meter Corio-Mass "Tri-Angle" Type mass flow meters, they are especially preferred in fluids such as CNG / LPG / LNG.

Since this model has high precision like other models and has a smaller size in terms of size, it is used as a measurement unit especially in gas dispensers. There are four diameters for this model. DN10 / 15 / 20 / 25.

CORIO-MASS FLOWMETER TRANSMITTER



- The Corio-Mass mass flow meter can be used as compact, up to a temperature of 150 ° C. For higher temperature applications, it is recommended to use the separated type (Seperate). Standard cable length is 1 meter. Indicators are Waterproof and Explosion proof. (Water proof, Ex-Proof / ExdibIICT6Gb)
- Control with keys on the touch LCD screen provides faster information communication in the process.
- Thanks to its state-of-the-art "light sensitive" feature, the indicator does not lose its functions under strong light in an open environment.
- It has 4-20mA, 0-10KHz output and Standard RS 485 communication protocol and HART outputs on the indicator.

TECHNICAL SPECIFICATIONS

TRANSMITTER SPECIFICATIONS

Display Type	4 lines LCD / Touch-Screen Display
	Light Sensing Display
1. Screen Info	Flow Rate / Total
2. Screen Info	Density / Temperature of Liquid
Mounting Type	Local - Seperate
Outputs	4-20mA (500 Ohm): Flow Rate or Density
	Pals Output (0-10kHz); Flow Rate
Communication Protocol	RS 485 Communication / HART
Enviromental Temperature	-20°C / +50°C (optional -41°C / +81°C)
Working Temperature	Standart: -50°C / +150°C
	Optional: -50°C / +350°C or -270°C / +150°C
Protection Class	IP67
Proof Type	Water-Proof / Ex-Proof
Cover Body Material	Aluminum Alloy Casting
Supply Power	24 VDC / 220 VAC



SENSOR SPECIFICION

Enviromental Temperature	-20°C / +50°C (optional -41°C / +81°C)
Working Temperature	Standard: -50°C / +150°C
	Optional: -50°C / +350°C or -270°C / +150°C
Pressure Class	Standard: 16/25/40 bar / Optional; 1000 bar
Accuracy	± % 0,5 / ± % 0,2 / ± % 0,1
Sizes	U Tipi: DN3-DN300
	V Tipi: DN10-DN300
	Triangel: DN10-DN25
Protection Class	IP67
Sensor Body Material	Standard: SS 304, Optional: SS 316L
Measuring Tube Material	Standard: SS 316L
	Optional: Hastelloy-C / PTFE / X (According to Inquiry)
Flange Material	SS 304 / SS 316L / Hastelloy-C
Connection Options	Flange (ANSI-DIN-JIS) / Threaded / Tri-Clamp



FLOW RATE TABLE

Corio-Mass “U” Type Flowmeters

Model	DN	Flow Rate (Kg/h)	Pressure (bar)	Standard Connection (mm)
CM-U10	10	0 - 500	0~40	Flanş 10
CM-U15	15	0 - 1000	0~40	Flanş 15
CM-U20	20	0 - 3000	0~40	Flanş 20
CM-U25	25	0 - 10.000	0~16	Flanş 25
CM-U40	40	0 - 20.000	0~16	Flanş 40
CM-U50	50	0 - 30.000	0~16	Flanş 50
CM-U65	65	0 - 50.000	0~16	Flanş 65
CM-U80	80	0 - 100.000	0~16	Flanş 80
CM-U100	100	0 - 150.000	0~16	Flanş 100
CM-U125	125	0 - 200.000	0~16	Flanş 125
CM-U150	150	0 - 300.000	0~16	Flanş 150
CM-U200	200	0 - 500.000	0~16	Flanş 150

Corio-Mass “V” Type Flowmeters

Model	DN	Flow Rate (Kg/h)	Pressure (bar)	Standard Connection (mm)
CM-V10	10	0 - 1000	0~40	Flanş 10
CM-V15	15	0 - 3500	0~40	Flanş 15
CM-V20	20	0 - 5500	0~40	Flanş 20
CM-V25	25	0 - 10.000	0~16	Flanş 25
CM-V50	40	0 - 40.000	0~16	Flanş 50
CM-V80	50	0 - 100.000	0~16	Flanş 80
CM-V100	65	0 - 200.000	0~16	Flanş 100
CM-V125	80	0 - 300.000	0~16	Flanş 125
CM-V150	100	0 - 500.000	0~16	Flanş 150
CM-V200	125	0 - 700.000	0~16	Flanş 200
CM-V250	150	0 - 800.000	0~16	Flanş 250
CM-V300	200	0 - 1.000.000	0~16	Flanş 300



www.sayac.com

www.sayacmarket.com

S METER SAYAÇ ve OTOMASYON A.Ş.
İsmetpaşa Mah. Çiçek Sok. No:4 77100 / YALOVA
Tel. 0226 812 60 00 Fax 0 (226) 811 59 89
info@sayac.com

f y i+ / sayacmarket