

Coriolis Mass **FLOWMETER**

ETRANS –PTCMF **Datasheet**



Precise Measurement,
Ultimate Control

Coriolis Mass Flowmeter

MODEL PTCMF



Application Areas

Water & Salt Water Networks
Food Production & Transfer Lines
Alcohol & Beverage Measurement
Chemical Fluids & Solvents
Fuel Transfer & Consumption Monitoring
Industrial Automation Integration (PLC/SCADA)

Features

- Universal measuring principle for liquids and gases
- Multivariable measurement – simultaneous measuring of mass flow, density, temperature, volumetric flow, and Brix
- High flow measuring accuracy: $\pm 0.1\%$
- High density measuring accuracy: $\pm 0.00025 \text{ gr/cc}$
- High zero stability
- Measuring principle independent of the physical fluid properties and the flow profile
- Fully temperature compensated
- Robust against environmental mechanical vibration
- Various sizes from DN8 up to DN250

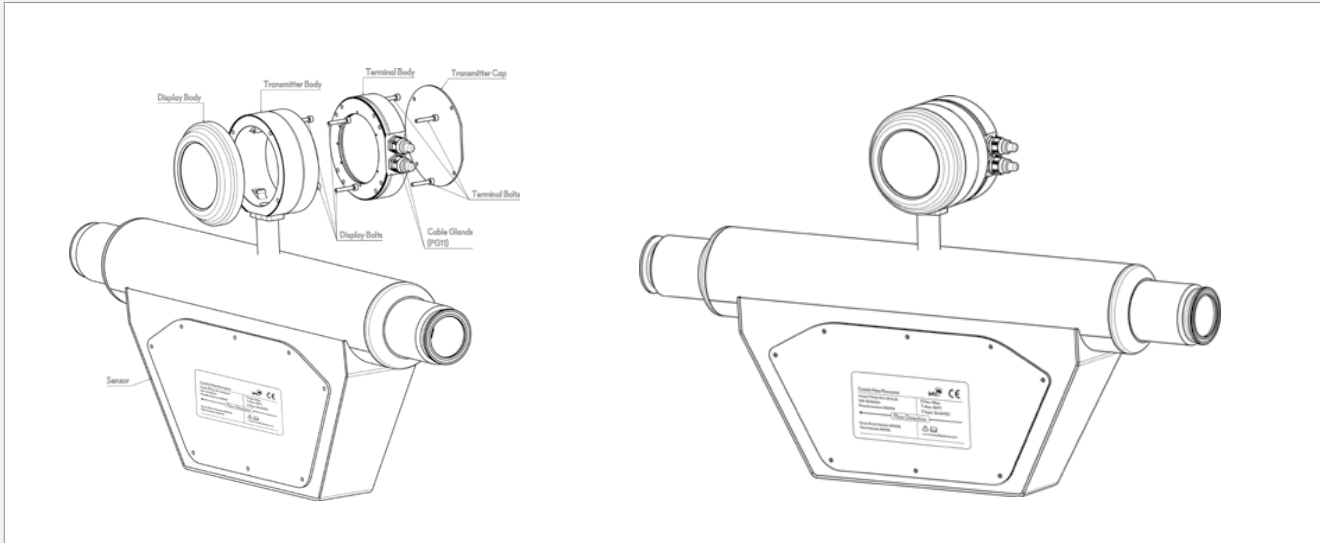
Description

A Coriolis mass flowmeter is based on the principles of motion mechanics. When the process fluid enters the sensor, it is split. During operation, a drive coil stimulates the tubes to oscillate in opposition at the natural resonant frequency. As the tubes oscillate, the voltage generated from each pickoff creates a sine wave. This indicates the motion of one tube relative to the other. The time delay between the two sine waves is directly proportional to the mass flow rate. In addition, the fluid density can also be determined from the oscillation frequency of the measuring tubes. The temperature of the measuring tube is also registered to compensate thermal influences. The process temperature derived from this is available as an additional output signal.

Enelsan Coriolis Mass Flowmeter PTCMF has been designed based on the state-of-the-art technologies to meet the requirement of all industries such as food and beverage, oil and gas, wastewater, and so on. These flowmeters are constructed in various sizes, and they can simultaneously measure multiple parameters such as mass flow, density, volumetric flow, Brix, and finally fluid temperature.



Diameters



Transmitter Specifications

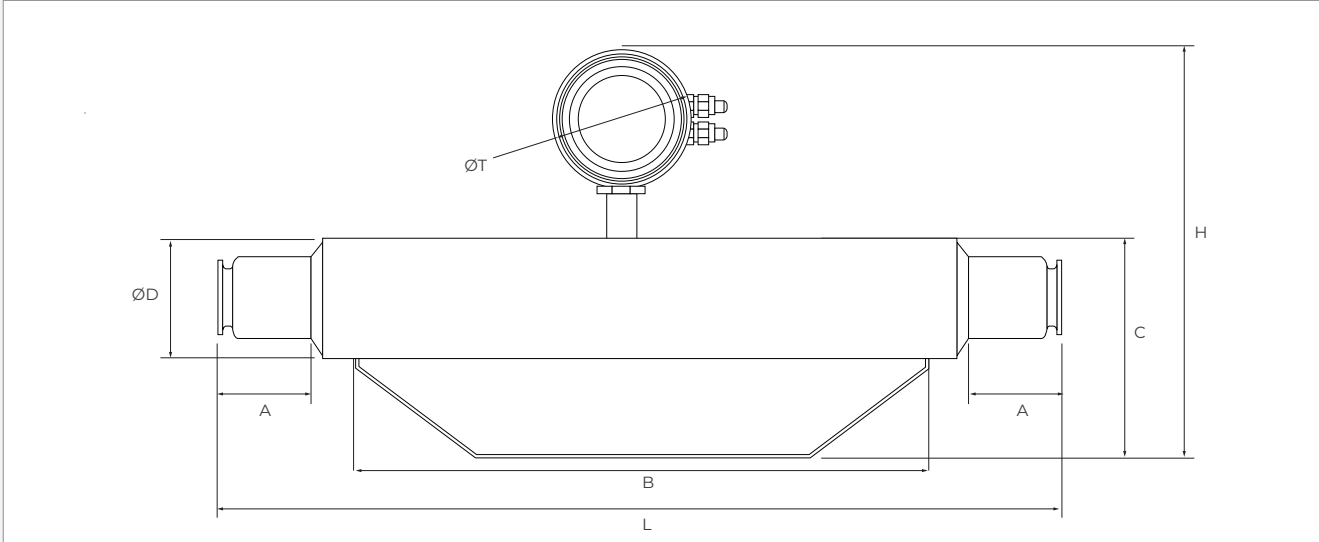
Measurement Parameters	Mass Flow / Volumetric Flow Density / Brix / Temperature
Tube Structure	Twin Bent Tubes
Tube Material	Stainless Steel AISI 316L
Mass Flow Accuracy	0.1%
Density Accuracy	±0.00015 gr/cc
Processor	32-bit ARM Microcontroller H7 Series, Cortex M7
Display	320 * 240 TFT Color LCD
Communication	RS485/Modbus RTU
Digital Output	Two Digital Output (24VDC)
Analog Output	Two Analog current 4-20 mA
Totalizer	Tri Clamp / CI150 Flange / ASME
Sensor Protection	IP68
Transmitter Protection	IP67
Operational Temperature	Up to 150°C
Input Power Supply	24VDC / 500mA

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Structure



Model	A	B	C	D	L	H	T
RM-08-S-01-16-24	39	240	95	41.5	367	255	119
RM-08-T-01-16-24	39	240	120	41.5	367	280	119
RM-08-U-01-16-24	34	120	145	41.5	229	305	119
RM-08-V-01-16-24	34	120	100	41.5	229	260	119
RM-15-S-01-16-24	49	261	99	47.5	398	259	119
RM-15-T-01-16-24	49	245	128	47.5	398	288	119
RM-15-U-01-16-24	39	172	173	47.5	273	333	119
RM-15-V-01-16-24	39	148	118	47.5	273	278	119
RM-25-S-01-16-24	48	296	108	59	434	268	119
RM-25-T-01-16-24	48	276	146	59	434	306	119
RM-25-U-01-16-24	42	205	225	59	324	385	119
RM-25-V-01-16-24	42	200	154	59	324	314	119
RM-40-S-01-16-24	61	386	145	71	558	305	119
RM-40-T-01-16-24	61	372	207	71	558	367	119
RM-40-U-01-16-24	55	310	243	71	456	403	119
RM-40-V-01-16-24	55	280	209	71	456	369	119
RM-50-S-01-16-24	79	486	185	100	720	345	119
RM-50-T-01-16-24	79	443	268	100	720	428	119
RM-50-U-01-16-24	64	370	377	100	562	537	119
RM-50-V-01-16-24	64	340	268	100	562	428	119

Contact us

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