



Coriolis mass flow meters-TERCMF-US



1. Overview:

Walsn's US Series Coriolis mass flow meters use a classic U-shape for their flowtubes. The Walsn mass flow meter is equipped with a transmitter utilizing a digital signal processor (DSP), integrated with digital closed-loop vibration control (DLC), which performs calculations and monitors diagnostic functions of the sensor. This provides high accuracy measurement, wide range ability and excellent reliability for you. Online node-configuration, diagnostics and data recording can be handled directly through a Hart communicator or Modbus. Walsn's US Series flowmeter not only provides mass flow rate, but can also calculate: density, temperature volumetric flow rate, total flow and component fractions online and in real-time

2. Features:

- ◆ U shape design – provides excellent stability and repeatability
- ◆ Dedicated ASIC with digital closed-loop control (DLC) improves the performance of gas-liquid flow measurement
- ◆ Dynamic vibration balance (DVB) technology enhances system stability
- ◆ 2-point temperature compensation and process pressure compensation
- ◆ Special configurations for difficult applications (e.g. high temperature)

3. Applicable Fluids

- ◎ Gases
 - ◎ Slurries
 - ◎ Liquids

4、 Typical Applications :

- ◎ Custody transfer
 - ◎ Reactor feed ratio
 - ◎ Density measurement
 - ◎ Batch control

5、 Specifications :

Basic Error	Liquid: $\pm 0.10\%$; Gas: $\pm 0.35\%$; Liquid density error: $\pm 0.0005\text{g/cm}^3$
Diameter(mm)	DN1 ~ DN250
Anti-explosion	CSA/PCEC/ATEX/IEC
Flange	316L/Titanium/Hastelloy alloy/Other materials required by users
Pressure Rating	10MPa
Material	Measuring tube: 316L, Titanium Alloy
Protection Level	IP65, IP67, IP68 (Remote Style Options only)
Medium Temperature	$-40^{\circ}\text{F} \sim 356^{\circ}\text{F}$ ($-40^{\circ}\text{C} \sim 180^{\circ}\text{C}$); $-40^{\circ}\text{F} \sim 662^{\circ}\text{F}$ ($-40^{\circ}\text{C} \sim 350^{\circ}\text{C}$); $-400^{\circ}\text{F} \sim 662^{\circ}\text{F}$ ($-240^{\circ}\text{C} \sim 350^{\circ}\text{C}$)
Ambient Temperature	$-25^{\circ}\text{C} \sim 60^{\circ}\text{C}$ ($-13^{\circ}\text{F} \sim 140^{\circ}\text{F}$) (with LCD); $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$ ($-40^{\circ}\text{F} \sim 185^{\circ}\text{F}$) (without LCD)
Repeatability	Liquid: $\leq 0.05\%$; Gas: $\leq 0.17\%$
Cable for Sensor	10m (The divided type is optional.)
Electronic Connection	M20*1.5 Seal, NPT1/2
Output signal	Analog + Pulse/Frequency; Analog+ Pulse/Frequency + HART; Analog+ PulseFrequency + RS485; Profibus PA/DP; FF; Specially customized