



FLOW SERIES

ONE-STOP SOLUTION

ONE-STOP SERVICE

MASS FLOW METER

U shape Mass Flow Meter MQF

Product Introduction



The mass flow meter is based on the principle of Coriolis Force to realize the direct and precise measurement of the mass flow of fluid without conversion or correction of pressure, temperature, viscosity, density, etc. It is composed of two parts: a sensor unit and a transmitter unit. This instrument is designed and manufactured according to the national standard for intrinsic safety explosion-proof device, and the explosion-proof mark is EX d ib II C T6 Gb.

U-type mass flow meter can directly measure the quality of almost all the fluid, the application range is wide, including non-Newtonian fluids, various slurries, suspensions, high viscosity fluids, etc. And its installation requirement is not strict (low requirements for the front and rear straight pipe sections of the instrument), and it features reliable and stable operation, and low maintenance rate.

Product features

1. Refined digital signal processing enables accurate and stable measurement
2. Simple flow path means self-draining, food capable and simple to clean
3. Choice of tube materials: Stainless Steel 316L, Hastelloy C, etc

Specification

Parameter	Specification
Diameter	DN3mm-250mm
Medium temperature	-50°C~+150°C (-200°C~+350°C customizable)
Environmental Temperature	Sensor: -41°C~+150°C Transmitter: -41°C~+80°C
Accuracy of flow rate measurement	$\pm 0.5\%$, $\pm 0.2\%$, $\pm 0.1\% \pm [(stability\ at\ zero\ point)/flow\ rate \times 100]\%$ flow
Accuracy of density measurement	$\pm 0.002\text{g/cm}^3$, $\pm 0.001\text{g/cm}^3$
Repeatability	$\pm 0.10\%$, $\pm 0.05\%$ flow $\pm [1/2(\text{zero point stability}/\text{flow value}) \times \text{flow}]$
Output signal	4~20mA load resistance <500Ω (Instantaneous flow or density optional, 0~10kHz Instantaneous flow pulse signal); 485 (MODBUS-RTU) Hart
Electrical Port	1/2"NPT
Explosion-proof grade	EX d ib II C T6 Gb
Protection grade	IP67
Work Temperature	-25~75°C
Storage Temperature	-40~85°C
Power supply	24V DC(220V AC or 24V DC and AC customizable)

General flow meter selection instructions

Instrument diameter (DN)	Measuring range(Kg/h)	Work pressure(MPa)	Connection Type(mm)
3	0~40	0~4	Φ6 connector
6	0~100	0~4	Φ8 connector
8	0~200	0~4	Φ8 connector
10	0~500	0~1.6	Flange DN10
15	0~1,000	0~1.6	Flange DN15
20	0~3,000	0~1.6	Flange DN20
25	0~10,000	0~1.6	Loose flange DN25
40	0~20,000	0~1.6	Flange DN40
50	0~30,000	0~1.6	Loose flange DN50
65	0~50,000	0~1.6	Flange DN65
80	0~100,000	0~1.6	Loose flange DN80
100	0~150,000	0~1.6	Flange DN100
125	0~200,000	0~1.6	Flange DN125
150	0~500,000	0~1.6	Flange DN150
200	0~800,000	0~1.6	Flange DN200

Description: 1. the standard of the flanges above is HG/T 20592-2009.
2. Other connections can be customized.

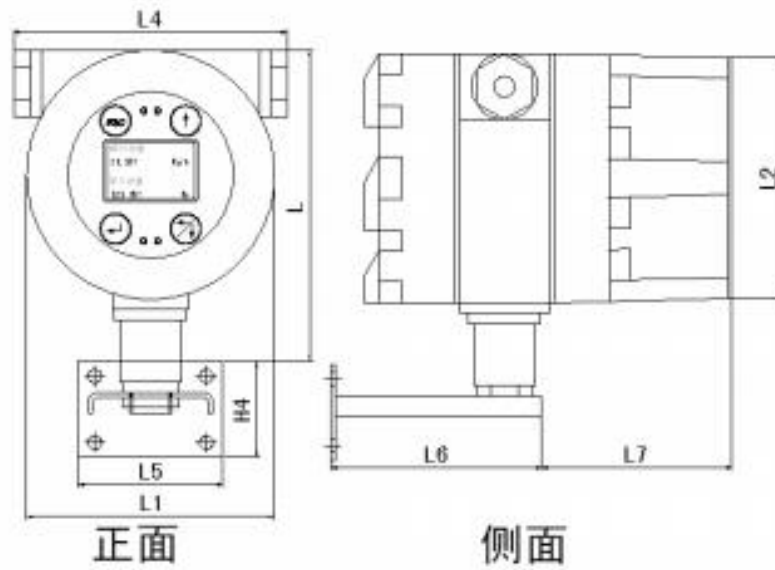
High pressure flow meter selection instructions

Instrument diameter	Measuring range(Kg/h)	Work pressure(MPa)	Connection Type(mm)
3	0~40	0~25	Φ6 connector
6	0~100	0~25	Φ8 connector
8	0~200	0~25	Φ8 connector
10	0~500	0~25	Welded movable connector Φ20×4
15	0~1000	0~25	Welded movable connector Φ20×3
20	0~3000	0~25	Welded movable connector Φ20×2
25	0~10000	0~25	Welded movable connector Φ31×3
40	0~20000	0~25	Welded movable connector Φ42×5.5
50	0~30000	0~25	Welded movable connector Φ57×3.5
Description:1. Higher pressure type can be customized(100MPa max) . 2. Other connections can be customized.			

It is recommended that the commonly used is 1/3 higher the standard range, and the minimum flow is over 1/10 of the standard range. For special needs, please specify when ordering, we can make calibrations according to the user's special needs to ensure that the instrument meets the requirements within the user's use range. According to the actual material characteristics, select the material, pressure level and temperature level of the instrument sensor, and ensure that the explosion-proof level meets the customer's requirements.

Name	L	L1	L2	L4	L5	L6	L7	L8	L9	H4
Transmitter	156	125	118	130	54	102	180	45.5	85	32

Drawings



Front View

Side View