

QFM404

Liquid Turbine Flowmeter

Overview

The QFM404 Liquid Turbine Flowmeter is a velocity flow meter, which converts the flow of liquid in the pipeline into an electrical pulse signal, and is processed by a display instrument or a computer system to complete the measurement or total measurement of liquid flow in the pipeline.

It works with the display instrument, which can measure closed pipes' liquids of which kinematic viscosity is under $5 \times 10^{-6} \text{ m}^2/\text{s}$, have no impurity of fibre, grain etc., and no corrosive interaction with the stainless steel, 1Cr18Ni9Ti, 2Cr13, and A12O₃, and hard alloy in seal pipes. If it is matched with a display instrument with special functions, it can also carry out quantitative control, overdosage alarm and etc.



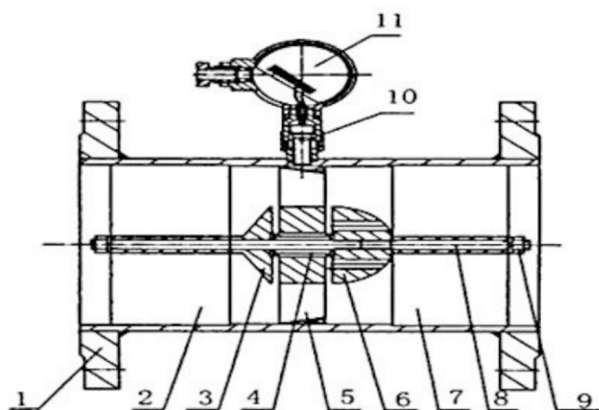
Features

- High accuracy, can reach $\pm 0.5\%R$
- Good repeatability (short-term one reaches 0.05%--0.2%)
- Pulse frequency signal output /High frequency (3-4kHz) /high resolution
- Wide rangeability, compact and light weight structure, convenient installation and maintenance, extensive application ability
- Customized low temperature type, high pressure type, sanitary type

Performance Parameter

Nominal Diameter	DN4-DN300
Accuracy	Regular accuracy $\pm 1\%R$, $\pm 0.5\%R$
Flow Range	Related to the accuracy: $\pm 1\%R: 0.4\text{m}^3/\text{h} \sim 1300\text{m}^3/\text{h}$; $\pm 0.5\%R: 0.6\text{m}^3/\text{h} \sim 1600\text{m}^3/\text{h}$
Nominal Pressure	1.0MPa~6.3MPa
Environmental Conditions	Ambient temperature: $-30 \sim +70^\circ\text{C}$; Relative humidity: 5% ~ 90% Atmospheric pressure: 86 ~ 106kPa
Medium Temperature	Normal temperature: $-20 \sim +100^\circ\text{C}$ (High temperature type can be customized); Explosion proof temperature: $-20 \sim +70^\circ\text{C}$
Power Supply	a. Two wire system: $+24\text{VDC}$; b. Three-wire system: $+12\text{VDC} \sim +24\text{VDC}$ c. Battery powered
Output Signal	a. Two-wire output: Output low level $I_{OL} \approx 3\text{mA}$, Output high level $I_{OH} \approx 13\text{mA}$ (square wave) Load resistance R (including line impedance) in the range of 100 to 500Ω (depending on the configured display meter or other receiving device input signal requirements, select the appropriate R value) b. Three-wire output: $V_{OP-P} \geq 5\text{V}$ (square wave)
Communication Distance	$\leq 1200\text{m}$
Installation	Thread/Flange/Clamp

Dimensions



- 1.Housing 2.Fluid guide 3.Cone 4.Bearing system 5.Impeller
6.Thrust reverser 7.Deflector 8.Long shaft 9.Nut 10.Signal detector 11.Amplifier

Ordering Guide

QFM404	Liquid Turbine Flowmeter	
15	Code	(Nominal Diameter XXX(mm))
	4	(DN4)
	6	(DN6)
	10	(DN10)
	15	(DN15)
	20	(DN20)
	250	(DN250) 300 (DN300)
A	Code	Mounting Type
	A	Thread connection type
	B	Flange connection type
	C	Clamp connection type
E	Code	Accuracy
	E	$\pm 1\%R$
	F	$\pm 0.5\%R$
01	Code	Nominal Pressure XX(MPa)
	01	1.0
	02	1.6
	03	2.5
	04	4.0
	05	6.3
	06	Other pressures can also be supported
1	Code	Power Supply
	1	Two wire system: +24VDC
	2	Three-wire system: +12VDC~+24VDC
	3	Battery powerd
H	Code	Output Signal
	H	4-20mA
	I	0-5V
	J	0-10V
	K	RS485
	L	Pulse output
W	Code	Wetted Material
	W	SS304
	V	SS316L