QFM403
Vortex Flowmeter

Overview

QFM403 Intelligent Vortex flowmeter is a kind of velocity flowmeter.Based on Karman vortex theory, it uses piezoelectric crystal to detect the vortex frequency generated by the fluid passing through the triangular column in the pipeline, so as to measure the flow rate of the fluid.It has features of not only excellent anti-vibration performance, zero drift , high reliability,but not contact with the medium and so on.

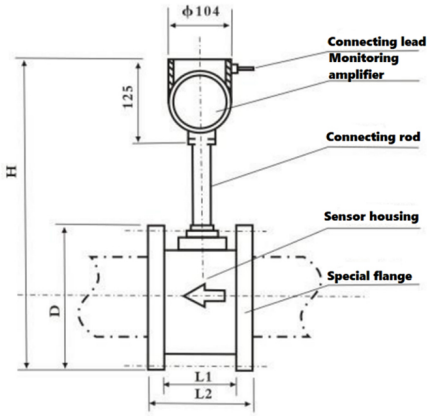
Features

- Excellent vibration resistance, zero drift and high reliability
- The detection element is not in contact with the medium, stable performance and long service life
- Wide measuring range, maximum range ratio up to 20:1, vortex flowmeter measurement volume flow without compensation
- In a certain range of Reynolds number, the flow characteristics are not affected by the fluid pressure, temperature, viscosity, density and composition, but only by the shape and size of the vortex-generating body
- Simple structure, firm, no moving parts, easy operation and maintenance

Performance Parameter

Norminal Diameter	DN15~DN1600(Flange connection type:DN15~DN300；plug-in type: 300~1000)
Medium Temperature	Piezoelectric type：-20°C~150°C；Capacitance：-20°C~250°C,-20°C~350°C
Norminal Pressure	1.6MPa ~4.0MPa （Special pressure can be customized)
Accuracy	Liquid:±0.5%F.S, /Gas、steam:±1.0%F.S/Plug-in:±2.5%F.S
Range Degree	1:10
Medium Velocity Range	Liquid:0.6~6m/s;/Gas:5~60m/s;/Steam:5~70m/s
Environment Condition	Ambient temperature:-20°C～55°C；Relative humidity :5%～90%；Atm pressure: 86～106kPa
Converter Power Supply	Voltage pulse output:+12VDC；4~20mA Current output:+24VDC；Live LCD display:3.6V1 No.1 lithium battery power supply, the service life is more than 2 years
Output Signal	Voltage pulse/4-20mA Current output/HART Agreement/RS485
Types	Stucture type: Split type，Integral type；Connection mode: Flange connection type, clamp connection type,thread connection type, plug-in type；Function type: with pressure compensation / temperature compensation / with pressure and temperature compensation / no need
Transmission Range	Three-wire system flow sensor：≤300m，electric sign of two-wire system transmitter (4～20mA)：load resistance≤750Ω
Body Material	1Cr 18Ni 9Ti (0ther materials according agreement to supply)
Application	Gases (air, oxygen, nitrogen, gas, natural gas,chemical gas, etc.), liquids (water,high temperature water, oil, food liquid, chemical liquid, etc.),steam(saturated steam, superheatedsteam)

Dimensions



Ordering Guide

QFM403	Vortex Flowmeter	
015	Code (Nominal Diameter XXX(mm))	
	15 (DN15)	80 (DN80) 450 (DN450)
	20 (DN6)	100 (DN100) 500 (DN500)
	25 (DN20)	125 (DN125) 600 (DN600)
	32 (DN25)	150 (DN150) 800 (DN800)
	40 (DN40)	200 (DN200) 900 (DN900)
	50 (DN50)	250 (DN250) Q10 (DN1000)
	65 (DN65)	300 (DN300) Q12 (DN1200)
	Q14 (DN1400) Q16 (DN1600)	
1	Code	Structured Type
	1	Split type
	2	Intergral type
2	Code	Connection Type
	1	Flange connection type
	2	Clamp connection type
	3	Plug-in connection type
	4	Thread connection type
0	Code	Function Type
	0	No need
	1	With pressure compensation
	2	With temperature compensation
	3	With pressure and temperature compensation
A	Code	Measuring Medium
	A	Liquids
	B	Gases
	C	Saturated steam
	D	Superheated steam
01	Code	Norminal Pressure (MPa)
	01	1.6
	02	2.5
	03	4
	04	Other pressures can also be supported
L	Code	Medium Maximum Temperature(°C)
	L	150
	M	250
	H	350
E	Code	Power Supply
	E	12~28VDC
	F	3.6V Lithium Battery(Live LCD display)
	G	85~265VAC(Romote display)
O	Code	Output Signal
	O	Pulse output
	P	4-20mA
	Q	HART
	R	RS485
U	Code	Explosion Type
	U	No explosion proof
	V	Explosion proof