

Vortex Flow Meter

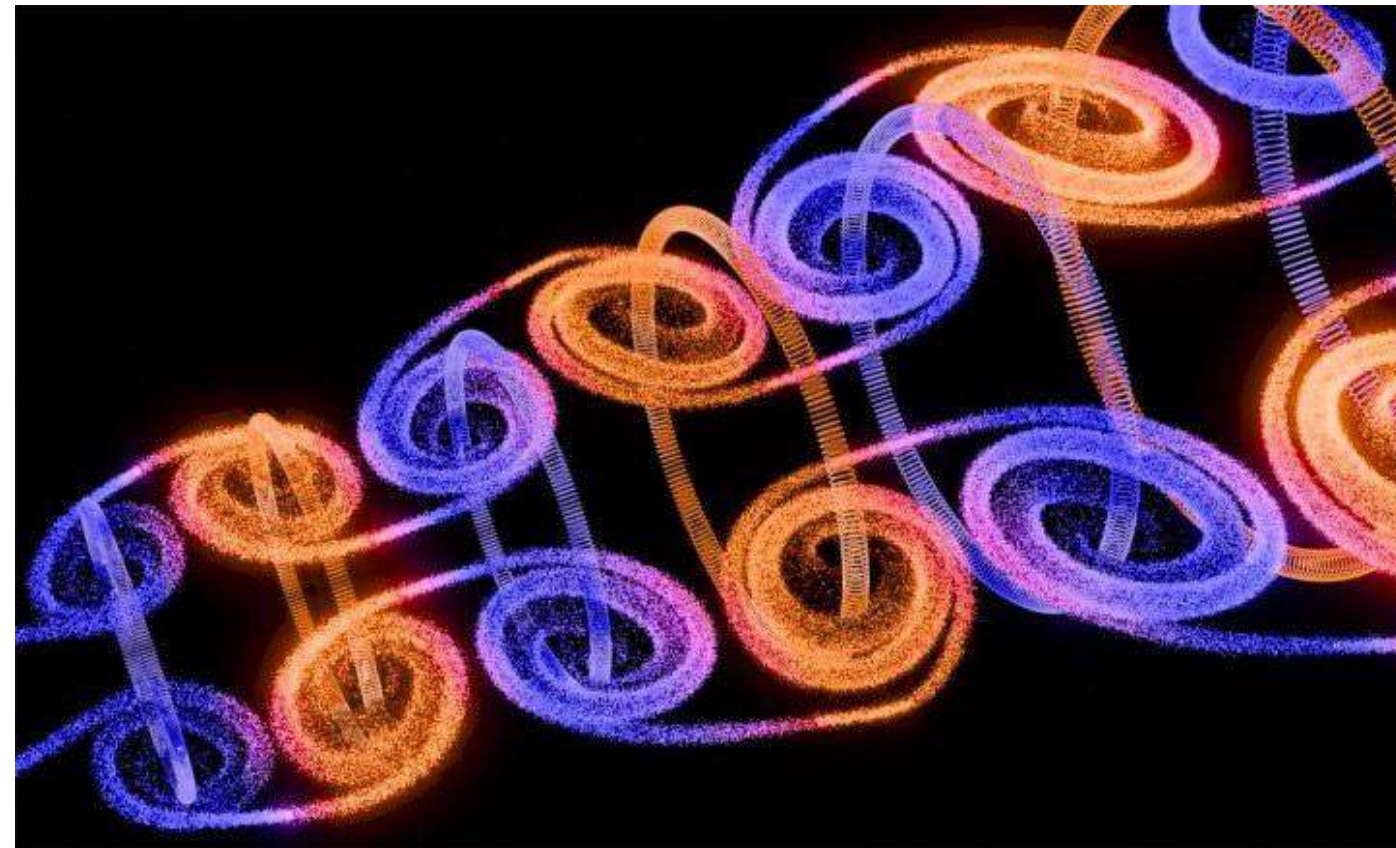


Solutions For Steam, Compressed air, High temperature liquid, etc.

Overview

The vortex flow meter produces a velocity flow meter based on the Karman vortex principle for measurement and metering of conventional gases, vapors and liquids.

The vortex flow sensor has high precision and a wide range ratio. It has no moving parts in use, which can improve mechanical stability and reduce maintenance.



Karman vortices

Vortex is almost unaffected by the temperature, pressure and composition of the medium when measuring the working volume, so it is convenient for the calibration production of the instrument. Therefore, the vortex flow sensor is widely used in production and life.

Connection Method



Wafer
Connection



Flange
Connection



Threaded
Connection



Insertion

More...

Features

01

LCD screen

Display flow rate, accumulation, frequency



02

Stainless steel bellows

The compression resistance is significantly improved and the service life is greatly extended.



03

Thickened condenser tube

2mm wall thickness
The overall compressive strength is significantly improved



04

Explosion-proof converter enclosure



05

Heat dissipation function

High temperature liquid and gas measurement



06

Varies connection

Flange, insert, wafer, etc.



Technical Parameters



For detailed accuracy level, please refer to the vortex flow meter user manual.

Nominal diameter (mm)	15、20、25、40、50、65、80、100、125、150、200、250、300、(300 ~ 1000 insertion)
Nominal pressure (MPa)	DN15-DN200 4.0(>4.0 Agreement supply), DN250-DN300 1.6(> 1.6 Agreement supply)
Medium temperature (°C)	Piezoelectric: -40 ~ 100, -40 ~ 250, -40 ~ 330; Capacitive: -40 ~ 400, -40 ~ 500 (Agreement supply)
Body material	Stainless steel
Allowable vibration acceleration	Piezoelectric:0.2g Capacitive:1.0 ~ 2.0g
Accuracy	±1%R, ±1.5%R; (Insertion: ±2.5%R)
Range	1: 6 ~ 1: 25
Supply voltage	Sensor:DC 24V; Battery powered: 3.6V battery
Output signal	Square wave pulse (excluding battery-powered type): high level ≥ supply voltage minus 1V, low level ≤ 1V; Current: 4 ~ 20mA Optional: RS485
Pressure loss coefficient	Meet the JB/T9249 standard $C_d \leq 2.4$
Explosion-proof class	EX ia IIC T4 Ga
Intrinsic safety parameters	Ui= 28VDC, Ii=100mA, Pi=0.657W, Ci=0.μF, Li=0mH
Protection class	IP65~IP68
Environmental conditions	Temperature -20°C ~ 55 °C, Relative humidity 5% ~ 90%, Atmospheric pressure 86 ~ 106kPa
Applicable medium	Gas, liquid, steam
Transmission distance	Three-wire pulse output type: ≤300m, two-wire standard current output type (4~20mA) ≤1500m; load resistance ≤500Ω; RS485≤1200m.

Flow Range

Pipe Size(mm)	Liquid		Gas	
	Measuring range (m³/h)	Output frequency range(Hz)	Measuring range (m³/h)	Output frequency range(Hz)
15	0.3 ~ 5	24 ~ 400	4~20	352 ~ 1761
20	0.6~10	23 ~ 382	6~30	254 ~ 1273
25	1.2~16	21 ~ 320	8~55	161 ~ 1112
32	1.8 ~ 20	18 ~ 200	10~120	97 ~ 1172
40	2 ~ 40	10 ~ 190	27~205	134 ~ 1018
50	3 ~ 60	8~150	35~380	87 ~ 952
65	4 ~ 85	6~120	60~640	71 ~ 764
80	6.5 ~ 130	4.1~82	86~1100	54 ~ 696
100	15 ~ 220	4.7~69	133~1700	42 ~ 548
125	20 ~ 350	3.2~57	150~2000	26 ~ 346
150	30 ~ 450	2.8~43	347~4000	34 ~ 392
200	45 ~ 800	2~31	560~8000	23 ~ 326
250	65 ~ 1250	1.5~25	890~11000	18.5 ~ 229
300	95 ~ 2000	1.2~24	1360~18000	16 ~ 216
(300)	100 ~ 1500	5.5~87	1560~15600	85 ~ 880
(400)	180 ~ 3000	5.6~87	2750~27000	85 ~ 880
(500)	300 ~ 4500	5.6~88	4300~43000	85 ~ 880
(600)	450 ~ 6500	5.7~89	6100~61000	85 ~ 880
(800)	750 ~ 10000	5.7~88	11000~110000	85 ~ 880
(1000)	1200 ~ 1700	5.8~88	17000~170000	85 ~ 880
> (1000)	protocol		protocol	

Vortex flow meter selection process must be based on the flow range.



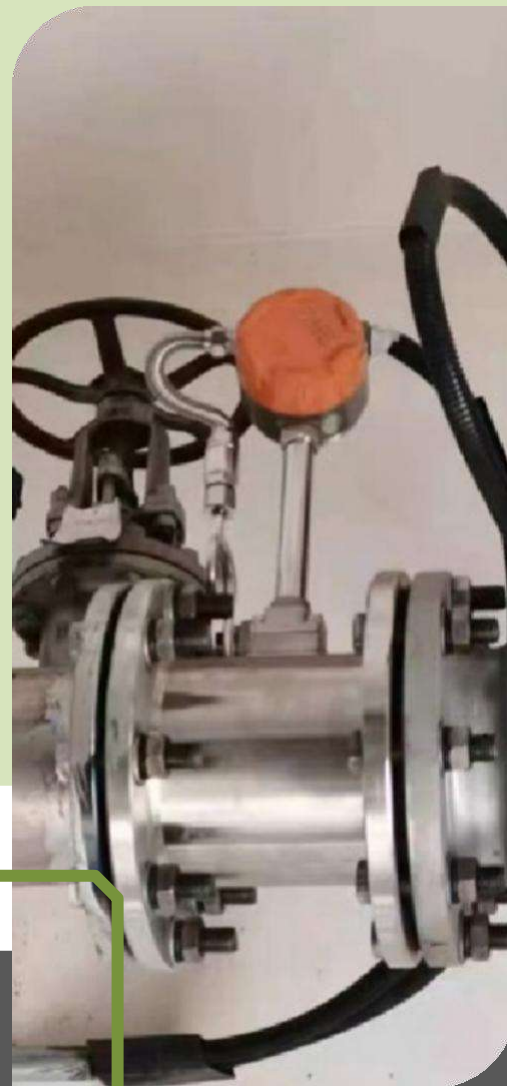
• Industry **Field**



**Boiler
water**



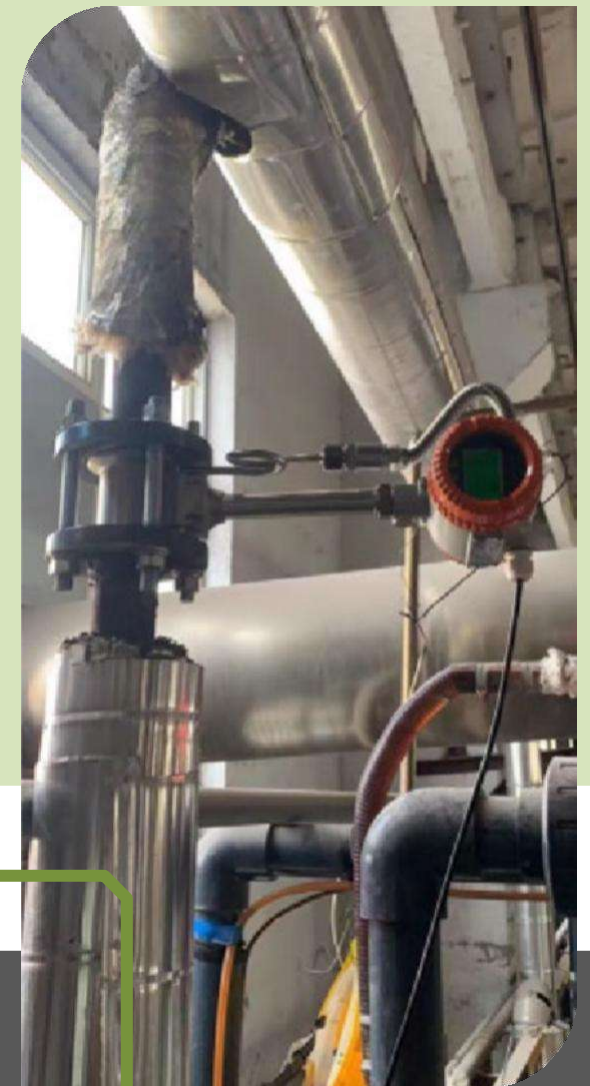
**Steam
measurement**



**Compressed
air**



**Hot water
Condensate**



**Biogas
measurement**

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