

Vortex Flowmeter

Intelligent Vortex flow meter is new generation product of vortex flow meter. Compared with conventional vortex flowmeter, it is more convenient to operate. For example, one converter is suitable to transducer of all drift diameters. It can constitute measuring control system with DCS, SCADA etc, can also be used as measuring instrumentation for measuring control commercial and trading blanching. It has wide range of application.

LUGB/E series are suitable for oil, chemical industry, metallurgy, heating power, spinning, papermaking, etc.

Be use of control: overheating vapor, saturation vapor, compressed air, ordinary air (oxygen, nitrogen, hydrogen, natural gas, coal gas, etc), water and liquid (water, petrol, alcohol, benzene, etc.)



Nominal diameter(mm)	15、20、25、40、50、65、80、100、125、150、200、250、300、(150~1000 plug-in)
Nominal press (MPa)	DN15-DN200 4.0(>4.0 supply agreement), DN250-DN300 1.6(>1.6 supply agreement)
Medium temperature(°C)	Piezoelectric type: -40~150, -40~250, -40~350; Capacitive type: -40~400 (supply agreement)
Body material	1Cr18Ni9Ti, (Other materials supply agreement)
Allowable vibration acceleration	Piezoelectric type: 0.2g Capacitive type: 1.0~2.0g
Accuracy	±1%R, ±1.5%R; plug-in: ±2.5%R,
Range	1: 8~1: 30
Power	Sensor: DC +12V~DC +24V; transmitter: DC +12V~ DC +24V; Battery-powered: 3.6V battery
Output single	Square wave pulse (excluding battery powered) : high level ≥5V, low level ≤1V; Current: 4 ~ 20mA
Pressure loss coefficient	Comply with JB/T9249 standard Cd ≤ 2.4
Explosion-proof marks	Intrinsic safety type: Exd II ia CT2-T6, Flameproof type: Exd II CT2-T6
Protection grade	Standard type: IP65 Diving type: IP68
Environmental conditions	Temperature: -20°C ~ 55°C, Relative humidity: 5% ~ 90%, Atmospheric pressure: 86 ~ 106kPa
Medium	Gas, liquid, steam
Transmission distance	Three-wire system pulse output type: ≤300m, Two-wire system standard current output type (4~20mA) ≤1500m; Load resistance ≤750Ω; RS485/HART ≤1200m.

Thermal Gas Mass Flowmeter

Thermal gas mass flow meter is designed on the basis of thermal dispersion, and adopts method of constant differential temperature to measuring gas flow. It has advantages of small size, easy installation, high reliability and high accuracy, etc.

The meter contains two platinum resistance temperature sensors. The thermal principle operates by monitoring the cooling effect of a gas stream as it passes over a heated sensor. Gas flowing through the sensing section passes over two sensors one of which is used conventionally as a temperature sensor, whilst the other is used as a heater. The temperature sensor monitors the actual process values whilst the heater is maintained at a constant differential temperature above this by varying the power consumed by the sensor.



Description	Specifications
Measuring Medium	Various gases (Except the acetylene)
Pipe Size	DN10~DN4000mm
Velocity	0.1~100 Nm/s
Accuracy	±1~2.5%
Working Temperature	Sensor: -40℃~+220℃ Transmitter: -20℃~+45℃
Working Pressure	Insertion Sensor: medium pressure ≤ 1.6MPa Flanged Sensor: medium pressure ≤ 1.6MPa Special pressure please contact us
Power Supply	Compact type: 24VDC or 220VAC, Power consumption ≤ 18W Remote type: 220VAC, Power consumption ≤ 19W
Response Time	1s
Output	4-20mA (optoelectronic isolation, maximum load 500Ω), Pulse, RS485 (optoelectronic isolation) and HART
Alarm Output	1-2 line Relay, Normally Open state, 10A/220V/AC or 5A/30V/DC
Sensor Type	Standard Insertion, Hot-tapped Insertion and Flanged
Construction	Compact and Remote
Pipe Material	Carbon steel, stainless steel, plastic, etc
Display	4 lines LCD Mass flow, Volume flow in standard condition, Flow totalizer, Date and Time, Working time, and Velocity, etc.
Protection Class	IP65
Sensor Housing Material	Stainless steel (316)

Ultrasonic Open Channel Flowmeter

The ultrasonic open channel flowmeter, together with measuring weir flume, is used to measure water flow in open channel. It is mainly used to measure the flow of sewage plant, sewage discharge outlet of enterprises and public institutions, urban sewers, as well as the channels for irrigation and water conservancy.

As for the meters produced by our company, the non-contact method is used for measurement by letting ultrasonic wave pass through air. Therefore, they are more reliable and durable in dirty and corrosive solutions compared with the contact-type meters.



Main Technical Indexes

Functions	Integrated type or Split type
Measurement range	0.1L/s~99999.99m ³ /h
Total flow	Max.: 4290000000.00m ³
Resolution ratio	3mm or 0.1% (the larger one shall be taken)
Display	LCD display in Chinese
Flow measurement accuracy	1~5% for standard weir flume (weir flume and channel complied with national standards)
	10~50% for non-standard weir flume
Analog output	4-wire, load of 4~20mA/600Ω
Relay output	(Optional) 2 sets AC 220V/ 8A or DC 24V/ 5A
Power supply	Standard 24VDC 100mA; or optional 220V AC+15% 50Hz
Working temperature	display instrument -20~+60°C, probe -20~+80°C
Working pressure	Standard atmospheric pressure
Working temperature	≤90%RH, non-condensed
Process temperature	-20~+80°C;
Process pressure	Standard atmospheric pressure
Communication	Optional, 485 & 232 communication, MODBUS protocol

Oval Gear Flowmeter

Oval gear flowmeter is a volumetric meter for continuous or intermittent measurement and control of liquid flow in a pipeline. It has many advantages, such as large range, high accuracy, small pressure loss, strong viscosity adaptability, measurement of high temperature and high viscosity liquid, convenient calibration, installation suggestion and so on. It is suitable for flow measurement in petroleum, chemical, chemical fiber, transportation, commerce, food, medicine and health departments. LC series oval gear flowmeter is equipped with a pointer and printing wheel accumulation device, and can directly display the liquid accumulation flow through the pipeline on the spot. The accumulative, quantitative and instantaneous flow remote transmission control can be realized by attaching the transmitter and the electric display instrument to the counting mechanism.



	LC—A Iron casting type	LC—B Stainless steel type	LC—E Cast steel type
Nominal pressure MPa	1.6	1.6, 2.5, 4.0, 6.3	1.6, 2.5, 4.0, 6.3
Temperature range °C	Conventional pointer type: -20~+80; High-temperature pointer type: -20~+200; Conventional LCD type: -20~+60; High-temperature LCD type: -20~+150;		
Precision level	0.5%		
Caliber (mm)	Viscosity: 0.6—2mPa.s		Viscosity: 2—200mPa.s
10	0.2-0.4 m ³ /h		0.08—0.4 m ³ /h
15	0.6-1.5 m ³ /h		0.3—1.5 m ³ /h
20	0.8—3 m ³ /h		0.6—3 m ³ /h
25	1.2—6 m ³ /h		0.8—6 m ³ /h
40	5—15 m ³ /h		3—15 m ³ /h
50	6—24 m ³ /h		4—24 m ³ /h
65	10—40 m ³ /h		8—40 m ³ /h
80 (light type)	10—40 m ³ /h		8—40 m ³ /h
80II (heavy type)	15—60 m ³ /h		10—60 m ³ /h
80 (heavy type)	15—60 m ³ /h		10—60 m ³ /h
100	30—100 m ³ /h		15—100 m ³ /h
150	45—190 m ³ /h		34—190 m ³ /h
200	68—340 m ³ /h		56—340 m ³ /h

Circular Gear Flowmeter

The circular gear flowmeter belongs to a type of volumetric flowmeter. Flowmeter is a volumetric meter used for the continuous or discontinuous measurement and control of liquid flow in pipeline, which has many advantages such as wide range of measurement, high accuracy, small pressure loss, strong viscosity adaptability, high temperature and high viscosity liquid measurement, convenient calibration, installation suggestions and so on. It is applicable to the flow measurement of petroleum, chemical industry, chemical fiber, transportation, commerce, food, medicine and health and other departments.

LW series cylindrical gear flowmeter is equipped with pulse transmission and digital LCD meter device. It can not only provide the stable and accurate pulse signal output, the instantaneous, accumulated liquid flow directly, and provide a variety of signal remote transmission function. It can also be matched with the electric display instrument to realize the remote transmission and centralized control of cumulative, quantitative and instantaneous flow, but also measure the liquid with high temperature and high viscosity. The excellent performance of the circular gear flowmeter can be well adapted to the various complex working conditions.



Technical parameters

Model	Measurement range l/H	K coefficient (P/L)	Maximum pressure (Bar)	Temperature	Interface (customizable)
LW-02	3-50	Nameplate	63	-20-60°C	G1/4
LW-04	5-250	Nameplate	63	-20-60°C	G3/8
LW-06	10-500	Nameplate	63	-20-60°C	G1/2
LW-10	50-1200	Nameplate	63	-20-60°C	G1/2
LW-15	200-3000	Nameplate	63	-20-60°C	G3/4
LW-25	1000-12000	Nameplate	63	-20-60°C	G1

Ultrasonic Water Meter

The conventional water meters suffer from the drawbacks that they are only operable at a higher flow rate and are insensitive to a small flow rate. However, the ultrasonic water meter can help tackle the bottleneck. And the meter is highly adaptable to diversified industrial conditions.

This series of water meter's production process is automatic or semi-automatic, including automatic detection of circuit boards, the automation of the circuit board's high-low temperature test machine, the automation of potting and calibration process, ensuring that every machine out of the factory are qualified.



Item	Specification
Measurement Range	Water, Sewage, Seawater (Other liquid need to customized), liquid should be full of the pipeline
Medium Temperature	0.1-30℃
Working Environment	Temperature: -10~45℃; Humidity ≤ 100% (RH)
Working Pressure	1.6MPa/2.5Mpa optional
The sensitivity of upstream flow field	U3
The sensitivity of downstream flow field	D0
Climatic and mechanical environment class	C class
Electromagnetic compatibility class	E2 class
Communication Interface	RS485/USART/Infrared
Output Signal	Two way OCT output/TTL pulse output/4-20mA output
Power supply	Built-in Lithium battery(3.6V)/ External DC 8~36V
Protection Class	IP68
Digital Display	Multi line 9 digital LCD display accumulative flow, 4 digital display for instantaneous flow, state prompt and units
Data Storage	EEPROM/FLASH
Measurement Cycle	Measuring: 1 times/second (2~4 times/second optional); Verification: 4 times/second
Power Consumption	<2.7AH/Year, 3 years life expectancy

Target Flowmeter

Target Flowmeter are mainly designed by the measuring tube (Shell), the new capacitive force sensor (with choke element), totalizer display and output electronic components. Depending on the different medium and various working conditions, manufacturer must choose appropriate sensors. Therefore, the on-site user shall provide accurate object and parameter measurement. It is very vital to get the accurate measurement.

When the fluid flows in the measuring tube, the pressure of its own momentum through the baffles (target sheet) sometimes produced, and there is a role Baffles

Force proportional to the square of its size and the medium velocity force. Baffles (target sheet) receiving a force F , is connected via a rigid transmission member (spindle) transmitted to the capacitive force sensor, a capacitive force sensor to generate a voltage signal output.

Thus, the voltage signal by the preamplifier, the AD conversion and computer processing, to obtain the corresponding instantaneous flow rate and cumulative total.



PROCESS FLUID	Liquid; gas; steam
NOMINAL DIAMETER (mm)	DN15~3000mm
OPER PRESSURE	0.6~42MPa
OPER TEMPERATURE	-200°C ~ +500°C or higher
ACCURACY	±0.2%; ±0.5%; ±1.0%; ±1.5%
SCALE RANGE	1:10; 1:20
COMPENSATION	Temperature and pressure compensation
REPEATABILITY	0.05% ~ 0.08%
POWER SUPPLY	lithium battery (3.6V); external power supply 24VDC
OUTPUT SIGNAL	4 ~ 20mA two-wire; pulse 0 ~ 5V; RS485/RS232
BODY MATERIAL	304SS; 316SS; OR OTHERS
EXPLOSION PROOF CLASS	ExII ICT4; ExdII CT4

Orifice Plate Flowmeter

Orifice plate is used for flow rate measuring in pipe systems. With orifice plate, pressure drop is created. Based on the magnitude of pressure drop, flow rate can be calculated.

Orifice plate calculator can be used for both liquids and gases. Fluid is considered as incompressible, so density (ρ) and temperature (T) are constant through tube. Also, gas is considered as ideal.

Suitable for liquids, gases and steam applications in line sizes from DN15 to DN200 and at pressures up to 100 bar, it combines all the major components needed for an orifice plate installation in one assembly. This eliminates the need for users to design, source and install a separate manifold, transmitter and impulse piping, typically cutting the cost of installation and commissioning.

The all-in-one design also offers enhanced accuracy and a faster speed of response, with no problems caused by issues such as long or blocked impulse lines, or impaired signals due to condensation in gas system impulse lines or gas bubbles in liquid lines.



Standard throttling device:	DN50~DN400
Non standard throttling device:	DN15~DN1200
Pressure measurement methods:	corner joint pressure measurement, flange pressure measurement, radial distance pressure measurement.
Nominal pressure:	-0.1~42Mpa.
Power supply :	24VDC
Intelligent differential pressure transmitter output	4-20mA DC or digital signal;
Accuracy:	$\pm 1\%$ to $\pm 1.5\%$ F.S.
Medium:	liquid, gas (including natural gas), steam.
Temperature of the tested medium:	0 to 600 °C.
Installation method:	horizontal or vertical.
Explosion proof level:	d II BT4, ia II CT4-6;
Protection level:	IP67
Meter header:	Blind meter and digital meter
Electrical interface:	1/2-14NPT; M20x1.5

Ultrasonic Level Meter

Ultrasonic level meter (for material and liquid level measurement) is a non-contact highly reliable and cost-effective material level measuring instrument which is easily installed and maintained. It can meet most of the material level measurement requirements without touching the medium. It is a new generation ultrasonic level meter with fully independent property rights developed by the company via years of hard work.

As the meter installation site environment is different, the basic information of measurement to be done must be learnt before the operation of the ultrasonic level meter, such as the measuring range, zero point, full scale and site conditions.



Main Technica parameters

Function	Integrated Type	Separate Type
Measuring range	5m, 10m, 15m, 20m, 30m, 40m, 50m, 60m	5m, 10m, 15m, 20m, 30m, 40m, 50m, 60m, 70m
Measurement accuracy	0.5%-1.0%	0.5%-1.0%
Resolution ratio	3mm or 0.1% (whichever is greater)	3mm or 0.1% (whichever is greater)
Display	English LCD	English LCD
Analog output	4-line system, 4~20mA/ 510Ω load 2-line system, 4~20mA/ 250Ω load	4~20mA/ 510Ω load
Relay output	2groups (i.e. AC 250V/ 8A or DC 30V/ 5A) optional, state programmable	2groups for single channel and 4 groups for double channels (optional) AC 250V/ 8A or DC 30V/ 5A, state programmable
Power supply	Standard configuration: 24VDC Optional: 220V AC±15% 50Hz	Standard configuration: 220V AC±15% 50Hz Optional: 24VDC 120mA Customized: 12VDC or battery powered
Ambient temperature	Display instrument: -20~+60°C Probe: -20~+80°C	Display instrument: -20~+60°C Probe: -20~+80°C
Communication	485, 232 communication (optional) (manufacturer agreement)	485, 232 communication (optional) (manufacturer agreement)
IP grade	Display instrument: IP66, probe: IP68	Display instrument: IP65, probe: IP68
Probe cable	None	100m available, standard configuration: 10m
Probe installation	Select type based on measuring range and probe	Select type based on measuring range and probe

Radar Level Meter

Radar level meter adopted the high frequency radar sensor, the maximum measurement range can reach up to 80 meters. Antenna is optimized further processing, the new fast microprocessors have higher speed and efficiency can be done signal analysis, the instrumentation can be used for reactor, solid silo and very complex measurement environment.

The high-frequency microwave pulse can be used to transmit a narrow microwave pulse. It is transmitted downward through the antenna, and reflected after contacting the surface of measured medium, and received by the antenna system again and transmitted to the electronic line part and automatically converted into water level signal. (Because the microwave travels very fast, the time it takes for the microwave to reach the target and return to the receiver through reflection is almost instantaneous)



Application:	Liquid or Solid material
Measuring Range:	10m, 20m, 30m , 70m, 80m
Process Connection:	Thread, Flange
Medium Temperature:	0°C ~ 80°C ,130°C ,230°C Customized
Process Pressure:	< 1MPa
Accuracy:	± 3mm .± 5mm ,± 10mm ± 15mm
Protection Grade:	IP65,IP67
Frequency Range:	6Ghz ,26GHz ,80GHz,120Ghz
Signal Output:	4-20mA/HART (Two-wire / Four) Optional RS485/ Modbus
Display :	English LCD display
Explosion-proof Grade:	Exia II C T6 Ga Optional
Power supply :	24VDC or 220VAC Customized
Shell material :	Plastic ,Aluminum ,Steel

Magnetic Flap Level Meter

Magnetic flap level meter is for on-site level indication, use float as measurement unit, the magnet drive turned column showing the level without energy. It can work from low temperature to high temperature, from vacuum to high pressure, high viscosity, corrosion and so on. It measures the level safely and reliably. Under various environments to measure the liquid, the whole process of measurement without blind spots, display eye-catching, intuitive readings, measuring range.



Technical parameters	Side-mounted				
	Basic model	Jacket model	High temperature High pressure model	Anti-corrosion model	
				Stainless Steel PTFE lining	Economy
Measuring range	200~6000mm, other sizes can be customized			200 ~ 4000mm	
Working pressure	0~4MPa	0.6-2.5MPa	0.6-32MPa	0.6-2.5MPa	0.6-1.6MPa
Operating temperature	-20~200℃	<520℃		-20~200℃	-20~90℃
Density	0.45-2.0g/cm ³			0.5-2.0g/cm ³	
Connection	Flange connection: DN20, DN25 or other (According to customer requirements). Threaded connections, welded pipe and other technology interfaces optional.				
Flange Standard	HG20592~20635-97, Other flange standards can be customized.				
Jacket Interface		DN20 or G1/2" Male			
Material	1Cr18Ni9Ti, 316L			Stainless Steel PTFE lining	PPR, ABS, UPVC, PVC
Optional items	Liquid level switches, signal transmission, drain valve, the top vent valve, drain / exhaust bolts.				
Technical parameters	Top-mounted		Top-mounted Side display		
Measuring range	200~5000mm		0~0.5m or 0~200m (Display can be segmented.)		
Working pressure	0.6-2.5MPa		0-1.6MPa		
Operating temperature	≤520℃		-20~500℃		
Medium Density	0.5~2.0g/cm ³		≥0.7g/cm ³		
Connection	Flange DN80, DN100, DN125, DN150.		Flange DN150		
Flange standard	HG20592~20635-97, Other flange standards, please specify.				
Material	1Cr18Ni9Ti, 316L				
Optional items	Liquid level switches, signal transmission.				