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Description

Electromagnetic flowmeter consists of sensors and converters in two parts. The product is based on Faraday's law of electromagnetic induction, used to measure the conductance greater than 5 µS / cm volume of conductive liquid flow, In addition to measuring the general volume of conductive liquid flow, but also can be used to measure strong acid, alkali and other strong corrosive liquids and mud, pulp, pulp and other liquid-solid two-phase suspension of uniform volume flow.

Applications

- Metallurgical industry, cooling water for continuous steel casting, continuous steel rolling, and steel-making electric furnaces;
- Water supply and drainage in water plants.
- Paper industry, slurry type used in grinding pulp, water, acid, and alkali.
- Coal industry, measuring coal washing and pipeline hydraulic conveying coal slurry.
- Food and beverage industries, tri-clamp and thread types are used to measure beer and beverage.
- Chemical and petrochemical industries, such as acids and alkalis etc

Features

- No moving parts, no pressure loss.
- Self-diagnosis, empty pipe alarm, exciting alarm. high and low flow alarm.
- Infrared telecontrol keyboard
- Recording time when power off, record power broken time automatically.
- Dual frequency excitation and stable zero point.
- Precision coil winding technology, makes magnetic field more uniform.
- Built-in reference electrodes.no need to connect ground ring
- Measure forward and reverse direction flows
- High accuracy: $\pm 0.5\%$ of reading, $\pm 0.2\%$ optional, velocity >0.3 m/s.

Speciations

Ambient Temperature

Liner Material

Size : DN3-DN3000mm (1/8" ~ 120")

: $\pm 0.5\%$ of reading, Accuracy

 \pm 0.2% optional, velocity > 0.3 m/s

: Normal liquid >5 µS/cm

: IP65, IP68 optional Conductivity

: SS316L, Hastelloy C, Hastelloy B, Protection Grade Titanium, Tantalum, Platinoiridium Flectrode

: AC85~250V. DC20V~36V

<20W Power Supply

: 4~20 mA, pulse Power Consumption

: RS485 Modbus, Hart, Profitbus Signal Output : LC Display,128X128mm, Communication

> Three lines, 4 buttons : -20°C~60°C

PTFE (-20°C~120°C, DN15-DN1600) Display

> FEP (-20°C~120°C,DN25-DN1800) PFA (-20°C~120°C.DN3-DN800) PU (-10°C~60°C, DN40-DN1600)

CR (-10°C~80°C,DN40-DN3000)

FLS (-10°C~200°C, DN40-DN3000)

: 0.1 m/s ~ 15 m/s Velocity

: 4.0 MPa (DN3-DN150) Nominal Pressure

> 1.6 MPa (DN200-DN600) 1.0 MPa (DN700-DN1000)

0.6 MPa (DN1200-DN3000)

: 1~5000 Hz Frequency Output

English, Italian, Spanish Language

 Flange Standard : EN1092-1 PN10,PN16,PN25,PN40

> ANSI BS16.5 Class 150.300.600 JIS2220 10K,20K,40 AS2129

Table D, Table E

AS4087 PN16, PN21, PN35

: 125mA, 187mA, 250mA, 500mA Exciting Current

: 3.12Hz, 4.16Hz, 6.25Hz 12.5Hz, 25Hz, 30Hz Exciting Frequency

: Carbon Steel (standard) Body Material

> : Stainless Steel 304 (optional) : Stainless Steel 316 (optional)

: CE-EMC, CE-LVD, ATEX

Certificates

Electromagnetic Flow Meter





Product : Flanged connection Magnetic Flow Meter

 Process connection : Flange

 Caliber size : DN3-DN3000

Structure : compact, remote

Power supply : 8~36 VDC, 85~265 VAC, 3.6 V lithium

Working pressure : 1.0 ~ 6.3 MPa

: $\pm 0.5\%$ std, $\pm 0.2\%$ optional Accuracy

: PTFE, PFA, FEP, PU, CR, FLS Liner

■ Working temperature : -20~200°C



Product : Battery-powered Magnetic Flow Meter

: Flange, tri-clamp, thread, wafer, insertion Process connection

Caliber size : DN10-DN2000

Structure : compact, remote

: 3.6 V lithium, 3.6 V + 24 VDC Power supply

Working pressure : 1.0 ~ 6.3 MPa

Accuracy : ±0.5%

Liner : PTFE, PFA, FEP, PU, CR, FLS

■ Signal Output : 4~20 mA, Pulse, RS485, GPRS, Hart



Product : Tri-clam / Sanitary Magnetic Flow Meter

: Tri-clamp Process connection

Caliber size : DN15-DN200

Structure : compact, remote

Power supply : 8~36 VDC, 85~265 VAC, 3.6 V lithium

Working pressure · 16 MPa

: $\pm 0.5\%$ std, $\pm 0.2\%$ optional Accuracy

Liner : PFA

■ Working temperature : -20~120°C



Product

: Insertion Magnetic Flow Meter

: Insertion G2"thread ball valve Process connection

Insertion 2" flange ball valve

Caliber size : DN100-DN300

: compact, remote Structure

Power supply : 8~36 VDC, 85~265 VAC, 3.6 V lithium

Working pressure : 1.6 MPa

: ABS Probe

: ±1.5% Accuracy

: -20~80℃ Working temperature



Product : GPRS / GSM Magnetic Flow Meter

Process connection : Flange, tri-clamp, thread, wafer, insertion

 Caliber size : DN3-DN3000

Structure : compact, remote

: 8~36 VDC, 85~265 VAC Power supply

Working pressure : 1.0 ~ 6.3 MPa

: \pm 0.5% std, \pm 0.2% optional Accuracy

: PTFE, PFA, FEP, PU, CR, FLS Liner

Communication : GPRS



Product

: Reduced Bore Magnetic Flow Meter

Special function

: No need straight pipe, Increase flow rate

Caliber size

Structure : compact, remote

Power supply

: 8~36 VDC, 85~265 VAC, 3.6 V lithium

: flange DN50-DN300

Working pressure

: 1.0 ~ 6.3 MPa

Accuracy

: $\pm 0.5\%$ std, $\pm 0.2\%$ optional

Liner

: Neoprene



Electromagnetic Flow Meter



Product : Thread Magnetic Flow Meter

Process connection : NPT / BSP, Male / Female

■ Caliber size : DN15-DN200

Structure : compact, remote

■ Power supply : 8~36 VDC, 85~265 VAC, 3.6 V lithium

■ Working pressure : 1.6 Mpa

Accuracy : $\pm 0.5\%$ std, $\pm 0.2\%$ optional

Liner : PFA

■ Working temperature : -20~120°C



Product : Partially-filled Magnetic Flow Meter

Process connection : Flange

Caliber size : DN200-DN3000

Structure : Remote

Power supply : 8~36 VDC, 85~265 VAC

■ Working pressure : 1.0 ~ 6.3 MPa

■ Accuracy : ±2.0%

■ Liner : PTFE, Neoprene

■ Working temperature : -20~80°C



■ Product : Slurry Magnetic Flow Meter, slurry <55%

Process connection : Flange

■ Caliber size : DN15-DN2000

Structure : compact, remote

■ Power supply : 8~36 VDC, 85~265 VAC

■ Working pressure : 1.0 ~ 6.3 MPa

Accuracy : $\pm 0.5\%$

■ Liner : PTFE, PFA, Neoprene

■ Working temperature : -20~120°C



Product : Mini Magnetic Flow Meter

Process connection : BSP, NPS Male thread

Caliber size : DN3, DN6, DN10, DN15

Structure : Compact

■ Power supply : 8~36 VDC, 85~265 VAC

■ Working pressure : 1.6 Mpa
■ Accuracy : ±0.5%
■ Measuring tube : PEEK

■ Working temperature : -10~55°C



Product : Multi-function Magnetic Flow Meter

■ Function : Bluetooth, Data logger

Process connection : Flange, tri-clamp, thread, wafer, insertion

Caliber size : DN3-DN2000

Structure : compact, remote

Power supply : 8~36 VDC, 85~265 VAC

• Accuracy : $\pm 0.5\%$, $\pm 0.2\%$ optional

■ Liner : PTFE, PFA, Neoprene

■ Working temperature : -20~120°C



Product : Open Channel Magnetic Flow Meter

■ Water depth : 10m max

Caliber size : DN50, DN100, DN200, DN400, DN600, DN800

Structure : Remote

■ Power supply : 8~36 VDC, 85~265 VAC

■ Working pressure : 1.6 Mpa ■ Accuracy : ±1.5%

Liner : PTFE, PFA, Neoprene

■ Working temperature : -20~120°C

Liquid Turbine Flow Meter

Description

Turbine flow meter is a volume sensing device. As liquid pass through the turbine housing, it causes the freely suspended turbine blades to rotate. The velocity of the turbine rotor is directly proportional to the velocity of the fluid passing through the flow meter.

The external pickoff mounted on the body of the flow meter, senses each rotor blade passing, causing the sensor to generate a frequency output. The frequency is directly proportional to the volume of the liquid

Applications

- Aerospace and Automobile fuel consumptions
- Natural Gas in industrial applications
- Ultra-pure water in pharmaceutical
- Monitor fuel supply to ship engines
- Petrochemicals
- Batching, Mixing, and Hygenic
- Edible oil
- Disposal wells

Features

- Wide flow rangeability including low flow rates
- Turndown ratio is up to 35:1
- Good level of accuracy at an economic price
- Wide variety of process connections
- Operate over a wide range of temperatures and pressures
- Low pressure drop across the turbine
- Most effective in applications with steady, high-speed flows

Speciations

Size : DN4-DN200mm (1/8" ~ 120")

• Accuracy : $\pm 0.5\%$ of reading, $\pm 0.2\%$ optional

Power Supply
 : DC20V~36V, 3.6 V lithium

Signal Output : 4~20 mA, pulse, RS485 Modbus, Hart

Display : LCD Display

Ambient Temperature : -20°C~60°C

Measured medium : -10 ~ 80 ℃ compact, -10 ~ 15 ℃ remote

Nominal Pressure : 1.0 ~4.0 Mpa

Process connection : Flange, thread, tri-clamp, wafer

Body Material : SS304 std, SS316 optional

• Cable Entry : IP65

Protection Grade : M20 x 1.5 std, 1/2"NPT optional

Explosion-proof
 Ex d IIC T6 Gb



Product : Turbine Flow SensorProcess connection : Thread, flange, tri-clamp

■ Caliber size : DN4 - DN200

■ Signal output : Pulse

Power supply : 24 VDC, 3.6 V lithium

■ Working pressure : 1.0 ~ 6.3 Mpa

• Accuracy : $\pm 0.5\%$ std, $\pm 0.2\%$ optional

■ Working temperature : -10~80°C



Product : Turbine Flow Transmitter

Process connection : Thread, flange, tri-clamp

Caliber size : DN4 - DN200Signal output : 4~20 mA

Power supply : 24 VDC, 3.6 V lithium

■ Working pressure : 1.0 ~ 6.3 Mpa

• Accuracy : $\pm 0.5\%$ std, $\pm 0.2\%$ optional

■ Working temperature : -10~80°C



Product : Turbine Flow Flow

Process connection : Thread, flange, tri-clamp

■ Caliber size : DN4 - DN200

■ Signal output : 4~20 mA, Pulse, RS485, HART

Power supply : 24 VDC, 3.6 V lithium

■ Working pressure : 1.0 ~ 6.3 Mpa

• Accuracy : $\pm 0.5\%$ std, $\pm 0.2\%$ optional

■ Working temperature : -10~80°C



Product : Turbine Flow Meter

Process connection: Ttri-clamp 11851

■ Caliber size : DN4 - DN200

■ Signal output : 4~20 mA, Pulse, RS485, HART

Power supply : 24 VDC, 3.6 V lithium

■ Working pressure : 1.6 Mpa

• Accuracy : $\pm 0.5\%$ std, $\pm 0.2\%$ optional

■ Working temperature : -10~80°C



Product : Turbine Flow Meter

Process connection : NPT / BSP, Male / Female

Caliber size : DN4 - DN200

■ Signal output : 4~20 mA, Pulse, RS485, HART

Power supply : 24 VDC, 3.6 V lithium

■ Working pressure : 1.6 Mpa

• Accuracy : $\pm 0.5\%$ std, $\pm 0.2\%$ optional

■ Working temperature : -10~80°C



Product

Process connection

Caliber size

Signal output

Power supply

Working pressure

Accuracy

Working temperature

: Turbine Flow Sensor

: Wafer

: DN4 - DN200

: 4~20 mA, Pulse, RS485, HART

: 24 VDC, 3.6 V lithium

: 1.6 Mpa

: $\pm 0.5\%$ std, $\pm 0.2\%$ optional

perature : -10~80℃





QT Series handheld ultrasonic flowmeter is designed to work with clamp-on transducers to enable the flow of a liquid within a closed pipe to be measured accurately without needing to insert any mechanical parts through the pipe wall or protrude into the flow system. Using ultrasonic transit time techniques, it is controlled by a micro-processor system which contains a wide range of data that enables it to be used with pipes with an outside diameter ranging from 15mm up to 6000mm (depending on model) and constructed of almost any material. The instrument will also operate over a wide range of fluid temperatures.

Applications

- Wastewater and dirty liquid applications
- Chemical compatibility, less maintenance, and low-pressure drop are required..
- Measure the velocity of a liquid through ultrasound to analyze volume flow.-Coal industry, measuring coal washing and pipeline hydraulic conveying coal slurry.
- measure the disparity between the transit time of ultrasonic pulses which transmits with the direction of liquid flow
- Chemical and petrochemical industries, such as acids and alkalis etc

Features

- High Accuracy, Accuracy better than 1%.
- ♦ Wide Measurement Range, Measurement range from DN15~DN6000mm
- Rechargeable Power Supply, Built-in high-capacity NiMH rechargeable batteries will last more than 10 hours(Fully charged)
- Non invasion measurement. Can achieve measurement with clamp on sensors
- Data Storage, 32K BIT built-in data storage, can store two thousand rows of data
- LCD display, LCD dispaly can display the instant flow,total flow,flow velocity and working condition

Speciations

Principle : Transit Time

• Velocity : $\pm 32 \text{ m/s}$ • Accuracy : $\pm 1.0\%$

• Repeatibility : 0.2%

• Size : DN15-DN6000mm (1/2" ~ 120")

• Power Supply : 24 VDC, 220 VAC, 3.6 V lithium

• Signal Output : 4~20 mA, Pulse, RS485 Modbus

• Display : LCD Display

Medium Temperature
 -30°C~90°C std, -30°C~160°C

• Turbidity: : 100000 ppm with a little bubble

Protection grade : IP65 std, IP68 Optional

• Transmitter types : Portable, Wallmount, Module

• Transducers : Clamp-on, insertion, inline

Data-logger : Portable type, wallmount type

Transmitter



Product : Protable Ultrasonic Flow Meter

Caliber size : DN15 ~ DN6000

: ±1.0% Accuracy Suitable Sensor : Clamp on : RS232 Communication

Power supply : 3.6 V lithium Working temperature : -30~160℃ Data logger : Included





Type : Clamp on

Caliber size : DN15 ~ DN6000

: -30~90°C std, -30~160°C optional Working temperature

■ Cable length : 5m

Protection grade : IP65 std, IP68 optional



Product : Wallmount Ultrasonic Flow / Heat Meter

Caliber size : DN15 ~ DN6000

Accuracy : ±1.0%

Suitable sensor : Clamp on / Insertion / Inline flange

: 4~20 mA, OCT Pulse, Relay ■ Signal output

Communication : RS485 MODBUS-RTU

■ Signal input : 3 ways 4~20 mA

Power supply : 24 VDC, 220 VAC

Working temperature : -30~80℃



Type : Insertion

Caliber size : DN80~ DN6000

Working temperature : -30~160℃

■ Cable length : 5m ■ Protection grade : IP65



: Modular Ultrasonic Flow Meter Product

: DN15 ~ DN6000 Caliber size

: ±1.0% Accuracy

: Clamp on / Insertion / Inline flange ■ Suitable sensor

: 4~20 mA, OCT Pulse, Relay ■ Signal output

: RS485 MODBUS-RTU

Communication

: 3 ways 4~20 mA ■ Signal input

: 24 VDC Power supply

: -30~80℃ ■ Working temperature



: Inline flange Type

: DN15 ~ DN6000 Caliber size

: -10~70°C std, -30~150°C optional Working temperature

: 5m ■ Cable length

: IP65 std, IP68 optional Protection grade

: DIN, ANSI, JIS, AS ■ Flange stand

: Carbon steel, SS304, SS316 Material

Vortex flow meter is one kind of velocity type flow meter, it's based on Karman vortex theory and adopts piezoelectric crystal to detect the burble frequency of the fluid caused by flowing through the triangular prism in the pipeline and then measure the flow of fluid. It is widely used in petrol, chemical industry, light industry and power heat supply and so on

Applications

- Measure non-conductive liquids, gases, saturated and superheated steam, especially for steam measurement trade settlement.
- Work as heat meter to measure the Gross/net heat of steam and hot water
- Industrial gases, such as natural gas, nitrogen gas, liquefied gases, flue gases, carbon dioxide etc, all could use vortex flow meter.
 Coal industry, measuring coal washing and pipeline hydraulic conveying coal slurry.
- Compressed air monitoring is very important, vortex flow meter also could use for process control
- Thermal oils, Desalinated water, demineralized water, RO water, boiler feed water, condensate water etc.

Features

- Integrated pressure and temperature compensation.
- 4-20mA, pulse with HART; Optional pulse with RS485
- Wide temperature range up to highest temperature 350°C
- Embedded sensor, 4 piezo-electric crystal encapsulated inside the sensor
- No moving parts, no abrasion, non-wearing parts inside, fully welded SS304 body (Optional SS316).

Speciations

Size : DN15-DN300mm (1/2" ~ 12")

Measured Medium : Liquid, Gas, Steam

• Accuracy : $\pm 0.5\%$ inline, $\pm 1.5\%$ insertion

• Measuring range ratio : 1:10(Standard air condition as reference)

1:15(Liquid)

• Flow Range : Liquid : 0.4-7 m/s

Gas : 4 ~ 60 m/s Steam : 5 ~ 70 m/s

: DC20V~36V, 3.6 V lithium

Pressure Loss Coefficient : Cd≤2.6Vibration Acceleration : ≤0.2g

Power Supply
 4~20 mA, pulse, RS485 Modbus, Hart

• Working Temperature : -40°C~+250°C std; 40°C~+350°C

Nominal Pressure : 1.0 ~6.3 Mpa

• Procession connection : Flange, wafer, tri-clamp, insertion

Body Material : SS304 std, SS316 optional

• Cable length : 10m remote

Protection Grade : IP65

Certificates : CE-EMC, CE-LVD, Atex



■ Product : Flange Vortex Flow Meter

Structure : Compact, remote

Caliber size : DN15 - DN300

• Accuracy : $\pm 0.5\%$

Signal output : 4~20 mA, Pulse, RS485, HART

■ Body material : SS304 std, SS316 optional

Process connection : Flange

■ Working pressure : 1.0 ~ 6.3 Mpa



■ Product : Flange Vortex Flow Meter

Structure : Compact, remoteCaliber size : DN15 - DN300

• Accuracy : $\pm 0.5\%$

■ Signal output : 4~20 mA, Pulse, RS485, HART

■ Body material : SS304 std, SS316 optional

Process connection : Flange

■ Working pressure : 1.0 ~ 6.3 Mpa

■ Function : Temperature and pressure compensation

: Compact, remote



Product : Wafer Vortex Flow Meter

Structure : Compact, remoteCaliber size : DN15 - DN300

■ Accuracy : ±0.5%

■ Signal output : 4~20 mA, Pulse, RS485, HART

■ Body material : SS304 std, SS316 optional

■ Process connection: Wafer

■ Working pressure : 1.0 ~ 4.0 Mpa



Product : Wafer Vortex Flow Meter

Caliber size : DN15 - DN300

■ Accuracy : ±0.5%

Structure

■ Signal output : 4~20 mA, Pulse, RS485, HART

■ Body material : SS304 std, SS316 optional

Process connection : Wafer

■ Working pressure : 1.0 ~ 4.0 Mpa

■ Function : Temperature and pressure compensation



Product : Insertion Vortex Flow Meter

Structure : Compact, remoteCaliber size : DN80 - DN300

■ Accuracy : ±1.5%

■ Signal output : 4~20 mA, Pulse, RS485, HART

■ Body material : SS304 std, SS316 optional

Process connection: DN50 flangeWorking pressure: 1.6 Mpa



Product : Vortex Flow Sensor

Structure : Compact

■ Caliber size : DN15 - DN300

• Accuracy : $\pm 0.5\%$ inline, $\pm 1.5\%$ insertion

■ Signal output : 4~20 mA, Pulse

■ Body material : SS304 std, SS316 optional

■ Process connection : Flange, wafer, tri-clamp, sanitary

■ Working pressure : 1.0 ~ 6.3 Mpa

Thermal gas mass flow meter is one of kind mass flow meter which Is popular in industrial applications is the way they are designed and built. The feature is no moving parts, nearly unobstructed straight through flow path, require no temperature or pressure corrections and retain accuracy over a wide range of flow rates. Straight pipe runs can be reduced by using dual-plate flow conditioning elements and installation is very simple with minimal pipe intrusions. Flange thermal gas mass flow meter size from DN10~DN2000mm

Applications

- Compressed air flow and distribution
- Natural gas consumption eg for burner and boiler feed control
- Monitoring and control of stack or flue gas (where composition known)
- Landfill gas recovery
- Flare gas measurement
- Gas leak testing and detection

Features

- Wide range ratio 1000:1
- Large diameter, low flow rate, negligible pressure loss
- Direct mass flow measurement without temperature and pressure compensation
- Very sensitive for low flow rate measurement.
- Easy to design and select, easy to install and use.
- Suitable for all kinds of single or mixed gas flow measurement Could measure gas with flow velocity from 100Nm/s to 0.1Nm/s, which can be used for gas leak detection.
- The sensor has no moving parts and pressure sensing parts, and is not affected by vibration on the measurement accuracy. It has good seismic performance and high measurement reliability
- No pressure loss or very small pressure loss
- Support multiple communication methods, such as RS485 communication,
 MODBUS protocol, etc., which can realize factory automation and integration

Speciations

Measured medium : Various of dry gas (Except acetylene)

• Size : DN15-DN4000 inline, DN32-DN4000 insertion

• Accuracy : $\pm 1.0\%$ inline, $\pm 1.5\%$ insertion

• Velocity : 0.1-100Nm/s

• Response Time : 1S

Power Supply : DC20V~36V, 220 VAC

• Signal Output : 4~20 mA, pulse, RS485 Modbus,Hart

Working Temperature : Sensor:-40~+220 ℃ Transmitter:-20~+45 ℃

Nominal Pressure : 1.0~4.0 Mpa

Process connection : Flange, thread, tri-clamp, insertion

Body Material : SS304 std, SS316 optional

• Cable length : 10m remote

• Cable entry : M20 x 1.5

Transmitter housing : Aluminium alloy with epoxy painting

• Protection Grade : IP65



Product : Insertion Thermal Mass Flow Meter

Sturcture : Compact, remote

■ Accuracy : ±1.5%

■ Caliber size : DN32 - DN4000

■ Process connection : G1/2" or G3/4" thread

■ Signal output : 4~20 mA, Pulse, RS485, HART

Sensors : SS316

Working pressure

Sensor body : SS304 std, SS316 optional

: 1.6 Mpa

Power supply : 20^36 VDC, 85^265 VAC



Product : Flanged Thermal Mass Flow Meter

Sturcture : Compact, remote

• Accuracy : $\pm 1.0\%$

■ Caliber size : DN15 - DN4000

Process connection : Flange

■ Signal output : 4~20 mA, Pulse, RS485, HART

Sensor body : SS304 std, SS316 optional

■ Power supply : 20~36 VDC, 85~265 VAC

■ Working pressure : 1.0 ~ 4.0 Mpa



Product : Tri-clamp Thermal Mass Flow Meter

Sturcture : Compact, remote

Accuracy : $\pm 1.0\%$

Caliber size : DN15 - DN4000Process connection : Tri-clamp 11851

110ccss connection . In clamp 11051

Signal output : 4~20 mA, Pulse, RS485, HARTSensor body : SS304 std, SS316 optional

,

■ Power supply : 20~36 VDC, 85~265 VAC

■ Working pressure : 1.6 Mpa



Product : Thread Thermal Mass Flow Meter

Sturcture : Compact, remote

■ Accuracy : ±1.0%

■ Caliber size : DN15 - DN4000

■ Process connection : NPT / BSP male/female thread

■ Signal output : 4~20 mA, Pulse, RS485, HART

Sensor body : SS304 std, SS316 optional

■ Power supply : 20~36 VDC, 85~265 VAC

■ Working pressure : 1.6 Mpa

LZ series intelligent Metal tube floater flowmeter is a variable area flowmeter which is based on the floater position measurement. It adopts full metal structure, which is with the features of small volume, low pressure loss, big range ratio(10~20:1), optional transmitter with HART communication function and installation and maintenance convenient. It is widely used in various industries under the complex and bad environment, which is measuring the flow and controlling the process to the small flow and low flow velocity, and all kinds of harsh conditions of medium.

Applications

- Metallurgical industry, cooling water for continuous steel casting, continuous steel rolling, and steel-making electric furnaces;
- Water supply and drainage in water plants.
- Paper industry, slurry type used in grinding pulp, water, acid, and alkali.
- Coal industry, measuring coal washing and pipeline hydraulic conveying coal slurry.
- Food and beverage industries, tri-clamp and thread types are used to measure beer and beverage.
- Chemical and petrochemical industries, such as acids and alkalis etc

Features

- Simple structure, good stability and reliability
- Independent of medium's physical and chemical states such as conductivity, dielectric constants, etc.
- Applicable for all kinds of medium environment such as corrosive, toxic and explosive one
- Interface measurement or level measurement of 2 kinds of medium with different density. .
- Two-wire 4~20mADC signal output, 0.8" or 0.56" LCD digital display
- Easy-to-read displays on all flow meter types) .

Speciations

• Size : DN15-DN150 (1/2" ~ 6")

• Accuracy : $\pm 1.5\%$ of reading, $\pm 1.0\%$ optional

• Range ratio : 10:1(Special type 20:1).

• Measuring range : Water (20°C) 16~150000 l/h.

Air (0.1013MPa 20°C) 0.5~4000 m³/h.

Power Supply : 20~36 VDC, 85~265 VAC

Signal Output : two-wire system 4 ~ 20mA / HART .

three-wire system 0 ~ 10mA.

Alarm: 1.Two-way relay output.

2.One-way or two-approach switches.

Pulse: 0-1KHz isolated output.

• Wetted part : SS304 std, SS3016 optional, HC-276 optional

• Ambient Temperature : -40°C~+120°C(Remote display without LCD≤85°C).

(Remote display with LCD≤70°C).

: Normalized type -80°C~+220°C.

Medium temperature
 High-temp 300°C. Lined with FEP type ≤85°C.

Nominal Pressure : 1.0 ~4.0Mpa

Dielectric viscosity : DN15 ≤ 30 mPa.s

DN25 ≤ 250mPa.s

DN50~DN150 ≤300mPa.s

Process connection : Flange, thread, tri-clamp

Protection Grade : IP65

• Explosion proof : ExialICT3~6, ExdIICT4~6



Product : Metal Romtameter : Digital LCD display Type

Installation : Flange : ±1.5% Accuracy Process connection : Vertical

■ Signal output

Caliber size : DN15 - DN150

: SS304 std, SS316 optional, HC-276 optional Wetted part

: 4~20 mA, Pulse, RS485, HART, Alarm

Sensor body : SS304 std, SS316 optional Power supply : 20~36 VDC, 85~265 VAC

Working pressure : 1.0 ~ 2.5Mpa ■ Working temperature : -80~220°C



Product : Metal Romtameter

: Mechanical Type Installation : Flange : ±1.5% Accuracy Process connection : Vertical

Caliber size : DN15 - DN150

: SS304 std, SS316 optional, HC-276 optional Wetted part

Sensor body : SS304 std, SS316 optional

■ Working pressure : 1.0 ~ 2.5Mpa ■ Working temperature : -80~220°C



■ Product : Metal Romtameter

Type : Digital LCD display

Installation : Flange : ±1.5% Accuracy : Horizontal Process connection : DN15 - DN150 Caliber size

■ Signal output : 4~20 mA, Pulse, RS485, HART, Alarm

Wetted part : SS304 std, SS316 optional, HC-276 optional

Sensor body : SS304 std, SS316 optional Power supply : 20~36 VDC, 85~265 VAC

■ Working pressure : 1.0 ~ 2.5Mpa ■ Working temperature : -80~220°C



Product : Metal Romtameter

: Mechanical Type

: Flange : ±1.5% Accuracy Process connection : Horizontal

Installation

: DN15 - DN150 Caliber size

: SS304 std, SS316 optional, HC-276 optional Wetted part

: SS304 std, SS316 optional Sensor body

Working pressure : 1.0 ~ 2.5Mpa ■ Working temperature : -80~220°C

QTWG series gas turbine flow meter is a new generation of high-precision and high-reliability gas precision measuring instrument, which is based on the advanced technology of flow meters domestic and abroad. It has excellent low-pressure and high-pressure metering performance, various signal output modes and low sensitivity to fluid disturbance. It is widely used for natural gas, coal-based gas, liquefied gas and other gases application.

Applications

- Natural Gas
- Petroleum
- Chemical
- Custody-transfer measurement
- Fuel gas consumption
- High-pressure cryogenic fluids

Features

- Advanced rectification technology and dust-proof structure
- Built-in temperature and pressure sensors which can achieve automatically compensation to make sure high accuracy
- Provides good solution for custody transfer between parties
- Gas turbine flow meter is with low pressure loss, low initiating flow and wider measurement range
- The display of gas turbine flow meter support to rotate 350°, easy to read data in different directions.





Speciations

Product

Size

ullet Accuracy : $\pm 1.5\%$ of reading, $\pm 1.0\%$ optional

• Repeatability : 0.2%

• Range Ratio : Max 40:1 (under P=101.325Kpa,T=293.15K)

Power Supply : DC20V~36V, 3.6 V lithium

• Signal Output : 4~20 mA, pulse, RS485 Modbus, Hart

• Sensor Material : Aluminum Alloy/Carbon Steel/Stainless Steel

• Ambient Temperature : -20°C~60°C

• Nominal Pressure : 1.0 ~2.5 Mpa

• Flange Standard : EN1092-1 PN10,PN16,PN25,PN40

ANSI BS16.5 Class 150

: Gas Turbine Flow Meter

: DN25-DN400mm (1" ~ 16")

JIS2220 10K,20K,40 AS2129

Table D, Table E

AS4087 PN16,PN21,PN35

• Explosion Proof : Ex ia IIC T6Ga

Protection Grade : IP65

Coriolis mass flow meter is a new type flow meter which is designed according to Micro Motion and Coriolis principle. This kind of new flow meter can measure the fluid directly in a sealed pipeline. It consists of two sections: Sensor and Signal Transmitter.

Applications

- Chemical: containing chemical reaction system
- Petroleum: moisture content analysis
- Lipids: including vegetable oils, animal fats and other oils
- Pharmaceutical
- Fuel: crude oil, heavy oil, coal slurry, lubricant and other fuels
- Food: gas dissolving beverage, health drink and other liquid.
- Low temperature fluid, like liquid oxygen and liquid nitrogen, the low temperature up to -200 $^{\circ}\text{C}$
- High pressure fluid, like slurry flow measurement for oil drilling cementing

Features

- Unique design delivers unparalleled measurement sensitivity and stability
- Unchallengeable QTCMF performance on liquid mass flow, volume flow, and density measurement
- Designed to minimize process, mounting, and environmental effect
- Recording time when power off, record power broken time automatically.





Speciations

• Size : DN3-DN150 (1/10" ~ 12")

 \bullet Accuracy : \pm 0.2% std, \pm 0.1% optional

Repeatability: : 1/2 measurement accuracy %

Density : 0.3∼3.000g/cm³

Body Material : SS304

• Protection Grade : IP65

• Power Supply : 24 VDC, 220 VAC

• Signal Output : 4~20 mA, pulse, RS485 Modbus,Hart

Ambient temperature: : -20∼60°C

Measured Temperature : -200∼350°C

• Nominal Pressure : 0.6 ~6.3 Mpa

Process connection : Flange, thread

• Explosion-proof : Exd (ia) II C T6Gb

LZ series intelligent Metal tube floater flowmeter is a variable area flowmeter which is based on the floater position measurement. It adopts full metal structure, which is with the features of small volume, low pressure loss , big range ratio($10^{\sim}20:1$), optional transmitter with HART communication function and installation and maintenance convenient. It is widely used in various industries under the complex and bad environment, which is measuring the flow and controlling the process to the small flow and low flow velocity, and all kinds of harsh conditions of medium.

Applications

- Mining Industry: transmitters are used to check the depth or length of mines or to check the level of the surface of the ore.
- Aeronautics Industry: levels are often tested by using contact type level indicators. However, in aeronautics, a fuel storage system is a little complex. Therefore, radar level transmitters are used.
- -Paper and Pulp Industry:

In the paper and pulp industry, in order to measure the level of slurry, water and storage tanks, these level transmitters are used

Features

- Small antenna size, easy to install: Non-contact radar, no wear, no pollution
- Almost no corrosion, bubble effect; almost not affected by water vapor in the atmosphere, the temperature and pressure changes.
- Serious dust environment on the high level meter work has little effect.
- A shorter wavelength, the reflection of solid surface inclination is better
- Beam angle is small, the energy is concentrated, can enhance the ability of echo and to avoid interference
- The measuring range is smaller, for a measurement will yield good results..



Application : All kinds of corrosive liquid

Measuring Range : 10m, 30m, 70m
 Process Connection : Thread, Flange
 Medium Temperature : -40°C ~ 120°C
 Process Pressure : -0.1~0.3 MPa

Accuracy : ± 5mmProtection Grade : IP67

■ Signal Output : 4~20mA/HART / Two/Four-wires, RS485-Modbus

Power supply : 24 VDC, 220 VAC



Application : Liquid

Measuring Range : 10m, 30m, 70m
 Process Connection : Thread, Flange
 Medium Temperature : -40°C ~ 150°C
 Process Pressure : -0.1 ~ 4.0 MPa

Accuracy : ± 3mmProtection Grade : IP67

■ Signal Output : 4~20mA/HART / Two/Four-wires, RS485-Modbus

Power supply : 24 VDC, 220 VAC



Application : Solid material, Strong dust

Measuring Range : 10m, 30m, 70m
 Process Connection : Thread, Flange
 Medium Temperature : -40°C ~ 120°C
 Process Pressure : -0.1~0.3 MPa

■ Accuracy : ± 5mm

Protection Grade: IP67

■ Signal Output : 4~20mA/HART / Two/Four-wires, RS485-Modbus

Power supply : 24 VDC, 220 VAC

Flange ultrasonic level meter is based on the Time-of-Flight principle. A sensor emits ultrasonic pulses, the surface of the media reflects the signal and the sensor detects it again. The Time-of-Flight of the reflected ultrasonic signal is directly proportional to the distance traveled. With the known tank geometry the level can be calculated.





Applications

- Storage Tank
- Pool
- Drains
- Granary
- Wells
- Metering Box

Features

- Non-contact, maintenance-free measurement.
- Measurement unaffected by media properties, like dc value or density
- Calibration without filling or discharging
- Self-cleaning effect due to vibrating sensor diaphragm.

Speciations

- Measuring range
- Structure
- Accuracy
- Resolution
- Sensor material
- Protection Grade
- Power Supply
- Signal Output
- Ambient Temperature
- Sensor temperature
- Cable length
- Process connection
- Cable entry

- : 4m, 6m, 8m, 12m, 20m, 30m
- : Compact, remote
- : 0.5%
- : 3mm or 0.1%
- : PVC, ABS
- : IP65 for transmitter, IP68 for sensor
- : 24 VDC
- : 4~20 mA, pulse, RS485 Modbus,Hart
- : -20°C~60°C
- : -40 ~ 75°C
- : 10m
- : G2"
- : M20 x 1.5 std, 1/2" NPT