

QTLD Mini Electromagnetic Flow Meter

DN3, DN6, DN10, DN15 / Thread

Description

The product is based on Faraday's law of electromagnetic induction, used to measure the conductance greater than 5 $\mu\text{s} / \text{cm}$ 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.

Benefit

- ◆ Integrated verification, diagnostic function and empty pipe detection.
- ◆ Measure forward and reverse direction flows.
- ◆ RS485 interface supporting up to 2km distance at 14400 bps communication
- ◆ Programmable low frequency square wave field excitation, improving measurement stability and reducing power consumption
- ◆ Implementing 'Rate-Of-Change Limit' technology to eliminate sharp electrical noise contained in the flow signal and stabilize the display and outputs
- ◆ Optional real-time clock, power-failure and history data logging function, storing up to 30 days measurement records



Standard Specification

- | | | | |
|---------------------|---|------------------------|-------------------------------|
| ● Size | : DN3, DN6, DN10, DN15 | ● Relative Humidity | : 5%~95% |
| ● Accuracy | : $\pm 0.5\%$ of reading | ● Ambient Temperature: | -10~55°C |
| ● Conductivity | : Normal liquid $> 5 \mu\text{s}/\text{cm}$, | ● Medium Temperature: | -10 °C~60°C |
| ● Protection Grade | : IP65 | ● Velocity | : 0.1 m/s ~ 15 m/s |
| ● Electrode | : SS316L, Hastelloy C, Titanium | ● Communication | : RS232 / RS485 MODBUS |
| ● Power Supply | : AC85~250V, DC20V~36V | ● Nominal Pressure | : 1.6 Mpa |
| ● Power Consumption | : < 10W | ● Language | : English, Chinese |
| ● Display | : LCD Display, 128X128mm Three lines | | Other languages are available |

● Material : Peek

● Signal Output : 4~20 mA,pulse

● Straight Pipe : Inlet Path ≥ 5D Outlet Path ≥ 3D

● Connection : 1/2 NPT,BSP

Electrode Property

| | |
|-------------|---|
| SS316L | Applicable in water,sewage and corrosive mediums. Widely used in industries of petrol,chemistry,carbamide,etc |
| Hastelloy C | Be resistant to oxidable acid such as nitric acid,mixed acid as well as oxidable salt such as Fe ⁺⁺⁺ ,Cu ⁺⁺ and sea water |
| Titanium | Applicable in seawater,and kinds of chloride,hypochlorite salt,oxidable acid(including fuming nitric acid),organic acid,alkali etc.Not resistant to a pure reducing acid(such as sulphuric acid,hydrochloric acid)corrosion.Acid contains antioxidant(such as Fe ⁺⁺⁺ ,Cu ⁺⁺)will greatly reduce corrosion. |

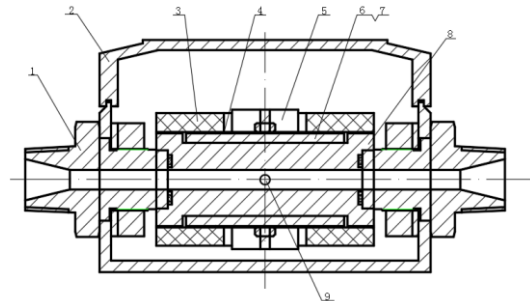
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Dimension of Sensor and Converter

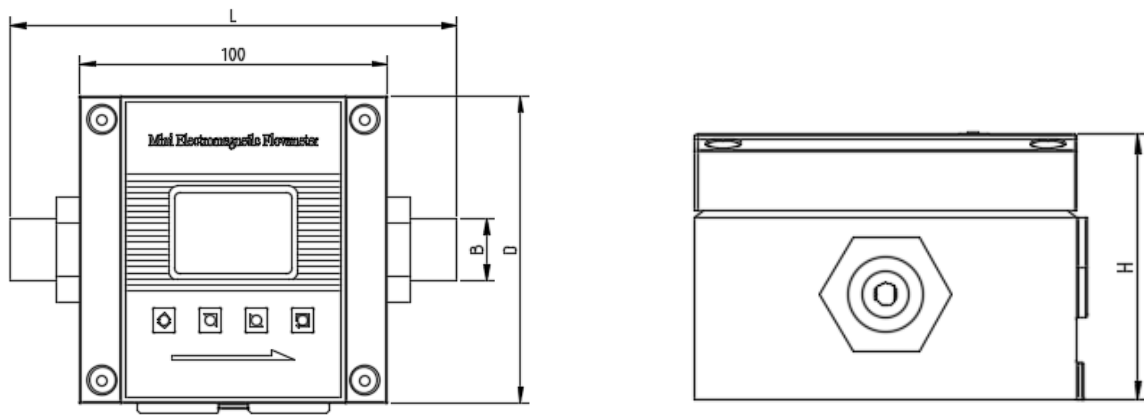
1. Structure

- 1. Connector 2. Shell 3. Excitation Coil 4. Pole Shoe
- 5. Magnet Yoke 6. Bracket Plate Assembly
- 7. Fixed Block 8. Measuring Tube 9. Electrode-assembly



2. Dimension of Sensor

| Caliber (mm) | Nominal Pressure (MPa) | Dimension | | | |
|-----------------|---------------------------|-----------|-----|----|-------|
| | | L | D | H | B |
| 3 | 0.6~1.6 | 135 | 100 | 70 | G1/2" |
| 6 | | 145 | | | G1/2" |
| 10 | | 145 | | | G1/2" |
| 15 | | 155 | | | G1/2" |



3. Flow Range

| DN (mm) | Flow Range (L/min) | | External Thread |
|---------|--------------------|---------|-----------------|
| | Standard | Special | |
| 3 | 0.2~2 | 0.2~4 | G1/2" |
| 6 | 0.8~8 | 0.8~16 | G1/2" |
| 10 | 2~20 | 2~40 | G1/2" |
| 15 | 5~50 | 5~100 | G1/2" |