


MARINE FLOW METER

LZYN Series Coriolis Mass Flowmeter

LZYN Series Coriolis Mass Flowmeter (hereafter we call LZYN) is designed according to the Coriolis Principle. It can be widely used for the process detecting and custody transfer/fiscal unit in many industries such as pe...

- ISO9001 Supplier
- Class Certificate
- Export Supply



Key Highlights

Category	Marine Flow Meter
Standard	DIN
Certificate	ABS, LR, BV, DNVGL, NK, KR, IRS, RMRS, CCS

We can supply according to your requirement, drawings, class certificate needs, and delivery schedule.

Technical Specifications			
Category	Marine Flow Meter	Model / SKU	LZYN-Series-Coriolis-Mass-Flowmeter
Standard	DIN	Certificate	ABS, LR, BV, DNVGL, NK, KR, IRS, RMRS, CCS
Warranty	12 Months unless specified otherwise	Origin	China

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China LZYN Series Coriolis Mass Flowmeter:

LZYN Series Coriolis Mass Flowmeter (hereafter we call LZYN) is designed according to the Coriolis Principle. It can be widely used for the process detecting and custody transfer/fiscal unit in many industries such as petroleum, petrochemical industry, pharmacy, paper making, food and energy etc.. As a fairly advanced kind of flow measuring instrument, it has been paid attention by the circle of measurement and accepted by many customers home and abroad.



Principle

LZYN is designed according to the principle of Coriolis force. Under the alternating current effect, the magnet and coil installed on the measuring tube will make two parallel measuring tubes vibrate according to some fixed frequency. Once there is flow passing through the pipes, Coriolis force will give rise to deflection (phase shift) on the vibration of two pipes and the deflection of vibration is directly proportional to the mass flow of fluid. Pick up them and the mass flowrate could be calculated.

The vibration frequency of measuring tube is determined by the total mass of measuring tube and inner fluid. When the fluid density changes, the vibration frequency of measuring tube will be also changed, as a result, the fluid density can be calculated.

The temperature transducer installed in the pipeline can pick up the fluid temperature on time under the coordination of measuring circuit.

Feature

3. 1 Digital transmitter Feature

Comparing with traditional analog circuit and analog transmitter, digital circuit and digital transmitter has the following obvious merits:

3.1.1 The DSP chip is the core of digital transmitter for LZYN. As we know, the techniques of Digital Signal Processing can greatly increase the accuracy of flowmeter and broaden turndown ratio.

3.1.2 The sampling rate of digital transmitter is much higher than traditional products, so it provides shorter response time for the flow, quicker reaction to the flow change, higher efficiency and better accuracy for small amount tank loading/unloading system.

3.1.3 Digital Signal Processing techniques can filter and shape the flow signal better. Well-designed digital filter can remove industrial frequency electromagnetic fields, spatial electromagnetic fields and noise effect on mass flowmeter, markedly enhance stability and reliability of mass flowmeter.

3.2. Mass Flowmeter Feature

Comparing with the traditional flow measurement method, LZYN has following obvious merits:

3.2.1 Enable to directly measure mass flow rate of fluid in the pipeline without changing any parameters, which avoids some measurement error Of intermediate links.

Its mass flow rate can be high accuracy and good repeatability within bigger range of turndown ratio.

3.2.2 Fluid measured can be more extensive, such as the steady uniform flow of common viscosity fluid, the high viscosity fluid, non-Newtonian fluid, slurry containing some solid components and the liquid containing some trace of gas.

3.2.3 Besides mass flow measurement, the density and temperature and water cut (ratio) can also be picked up and output by RS485-Modbus / HART.

Specifications

4.1 Measuring the mass, volume, density and temp.

4.2 Application:

It's an instrument that measures the mass flow rate and density of a fluid flowing through a tube. It's widely used for the process detecting and custody transfer/fiscal unit in many industries such as petroleum, petrochemical industry, pharmacy, paper making, food and energy etc.

4.3 Delivery date: 10-21 days.

4.4 Warranty period: 12 months from the date of putting the instruments in operation, but not more than 18 months from the date of official shipment from our factory.

4.5 Medium: Liquid OR Gas

4.6 Connection: Flange or Thread type

DN	8-300(mm)	 0.072449s
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Structure	Integrate Type(-50~125)°C
	Separate Type(-50~300)°C
	High temp. type(-50~300)°C
	Low temp. type(-200~300)°C
Sensor	U type, Micro-bend type, Triangle type, Super-bend type
Transmitter	DSP
Explosion grade	Exib II CT3~T6
Power Supply	24VDC OR 220VAC
Output Interface	RS485 OR HART
Max pressure	250 bar
Signal output	Pulse output + (4~20)mA
Accuracy	0.1%, 0.2%, 0.5%
Enclosure	IP65
Certificate	Ce/ATEX/NEPSI