Jinbo Marine

Marine & Offshore Equipment Datasheet

PRODUCT DATASHEET

MARINE FLOW METER

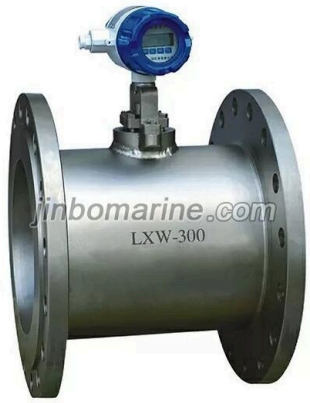
LXW Series Vortex Flowmeter

ISO9001 Supplier

Class Certificate

Export Supply

General LXW Series vortex flowmeter is manufactured according to the principle of Karman vortex principle together with latest digital transmitter (DSP technology). It is widely used to measure liquid, gas, stea...



Key Highlights

Category	Marine Flow Meter
Standard	DIN
Material	It is widely used to measure liquid, gas, steam flow in the closed pipel...
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	LXW-Series-Vortex-Flowmeter
Standard	DIN	Material	It is widely used to measure liquid, gas, steam flow in the closed pipeline because the original detection is sealed in the test body, no contact with the measured medium and there is no lining material and moving parting, it does not need on-site maintenance and it is very popular with the majority of users in industries of oil, petrochemical, water/waste water treatment, metallurgy, pharmacy, thermoelectric, etc.
Certificate	ABS, LR, BV, DNVGL, NK, KR, IRS, RMRS, CCS	Warranty	12 Months unless specified otherwise
Origin	China		

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General

LXW Series vortex flowmeter is manufactured according to the principle of Karman vortex principle together with latest digital transmitter (DSP technology). It is widely used to measure liquid, gas, steam flow in the closed pipeline because the original detection is sealed in the test body, no contact with the measured medium and there is no lining material and moving parting, it does not need on-site maintenance and it is very popular with the majority of users in industries of oil, petrochemical, water/waste water treatment, metallurgy, pharmacy, thermoelectric, etc. for process control and measurement management.

Feature And Main Technical Datum

Compact structure

No moving parts, long service time

Long time stability

Same sensor can measure liquid, gas and steam

With acceptable Reynold number, the meter coefficient is free from the influence of the change of temperature, pressure, viscosity and others.

Reynolds No. Range: 2104~7106 (For DN25~DN100)

4104~7106 (For DN150~DN300)

Display: to display instant and total Flow

Working Pressure: 1.6~32MPa

Medium Temp.: 0℃~150℃(Integral Type)

+100℃ ~+350℃(High temp. Type)

Ambient Temp.:-25℃~+60℃

Power:24VDC ± 10% or 220VAC

Relative Humidity: 5 % ~95 %

Atmospheric Pressure: 86~106KPa

Measurable Fluid: liquid, gas and steam

Accuracy: 1% (For Liquid), 1.5%(For Gas and Steam)

Output Signal: 4~20mA Current(2 Wire System) Or Standard Pulse Output(3 Wire System)

Digital Communication Modbus RTU

Analog signal

Anti-explosion Grade: Exd II BT4

Principle

Put a drum vertically into a burette and let some fluid flow down along the drum, by two sides of which there formed, in rotation, regular vortexes , which is called the Karman Vortex Street. An output frequency of the Karman Vortex Street is related to fluid velocity and drum diameter, which can be described by following formula:

f=St SHAPE* MERGEFORMAT

Where,

f-Output frequency of the Karman Street

St-Coefficient (called as Strohar number)

v-velocity

d-Diameter of drum

As an output frequency of the Karman Vortex Street f is direct proportional to a velocity v. It may work out an instantaneous flow rate by using a tested output frequency of the Karman Street. The Strohar number is a key coefficient for vortex street flow meters. Within the lineal section of the curve, where St ≈0.17, the output frequency is direct proportional to the flow velocity, so a velocity v is derivable by using a tested frequency f.

LXW serials vortex street flow transducers detect the output frequency by using piezoeletricial elements inside the sensors (probes) to test the stress that is alternatively acted on the elements by vortex.