LDC Inserting Electromagnetic Flowmeter

Overview

LCD inserting electromagnetic flowmeter is suitable for measuring the volumetric flow of conductive liquid and seriflux (minimum conductivity is bigger than 20μs/cm) in sealed pipeline, such as clean water, sewage, slurry, pulp, food liquid, various solutions of acid, alkali and salt. It is also suitable for occasions such as wastewater treatment, surface treatment, washhouse, chemical industry (non-hazardous area), food industry, assistant factory, swimming pool, and so on.

Operating Principle

The measuring principle of LDC inserting electromagnetic flowmeter is based on Faraday's law of electromagnetic induction. According to Faraday's law, when the conductive liquid (minimum conductivity is bigger than 20μs/cm) contacts two electrodes and flows through pipeline, pressure can be measured between the two electrodes, and the pressure is proportional to flow velocity which can be converted to the flow quantity in unit time according to selected pipeline's K coefficient.

Main Technical Parameters

Velocity Measurement Range	Flow rate 0.3~10m/s
Accuracy	it is ±1.5% of measured value when adopt field online calibration it is ±2% of measured value when adopt standard K coefficient calibration
Repeatability	Indicator value 0.25%
Inside Nominal Diameter	100~3000mm
Operating Pressure	0.6~1.6Mpa
Working and Storing Temperature	0℃~+60℃
Working Power Source	220VAC/24VDC
Minimum Conductivity	20μs/cm
Material Contacting with Medium	Stainless steel 316L
Output Signal	Pulse, 4~20Ma (two-wire system), RS-485, Modbus, Hart protocol, etc.
Relative Humidity	<80%
Protective Level	IP65
Shell Material	Stainless steel 316L

Ordering Models

Model	F	D	Illustration
	Ball valve	Inside Nominal Diameter	
LDG			Inserting electromagnetic flow meter
	F		With ball valve
		D100~300	100~300