Battery Operated Magnetic Flowmeter

SHENGDA
Fluid technology

INTRODUCTION:

Lithium battery powered electromagnetic flowmeter is mainly used for water and wastewater measurement in remote areas. Our battery powered electromagnetic flowmeter supports wireless data transmission function. The transmission mode can be GPRS / 4G / nb-iot / Lora and other transmission modes, which can be controlled remotely.

FUNCTION:

- ♦ Various wireless communication methods: The wireless communication methods such as GPRSS/4G/NB-IOT/LoRa.
- ♦ Measure instantaneous flow and cumulative flow
- ♦ Flow limit setting and Range setting.
- ♦ Lower limit of flow alarm.Flow limit alarm.Pipeline empty pipe alarm.Instrument failure alarm.
- ♦ Anti radio interference function
- ♦ Total flow is recorded in hours/minutes/seconds
- ♦ Output: pulse signal, output current signal.
- ♦ Two way measurement system, forward total amount, reverse total amount and difference total amount, can display positive and reverse flow.
- ♦ Remote transmission function: remote transmission of data and parameters at regular intervals, or manual trigger transmission.

SPECIFICATION :

MAG Flow Meter			
Types	Battery powered	Battery powered with GPRS/LoRa/4G/NB-Iot	Pressure measurement function
Pressure	1.0Mpa, 1.6Mpa, 4.0Mpa, others		
Size	DN15~DN600(½ inch~24 inch)	DN15~DN300(½ inch~12 inch)	
Power	Battery 3.6 VDC(working 3-6years)		
Outputs	Std. 4 – 20 mA,0Hz~5kHz		
Communication	MODBUS RS-485/ Pulse/ Frequency/ **GPRS/4G/NB-IoT/LoRa.**		
Liner	Neoprene, Polyurethane rubber, natural rubber, PFA, PTFE, etc,		
Electrode Material	SS316L(standards), Hastelloy B/C,etc.		
Accuracy	± 0.2%, ± 0.3%,±0.5%(flowrate<1m/s) .Optional		
Measuring Range	0.5m/s~10m/s		
Display Unit	Standard Unit in m^3, Litre		
Process Temperature	0°C~80°C		
Protection Class	IP65,IP67,IP68.Optional		
Flow Tube Material	SS316,SS304(Optional)		
Construction Material	Mild steel/stainless steel		

APPLICATION

- ☑ Clean water
- ☑ Sewage, chemical sewage
- ☑ Pulp and slurry
- ☑ Revenue metering or billing.
- ☑ Leakage detection.
- ☑ Irrigation.
- ☑ Industry water.
- ☑ Cooling water.
- ☑ Wastewater.

ELECTRODE MATERIALS:

Electrode	Application
SS316L	Nitric acid, sulfuric acid with concentration <5% at room temperature, weak acid, alkali solution, sulfite under certain pressure, sea water, acetic acid and other media have strong corrosion resistance.
Hastelloy B Hastelloy C	It can resist the corrosion of oxidizing acids, such as nitric acid, mixed acid, or mixed medium of chromic acid and sulfuric acid, and also can resist the corrosion of oxidizing salts, such as fe++, cu++. Or hypochloric acid and alkali, seawater
Titanium	It is resistant to the corrosion of seawater, various chlorides, hypochlorites, chlorinated acids, organic acids, alkalis, etc., and is not resistant to the corrosion of relatively pure reducing acids (such as sulfuric acid and hydrochloric acid)
Tantalum	Excellent corrosion resistance. Except hydrofluoric acid, fuming sulfuric acid and alkali, it can resist the corrosion of almost all chemical media (including hydrochloric acid, nitric acid with boiling,oint and sulfuric acid below 175 ℃), but it is not resistant to corrosion in alkali.
Platinum-iridium	Good corrosion resistance to acid, alkali and various salts, But not resistant to nitromurlatic acid corrosion
Stainless steel coated with tungsten carbide	For non corrosive and strong abrasive media

LINER MATERIALS :

Liner materials	Application
Soft rubber (DN50~DN3000) Hard rubber(DN50~ DN3000)	0 °C ~ 80 °C non strong acid, strong alkali and strong oxidizing medium Masurable sewage and mud
PTFE (≤DN1000)	1.-25°C~140°C 2. Strong corrosive media such as concentrated acid and alkali 3. Sanitary media
Polyurethane (≤DN300)	1.-25°C~60°C 2. Neutral strong wear mineral slurry, coal slurry and slurry
PFA(≤DN250)	1.-25 °C ~ 140°C non strong wear medium 2. sanitary media
P46(≤DN250)	1.-25 °C ~ 100°C non strong wear medium 2. sanitary media

SELECTION TABLE:

Model	SDLD-F	□□□	□□	□	□	□	□	□	□	□	□	□	□	□
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Caliber	DN15-DN600	eg:015 means DN15												
Flang standard /	0.25Mpa		02											
	0.6MPa		06											
	1.0MPa		10											
	1.6MPa		16											
	ANSI 150		20											
	4.0MPa		40											
	ANSI 300		50											
	JIS 10K		91											
	JIS 20K		92											
	Customization		XX											
Liner materials	Soft rubber (DN50~DN3000)			1										
	Hard rubber(DN50~ DN3000)			2										
	PTFE (≤DN1000)			3										
	Polyurethane (≤DN300)			4										
	PFA(≤DN250)			5										
	F46(≤DN250)			6										
	Ceramics(DN50~ DN150)			7										
Electrode Material	Stainless steel 316L				1									
	Hastelloy C				2									
	Hastelloy B				3									
	Titanium				4									
	Tantalum				5									
	Platinum-iridium				6									
	Stainless steel coated with tungsten carbide				7									
	Conductive ceramics				8									
Grounding and lining protection	Grounding screws					0								
	Grounding rings					1								
	Grounding electrodes					2								
	Inlet protection flange					3								
Materials temperature	≤80°C						A							
	≤120°C						B							
	≤180°C						C							
Protection Grade	IP65							1						
	IP67							2						
	IP68							3						
	IP65+Ex d ib mb IIC T4 Gb							4						
Structure	Integrated								C					
	Seperated								R					
Power Supply	85~265VAC/45~63Hz									A				
	16~36VDC									D				
	3.6VDC									B				
Display	LCD										1			
	OLED										2			
Signal Output And Communication	4~20 mA+ Pulse+alarm (standards)											0		
	4~20 mA+ Pulse+alarm+RS232											2		
	4~20 mA+ Pulse+alarm+RS485											4		
	4~20 mA+ Pulse+alarm+MODBUS											M		
	4~20 mA+ Pulse+alarm+HART											H		
	4~20 mA+ Pulse+alarm+Profibus+DP											P		
Calibration	±0.5% three flow												1	
	±0.2% five flow												2	
	±0.5% five flow												3	
	Standard												X	
Shell Material	Carbon steel													0
	Stainless steel 304													1

PLEASE CONTACT US FOR MORE INFORMATION AND SOLUTIONS.

Shengda Water Meter since 1995

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