# **Stainless Steel Electromagnetic Flow Meter**



### INTRODUCTION

Stainless steel electromagnetic flow meter is widely used in occasions requiring sanitation and cleaning, such as liquid drinks, daily cosmetics and medicine, as well as the measurement of corrosive solutions in industrial departments such as metallurgy and chemical industry.



#### SPECIFICATION:

1. Nominal Dia (mm): DN 15~DN 300

2. Accuracy: ± 0.2%, ±0.5%(flowrate<1m/s)

3. Measuring Range: 0.5m/s~10m/s

4. Conductivity of medium: more than 5µS/cm

5. Display Unit: Standard Unit in M3, Litre

6. Process Temperature: -20°C~180°C

7. Process Pressure: 1.6MPa~4.0MPa,(Optional)

8. Sensor Protection Class: IP 65,IP67,IP68.Optional

9. Flow Tube Material: SS316,SS304(Optional)

10. Material of Construction: SS304/SS316/SS316L

11. Electrode Material: SS316L, Hastelloy B/C, Tantalum, Ti, Stainless steel coated tungsten carbide,

Platinum iridium alloy.etc.

12. Liner material: PTFE,ceramics.

13. Flange Standard: ANSI/DIN/GB/JIS

14. End Connection: Flange

15. Power Supply: AC220 V/DC24 V/DC3.6V

16. Output : Std. 4 – 20 mA,0Hz~5kHz

17. Cable Length: Std 10 meters(Customizable)

18. Installation: Inline Flange Type.

19. Communication: Std RS485,RS485 Modbus RTU (RS232,MODBUS,HART,PROFIBUS-DP,Optional)

20. Display: LCD Display/OLED

21. Version: Smart /Remote

#### **FUNCTION:**

- ♦ Measure instantaneous flow, Measure the cumulative flow. Two way measurement system, forward total amount, reverse total amount and difference total amount, can display positive and reverse flow.
- ♦ Lower limit of flow alarm. Flow limit alarm. Pipeline empty pipe alarm, Instrument failure alarm.
- ◆ Flow limit setting, Flow Range setting
- ♦ Anti radio interference function
- ♦ Total flow is recorded in hours/minutes/seconds
- ♦ Output: pulse signal, output current signal.
- ◆ Transmit the collected data to the operating system or automatic control system through communication cable or wireless

## **APPLICATION:**

- Liquid drinks
- Daily cosmetics and medicine
- ✓ Metallurgy and chemical industry
- Industry water
- Leakage detection
- ✓ Water purification and desalination
- All kinds of liquid treatment

### **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 °C), 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 $^{\circ}\text{C} \sim 80$ $^{\circ}\text{C}$ non strong acid, strong alkali and strong oxidizing medium Masurable sewage and mud						
PTFE (≪DN1000)	125°C~140°C 2. strong corrosive media such as concentrated acid and alkali 3. sanitary media						
Polyurethane (≪DN300)	125°C~60°C 2. neutral strong wear mineral slurry, coal slurry and slurry						
PFA(≪DN250)	125 °C ~ 140 °C non strong wear medium 2. sanitary media						
P46(≪DN250)	125 °C ~ 100 °C non strong wear medium 2. sanitary media						

#### **SELECTION TABLE:**

Model	SDLD-F													1
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Caliber		eg:015	(2)	(0)	(/	(0)	(0)	(//	(0)	(//	(10)	(11)	(12)	(10)
	DN15-DN300	means												
		DN15												
Flang standard /	0.25Mpa		02											
	0.6MPa		06	1										
	1.0MPa 10			1										
	1.6MPa		16	1										
	ANSI 150		20	1										
	4.0MPa		40	1										
	ANSI 300		50	1										
	JIS 10K		91	1										
	JIS 20K		92	1										
	Customization		XX	-										
	Soft rubber (DN50~	-DN3000)		1										
				2	-									
Liner	Hard rubber(DN50~ DN3000) PTFE (≤DN1000)			3	-									
materials	Polyurethane (≤DN	300)		4	-									
materials		300)		5										
-	PFA(≤DN250)													
	F46(≤DN250)	NI1EO)		6 7	-									
	Ceramics(DN50~ D Stainless steel 316			/	4	-								
-		L			1	-								
	Hastelloy C				2									
Ele etce de	Hastelloy B				3									
Electrode	Titanium				4									
Material	Tantalum				5									
	Platinum-iridium				6									
	Stainless steel coa		sten carb	ide	7	]								
	Conductive ceramic	cs			8									
Grounding	Grounding screws 0													
and lining	Grounding rings 1													
protection	Grounding electrodes 2													
	Inlet protection flan	ge				3								
Materials	≤80°C						Α							
temperature	≤120°C						B C							
tomporataro	≤180°C													
_	IP65							1						
Protection	IP67							2						
Grade	IP68							3						
	IP65+Ex d ib mb IIC	CT4 Gb						4						
Structure	Integrated								С					
Structure	Seperated								R	1				
Power Supply	85~265VAC/45~63	Hz							•	Α	1			
	16~36VDC									D				
	3.6VDC									В	]			
Diople	LCD										1	]		
Display	OLED 2										2	1		
	4~20 mA+ Pulse+a	larm (stand	ards)									0	1	
	4~20 mA+ Pulse+a											2	1	
Signal Output												4	1	
And	4~20 mA+ Pulse+alarm+RS485  4~20 mA+ Pulse+alarm+MODBUS											M	†	
Communication	4~20 mA+ Pulse+alarm+HART											H	1	
	4~20 mA+ Pulse+alarm+Profibus+DP											P	1	
Calibration -														
	±0.5% three flow												1	
	±0.2% five flow												2	
	±0.5% five flow											3		
01 "	Standard												Х	_
Shell	Carbon steel													0
Material	Stainless steel 304													1