

MEF-8600

Marmonix electromagnetic flow meter for wastewater

Overview:

Marmonix electromagnetic flow meter for wastewater MEF-8600 is hallmarked by its high performance and reliability based on successful, field-proven technology. It is being widely used in industries such as petroleum, chemical engineering, iron and steel, electric power, paper making, water treatment, petrochemical, medicine etc.

Features:

- Medium temperature can be $-20^{\circ}\text{C} \sim 200^{\circ}\text{C}$.
- Integrated verification, diagnostic function and empty pipe detection.
- Measure forward and reverse direction flows.
- Built-in reference electrodes, no need to connect ground ring.
- Dual frequency excitation and stable zero point.
- Precision coil winding technology, makes magnetic field more uniform.
- High protection grade, IP65.
- No moving parts, no pressure loss.
- High accuracy: $\pm 0.5\%$ of reading, $\pm 0.3\%$ and $\pm 0.2\%$ optional, velocity > 0.3 m/s.

Application:

- Chemical
- Medicine
- Beverage
- Iron and steel
- Water supply
- Electric power
- Water treatment





1-DC 4-20mA
Pulse alarm
Modbus485 RTU



2-Standard:GB
ANSI DIN JIS



3-PTFE,PFA,FEP,
F46,PU Ceramic



4-display flow
rate, total flow,
duplex flow



5-316L HC HB
Tan Ti Pt
stainless steel
covered with
tangsten carbide



6-99.99% pure
copper coil

Specification

Size	DN3-DN3000mm (1/8"~120")
Accuracy	±0.5% of reading, velocity >0.3 m/s
Conductivity	Normal liquid >5 μS/cm, DI water >20 μS/cm
Velocity	0.1-15 m/s
Protection Grade	IP65 Compact, IP68 Separated
Power Supply	AC85~250V, DC20V~36V
Electrode Type	Fixed, Scraper
Power Consumption	<20W
Signal Output	4~20 mA, pulse
Communication	RS485/Modbus, Hart over 4~20 mA, Hart, Profibus
Language	English, Chinese (Other languages can be provided on request)
Display	LC Display, 128X128mm, Three lines, 4 internal push buttons
Ambient Temperature	-25 ~ +60°C / -77 ~ 140°F Sensor -10~ +60°C / -50~140°F Convertor
Liquid Temperature	Integrated: 70°C / 158°F max Separated: 200°C / 392°F max
Relative Humidity	5%~90%
Exciting Current	125mA, 187mA, 250mA, 500mA
Exciting Frequency	25Hz, 3.125Hz, 2.5Hz, 2Hz
Measuring Tube	Stainless Steel 304
Flange	Carbon Steel (standard) Stainless Steel 304 Stainless Steel 316
Straight Pipe	Inlet Path ≥ 10D, Outlet Path ≥ 5D
Certificates	CE 6022120716, ISO9001:2008, CQC1500155689521
Frequency Output	1~5000 Hz
Electrode	SS316L (standard), Hastelloy C, Hastelloy B, Titanium Tantalum, Platinoidium, Stainless Steel Covered Tungsten carbide
Liner Material	PTFE DN15-DN1600 -20°C ~ +120 °C (-68°F ~ 248°F) PFA DN3-DN800 -20°C ~ +120 °C (-68°F ~ 248°F) F46 DN25-DN1800 -20°C ~ +120 °C (-68°F ~ 248°F) Neoprene DN40-DN3000 -10°C ~ + 80°C (-50°F ~ 176°F) Polyurethane DN40-DN1600 -10°C ~ + 60°C (-50°F ~ 140°F) FLS DN40-DN1800 -10°C ~ + 200°C (-50°F ~ 392°F)
Pressure Rating	4.0 MPa (DN3-DN150) 1.6 MPa (DN200-DN600) 1.0 MPa (DN700-DN1000) 0.6 MPa (DN1200-DN3000)
Flange Standard	ANSI B16.5 150#, 300#, 600# EN1092-1 PN10, PN16, PN25, PN40 JIS B2220 10K, 20K, 40K

Selection Model

Model												
Structure	Integrated	S1										
	Seperated	S2										
Nominal Pressure	0.6MPa		P1									
	1.0MPa		P2									
	1.6MPa		P3									
	4.0MPa		P4									
Liner Material	PTFE DN15-DN1600 -20℃~ 120 ℃			L1								
	PFA DN3-DN800 -20℃~ 120 ℃			L2								
	F46 DN25-DN1800 -20℃~ 120 ℃			L3								
	Neoprene DN40-DN3000 -10℃~ 80℃			L4								
	Polyurethane DN40-DN1600 -10℃ ~ 60℃			L5								
	FLS DN40-DN1800 -10℃ ~ 200℃			L6								
Electrode Material	Stainless steel 316L				E1							
	Hastelloy B				E2							
	Hastelloy C				E3							
	Titanium				E4							
	Platinum-iridium				E5							
	Tantalum				E6							
	Stainless steel covered with tungsten carbide				E7							
Body Material	Carbon Steel					B1						
	Stainless steel 304					B2						
	Stainless steel 316L					B3						
Flange Standard	ANSI 150#, 300#, 600#						F1					
	JIS 10K, 20K, 40K						F2					
	DIN PN10,PN16,PN25,PN40						F3					
Power Supply	AC85~250V							D1				
	DC20V~36V							D2				
Signal Output	4~20 mA								G1			
	Pulse								G2			
Commu- nication	Modbus-RS485									C1		
	Hart									C2		
	Profitbus									C3		
Protec- tion Grade	IP65 Integrated										H1	
	IP68 Seperated										H2	
Electrode Type	Fixed											D1
	Scraper											D2

Performance for Electrode

Electrode Material	Applications
Stainless Steel 316L	Applicable in water, sewage and corrosive mediums. Widely used in industries of petrol , chemistry , carbamide ,etc
Hastelloy B (HB)	Having strong resistance to hydrochloric acid of any consistence which is below boiling point. Also resistable against vitriol, phosphate, hydrofluoric acid, organic acid etc which are oxidable acid, alkali and non-oxidable salt.
Hastelloy C (HC)	Be resistant to oxidable acid such as nitric acid, mixed acid, as well as oxidable salt such as Fe ⁺⁺⁺ ,Cu ⁺⁺ and sea water
Titanium	Applicable in sea water, and kinds of chloride, hypochlorite salt, oxidable acid (including fuming nitric acid), organic acid, alkali etc. Not resistant to a pure reducing acid (such as sulphuric acid ,hydrochloric acid corrosion. But if acid contains antioxidant is greatly reduce corrosion.
Tantalum	Having strong resistance to corrosive mediums that is similar with glass Almost is applicable to all chemical mediums. Except for hydrofluoric acid, oleum and alkali.
Platinum-iridium	Almost be applicable in all chemical mediums except for ammonium salt.
Stainless Steel Covered Tungsten Carbide	Applicable in mediums of no corrosive and low abrasion.

