

MEF-8400

Marmonix Flange Ball Valve Insertion Electromagnetic Flow Meter

Overview:

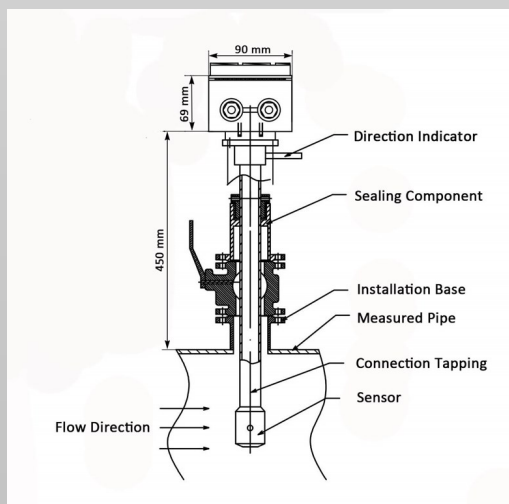
Marmonix Flange Ball Valve Insertion Electromagnetic Flow Meter MEF-8400 is hallmarked by its high performance and reliability based on successful, field-proven technology. It is being widely used in industries such as petroleum, chemical engineering, iron and steel, food, electric power, paper making, water treatment, petrochemical, medicine etc.

Application:

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

Features:

- Medium temperature can be $-20^{\circ}\text{C} \sim 80^{\circ}\text{C}$.
- Integrated verification, diagnostic function and empty pipe detection.
- Measure forward and reverse direction flows.
- Easy to install and it can be installed without shutting down the process.
- Dual frequency excitation and stable zero point.
- Precision coil winding technology, makes magnetic field more uniform.
- High protection grade, IP65, IP68.
- No moving parts, no pressure loss



SPECIFICATION

Size	DN100-DN3000mm (4"~120")
Accuracy	±1.5% of reading, velocity >0.3 m/s
Velocity	Normal liquid >5 μS/cm, DI water >20 μS/cm
Protection Grade	IP65 (Integrated), IP68 (seperate)
Power Supply	AC85~250V, DC20V~36V
Power Consumption	<15W
Communication	RS485/Modbus, Hart over 4~20 mA, Hart, Profitbus
Language	English, Chinese (Other languages also 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
Relative Humidity	5%~95%
Liquid Temperature	-20°C -80°C (-68°F ~ 176°F)
Velocity	0.1 m/s ~ 15 m/s
Max Distance	50m (sensor and transmitter)
Working Pressure	≤1.6 MPa
Flange Standard	DN40, PN16
Connection	Simple, Flange ball Valve, Thread Ball Valve
Signal Output	4~20 mA, Pulse
Grounding Resistance	<10Ω
Cable Entry	M20*1.5
Transmitter Housing Material	Aluminum
Probe	ABS
Exciting Current	125mA, 187mA, 250mA, 500mA
Exciting Frequency	25Hz, 3.125Hz, 2.5Hz, 2Hz
Electrode Material	SS316L, Hastelloy C, Hastelloy B, Titanium Tantalum, Platinoiridium, Stainless Steel Covered Tungsten carbide
Body Material	Stainless Steel 304 Stainless Steel 316
Straight Pipe	Upsteam Required Single bend preceded by ≥ 9 diameters of straight pipe 10 D Pipe size reduction / expansion in straight pipe run 10 D Single bend preceded by ≤ 9 diameters of straight pipe 15 D Outflowing tee / Pump outflow 20 D Multiple bends out of plane 30 D Inflowing tee 30 D Control / Modulating valve 30 D Downstream Required 5 D

Selection Table

Selection Table for Insertion Electromagnetic Flow Meter										
Model	XXX X X X X X X X									
Caliber Size	DN100-DN3000mm									
Nominal pressure	1.6Mpa	3								
	Other	5								
Install Connection	Flange ball valve	1								
	Thread ball valve	2								
Sensor probe material	ABS	1								
	Polypropylene	2								
Electrode	316L	1								
	Hastelloy B	2								
	Hastelloy C	3								
Structure type	Integral type	1								
	Remote type	2								
Power Supply	220VAC 50HZ							E		
	24VDC							G		
Output/ Communication	Flow volume 4~20m ADC/pulse								A	
	Flow volume 4~20m ADC/RS232C Communication								B	
	Flow volume 4~20m ADC/RS485 Communication								C	
	Flow volume HART output/with communication								D	
Converter figure	Square									A
	Circular									B

Performance of 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 seawater, 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 it greatly reduces 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.

