

JDBE Electromagnetic flow meter

Feature

- The measurement is not be affected by the density, viscosity, temperature, pressure and conductivity of the liquid;
- It can measure mud, coal water slurry, highly corrosive liquid flow.
- It can only measure the conductive liquid.

Measuring medium:mud,coal water slurry,other slurry,sewage, tap water,corrosive liquids,etc.

Technical details



Executive standard	JB/T 9248-1999			
Nominal diameter	15-2000mm			
Velocity range	0 - 10m/s			
Degree of accuracy	±0.5%R , ±1%R (<DN20)			
Medium conductivity	≥5uS/cm , Actual conductivity≥30uS/cm			
Nominal pressure	1.0MPa	1.6MPa	2.5MPa	4.0MPa
	DN15-DN800	DN15-DN800	DN15-DN600	DN15-DN50
Environment temperature	Sensor	0°C - +80°C or -25°C - +120°C or +70-+250°C		
	Incorporate type	-10°C - +55°C		
Highest medium temperature	CR chloroprene rubber liner (CR)	+80°C		
	Fluorosilicone rubber(FVMQ)	+70°C - +250°C		
	Polytetrafluoroethylene lining(F4)	+80°C or +120°C		
	Politef lining(F46)			
	Teflon(PFA)			
Output signal	4-20mA ; Pulse/Frequency 2kHz(Default) , 5KHz(Max)			
Cable entry size	M20 × 1.5 (Standard nylon waterproof connector, optional explosion-proof metal connector)			
Supply voltage	110/220VAC(100-240VAC) , 50Hz/60Hz ; 24VDC ±10%			
Power dissipation	≤15VA			
Digital communication	RS-485,Support standard Modbus-RTU protocol;GPRS			
Signal electrode and the ground electrode material	Stainless steel 316L,Hastelloy C,Hastelloy B,titanium, tantalum, platinum			
Form of electric pole	Interpolating, extrapolating electrode need to customize			
Number of electrodes	Standard configuration 3-4 electrodes (two measuring electrodes plus a grounding electrode), according to the caliber configuration			
Flange Standard	Conform to the international GB9119 (customize according to customer's demand)			
Connecting flange material	Standard carbon steel and stainless steel are needed to be customized			
Grounding ring material	Stainless steel, and stainless steel that contains molybdenum, etc.			
	DN15-DN450	Stainless steel 1Cr18Ni9Ti(Ordinary austenitic stainless steel SUS321)		
Housing material	Standard carbon steel and stainless steel are needed to be customized			
Level of protection	Separate body-type	IP68, IP65		
	Incorporate type	IP65		
Interval / wire length (Separate body-style)	10m standard configuration connecting line, optional 15m, 20m, 25m, 30m.			

Ordering instruction

The following questions should be clear when selects the electromagnetic flow meter :

- (1) The medium to be measured must be conductive fluid, and it isn't available to the gas, oil, organic solvents and the non-conductive medium.
- (2) When selects the model and specification, we should provide the measurement range of the electromagnetic flowmeter for the manufacturer, then the factory should make a demarcation within the scope of this measure in order to ensure accuracy of the instrument.
- (3) The users should provide manufacturers with the medium's process parameters, flow rate and temperature, pressure and other parameters of the selection table, then based on these parameters, select the appropriate meter.
- (4) When selects the separate body-type electromagnetic flow meter, the users should propose wiring length requirements to the factory according to the sensor distance away from installation location of converter.
- (5) If users need to install accessories, such as supporting flange, metal ring gasket, bolts, nuts, washers and other additional requirements, they can put them forward when ordering.

Model Selection Catalog

Name	Specification code	Explanation
Instrument type		Intelligent electromagnetic flowmeter
Diameter code	/	For example: 100 represents DN 100
Electrode form	1	Standard stationary type
Electrode material	0	Stainless steel(316L)
	1	Platinum Pt
	2	Hestelloy B(HB)
	3	Ta Tantalum Ta
	4	Titanium Ti
	5	Hastelloy C(HC)
Lining material	3	Chloroprene rubber
	4	Polyurethane rubber
	5	F4(PTEE)polyfluortetraethylene
	6	F46(FEP)polyperfluoroethylene-propylene
Rated pressure	4.0	DN10-80
	1.6	DN100-150
	1	DN200-1000
	0.6	DN1100-2000
	0.25	DN2200
Operating temperature	E	less than 60°C
	H	less than 120°C
Grounding	/	Built-in grounding electrode
Grade of protection	0	IP65
	1	IP68
Converter type	0	Integral type
	1	Split type
Case material	-0	Carbon steel
	1	Stainless steel
Instrument flange	0	Carbon steel
	1	Stainless steel
Installing timing flange	0	without
	1	with
Power supply source	0	220VAC
	1	24VDC
Instrument range	(xxx)	For example:(200)represents maximum flux corresponding to 20mA
		200m3/h

1. Sensor optional pressure level is 1.0MPa, 1.6MPa, 2.5MPa, 4.0MPa. The selection reference of maximum pressure level of each diameter range (high voltage can be customized): DN15 - DN50, PN≤4.0MPa ; DN65 - DN150, PN≤1.6MPa ; DN200 – DN450, PN≤1.0MPa.
2. Flange: 9119-2000 GB/T standard carbon steel, other standard flange needs to be customized.
3. Please selects caliber on the caliber option table, we should consider that the medium measuring flow rate should be kept in the appropriate range when choosing caliber.
4. When selects A1 as the highest using temperature (mainly refers to measurement medium temperature, the same below), the flowmeter working temperature range is 0°C ~ + 80°C which can use CR lining or PTFE F4 lining. The maximum operating temperature is higher than 80°C and the minimum temperature is less than 0 ° C, which needs to use the separate body-type, you can use PTFE F4 lining.
5. The maximum operating temperature is less than or equals to 120°C, you can choose PTFE F4 lining, FEP F46 lining or soluble PFA.
6. The maximum use temperature of 70-250 C, can be selected silicone rubber (FVMQ).
7. the sensor signal cable is 10m; the optional 15m, 20m, 25m, 30m.
8. 110/220VAC power supply voltage range : 100-240VAC、50/60Hz.
9. 24VDC power supply voltage range : 22-26VDC.