

## Electromagnetic flow meter



### Measure principle:

Electromagnetic flowmeter is an instrument that uses Faraday electromagnetic induction principle to measure the flow of conductive fluid, the instrument generates electromotive force when the conductive fluid pass through the external magnetic field.

### Feature:

1. The measurement result isn't effected by changing the fluid density, viscosity, temperature, pressure and conductivity.
2. Without flow parts and pressure loss in measurement pipe, the request is simple in the straight pipe section. It has unique adaptability to slurry measurement.
3. It has good corrosion resistance and abrasion resistance to choice the appropriate sensor and electrode material.
4. The converter adopts novel excitation mode, the advantage are low power consumption, zero point stability and high accuracy.
5. The converter and sensor can constitute one body type or separation type.
6. The converter adopts 16 bit high performance microprocessor, 2X16LCD display, convenient setting parameter and reliable programming.
7. The flowmeter is a two-way measurement system with three integrators: forward total, reverse total, total difference; it displays positive and reverse flow, and has many output: current, pulse, digital communication and HART.
8. The converter adopts surface installation technology (SMT), and has self-test and self-diagnosis functions.
9. It is a two-way measurement system, and measurement the positive and reverse flow. To ensure the product performance is stable in long time by adopting special manufacture technique and high quality materials.
- 10: DN: ND6-DB2000, Accuracy: 0.5%

### Technical parameters:

Complete machine and sensor technical data			
standard	JB/T9248—1999		
size	DN15-3000mm		
maximum velocity	15m/s		
accuracy	0.50%		
fluid electric conductivity	≥20 $\mu$ s/cm		
nominal pressure			
environment temperature	sensor	-25°C—+60°C	
	converter and one-body type	-10°C—+60°C	
lining material	F4,CR,PU,F46		
maximum fluid temperature	one-body type	70°C	
	Separation type	CR lining	80°C; 120°C (specify when ordering goods )
		PU lining	80°C
		F4 lining	100°C; 150°C (specify when ordering goods )
		(F46)	
electrode material	316L, HB, HC, Ti, Ta, Platinum/Iridium alloys		
housing protection	DN15~DN3000 separate type rubber or polyurethane(PU) lining sensor		IP65 or IP68
	Other sensors, one-body type flow meters and separation converters		IP65
spacing	The distance between the converter and the sensor is not usually more than 100m		