

PRECISION FLOW MEASUREMENT

Integrated Electromagnetic Flowmeter

Full-bore measurement and control of conductive liquids using Faraday's law of electromagnetic induction, with bidirectional flow sensing and flexible process communications.



NOMINAL DIAMETER

DN6-DN3000

ACCURACY

±0.5%

PRESSURE

0.6-4.0 MPa

PROTECTION

IP65 / IP68

TECHNICAL SPECIFICATIONS

Nominal diameter	DN6-DN3000 mm
Accuracy	±0.5%
Sensor material	Carbon steel, SS304, SS316L
Power supply	24 VDC, 220 VAC, 3.6 V battery powered
Electrode	SS316L, Hastelloy B, Hastelloy C, Ti, Ta, Pt, WC
Liner	CR, PU, PTFE, F46, FPM
Rated pressure	0.6-4.0 MPa; higher pressure customizable
Thread connection	DN4-DN50 mm
Tri-clamp connection	DN4-DN100 mm
Flange connection	DN10-DN3000 mm
Structure	Integrated, remote or insertion type
Protection level	IP65 / IP68
Remote cable	10 m standard configuration
Standard outputs	Pulse, 4-20 mA, RS485 Modbus
Optional communication	HART, GPRS, Profibus
Explosion protection	Ex d ia [ia Ga] q IIC T6 Gb

FUNCTIONAL ADVANTAGES

- Forward and reverse flow measurement
- No moving parts in the flow path
- Multiple outputs: pulse, 4-20 mA and RS485 Modbus
- Optional HART, GPRS and Profibus communication
- Wide selection of electrodes and liners
- Suitable for conductive liquids containing impurities
- Unaffected by temperature, density, viscosity or concentration changes
- Integrated, remote and insertion configurations

MEASURING MEDIA

- Water, wastewater and sewage
- Acids, alkalis and seawater
- Pulp and slurry
- Food and beverage processing
- Petrochemical processing
- Iron and steel metallurgy
- Water supply, drainage and irrigation
- Paper making and pharmaceutical processes

MEASUREMENT PRINCIPLE

When a conductive liquid moves through the meter's magnetic field, an induced voltage proportional to flow velocity is detected by the electrodes and converted into pulse, 4-20 mA or digital communication signals.