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ELECTROMAGNETIC FLOWMETER

PEM-1000
Please get in contact to discuss specific requirements

- Maximum static pressure 1,6MPa
- ATEX versions available on request
- Analog outputs: 4-20mA
- Communication interface: Modbus RTU / RS 485
- IP65 or IP67 (depending on model and configuration)

PRODUCT DESCRIPTION

HOW MAGNETIC FLOW METER SENSORS SUPPORT WASTEWATER MANAGEMENT

Magnetic flowmeters are essential tools in modern wastewater treatment because they **accurately measure the flow of conductive liquids** without any moving parts. This makes them highly reliable in challenging conditions like sewage, sludge, and industrial effluent.

Key Benefits in Wastewater Applications:

Accurate Flow Monitoring

- Measures influent and effluent flows for regulatory reporting and process control.
- Detects abnormal flow rates to identify leaks, blockages, or system inefficiencies.

Handles Dirty and Slurry Fluids

- Can measure raw sewage, sludge, or chemical-treated wastewater because solids do not affect the measurement.
- No moving parts to clog or wear out.

Supports Process Optimisation

- Enables precise dosing of chemicals such as coagulants, neutralisers, or disinfectants.
- Tracks return activated sludge (RAS) and waste activated sludge (WAS) flows to optimise biological treatment.

Regulatory Compliance

- Provides reliable flow data for discharge permits and environmental compliance reporting.
- Digital outputs (Modbus / 4–20 mA) integrate seamlessly with SCADA systems.

Low Maintenance and Long Service Life

- Non-intrusive, fully sealed design eliminates mechanical wear.
- This design also minimises downtime and lowers the lifetime operating costs.

TECHNICAL DATA

Accuracy	0.5% of measured value
Approvals	CE, ATEX
Conductivity	≥ 20 µS/cm
Flow Range	0.3 to 10 m/s
Installation postition	Horizontal or vertical
IP class	IP65, IP67
Material electrode	Stainless steel, Hastelloy, Titanium
Material internal parts	Rubber, PTFE

Measurement technology	Electromagnetic
Pipe size	DN10 to DN1000
Power supply	24 V DC (standard), optionally 230 V AC
Process connection	Flanged (EN 1092-1)
Signal outputs	4–20 mA, Pulse/Frequency, Modbus RS-485
Temperature range	Up to 80°C for rubber, Up to 130°C for PTFE