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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
Cable length	8 m
Conductivity	≥ 20 µS/cm
Flow Range	0.3 to 10 m/s
Installation postition	Horizontal or vertical
IP class	IP67, IP66

Material electrode	Stainless steel, Hastelloy, Titanium
Material of wetted parts	Rubber, PTFE, Neoprene
Pipe size	DN10 to DN1000 / ANSI 0,5"... 40"
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 ambient from	-20 °C
Temperature ambient to	60 °C
Temperature range	Up to 80°C for rubber, Up to 130°C for PTFE