

Standard solution for the process industry

The Optiflux 4000 electromagnetic flow sensor is the standard in the process industry and suitable for demanding applications.

Highlights

- Robust and reliable
- Works reliably under demanding conditions: High temperatures (up to 180°C / 356°F) and low conductivity
- Quick and easy to install and operate
- Chemically resistant to alkaline solutions and acids

Industries

- Chemicals
- Pulp and Paper
- Minerals and Mining
- Iron, Steel and Metals
- Water and Wastewater
- Petrochemicals / Oil and Gas
- Food and Beverages

Applications

- Measurement of aggressive chemicals, acids and alkalies etc
- Measurement of pulps and pastes etc
- Measurement of abrasive slurries, pastes with high solid content etc
- Measurement of abrasive slurries, water etc
- Measurement of water, effluent etc
- Measurement of milk, juices, concentrates, water etc



The Optiflux 4000 has been designed for measuring any application in any industry. Furthermore the modular concept allows tailor-made solutions for challenging applications. Every meter that leaves our factory is wet-calibrated on our calibration rigs (ISO/IEC 17025 standards)

Product Features

The IFC 100 signal converter is designed to measure the flow velocity, conductivity, volume and mass flow of electrically conductive liquid media.

IFC 100 signal converter can be combined with any KROHNE flow sensor, making it very widely used. Available in compact version, in which the signal converter is connected to the flow sensor, at 0° and 45° version. If the measuring point is difficult to access or the ambient conditions prevent the use of the compact version, the signal converter is available in a remote wall-mounted housing.



(Signal converter in wall-mounted housing)



(Compact designs with 45° and 0° versions)

1. Large back lit graphic display with 4 push buttons to operate the signal converter
2. Supply voltage: 85...250 VAC.

Highlights

- Simple installation and start-up
- Available inputs and outputs: Current output (incl. HART®) and status output
- Large backlit graphic display with intuitive operation
- Maintenance free
- Excellent price to performance ratio
- Extremely quick signal conversion

Applications and Industries

- Suitable for diverse flow measuring applications
- Water & Wastewater
- Water treatment and distribution network
- Agriculture
- Heating, Ventilation & Air Conditioning (HVAC)
- Machinery
- Power plants

Technical Data

Measuring sensor	
Optiflux 2000	DN 25 ... DN 1200 / 1" ... 48"
Optiflux 4000	DN 10 ... DN 1200 / 3/8" ... 48"
Ecomag	DN 25 ... DN 150 / 1" ... 6"
Aquamag	DN 50 ... DN 150 / 2" ... 6"
Signal converter	
Version	Compact (0° and 45° version)
	Wall mounted
Version	Standard: Non-Ex
Outputs	
Current	0 / 4 ... 20mA, HART (active / passive)
Pulse/Frequency	Selectable
Status output (Passive)	Adjustable for switching point or empty pipe detection
Diagnostics functions	Empty pipe detection
Display and User interface	
Graphic display	LC Display, backlit white, Size: 128 x 64 pixel
Units	User selectable as required from lists for volume flow
Programming	4 push buttons for operator control of the signal converter
Remote programming	HART® through Hand Held Communicator
Measuring Accuracy	
Measuring error	±0.5% of the measured value
Repeatability	±0.1%
Calibration media	Water
Operating conditions	
Temperature	
Process temperature	Refer to technical data for the measuring sensor.
Ambient temperature	-40...+65°C / -40...+149°F
Storage temperature	-40...+70°C / -40...+158°F
Chemical properties	
Electrical conductivity	≥ 20 µS/cm
Gas content (volume)	≤ 3% by volume
Materials	
Signal converter housing	Die-cast Aluminum - Polyurethane coated
Electrical connection	
Power supply	Universal: 100...230 VAC (-15% / +10%), 50/60 Hz
Power consumption	8 VA
Cable length	Maximum 100 m / 325 ft
Cable entry	M20 x 1.5
Error Identification	Without HART®: 0 ... 22mA
	With HART®: 3.5 ... 22mA
Low flow cut-off	
Function	Switching point and hysteresis separately adjustable for each output, counter and the display, settable in increments of 0.1
Time Constant	0 ... 100s, settable in increments of 0.1
Approvals and Certifications	
Protection category to IEC 529 / EN 60529	IP 66 / 67 (eq. to NEMA 4X/6)
CE	The device fulfils the statutory requirements of the EC directives.