

Hybrid signal converter For magnetic-inductive flow meters Model FLC-608

WIKA data sheet FL 20.05

Applications

- Water and wastewater
- Chemical industry
- Pulp and paper industry
- Leakage detection systems
- Applications without access to the power supply network

Special features

- Power supply via power supply network, battery, power supply network and battery or solar panel
- HART® protocol and module for pressure and temperature readout available



Hybrid signal converter, model FLC-608

Description

Versatile in application

The model FLC-608 hybrid signal converter is available in many versions and can also be used in remote applications that do not have access to the power supply network.

Data security

The integrated EEPROM memory (“electrically erasable programmable read-only memory”) ensures high data security. Up to 200,000 data sets can be saved.

With the supplied software, the model FLC-608 can communicate via IrCOM or Modbus RS-485 interface with a PC, laptop or mobile device to program the signal converter and to manage and download measured values.

A multi-level password system guarantees data access for authorised users only.

Additional modules

With the available pressure and temperature readout modules and the optional HART® protocol, the signal converter for magnetic-inductive flow meters can be used to monitor the process parameters of flow, pressure and temperature.

Recording the measured values in one instrument saves the cost of installation, programming and maintenance of further measuring instruments.

Instrument versions

Instrument version	Voltage supply	Case	Ingress protection per EN 60529	
	Model FLC-608A	Mains-operated version with AC/DC 12 ... 24 V input or AC 90 ... 264 V input	Aluminium case	IP68
	Model FLC-608B	Battery-operated version, battery life: approx. 6 years, max. DN 600 with full-flow units	Aluminium case	IP68
	Model FLC-608R	Rechargeable battery-operated, with solar panel and AC/DC 12 ... 24 V input, max. DN 600 with full-flow units	Aluminium case	IP68
	Model FLC-608P	Mains-operated version with AC/DC 12 ... 24 V input	Polycarbonate case	IP54
	Model FLC-608I	Mains-operated version with AC/DC 12 ... 24 V input or AC 90 ... 264 V input, with internal battery buffer or rechargeable battery with solar panel	Stainless steel case	IP54

Specifications

Output signal	Model FLC-608A	Model FLC-608P	Model FLC-608B	Model FLC-608R	Model FLC-608I
Signal type					
Analogue output signal, 4 ... 20 mA	√	√	√ Loop-powered	Only in rechargeable battery operation	√
Pulse output	√	√	√	√	√
HART® protocol	√	√			
Programmable digital output	√	√		Only in rechargeable battery operation	√
Digital output with active frequency 0 ... 10 kHz	√	√		Only in rechargeable battery operation	√
Voltage supply					
AC 90 ... 264 V	√				√
AC/DC 12 ... 24 V	√	√			√
Battery			√		√
Rechargeable battery and solar panel				√	√
Communication					
IrCOM interface	√	√	√	√	√
MODBUS® RTU via RS-485 interface	√	√		Only in rechargeable battery operation	√
Approval per OIML R49-1:2013, class 2	√				

Instrument construction

Integration

Compact version	Available for model FLC-608A, model FLC-608B and model FLC-608R
Separated version, max. cable length	<ul style="list-style-type: none"> ■ Max. 100 m for model FLC-608A, model FLC-608P and model FLC-608I ■ Max. 30 m for model FLC-608B and model FLC-608R

LC display

Size	50 x 25 mm, 128 x 64 pixels
Illumination	Yes

Flow totalisers

5 (2 positive, 2 negative, 1 net flow)

Additional modules

- Pressure readout module
- Temperature readout module

Software

Software functions

- Commissioning
- Data printout
- Data export (CSV files)
- Firmware update
- Read the flow rate
- Read and write all non-volatile parameters
- Download the internal data logger

Programming

With the buttons on the instrument, with the IrCOM interface or with Modbus® RTU via RS-485 interface

Selectable flow units

- | | | | |
|------|------------------|-------------------|---------|
| ■ ml | ■ dal | ■ in ³ | ■ USgal |
| ■ cl | ■ hl | ■ ft ³ | ■ bbl |
| ■ dl | ■ m ³ | ■ gal | ■ oz |
| ■ l | | | |

Process data memory

4 MB flash memory with max. 200,000 data sets

Alarms and status display

Status indication on the display, alarms are recorded in the data logger

Software

Possible alarms

- Excitation failure
- Empty-pipe alarm on the 4th electrode
- Temperature too high
- Pulse overlapped
- Measuring error

External test

Field test instrument available for verification of calibrations and for checking the electronics

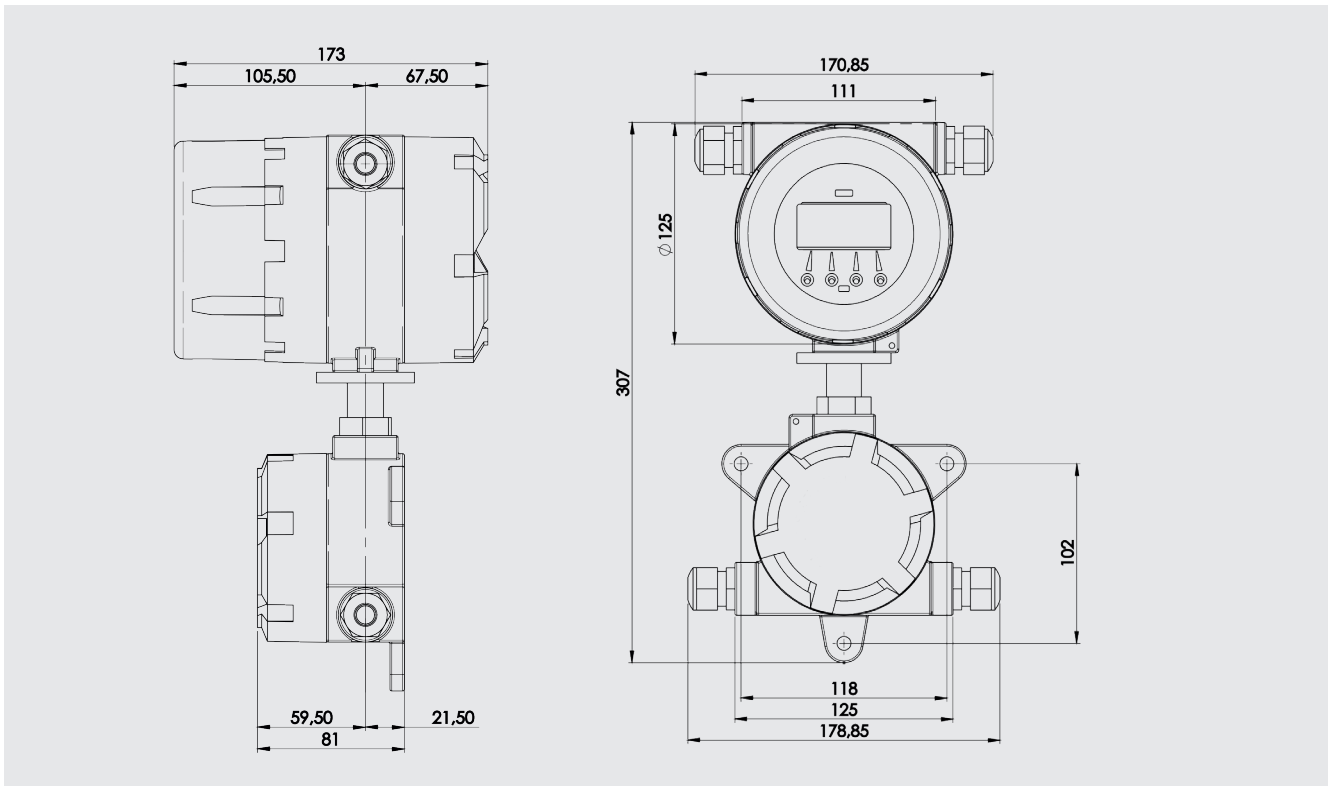
Operating conditions

Temperature ranges

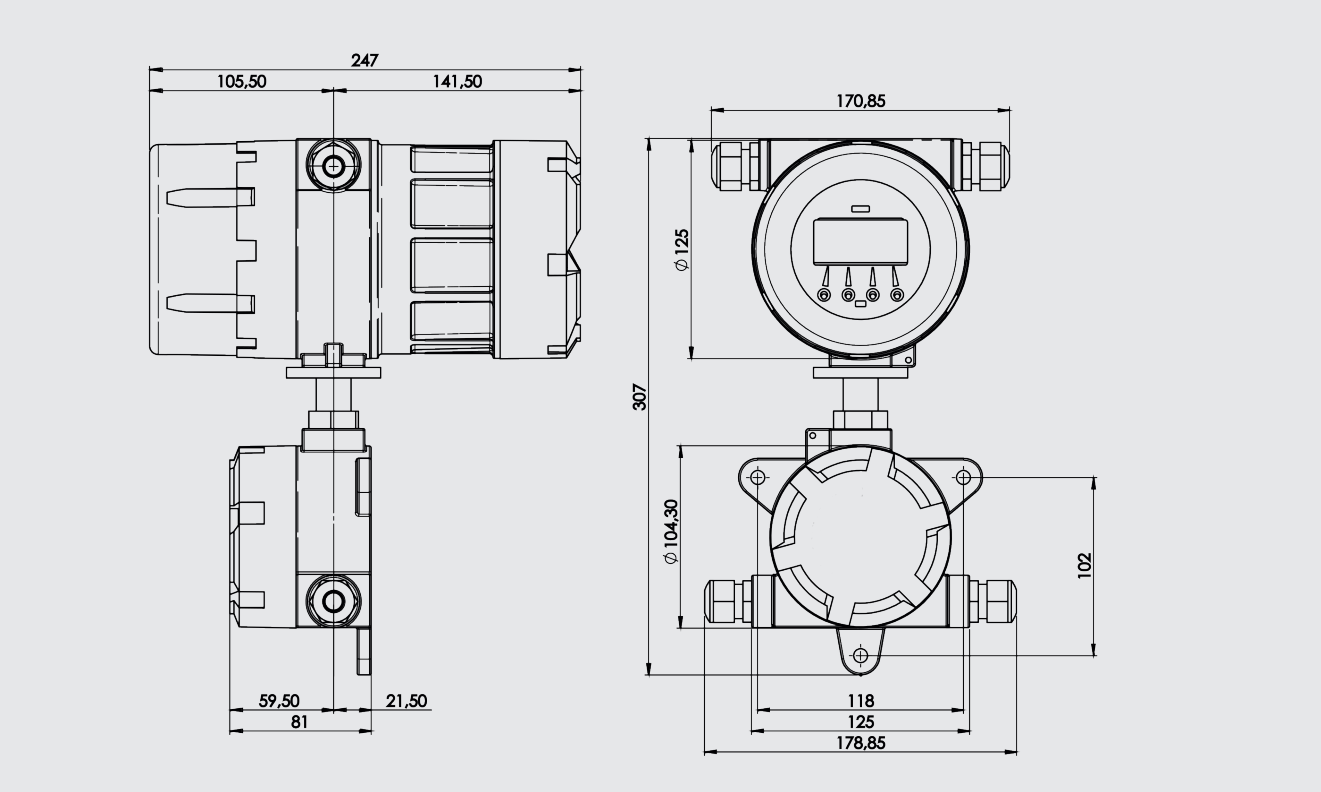
Ambient	-20 ... +60 °C [-4 ... +140 °F]
Medium	-25 ... +80 °C [-13 ... +176 °F]
Storage	-40...+70 °C [-44 ... +158 °F]

Dimensions in mm

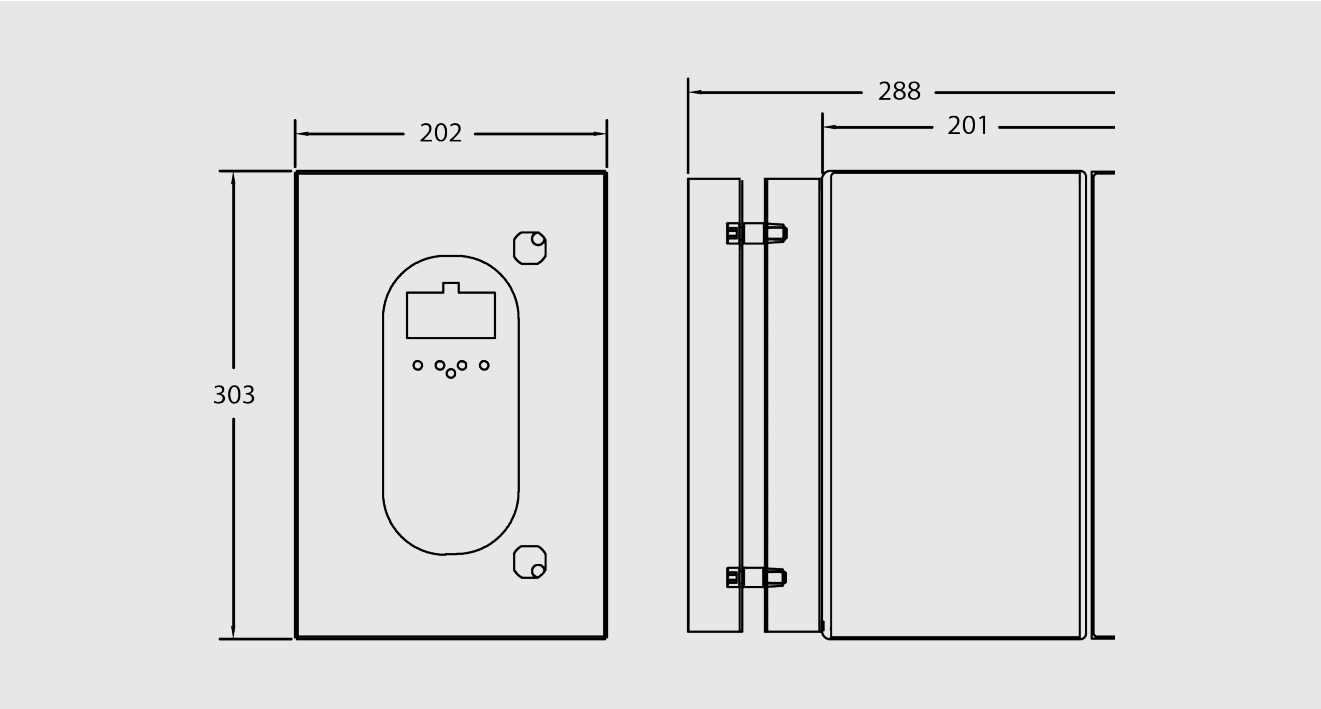
Model FLC-608A



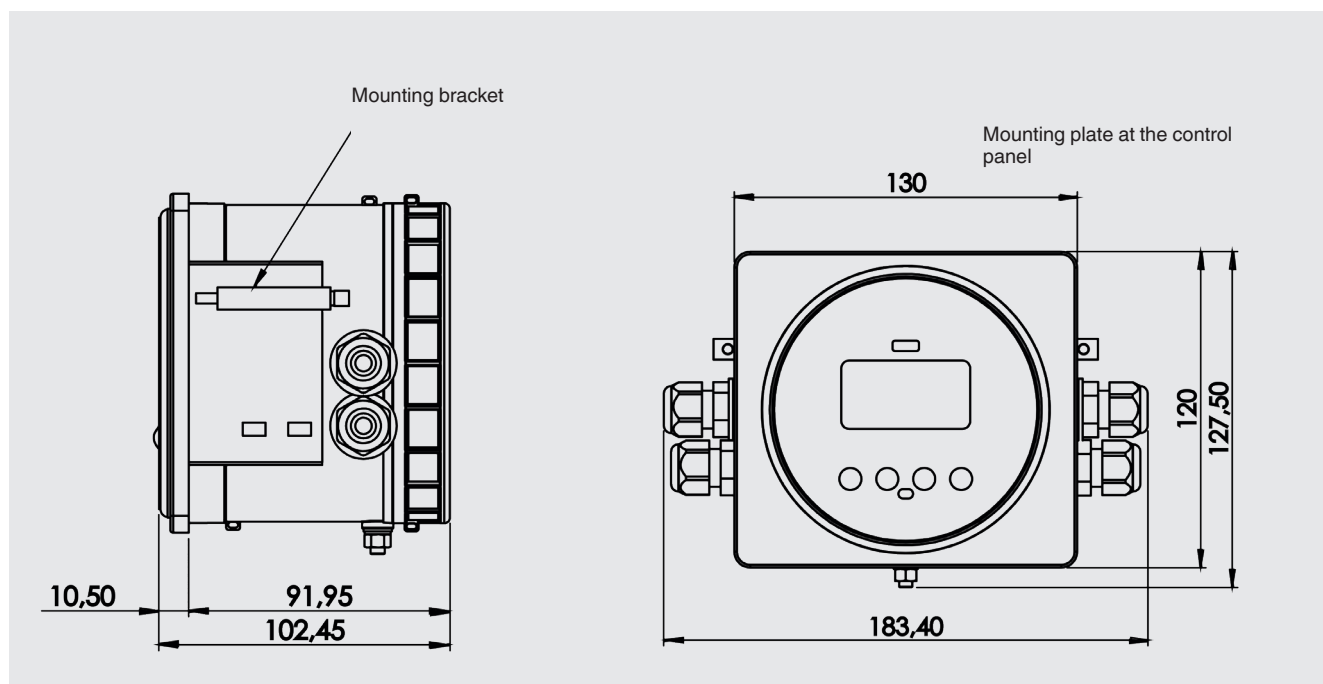
Model FLC-608B and model FLC-608R



Model FLC-608I



Model FLC-608P



Approvals

Logo	Description	Country
CE	EU declaration of conformity	European Union
	EMC directive	
	EN 61326 emission (group 1, class B) and immunity (industrial application)	
	Low voltage directive	

Approvals and certificates, see website

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