IFC 050

Signal converter for electromagnetic flowmeters

⚠ Installation, assembly, start-up and maintenance may only be performed by appropriately trained personnel.

⚡ This instrument complies with requirements of Low Voltage Directive. Instruments must not be connected to power supply before reading instructions described in the manual.
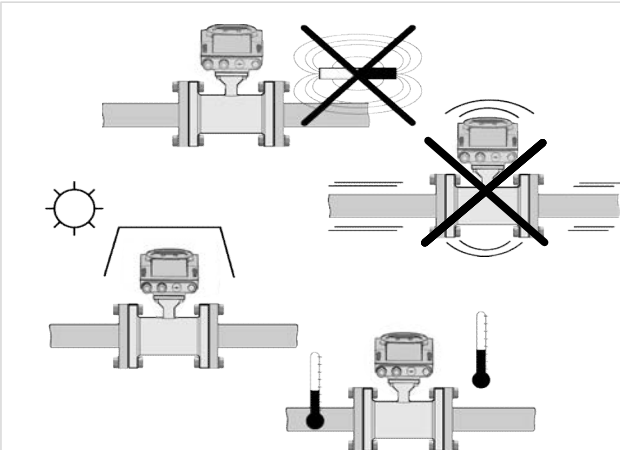
§ The responsibility as to the suitability, intended use and corrosion resistance of the used materials against the measured fluid of this device rests solely with the operator.

⚠EX This device cannot be used in Hazardous Locations or Explosive Gas Atmospheres!
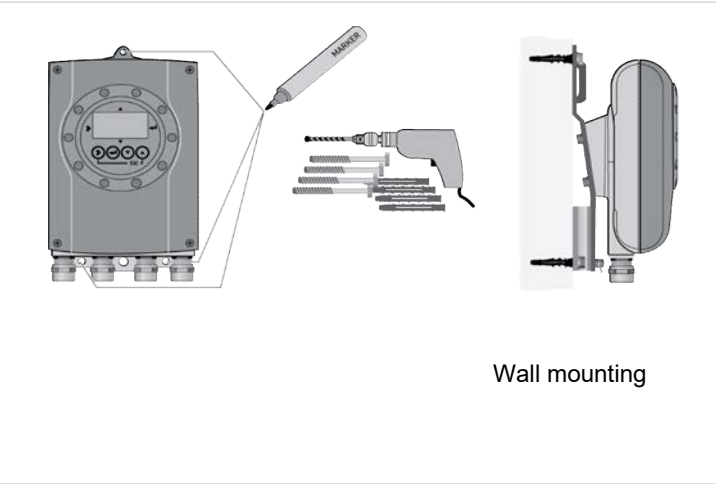
General

⚠ 📖

Maximum ambient and process temperatures are depending on version (e.g liner material, size), temperature and protection class and maximum surface temperature of sensor.

Device nameplate (example)
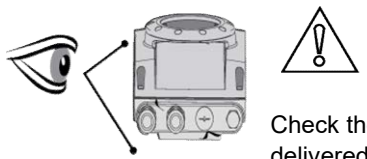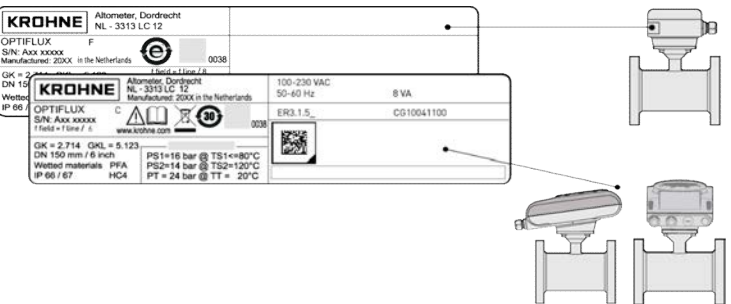
Check the device nameplate to ensure that the device is delivered according to your order.

Device version(s)

Compact version   Remote version
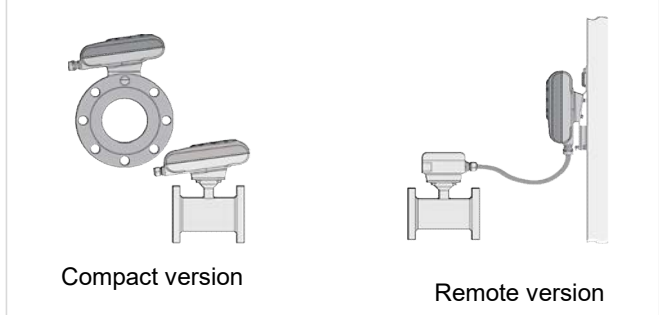
Transport

- No special requirements

- Use the original packing of the device(s) when transporting to the installation location.

1 Installation

ℹ Refer to the documentation of the flow sensor for specific installation conditions.

General installation requirements

Avoid vibration / Electromagnetic fields
Use sunshade / Check medium and ambient temperature specifications

Wall mounting

Mounting the field housing, remote version
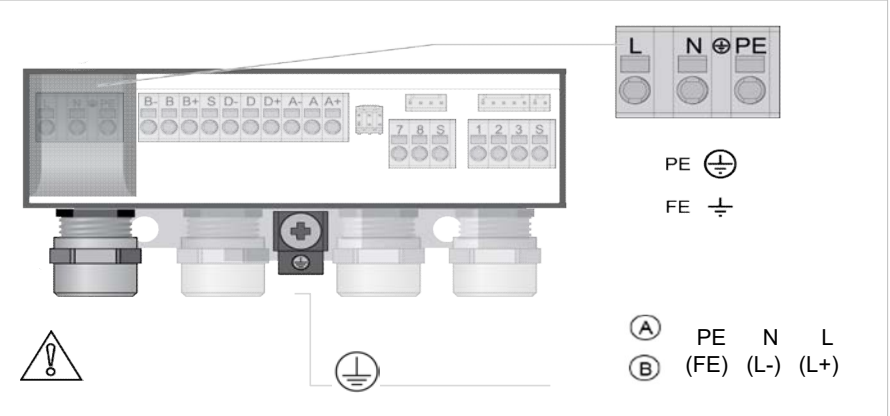
2 Electrical connection

⚡ All work on the electrical connections may only be carried out with the power disconnected. Take note of the voltage data on the nameplate! Observe the national regulations for electrical installations!
The device must be grounded in accordance with regulations in order to protect personnel against electric shocks.

⚠ There should be no difference in potential between the flow sensor and the housing or protective earth of the signal converter.

Observe without fail the local occupational health and safety regulations. Any work done on the electrical components of the measuring device may only be carried out by properly trained specialists.

ℹ Refer to the manual for more details on connection options and preparing the signal and field current cable.

Electrical connections signal converter

Power supply - grounding

⚠
Ⓐ 100...230 VAC (-15% / +10%), 15 VA
Ⓑ 24 VDC (-30% / +30%), 5.6 W

	PE	N	L
Ⓐ	PE	N	L
Ⓑ	(FE)	(L-)	(L+)

I/O connections

Remote version

Compact version

S	Shield connection terminal
A, B, D A+, B+, D+	I/O positive terminal (+)
A-, B-, D-	I/O negative terminal (-)

A	Current output
D	Frequency / pulse output
B	Modbus I/O (option)
D	Status output

Observe connection polarity

Refer to the manual for more details on connection options / Connection diagram

Sensor cable connections

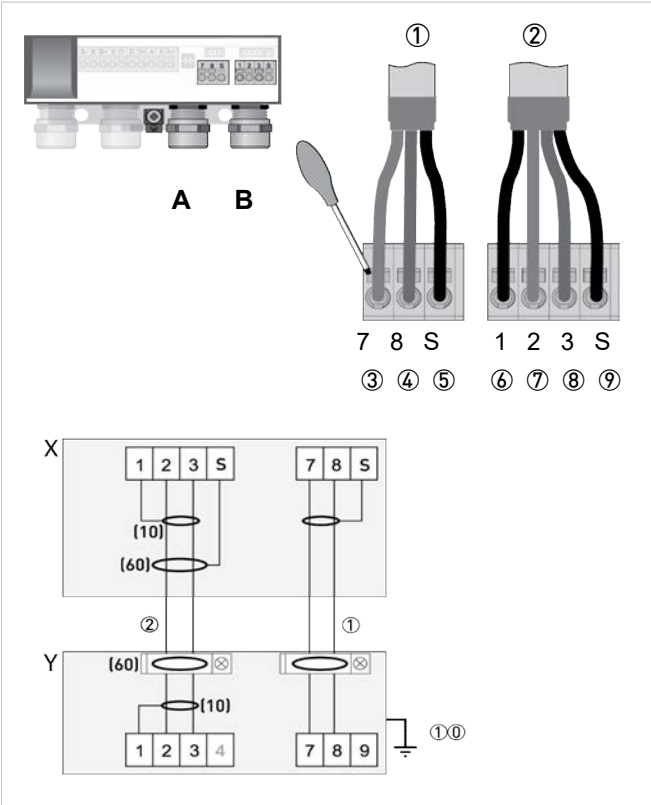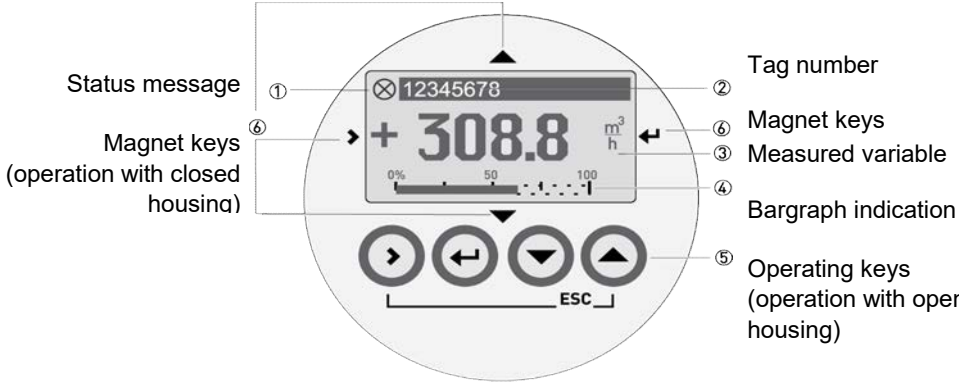| ① / A	Field current cable
② / B	Signal cable A (DS 300)
③	Electrical conductor (7)
④	Electrical conductor (8)
⑤	Shield connection terminal (S)
⑥	Inner shield of signal cable (1)
⑦	Electrical conductor (2)
⑧	Electrical conductor (3)
⑨	Shield connection terminal (S)
①⓪	Functional ground (FE)

X	Signal converter terminal compartment
Y	Flow sensor connection box

3   Quick Setup

Status message ①
Tag number ②
Magnet keys (operation with closed housing) ⑥
Magnet keys ⑥
Measured variable ③
+ 308.8 m³/h
Bargraph indication ④
Operating keys (operation with open housing) ⑤
ESC

Measuring mode	Select menu ↑↓		Select Submenu ↑↓		Functions ↑↓ >
Press > 2.5 s					
	A quick setup		A1 language		
		>	A2 HART	>	A2.1 Tag	>
			A3 RS 485 / Modbus		A3.1 Tag
					A3.2 slave address
			A4 reset?		A4.1 reset errors
					A4.2 counter 1
					A4.3 counter 2
			A5 analogue outputs		A5.1 range
					A5.2 time constant
					A5.3 low fow cutoff
			A6 digital outputs		A6.1 max. pulse rate
					A6.2 pulse value unit
					A6.3 value p. pulse
			A7 process input		A7.1 device serial no.
					A7.2 zero calibration
					A7.3 size
					A7.4 GKL
					A7.5 field frequency
					A7.6 flow direction
↑↓	↑↓		↑↓		↑↓

Download documents/software

Scan the code on the nameplate or scan the following code and enter the serial number.

Contact

Select your country from the region / language selector to view your local KROHNE contact details on:

www.krohne.com