





IFC 300 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.


 For use in hazardous areas, special codes and regulations are applicable. Instruments must not be connected to power supply before reading instructions described in the supplementary manual.

Special conditions to be observed

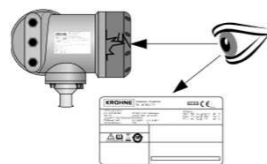
- For ambient and process temperatures, specific product and electrical data, see Ex manual or certificate.
- For dimensions and details of the flameproof joints, the manufacturer shall be contacted.
- The tensile strength of the special fasteners is at least 700 N/mm² (property class A2-70 / A4-70).

Ex ▶ Type Examination Certificate: FTZU_12 ATEX 0198 X / IECEx FTZU 12.0023 X



General

 Check the device nameplate to ensure that the device is delivered according to your order.

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



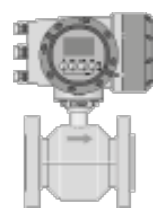
Device nameplate (example)

KROHNE	
Altometer, Dordrecht NL - 3313 LC 12	
OPTIFLUX 2300 C	CG30011100
S/N: A20324999	
Mfd.: 2021 in The Netherlands	
	
www.krohne.com	
GK: 3.8494	f field = f line /6
GKL: 7.7657	DN 200 mm/ 8 inch
ER3.4.1	
12-24 VDC	
12 W	
Wetted materials: HR(0) 316Ti	
IP66/67	
PED/G1/IL	
PS1=10 bar @ TS1<=20 °C	
PS2=9.4 bar @ TS2= 80 °C	
PT =15 bar @ TT= 20 °C	

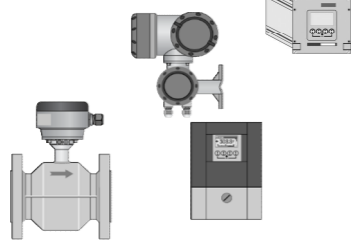
Check the Ex data on nameplate in case of an Ex version (if applicable)

Device version(s)

See manual for the specific IFC 300 Rack version (21/28 TE) *



Compact version




Remote version

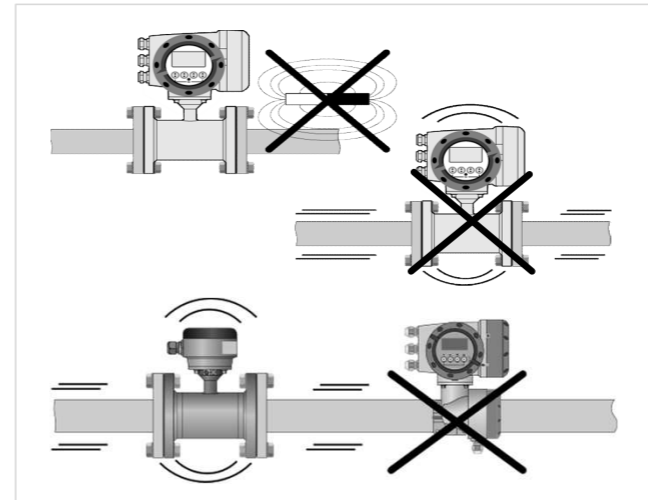
Transport

- No special requirements
- Use the original packing of the device(s) when transporting to the installation location.

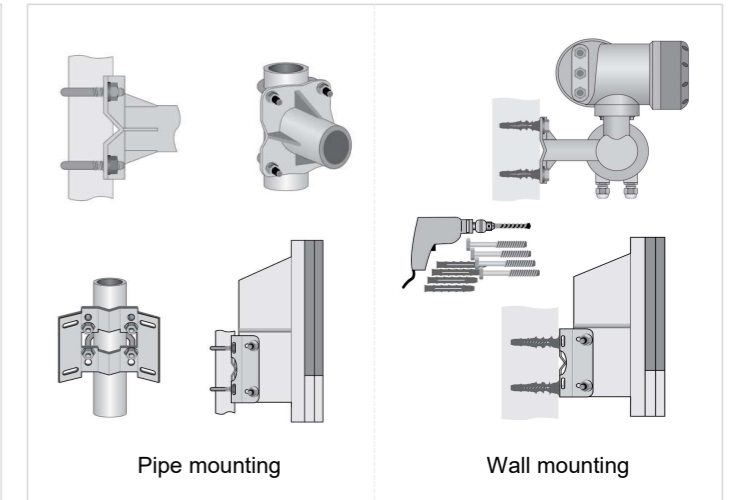
1 Installation

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

General installation requirements




Avoid vibration / Electromagnetic fields




Pipe mounting

Wall mounting


Mounting the field housing, remote version


 Avoid the risk of ignition as a result of electrostatic charging. Do not use the device in areas, with processes that generate high charges, with mechanical friction and cutting process, near electrostatic painting systems (spraying of electrons), with exposure of airborne powder or dust particles (pressurized systems).

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!

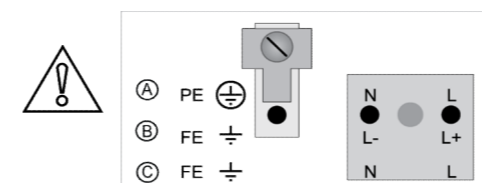
The device must be grounded in accordance with regulations in order to protect personnel against electric shocks.

 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.

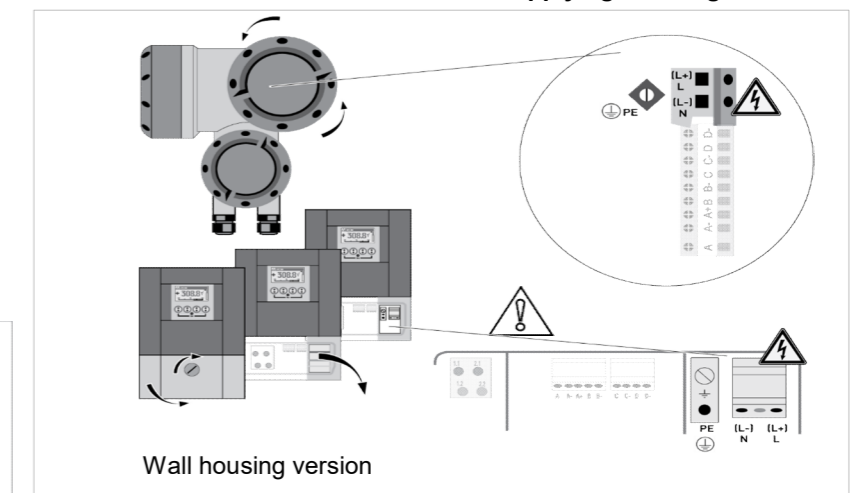
 Refer to the manual for more details on connection options and preparing the signal and field current cable.

Electrical connections signal converter

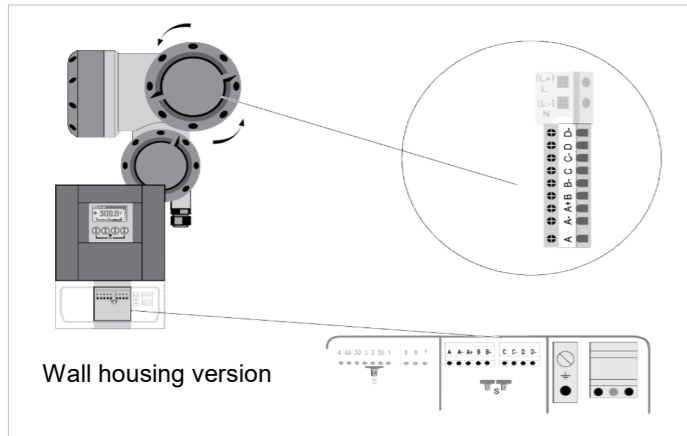
- (A) 100...230 VAC (-15% / +10%), 22 VA
- (B) 12...24 VDC (-55% / +30%) 12 W
- (C) 24 VAC/DC (AC: -15% / +10%; DC: -25% / +30%) 22 VA or 12 W



Power supply - grounding



I/O connections



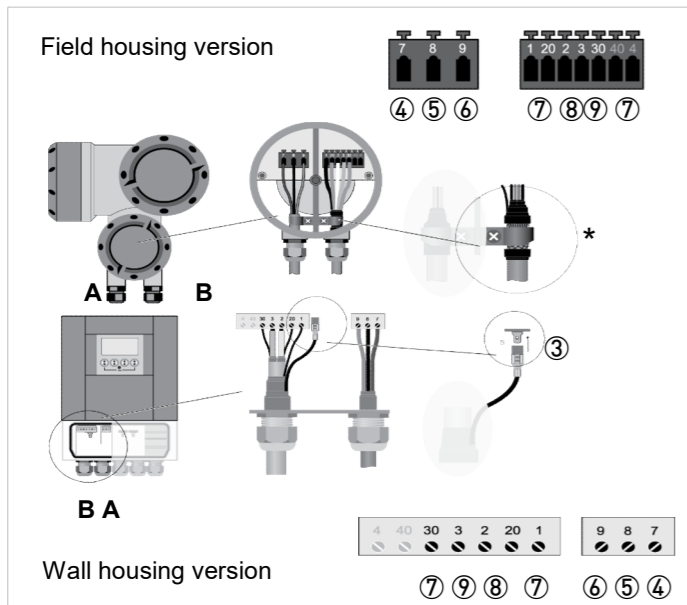
Wall housing version

Refer to the manual for more details on connection options

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

POWER		CG 3x xxxxxx S/N: XXXxxxxx	KROHNE
L(L+) N(L-)			
		A = Active P = Passive NC = Not connected	
INPUT / OUTPUT	D -	P	PULSE OUT / STATUS OUT Imax = 100 mA@f<= 10 Hz; = 20 mA@f<=12 kHz Vo = 1.5 V @ 10 mA; Umax = 32 VDC
	D	P	STATUS OUT Imax = 100 mA; Vmax = 32 VDC
	C -	P	STATUS OUT / CONTROL IN Imax = 100 mA Von > 19 VDC, Voff < 2.5 VDC; Vmax = 32 VDC
	C	P	STATUS OUT / CONTROL IN Imax = 100 mA Von > 19 VDC, Voff < 2.5 VDC; Vmax = 32 VDC
	B -	P	ACTIVE (Terminals A & A+); RLmax = 1 kohm
	B	P	PASSIVE (Terminals A & A-); Vmax = 32 VDC

Sensor cable connections



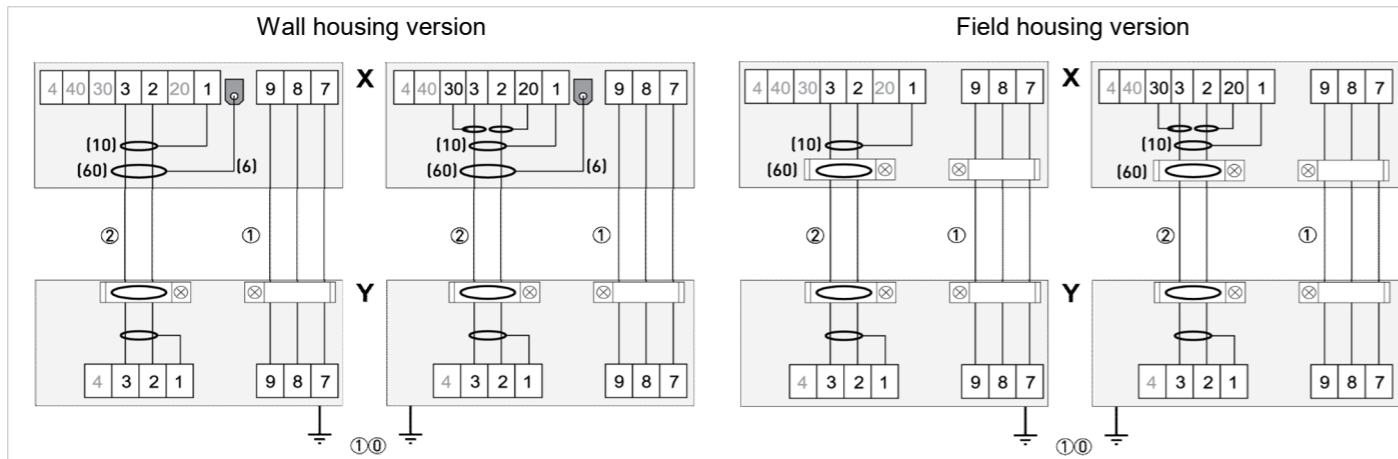
Field housing version

Wall housing version

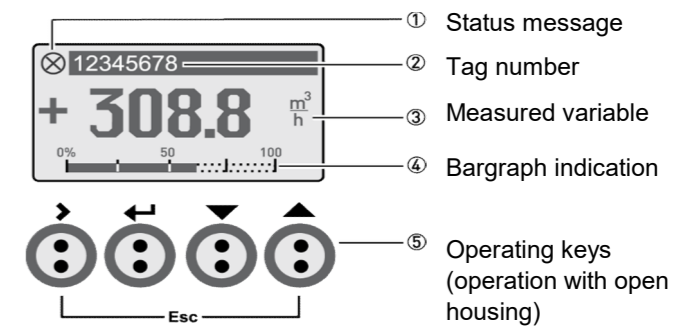
① / A	Field current cable
② / B	Signal cable A (DS 300) / Signal cable B (BTS 300)
③	Shield connection terminal (S)
④	Electrical conductor (7)
⑤	Electrical conductor (8)
⑥	Electrical conductor (9)
⑦	Stranded drain wires (1 - 20 - 30)
⑧	Electrical conductor (2)
⑨	Electrical conductor (3)
⑩	Functional ground (FE)
X	Signal converter terminal compartment
Y	Flow sensor connection box
*	Clamp connect outer shield to the housing

Do not connect the outer shielding of the field current cable!

Connection diagram



3 Quick Setup



Measuring mode			
	Select menu	Select Submenu	Functions
Press > 2.5 s	↑ ↓	↑ ↓	↑ ↓ >
A	A1 language		
quick setup	A2 Tag		
	A3 reset	A3.1 reset errors A3.2 counter 1 A3.2 counter 2 A3.4 counter 3	
	A4 analog outputs	A4.1 measurement A4.2 unit A4.3 range A4.4 low flow cutoff A4.5 time constant	
	A5 digital outputs	A5.1 measurement A5.2 pulse value unit A5.3 value p. pulse A5.4 low flow cutoff	
	A6 GDC IR interface		
	A7 process input	A7.1 device serial no. A7.2 zero calibration A7.3 size A7.4 GK A7.5 GKL A7.6 coil resistance Rsp A7.7 calib. coil temp. A7.8 target conduct. A7.9 EF electr. factor A7.10 field frequency A7.11 flow direction	

Download documents/software

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



Contact

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www.krohne.com