

OPTIFLUX 4000

Electromagnetic flow sensor



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.



This instrument complies with the requirements of Pressure Equipment Directive. Please refer to the nameplate for operating condition limits. Instruments must not be pressurised 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).
- Use Ex e certified cable glands according a minimal IP64 rate and temperature range -40...+80°C
- All connection cables are fixed and installed correctly so adequate protection against possible damage is guaranteed.
- The instructions provided with the product shall be followed in detail to assure safe operation.

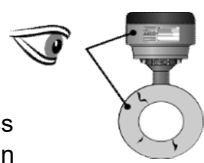
Ex ► Type Examination Certificate: FTZU 13 ATEX 0175 X / IECEx FTZU 14.0001 X

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.

Check for damage



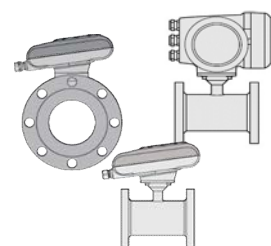
Device nameplate (example)

KROHNE Altometer, Dordrecht NL - 3313 LC 12	
OPTIFLUX 4000 F S/N: Axx xxxxx Manufactured: 20XX in the Netherlands	
GK = 2.714 GKL = 5.123 DN: 150mm / 6 inch IP66 / 67	
PS1=40 bar @ TS1<=40°C PS2=32 bar @ TS2=180°C PT =60 bar @ TT = 20°C	Tag: xxxxxxxxxxxxxxxxxxxxxxxx

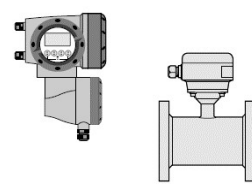
Check the device nameplate to ensure that the device is delivered according to your order.

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

Device version(s) (example)



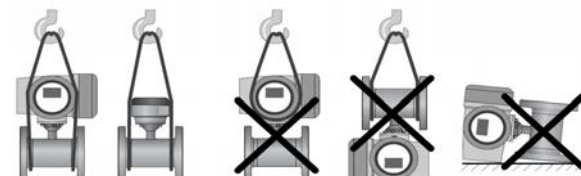
Compact version



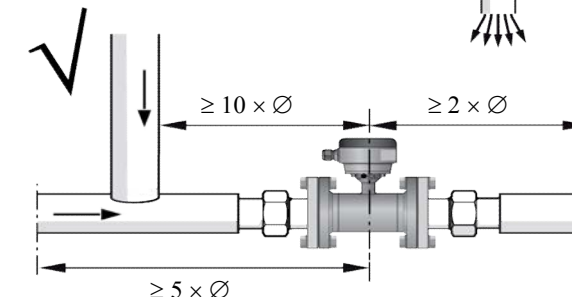
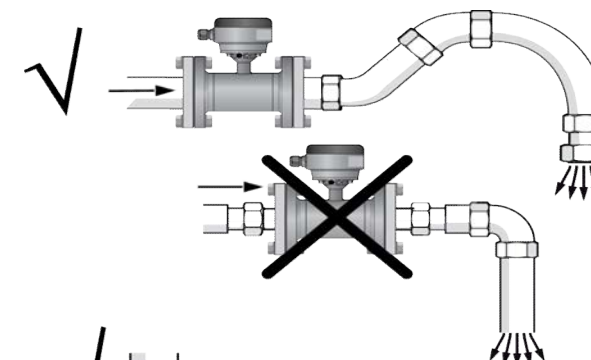
Remote version

Transport

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



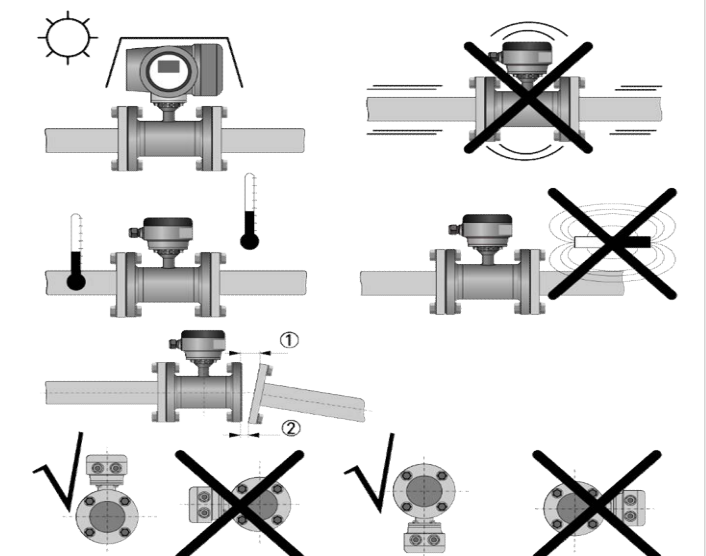
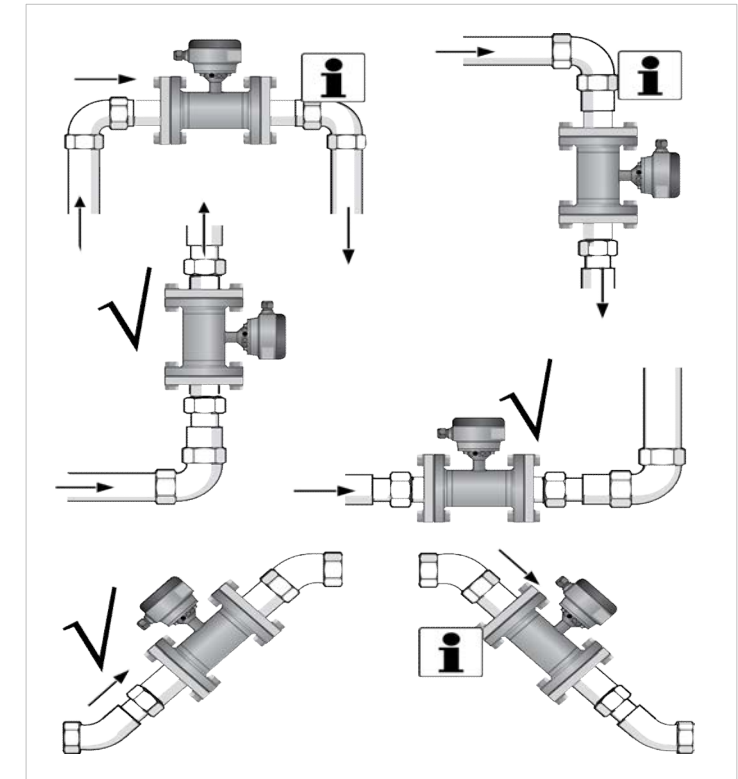
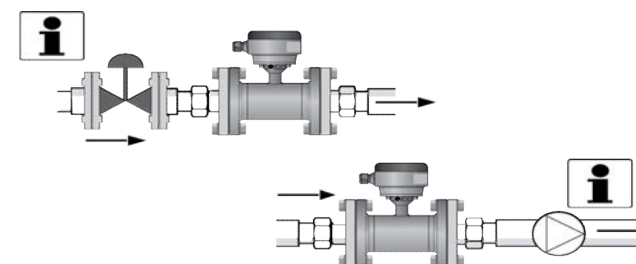
1 Installation



Depends on 2D/3D bends upstream

Inlet length:

- ① XYZ (3D bends upstream) = 10 DN
- ② XY (2D bends upstream) = 5 DN



① - ②: Lmax - Lmin < 0.5 mm / 0.02"



Check the manual for more details on installation options.



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!



For devices used in hazardous areas, additional safety notes apply; please refer to the Ex documentation. Refer to the manual for connection of Ex (i) acc. to NAMUR

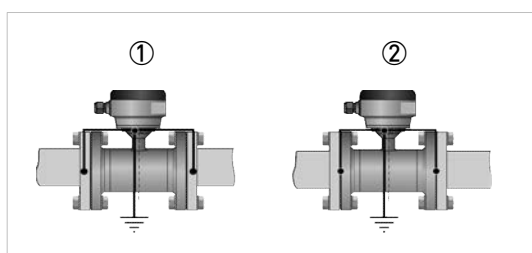


Observe without fail the local occupational health and safety regulations. Any work done on the electrical components of the measuring device may only be carried out by properly trained specialists.

Grounding

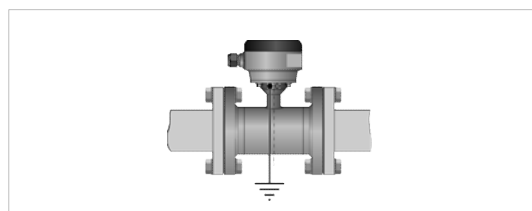


The device must be grounded in accordance with regulations in order to protect personnel against electric shocks.



- ① Metal pipelines, without a lining. Ground the device without grounding rings!
- ② Metal pipelines with a lining and non-conductive pipelines. Ground the device with grounding rings!

Virtual reference



Minimum requirements

- Nominal diameter: $\geq \text{DN}10 / \frac{3}{8}"$
- Electrical conductivity: $\geq 200 \mu\text{S}/\text{cm}$
- Electrode cable, type DS: max. 50 m / 164 ft

Only for IFC 300/ IFC 400 signal converter

3 Quick Setup



For the start up and menu description please refer to the manual of the applicable signal converter.
For the connection diagrams please refer to the applicable manual .

Download documents/software

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



Support

Contact Smith Meter Customer Support at:
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