KROHNE

Quick Start

For initial set up, we strongly recommend the use of the relevant manuals in addition!

OPTISONIC 6300 F/W

Ultrasonic clamp-on flowmeter for liquids

Installation, assembly, start-up and maintenance may only be performed by appropriately trained personnel. Check the nameplate for correct operating conditions.

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
- The enclosures of the flow sensor and/or cable box shall be protected against electrostatic charging
- 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)
- All connection cables are fixed and installed correctly so adequate protection against possible damage is guaranteed
- Only for connection to a separately certified UFC 300 F/…Ex flow converter
- The instructions provided with the product shall be followed in detail to assure safe operation

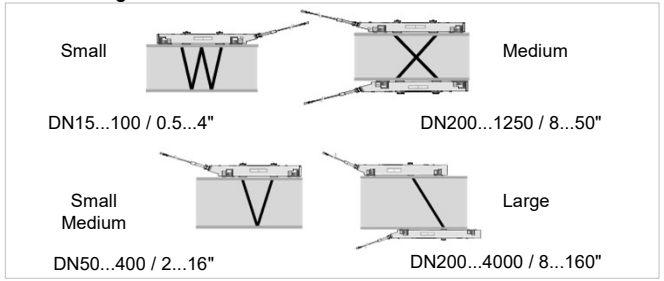
Ex ► Type Examination Certificate: KIWA 17ATEX 0034 X / KIWA 18ATEX0007 X

General

Ta = -40…+70°C / -40…+158°F
Tp = -40…+200°C / -40…+392°F

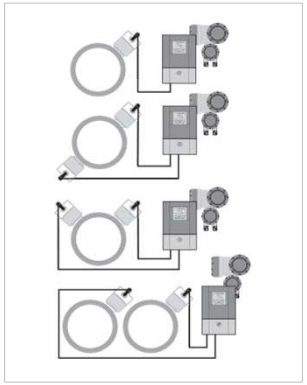
Maximum ambient and process temperatures are depending on version (e.g liner material , DN size), temperature and protection class and maximum surface temperature of sensor.

Diameter range and rail versions



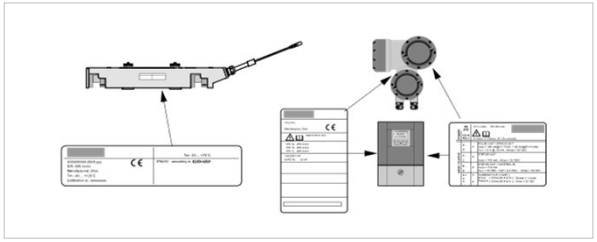
Preferred measuring modes

General



System Configuration

Device nameplate



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)

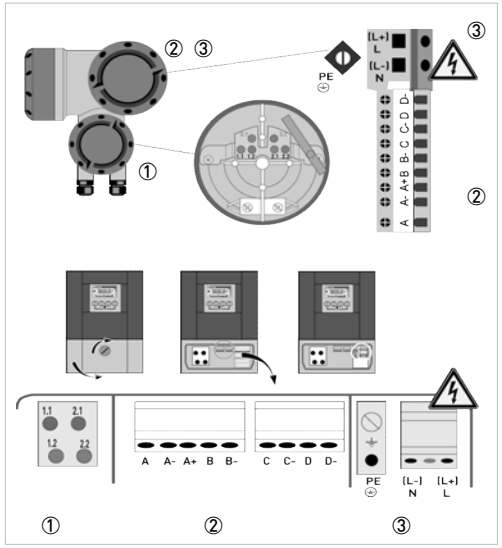
Check for damage

1 Electrical connection

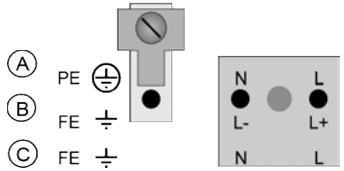
All work on the electrical connections may only be carried out with the power disconnected. Take note of the voltage data on the nameplate! Observe the national regulations for electrical installations!

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.

Electrical connections signal converter



Power supply - grounding



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

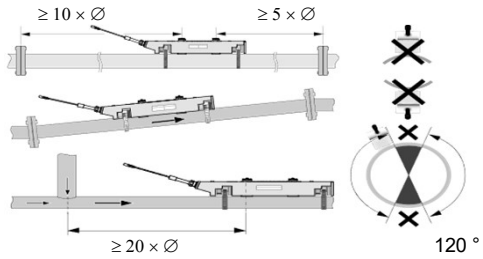
The device must be grounded in accordance with regulations in order to protect personnel against electric shocks.

For devices used in hazardous areas, additional safety notes apply; please refer to the Ex documentation.

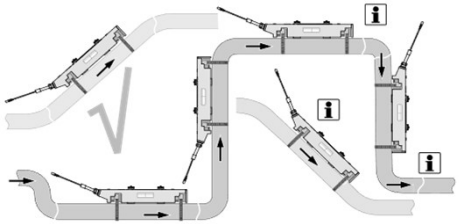
Refer to the manual for connection of Ex (/i) acc. to NAMUR

① Sensor cable connections
② I/O connections
③ Mains supply connection

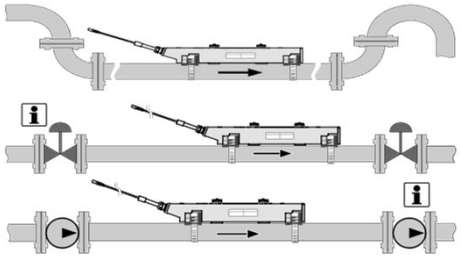
2 Installation



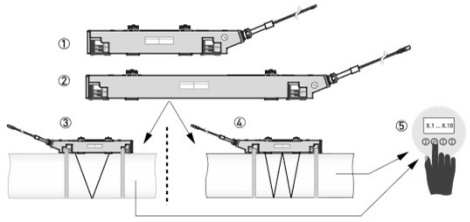
Installation position



Pump, control valve - open feed / discharge



Check the manual for more details on installation options

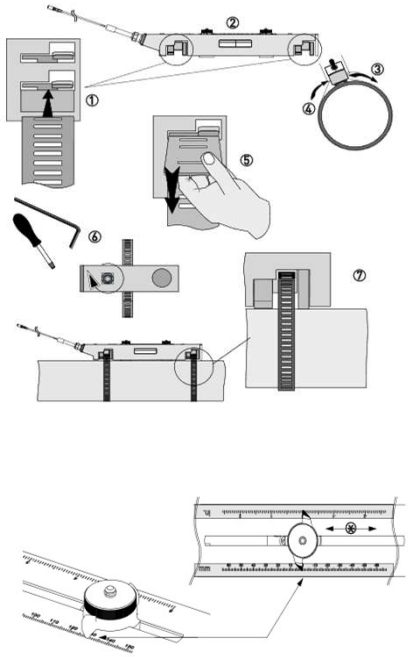


① ② Choose sensor size

③ ④ Choose the applicable measuring mode

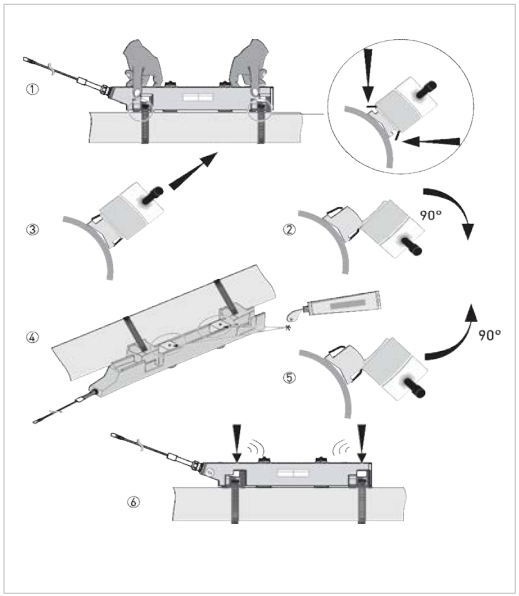
⑤ Go through menu X1...X5

General installation of the rails



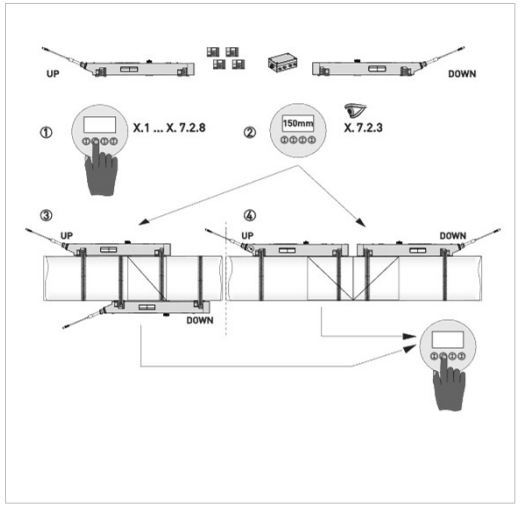
Change the position of the transducer

Greasing the transducer surfaces



Check the manual for more details on installation options
(e.g. Large version installation or applying solid pads)

General configuration instructions



Go through menu X1...X5

① Enter the values for the installation menu, X1...X7.2.8

② Read the advised mounting distance in menu X7.2.3

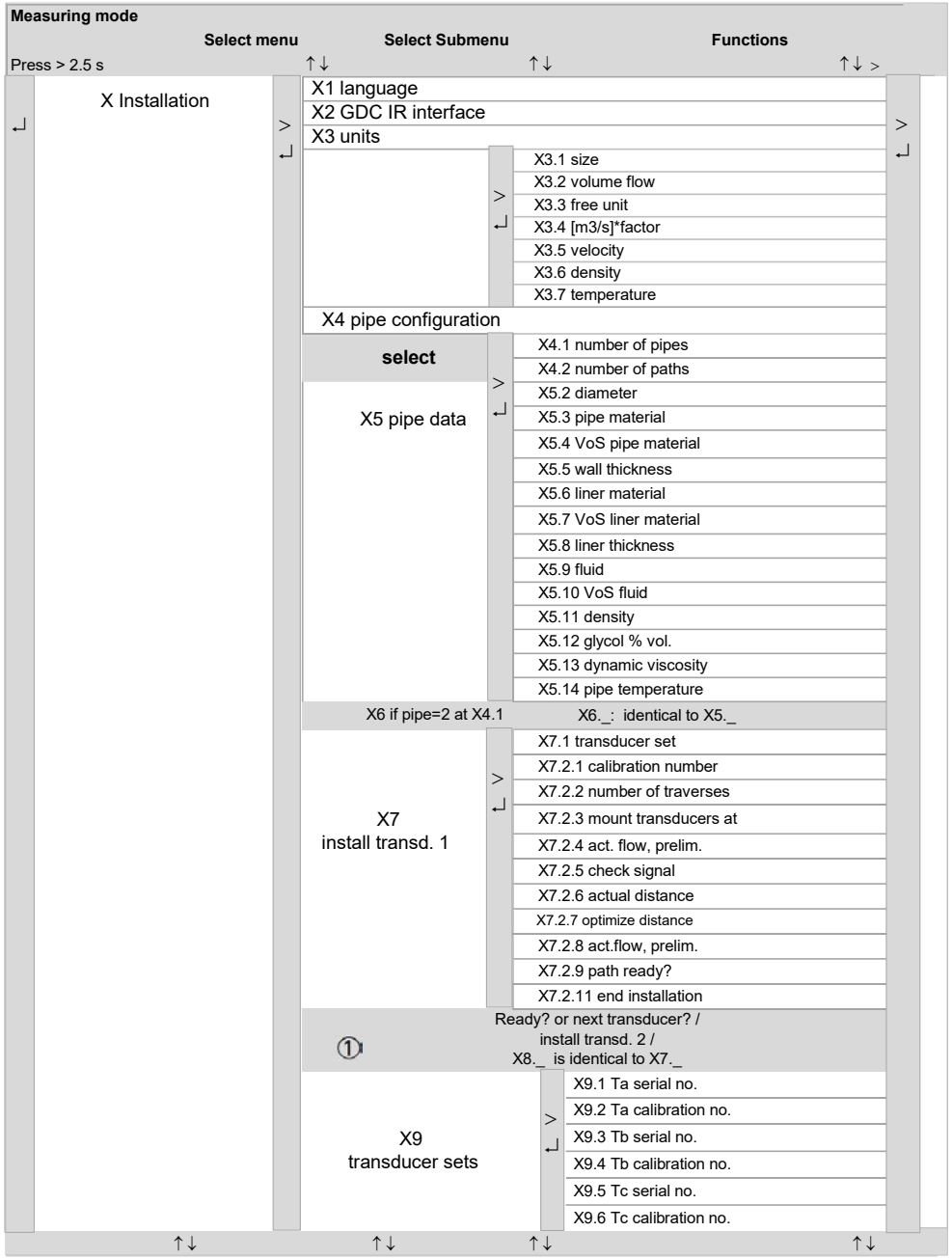
③ The advised distance (menu X7.2.3) must be > 246 mm / 9.7" for V-mode

Follow up with menu X7.2.4…X7.2.8
Run the optimization loop

Repeat if necessary.

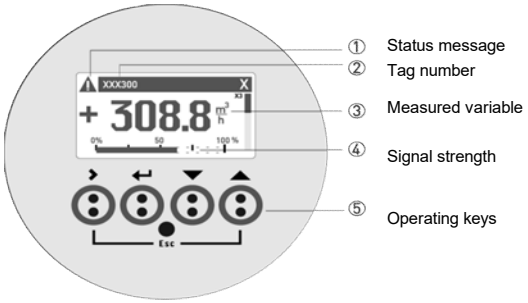
④ Adjust settings in menu X5 / X7 and finish with X7.2.9…7.2.11

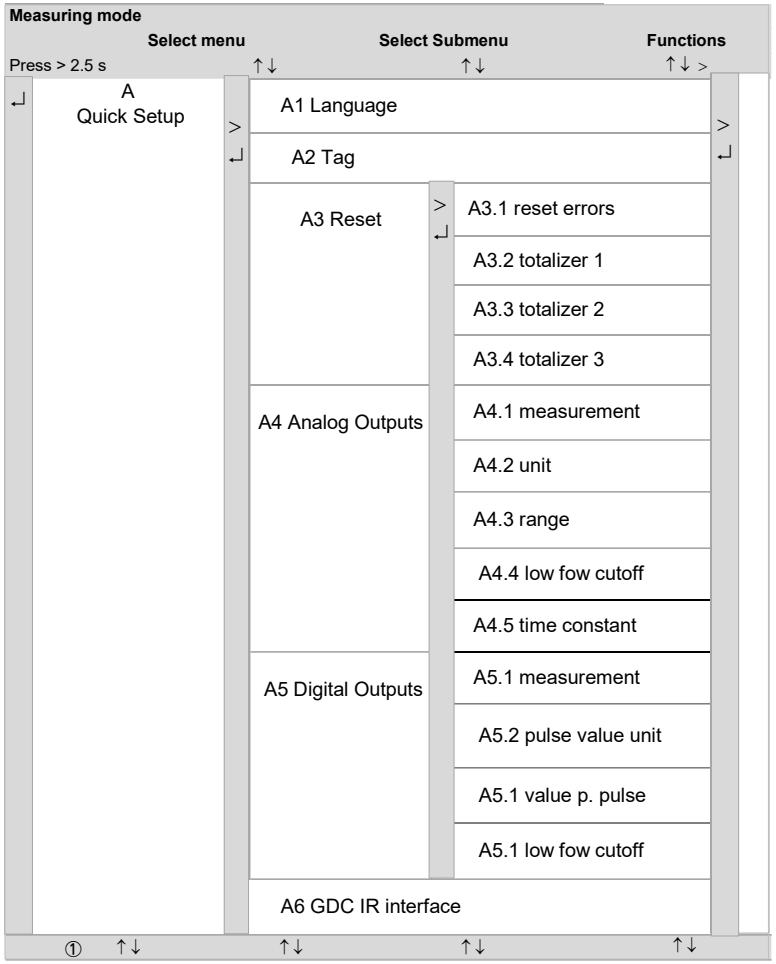
3 Installation menu X



① shows when configuring a 2 pipe installation

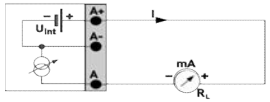
4 Quick Setup



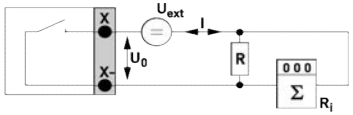


Connection diagram

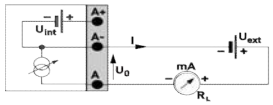
Observe connection polarity



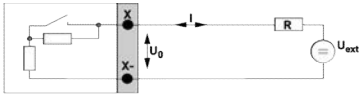
Current output active Ia (basic I/O)



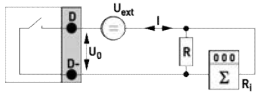
Pulse/frequency output passive Pp (modular I/O)



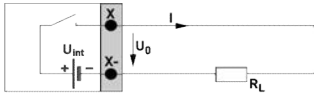
Current output passive Ip (basic I/O)



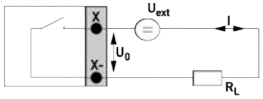
Pulse/ frequency output passive PN, NAMUR (modular I/O)



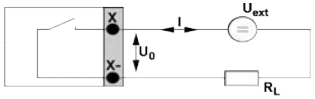
Pulse/frequency output passive Pp (basic I/O)



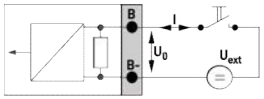
Status output/limit switch active Sa, (modular I/O)



Status output/limit switch passive Sp (basic I/O)

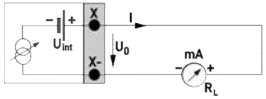


Status output/limit switch passive Sp, (modular I/O)

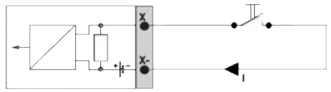


Control input passive Cp (basic I/O)

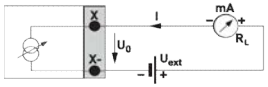
Status output/limit switch SN, NAMUR, (modular I/O)



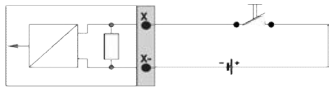
Current output active Ia (modular/Ex i I/O)



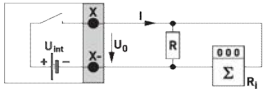
Control input active Ca, (modular I/O)



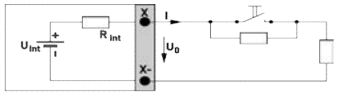
Current output passive Ip (modular/Ex i I/O)



Control input passive Cp, (modular/Ex i I/O)



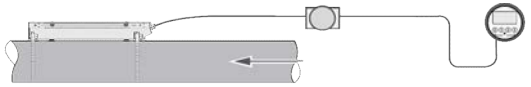
Pulse/frequency output active Pa (modular I/O)



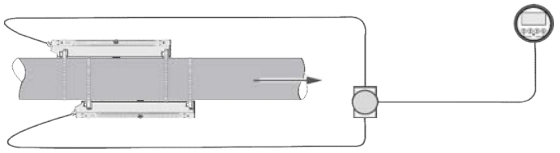
Control input active CN to NAMUR, (modular I/O)

Extension of signal cables

Small/medium sensor rail



Large sensor rails



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