

FLEXMAG 4050 C

Single use electromagnetic flowmeter



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



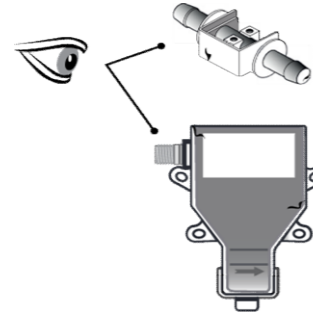
This instrument complies with requirements of Low Voltage Directive. Instruments must not be connected to power supply before reading instructions described in the manual.



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.

General

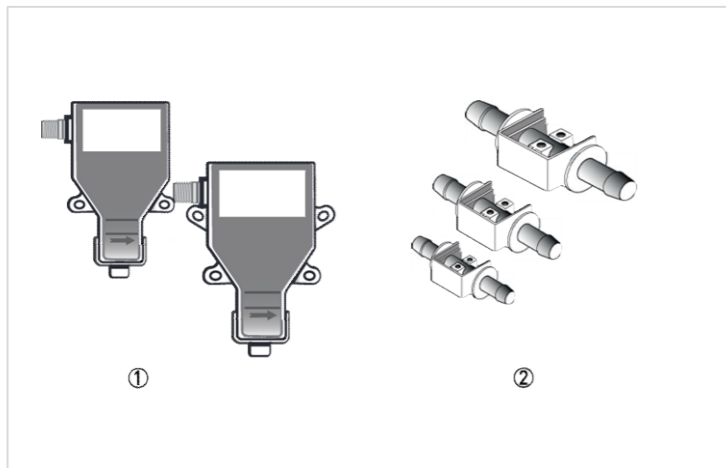
Check the device nameplate to ensure that the device is delivered according to your order



Device nameplate (example)

KROHNE	Altometer, Dordrecht, NL - 3313 LC www.krohne.com	
	FLEXMAG 4050 C	S/N 123456789
Q _{max} xx": xxx l/min	P _{max} = x.x bar	T _{max} = 45°C
Q _{max} xx": xxx l/min	DC power input: 24 V DC	
ER: x.y.z	IP 54	
Tag:		
Made in the Netherlands, 2022		

Device version(s)

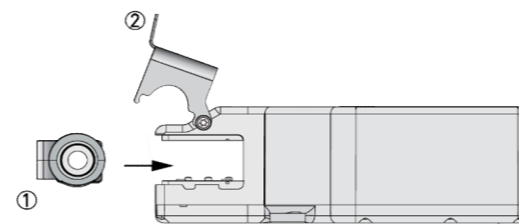


① Device versions: Small, Medium and Large size

② Available size of tubes: ID 1/4...1"

Transport

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



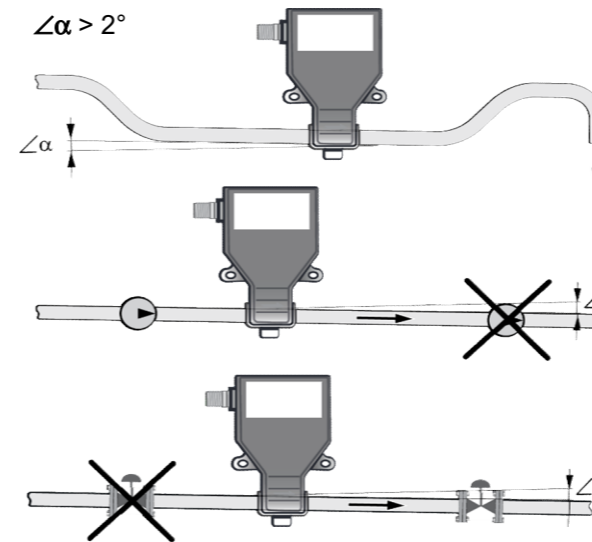
① Move the tube horizontally into the transmitter

② Push the clamp downward until a "click" is noticed

1 Installation

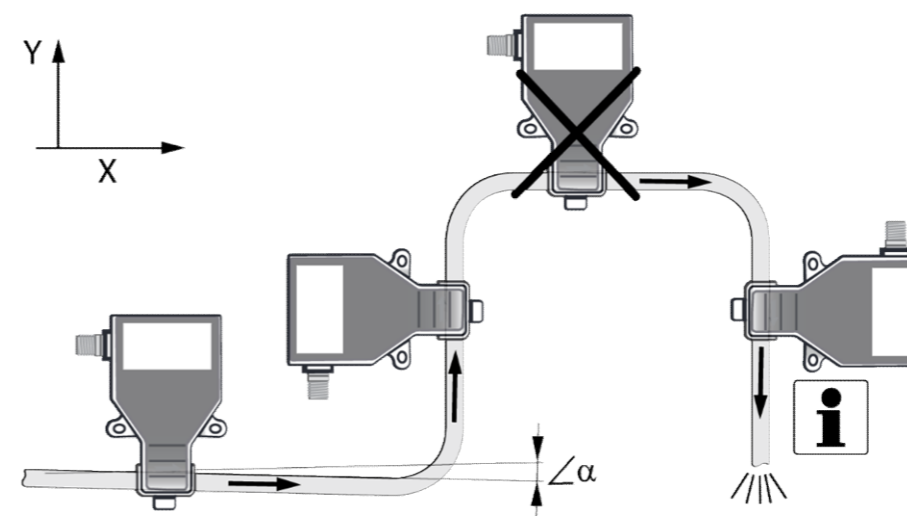
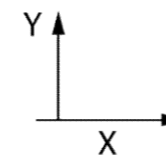
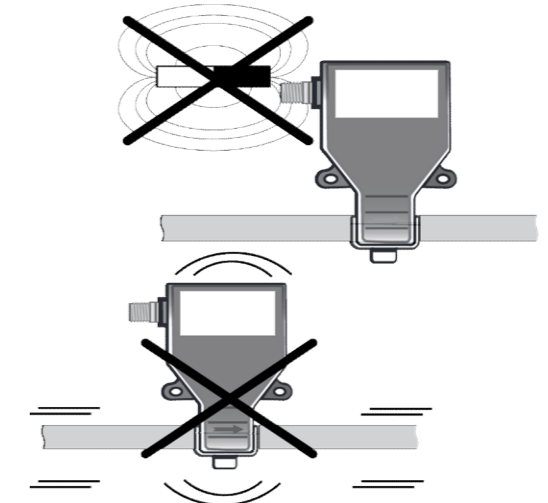
Installation conditions

Pump, control valve - open feed / discharge



General installation requirements

Avoid vibration / EM field



Vertical down position only in conjunction with a control valve

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.

Grounding



Avoid any electrostatic discharge, to minimize the risk of non-reversible damage.



The transmitter is working with the pulse or mA output. Do not connect both outputs at the same time. The cable of the output which is not used, should be cut short or placed in a connector with open ends.

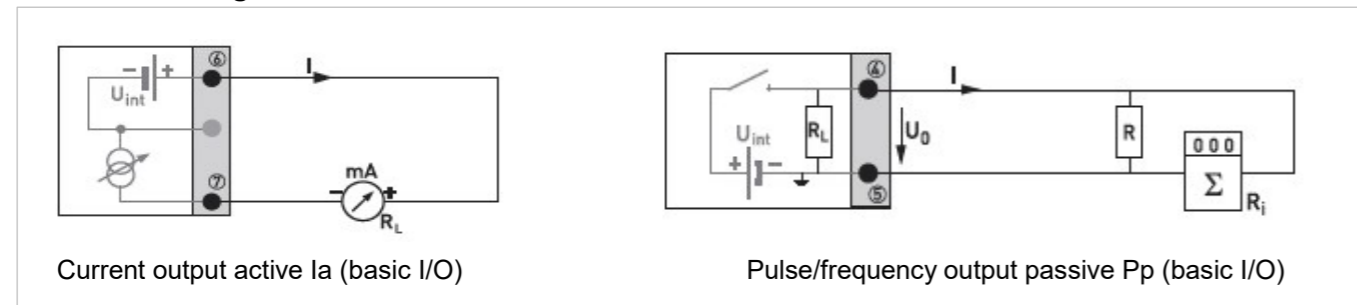


Make sure to use a galvanically isolated power source.

Cable connections

Pin	Function	Wire colour
1	Not used	White
2	+ 24 V DC	Red
3	Ground (GND)	Blue
4	Frequency output (+)	Yellow
5	Frequency output (GND)	Grey
6	Current output +	Brown
7	Current output -	Green
8	To be connected for service only	Pink

Connection diagram



The frequency output is polarity sensitive. If connected incorrectly, the device will be damaged.

3 Quick Setup



For the correct calculation of the flow rate make sure that;

- After each change of the single-use flow tube, to check and enter the maximum flow (Q_{max.}) and the k-factor of the new flow tube into the formula of the control system.
- The k-factor is put in the control system correct and accurately (without typing an error, with 3 digits after the decimal point) as printed on the flow tube label.
- The tube diameter is entered in the control system (1/4 - 3/8 - 1/2 - 3/4 or 1", as printed on the label).

Flow ranges (standard factory settings)

Flow tube size	Flow range (L/min.)
1/4"	0.015...3
3/8"	0.07...14
1/2"	0.1...20
3/4"	0.3...62
1"	0.5...75

Flow tube label



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