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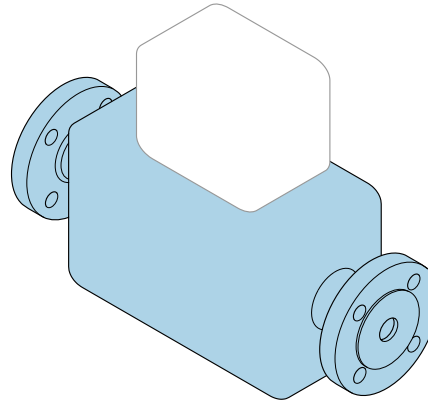
71756807
2026-03-02



# Brief Operating Instructions
# **Flowmeter**
# **Proline Promag H**

Electromagnetic sensor

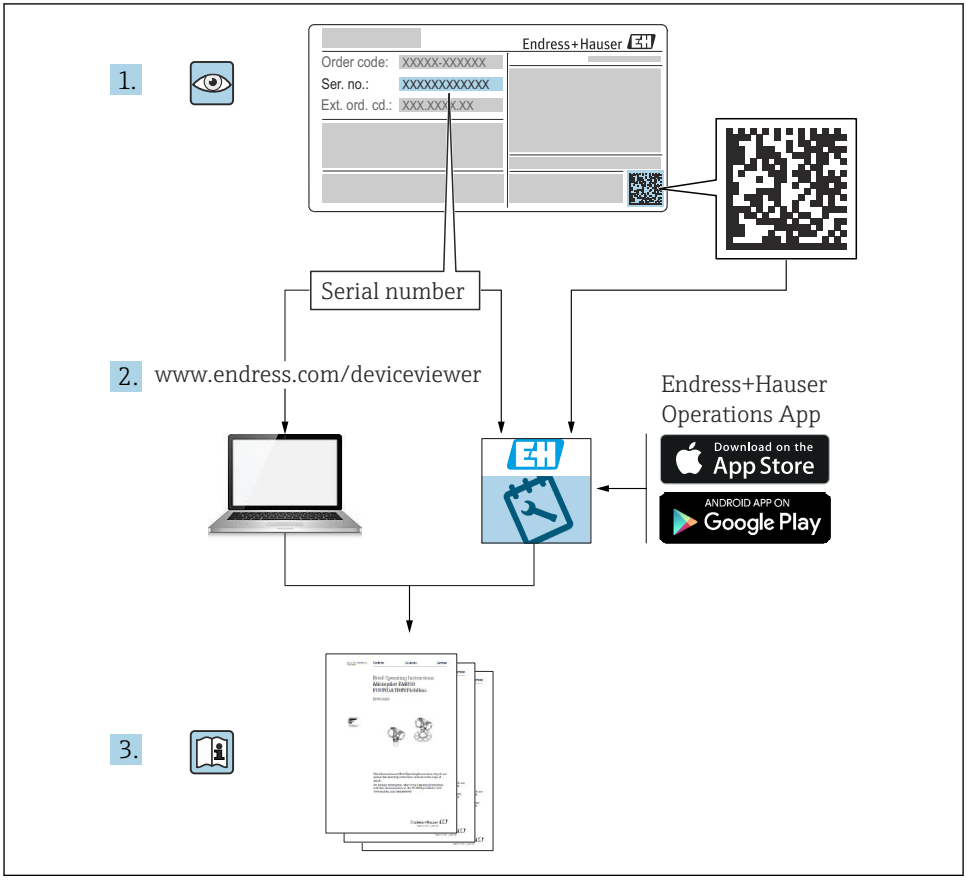


These Brief Operating Instructions are **not** a substitute for the Operating Instructions pertaining to the device.

**Brief Operating Instructions Part 1 of 2: Sensor**
Contain information about the sensor.

Brief Operating Instructions Part 2 of 2: Transmitter
→ 3.

Endress+Hauser
People for Process Automation


1.
Endress+Hauser
Order code: XXXXX-XXXXXX
Ser. no.: XXXXXXXXXXXX
Ext. ord. cd.: XXX.XXX-XXX
Serial number
2.
www.endress.com/deviceviewer
Endress+Hauser
Operations App
Download on the
App Store
ANDROID APP ON
Google Play
3.

A0023555

# Brief operating instructions Flowmeter

The device consists of a transmitter and a sensor.

The process of commissioning these two components is described in two separate manuals which together form the Brief Operating Instructions for the flowmeter:
- Brief Operating Instructions Part 1: Sensor
- Brief Operating Instructions Part 2: Transmitter

Please refer to both parts of the Brief Operating Instructions when commissioning the device, as the contents of the manuals complement one another:

**Brief Operating Instructions Part 1: Sensor**
The Sensor Brief Operating Instructions are aimed at specialists with responsibility for installing the measuring device.
- Incoming acceptance and product identification
- Storage and transport
- Mounting procedure

**Brief Operating Instructions Part 2: Transmitter**
The Transmitter Brief Operating Instructions are aimed at specialists with responsibility for commissioning, configuring and parameterizing the measuring device (until the first measured value).
- Product description
- Mounting procedure
- Electrical connection
- Operation options
- System integration
- Commissioning
- Diagnostic information

# Additional device documentation

These Brief Operating Instructions are the **Brief Operating Instructionspart 1: Sensor**.

The "Brief Operating Instructions part 2: Transmitter" are available via:
- Internet: www.endress.com/deviceviewer
- Smart phone/tablet: *Endress+Hauser Operations App*

Detailed information about the device can be found in the Operating Instructions and the other documentation:
- Internet: www.endress.com/deviceviewer
- Smart phone/tablet: *Endress+Hauser Operations App*

# Table of contents

# 1 About this document

## 1.1 Symbols used

### 1.1.1 Safety symbols

**DANGER**
This symbol alerts you to a dangerous situation. Failure to avoid this situation will result in serious or fatal injury.

**WARNING**
This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in serious or fatal injury.

**CAUTION**
This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in minor or medium injury.

**NOTICE**
This symbol contains information on procedures and other facts which do not result in personal injury.

### 1.1.2 Symbols for certain types of information

| Symbol | Meaning | Symbol | Meaning |
|---|---|---|---|
|  | **Permitted**<br>Procedures, processes or actions that are permitted. |  | **Preferred**<br>Procedures, processes or actions that are preferred. |
|  | **Forbidden**<br>Procedures, processes or actions that are forbidden. |  | **Tip**<br>Indicates additional information. |
|  | Reference to documentation |  | Reference to page |
|  | Reference to graphic | 1., 2., 3... | Series of steps |
|  | Result of a step |  | Visual inspection |

### 1.1.3 Electrical symbols

| Symbol | Meaning | Symbol | Meaning |
|---|---|---|---|
|  | Direct current |  | Alternating current |
|  | Direct current and alternating current |  | **Ground connection**<br>A grounded terminal which, as far as the operator is concerned, is grounded via a grounding system. |

| Symbol | Meaning |
|---|---|
|  | **Potential equalization connection (PE: protective earth)**<br>Ground terminals that must be connected to ground prior to establishing any other connections.<br>The ground terminals are located on the interior and exterior of the device:<br>▪ Interior ground terminal: potential equalization is connected to the supply network.<br>▪ Exterior ground terminal: device is connected to the plant grounding system. |

### 1.1.4 Tool symbols

| Symbol | Meaning | Symbol | Meaning |
|---|---|---|---|
|  | Torx screwdriver |  | Flat-blade screwdriver |
|  | Phillips head screwdriver |  | Allen key |
|  | Open-ended wrench | | |

### 1.1.5 Symbols in graphics

| Symbol | Meaning | Symbol | Meaning |
|---|---|---|---|
| **1, 2, 3,...** | Item numbers | 1., 2., 3... | Series of steps |
| **A, B, C, ...** | Views | **A-A, B-B, C-C, ...** | Sections |
|  | Hazardous area |  | Safe area (non-hazardous area) |
|  | Flow direction | | |

# 2 Basic safety instructions

## 2.1 Requirements for the personnel

The personnel must fulfill the following requirements for its tasks:
- Trained, qualified specialists must have a relevant qualification for this specific function and task.
- Are authorized by the plant owner/operator.
- Are familiar with federal/national regulations.
- Before starting work, read and understand the instructions in the manual and supplementary documentation as well as the certificates (depending on the application).
- Follow instructions and comply with basic conditions.

## 2.2 Intended use

**Application and media**
The measuring instrument is intended only for the flow measurement of liquids with a minimum conductivity of 5 µS/cm(Promag 10, 100, 300, 500) or 20 µS/cm (Promag 200).

Depending on the version ordered, the measuring instrument can also be used to measure potentially explosive [1)], flammable, toxid and oxidizing media.

Measuring instruments for use in hazardous areas, in hygienic applications, or where there is an increased risk due to pressure, are specially labeled on the nameplate.

To ensure that the measuring instrument is in perfect condition during operation:
- Only use the measuring instrument in full compliance with the data on the nameplate and the general conditions listed in the Operating Instructions and supplementary documentation.
- Using the nameplate, check whether the ordered device is permitted for the intended use in the hazardous area (e.g. explosion protection, pressure vessel safety).
- Use the measuring instrument only for media to which the process-wetted materials are sufficiently resistant.
- Keep within the specified pressure and temperature range.
- Keep within the specified ambient temperature range.
- Protect the measuring instrument permanently against corrosion from environmental influences.

**Incorrect use**
Non-designated use can compromise safety. The manufacturer is not liable for damage caused by improper or non-designated use.

**⚠ WARNING**

**Danger of breakage due to corrosive or abrasive fluids and ambient conditions!**
- Verify the compatibility of the process fluid with the sensor material.
- Ensure the resistance of all fluid-wetted materials in the process.
- Keep within the specified pressure and temperature range.

1) Not applicable for IO-Link measuring instruments

NOTICE

**Verification for borderline cases:**

- For special fluids and fluids for cleaning, Endress+Hauser is glad to provide assistance in verifying the corrosion resistance of fluid-wetted materials, but does not accept any warranty or liability as minute changes in the temperature, concentration or level of contamination in the process can alter the corrosion resistance properties.

**Residual risks**

⚠ CAUTION

**Risk of hot or cold burns! The use of media and electronics with high or low temperatures can produce hot or cold surfaces on the device.**

- Mount suitable touch protection.

## 2.3 Workplace safety

When working on and with the device:

- Wear the required personal protective equipment as per national regulations.

## 2.4 Operational safety

Risk of injury!

- Operate the device in proper technical condition and fail-safe condition only.
- The operator is responsible for interference-free operation of the device.

**Ambient requirements for transmitter housing made of plastic**

If a plastic transmitter housing is permanently exposed to certain steam and air mixtures, this can damage the housing.

- If you are unsure, please contact your Endress+Hauser Sales Center for clarification.
- If used in an approval-related area, observe the information on the nameplate.

## 2.5 Product safety

This measuring device is designed in accordance with good engineering practice to meet state-of-the-art safety requirements, has been tested, and left the factory in a condition in which it is safe to operate.

It meets general safety standards and legal requirements. It also complies with the EU directives listed in the device-specific EU Declaration of Conformity. The manufacturer confirms this by affixing the CE mark to the device..

## 2.6 IT security

The manufacturer warranty is valid only if the product is installed and used as described in the Operating Instructions. The product is equipped with security mechanisms to protect it against any inadvertent changes to the settings.

IT security measures, which provide additional protection for the product and associated data transfer, must be implemented by the operators themselves in line with their security standards.

# 3 Incoming acceptance and product identification

## 3.1 Incoming acceptance

On receipt of the delivery:

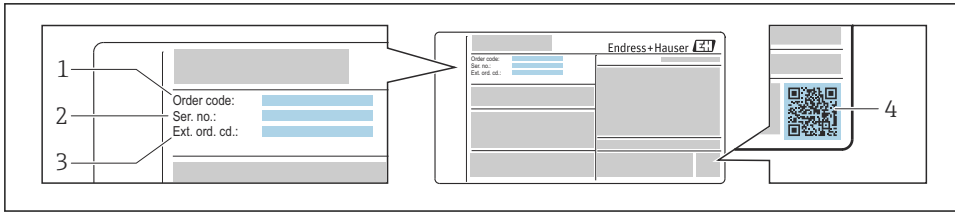
1. Check the packaging for damage.
   - ↳ Report all damage immediately to the manufacturer.
     Do not install damaged components.
2. Check the scope of delivery using the delivery note.
3. Compare the data on the nameplate with the order specifications on the delivery note.
4. Check the technical documentation and all other necessary documents, e.g. certificates, to ensure they are complete.

If one of the conditions is not satisfied, contact the manufacturer.

## 3.2 Product identification

The device can be identified in the following ways:

- Nameplate
- Order code with details of the device features on the delivery note
- Enter the serial numbers from the nameplates in the *Device Viewer* (www.endress.com/deviceviewer): all the information about the device is displayed.
- Enter the serial numbers from the nameplates into the *Endress+Hauser Operations app* or scan the DataMatrix code on the nameplate with the *Endress+Hauser Operations app*: all the information about the device is displayed.




1 *Example of a nameplate*

1 *Order code*
2 *Serial number*
3 *Extended order code*
4 *2-D matrix code (QR code)*

For detailed information on the data on the nameplate, see the Operating Instructions for the device.

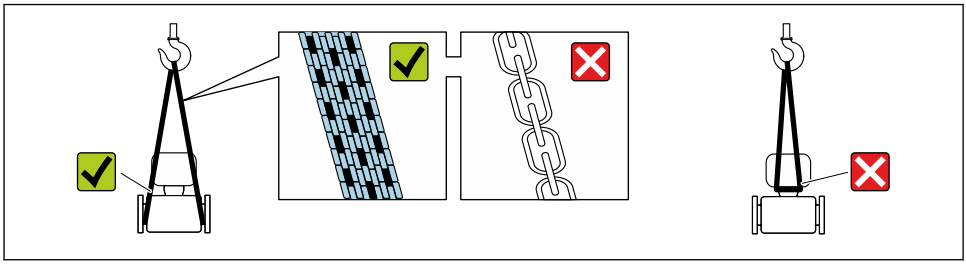
# 4 Storage and transport

## 4.1 Storage conditions

Observe the following notes for storage:
- Store in the original packaging to ensure protection from shock.
- Do not remove protective covers or protective caps installed on process connections. They prevent mechanical damage to the sealing surfaces and contamination in the measuring tube.
- Protect from direct sunlight. Avoid unacceptably high surface temperatures.
- Select a storage location that excludes the possibility of condensation forming on the measuring device. Fungi and bacteria can damage the liner.
- Store in a dry and dust-free place.
- Do not store outdoors.

## 4.2 Transporting the product

Transport the measuring device to the measuring point in the original packaging.



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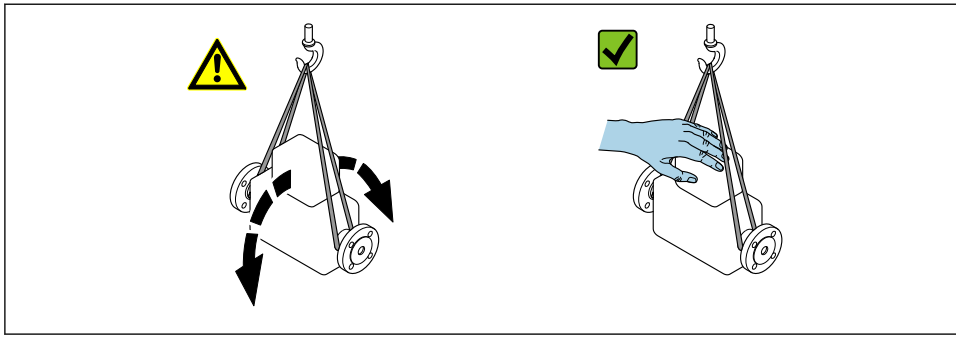
Do not remove protective covers or caps installed on process connections. They prevent mechanical damage to the sealing surfaces and contamination in the measuring tube.

### 4.2.1 Measuring devices without lifting lugs

**WARNING**

**Center of gravity of the measuring device is higher than the suspension points of the webbing slings.**

Risk of injury if the measuring device slips.
- Secure the measuring device against slipping or turning.
- Observe the weight specified on the packaging (stick-on label).



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### 4.2.2 Measuring devices with lifting lugs

**⚠ CAUTION**

**Special transportation instructions for devices with lifting lugs**

- ▶ Only use the lifting lugs fitted on the device or flanges to transport the device.
- ▶ The device must always be secured at two lifting lugs at least.

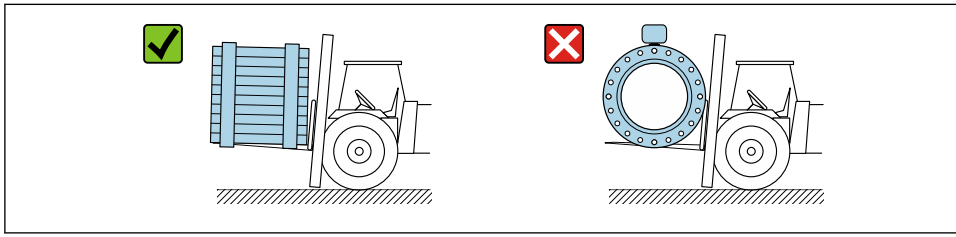
### 4.2.3 Transporting with a fork lift

If transporting in wood crates, the floor structure enables the crates to be lifted lengthwise or at both sides using a forklift.

**⚠ CAUTION**

**Risk of damaging the magnetic coil!**

- ▶ If transporting by forklift, do not lift the sensor by the metal casing.
- ▶ This would buckle the casing and damage the internal magnetic coils.



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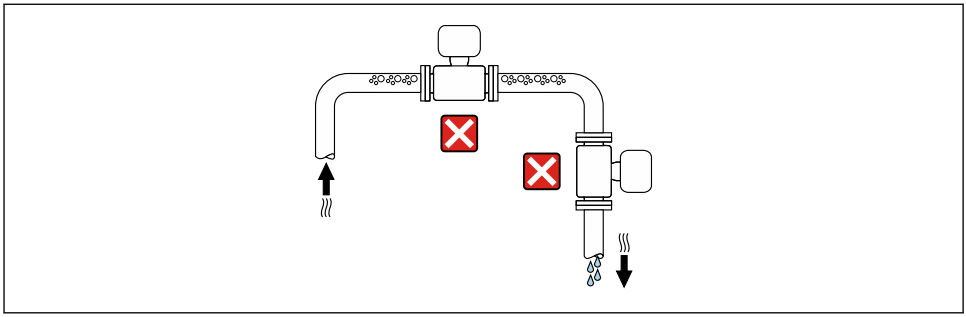
# 5 Installation

## 5.1 Installation requirements

### 5.1.1 Installation position

#### Installation location

- Do not install the device at the highest point of the pipe.
- Do not install the device upstream from a free pipe outlet in a down pipe.



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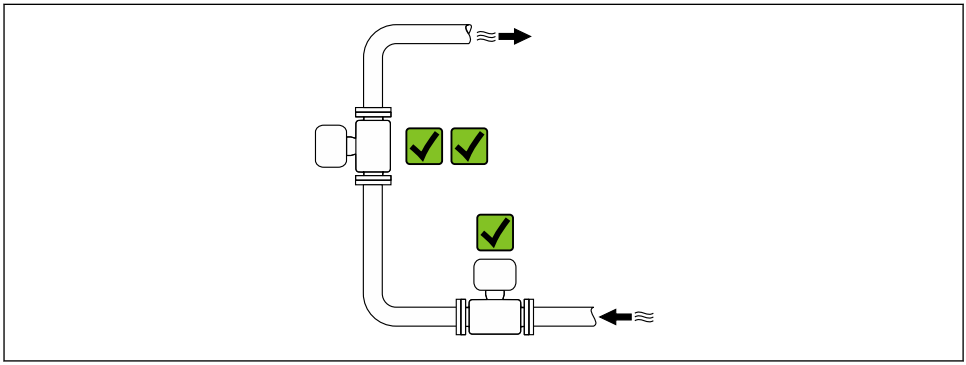
The device should ideally be installed in an ascending pipe.



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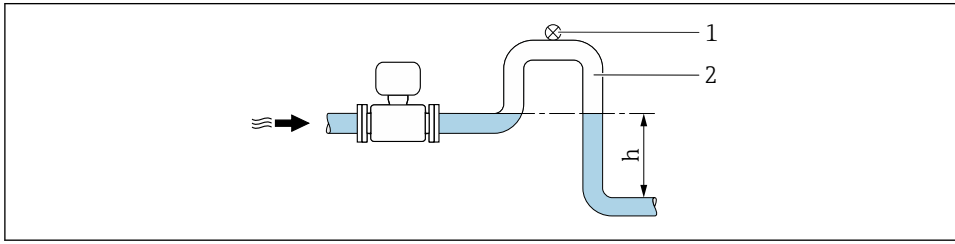
*Installation upstream from a down pipe*

NOTICE

**A vacuum in the measuring tube can damage the liner!**

- ▶ If installing upstream of down pipes whose length h ≥ 5 m (16.4 ft): install a siphon with a vent valve downstream of the device.

This arrangement prevents the flow of liquid stopping in the pipe and the formation of air pockets.

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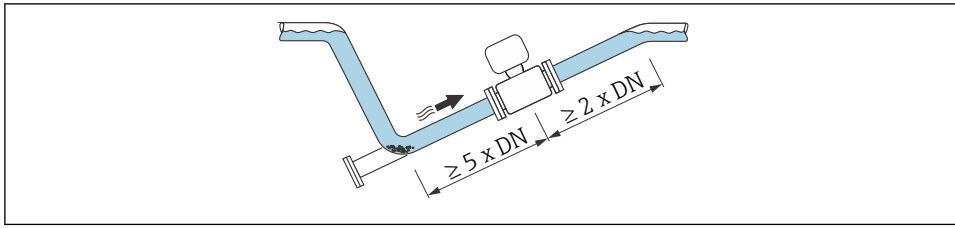
*1 Vent valve*
*2 Pipe siphon*
*h Length of down pipe*

*Installation with partially filled pipes*

- Partially filled pipes with a gradient require a drain-type configuration.
- The installation of a cleaning valve is recommended.



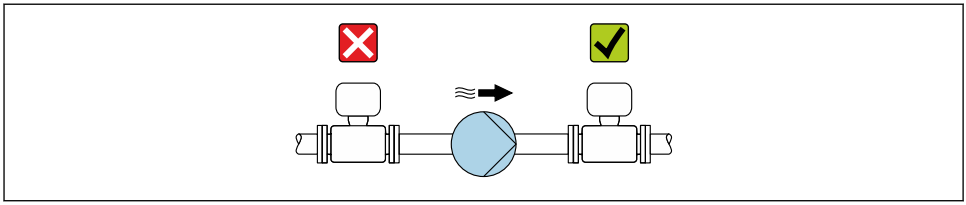

A0041088

*Installation near pumps*

NOTICE

**A vacuum in the measuring tube can damage the liner!**

- ▶ In order to maintain the static pressure, install the device in the flow direction downstream from the pump.
- ▶ Install pulsation dampers if reciprocating, diaphragm or peristaltic pumps are used.



A0041083

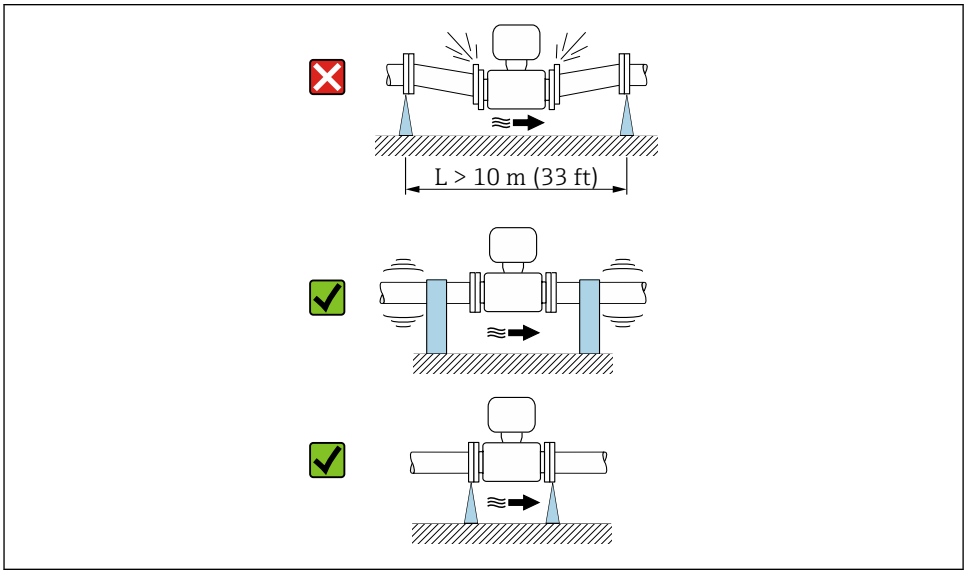
*Installation in event of pipe vibrations*

A remote version is recommended if the pipe is subject to strong vibrations.

**NOTICE**

**Pipe vibrations can damage the device!**

- ▶ Do not expose the device to strong vibrations.
- ▶ Support the pipe and fix it in place.
- ▶ Support the device and fix it in place.
- ▶ Mount the sensor and transmitter separately.

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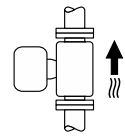
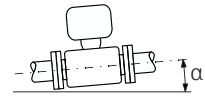
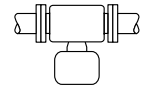
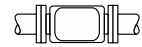
## Orientation

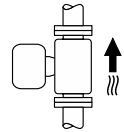
The direction of the arrow on the nameplate helps you to install the measuring instrument according to the flow direction.

| Orientation | | Recommendation |
|---|---|---|
| Vertical orientation |  A0015591 | ✓✓ |
| Horizontal orientation |  A0041328 | ✓ 1) |
| Horizontal orientation, transmitter at bottom |  A0015590 | ✓✓ 2) 3) ✗ 4) |
| Horizontal orientation, transmitter at side |  A0015592 | ✗ |

1) The measuring instrument should be self-draining for hygiene applications. A vertical orientation is recommended for this. If only a horizontal orientation is possible, an angle of inclination $\alpha \geq 10^{\circ}$ is recommended.
2) Applications with high process temperatures may increase the ambient temperature. To maintain the maximum ambient temperature for the transmitter, this orientation is recommended.
3) To prevent the electronics module from overheating in the case of a sharp rise in temperature (e.g. CIP or SIP processes), install the measuring instrument with the transmitter component pointing downwards.
4) With the empty pipe detection function switched on: empty pipe detection only works if the transmitter housing is pointing upwards.

### *Vertical*

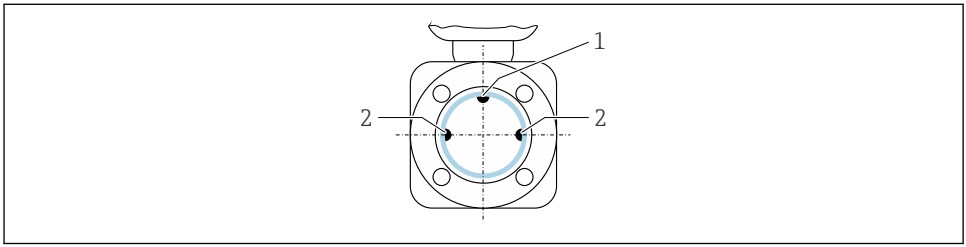
Optimum for self-emptying pipe systems and for use in conjunction with empty pipe detection.



A0015591

*Horizontal*

- Ideally, the measuring electrode plane should be horizontal. This prevents brief insulation of the measuring electrodes by entrained air bubbles.
- Empty pipe detection only works if the transmitter housing is pointing upwards as otherwise there is no guarantee that the empty pipe detection function will actually respond to a partially filled or empty measuring tube.




A0028998

*1 EPD electrode for empty pipe detection, available from ≥ DN 15 (½")*
*2 Measuring electrodes for signal detection*

Measuring instruments with a nominal diameter < DN 15 (½") do not have an EPD electrode. In this case, empty pipe detection is performed via the measuring electrodes.

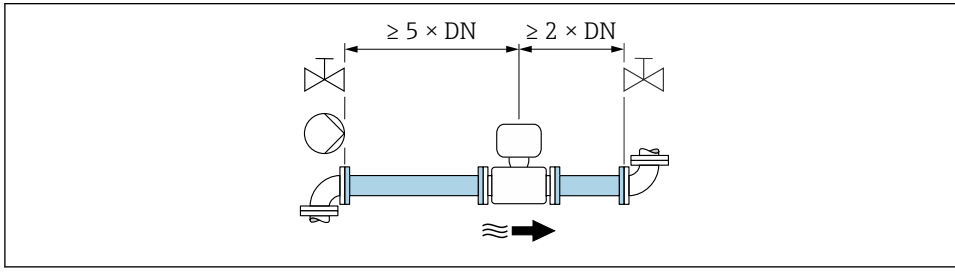
### Inlet and outlet runs

*Installation with inlet and outlet runs*

Installation is carried out with inlet and outlet runs.

Maintain straight, unimpeded inlet and outlet runs.

To avoid a vacuum and to maintain the specified level of measurement accuracy, if possible install the device upstream from assemblies that produce turbulence (e.g. valves, T-sections) and downstream from pumps.

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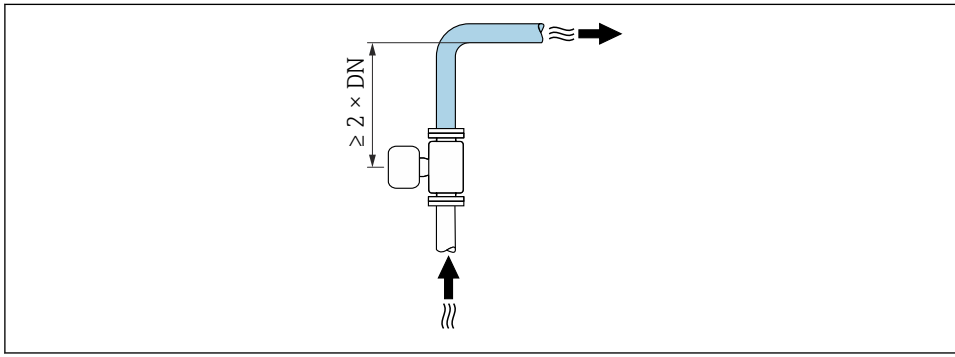
Keep a sufficient distance to the next pipe elbow.




A0042132

*Installation without inlet and outlet runs*

Depending on the device design and installation location, the inlet and outlet runs can be reduced or omitted entirely.

**Maximum measurement error**
When the device is installed with the inlet and outlet runs described, a maximum measurement error of ±0.5 % of measured value ±1 mm/s (0.04 in/s) (optional: ±0.2 % of measured value ±2 mm/s (0.08 in/s)) can be ensured.

*Devices and possible order options*

| Order code for "Electrodes" | | |
|---|---|---|
| **Option** | **Description** | **Design** |
| J | 1.4435/316L, pointed for 0 x DN inlet/outlet runs | 0 x DN full-bore design [1] |
| L | 1.4435/316L for 0 x DN inlet/outlet runs | |
| M | Alloy C22 for 0 x DN inlet/outlet runs | |
| N | Tantalum for 0 x DN inlet/outlet runs | |

1) "Full-bore" indicates a measuring tube cross-section corresponding to the nominal diameter without constriction. This means there is no pressure loss.

*Devices and possible order options*

| Order code for "Electrodes" | | |
|---|---|---|
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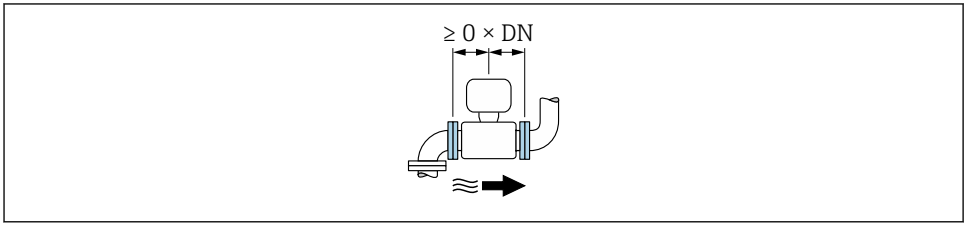
| N | Tantalum for 0 x DN inlet/outlet runs | |

1) "Full-bore" indicates a measuring tube cross-section corresponding to the nominal diameter without constriction. This means there is no pressure loss.

*Installation before or after bends*

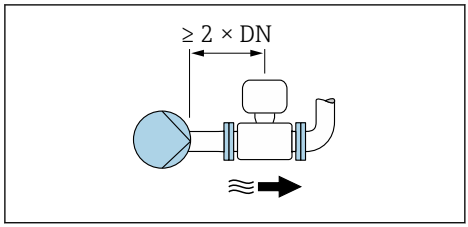
Installation without inlet and outlet runs is possible.




A0032859

*Installation downstream of pumps*

Installation without inlet and outlet runs is possible.

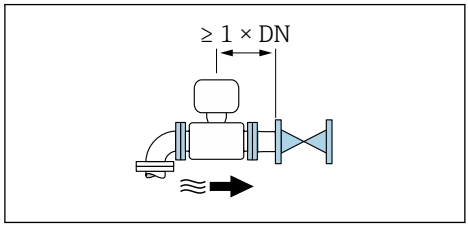


A0045530

An inlet run of ≥ 2 x DN is recommended.

*Installation upstream of valves*

Installation without inlet and outlet runs is possible.



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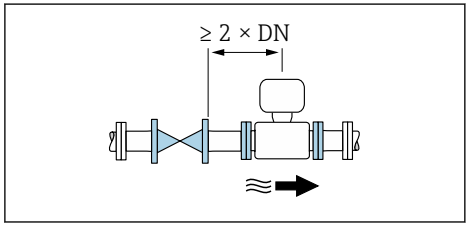
An outlet run of ≥ 1 x DN is recommended.

*Installation downstream of valves*

The device can be installed without inlet and outlet runs if the valve is 100% open during operation.



A0045786

An inlet run of ≥ 2 x DN is recommended if the valve is 100% open during operation.

### 5.1.2 Environmental and process requirements

#### Ambient temperature range

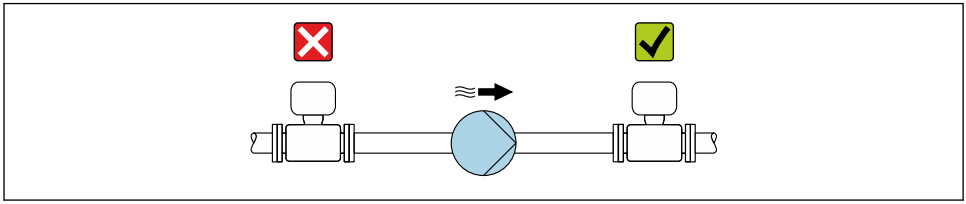
For detailed information on the ambient temperature range, see the Operating Instructions for the device.

If operating outdoors:
- Mount the measuring instrument in a shady location.
- Avoid direct sunlight, particularly in warm climatic regions.
- Avoid direct exposure to weather conditions.

*Temperature tables* [2)]

For detailed information on the temperature tables, see the separate document entitled "Safety Instructions" (XA) for the device.

### System pressure



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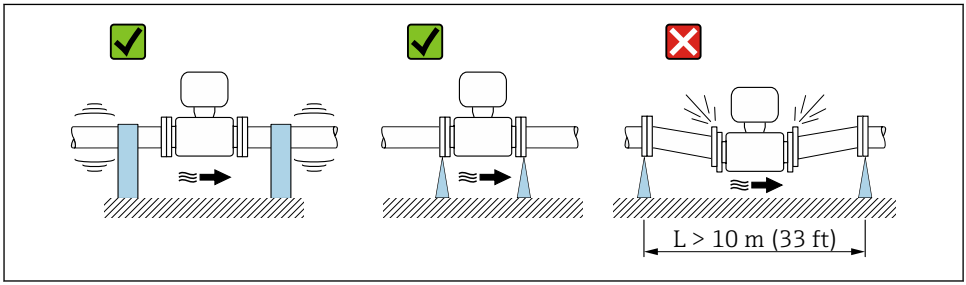
Furthermore, install pulse dampers if reciprocating, diaphragm or peristaltic pumps are used.

### Vibrations

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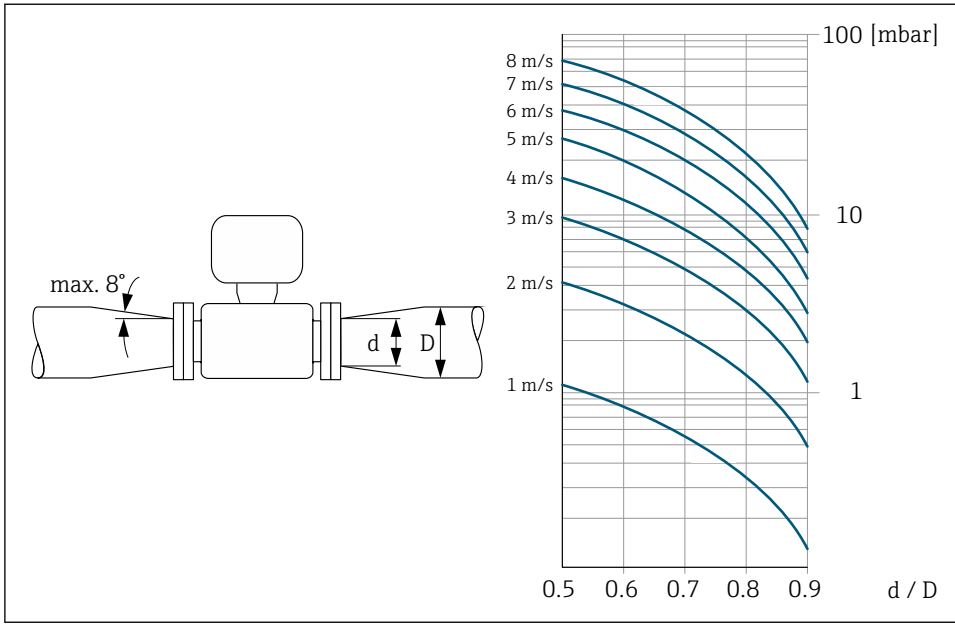
2 *Measures to prevent vibration of the device*

2) Not applicable for IO-Link measuring instruments

### Adapters




## 5.2 Installing the device

### 5.2.1 Required tools

For flanges and other process connections, use an appropriate mounting tool

### 5.2.2 Preparing the measuring device

1. Remove all remaining transport packaging.
2. Remove any protective covers or protective caps present from the sensor.
3. Remove stick-on label on the electronics compartment cover.

### 5.2.3 Installing the sensor

**⚠ WARNING**

**An electrically conductive layer could form on the inside of the measuring tube!**
Risk of measuring signal short circuit.

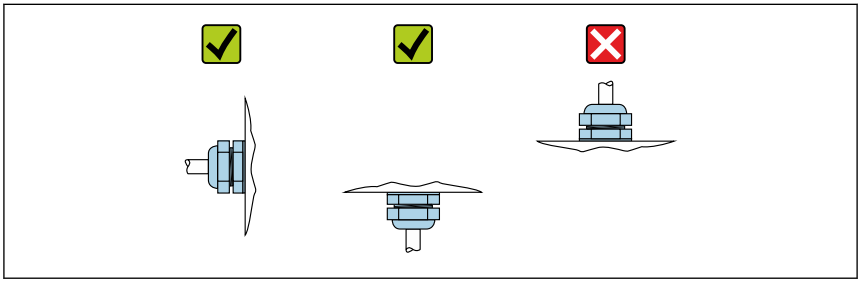
- ▶ Ensure that the inside diameters of the gaskets are greater than or equal to that of the process connections and piping.
- ▶ Ensure that the gaskets are clean and undamaged.
- ▶ Install the gaskets correctly.
- ▶ Do not use electrically conductive sealing compounds such as graphite.

**⚠ WARNING**

**Danger due to improper process sealing!**

- ▶ Ensure that the inside diameters of the gaskets are greater than or equal to that of the process connections and piping.
- ▶ Ensure that the seals and sealing surfaces are clean and undamaged.
- ▶ Secure the seals correctly.

1. Ensure that the direction of the arrow on the sensor matches the flow direction of the medium.
2. To ensure compliance with device specifications, install the measuring device between the pipe flanges in a way that it is centered in the measurement section.
3. Install the measuring device or turn the transmitter housing so that the cable entries do not point upwards.



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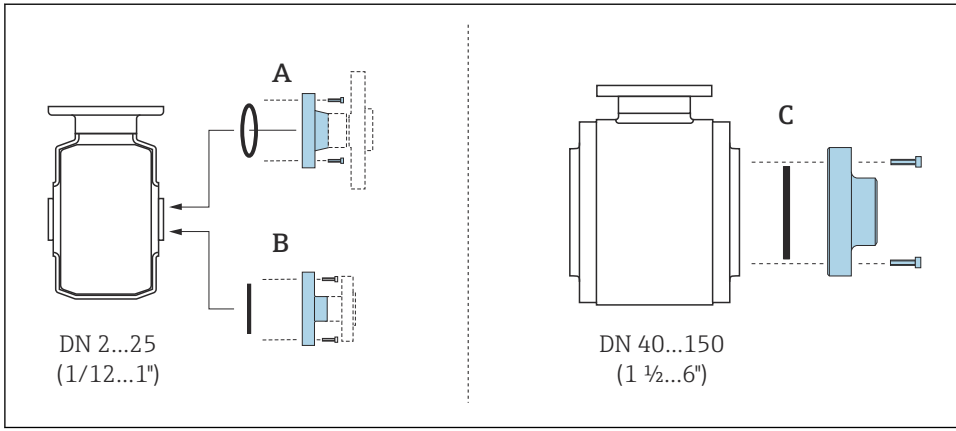
### Process connections

The sensor is supplied to order, with or without pre-installed process connections. Pre-installed process connections are firmly secured to the sensor by 4 or 6 hexagonal-headed bolts.

The sensor may need to be supported or additionally secured depending on the application and pipe length. In particular, it is absolutely essential to secure the sensor additionally if plastic process connections are used. An appropriate wall mounting kit can be ordered separately as an accessory from Endress+Hauser.

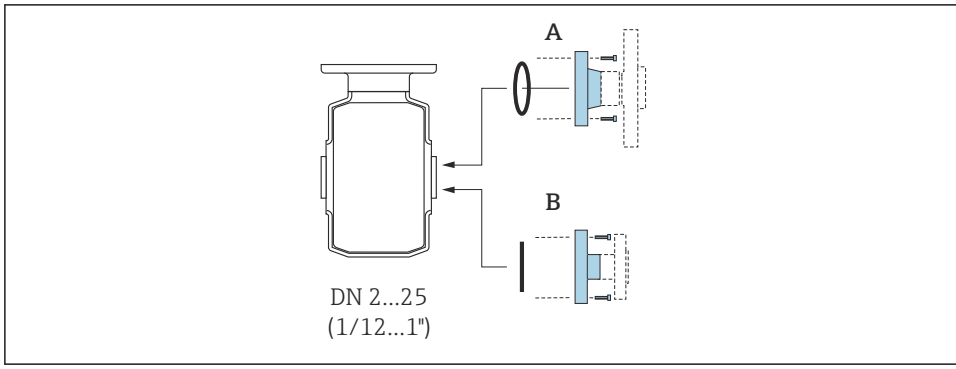
### Seals

- In the case of metal process connections, the screws must be tightened securely. The process connection forms a metal connection with the sensor, which ensures a defined compression of the seal.
- In the case of plastic process connections, observe the maximum torques for lubricated threads: 7 Nm (5.2 lbf ft); always insert a seal between the connection and the counterflange.
- Depending on the application, the seals should be replaced periodically, particularly if molded seals are used (aseptic version). The interval between changes depends on the frequency of the cleaning cycles, the cleaning temperature and the medium temperature. Replacement seals can be ordered as an accessory.
- For "PFA" lining: additional seals are **always** required (Promag 200).




3 *Seals of process connections Promag H 10 and H 100*

*A Process connections with O-ring seal*
*B Process connections with aseptic molded seal, DN 2 to 25 (1/12 to 1")*
*C Process connections with aseptic molded seal, DN 40 to 150 (1 ½ to 6")*




4 *Seals of process connections Promag H 200*

*A Process connections with O-ring seal*
*B Process connections with aseptic gasket seal*

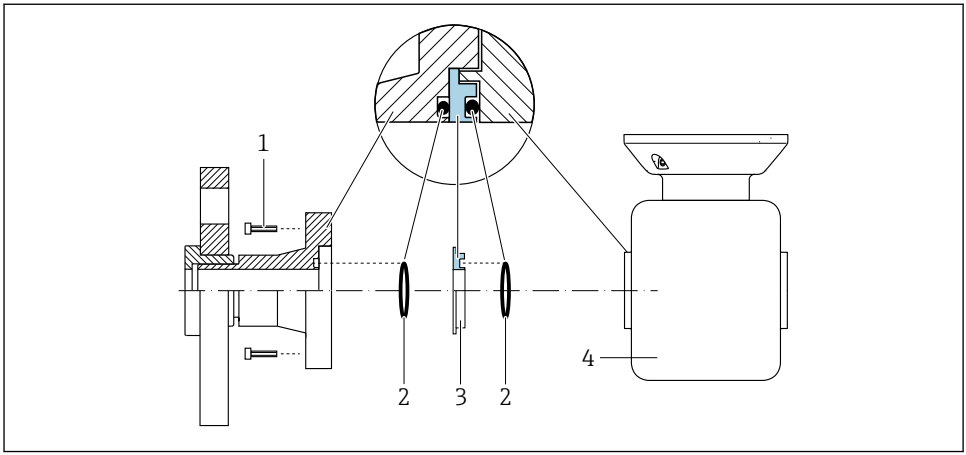
### Mounting grounding rings, DN 2 to 25 (1/12 to 1")

For information on potential equalization, see the Transmitter Brief Operating Instructions.

In the case of plastic process connections (e.g. flange connections or adhesive fittings), additional grounding rings must be used to ensure potential matching between the sensor and

the fluid. The absence of grounding rings can impair measurement accuracy or result in damage to the sensor due to electrochemical degradation of the electrodes.

- Depending on the option ordered, plastic disks are used instead of grounding rings on some process connections. These plastic disks only act as "spacers" and do not have any potential matching function. Furthermore, they also perform a significant sealing function at the sensor/process connection interface. Therefore, in the case of process connections without metal grounding rings, these plastic disks/seals should never be removed and should always be installed!
- Grounding rings can be ordered separately as an accessory from Endress+Hauser. When ordering make sure that the grounding rings are compatible with the material used for the electrodes, as otherwise there is the danger that the electrodes could be destroyed by electrochemical corrosion!
- Grounding rings, including seals, are mounted inside the process connections. This does not affect the installation length.




5 *Installing grounding rings*

1 *Hexagonal-headed bolts of process connection*
2 *O-ring seals*
3 *Grounding ring or plastic disk (spacer)*
4 *Sensor*

1. Loosen the 4 or 6 hexagonal-headed bolts (1) and remove the process connection from the sensor (4).
2. Remove the plastic disk (3), along with the two O-ring seals (2), from the process connection.
3. Place the first O-ring seal (2) back into the groove of the process connection.
4. Fit the metal grounding ring (3) in the process connection as illustrated.
5. Place the second O-ring seal (2) into the groove of the grounding ring.

6. Mount the process connection back on the sensor. When doing so, make sure to observe the maximum screw tightening torques for lubricated threads: 7 Nm (5.2 lbf ft)

### Welding the sensor into the pipe (welding connections)

**WARNING**

**Risk of destroying the electronics!**

- ▶ Make sure that the welding system is not grounded via the sensor or transmitter.

1. Tack-weld the sensor to secure it in the pipe. A suitable welding aid can be ordered separately as an accessory.
2. Release the screws on the process connection flange and remove the sensor, along with the seal, from the pipe.
3. Weld the process connection into the pipe.
4. Reinstall the sensor in the pipe, and in doing so make sure that the seal is clean and in the right position.

- If thin-walled pipes carrying food are welded correctly, the seal is not damaged by the heat even when mounted. However, it is recommended to disassemble the sensor and seal.
- It must be possible to open the pipe by approx. 8 mm (0.31 in) for disassembly.

### Cleaning with pigs

It is essential to take the internal diameters of the measuring tube and process connection into account when cleaning with pigs. All the dimensions and lengths of the sensor and transmitter are provided in the separate "Technical Information" document.

## 5.3 Post-installation check

| | |
|---|---|
| Is the device undamaged (visual inspection)? | ❑ |
| Does the measuring instrument correspond to the measuring point specifications?<br><br>For example:<br>▪ Process temperature<br>▪ Process pressure (refer to the section on "Pressure-temperature ratings" in the "Technical Information" document.<br>▪ Ambient temperature<br>▪ Measuring range | ❑ |
| Has the correct orientation been selected for the sensor → 🖹 15 ?<br><br>▪ According to sensor type<br>▪ As per medium temperature<br>▪ As per medium properties (outgassing, with entrained solids) | ❑ |
| Does the arrow on the sensor match the direction of flow of the medium→ 🖹 15? | ❑ |
| Is the tag name and labeling correct (visual inspection)? | ❑ |
| Is the device sufficiently protected from precipitation and direct sunlight? | ❑ |
| Are the fixing screws tightened securely? | ❑ |
| Was cleaning carried out in accordance with the specified cleaning specifications before initial commissioning? (See the "Cleaning" section of the "Operating Instructions".) | ❑ |

# 6 Disposal

If required by the Directive 2012/19/EU on waste electrical and electronic equipment (WEEE), the product is marked with the depicted symbol in order to minimize the disposal of WEEE as unsorted municipal waste. Do not dispose of products bearing this marking as unsorted municipal waste. Instead, return them to the manufacturer for disposal under the applicable conditions.

## 6.1 Removing the measuring device

1. Switch off the device.

**⚠ WARNING**

**Risk of personal injury due to process conditions!**

- Beware of hazardous process conditions such as pressure in the measuring device, high temperatures or aggressive media.

2. Carry out the mounting and connection steps from the "Mounting the measuring device" and "Connecting the measuring device" sections in reverse order.
3. Observe the safety instructions.

## 6.2 Disposing of the measuring device

**⚠ WARNING**

**Danger to personnel and environment from fluids that are hazardous to health.**

- Ensure that the measuring device and all cavities are free of fluid residues that are hazardous to health or the environment, e.g. substances that have permeated into crevices or diffused through plastic.

Follow these instructions when disposing of the device:

- Comply with national regulations.
- Ensure proper separation and reuse of the device components.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