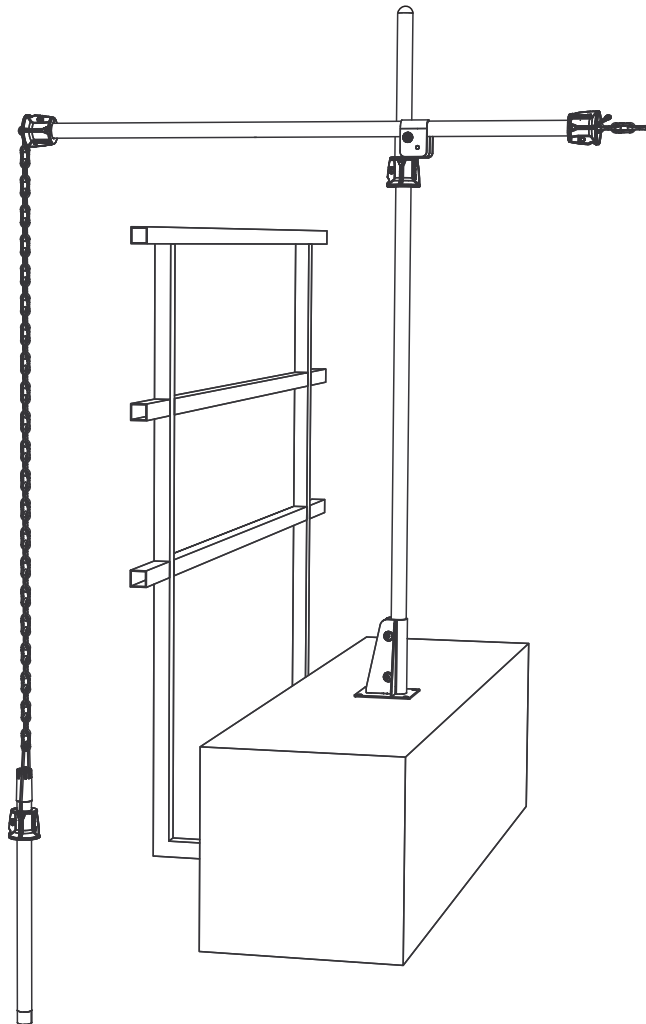


Operating Instructions

Flexdip CYH112





Holder for water and wastewater assemblies



Document information

Warnings

The structure, signal words and safety colors of the warning signs comply with the specifications of ANSI Z535.6 ("Product safety information in product manuals, instructions and other collateral materials").

Safety message structure	Meaning
 DANGER Causes (/consequences) Possible consequences if ignored ▶ Corrective action	This symbol alerts you to a dangerous situation. Failure to avoid the situation will result in a fatal or serious injury.
 WARNING Causes (/consequences) Possible consequences if ignored ▶ Corrective action	This symbol alerts you to a dangerous situation. Failure to avoid the situation can result in a fatal or serious injury.
 CAUTION Causes (/consequences) Possible consequences if ignored ▶ Corrective action	This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in minor or more serious injuries.
 NOTICE Cause/situation Possible consequences if ignored ▶ Action/note	This symbol alerts you to situations that can result in damage to property and equipment.

Symbols used




-  Additional information, tips
-  Permitted or recommended
-  Forbidden or not recommended

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1 Basic safety instructions

1.1 Requirements for personnel

- ▶ Installation, commissioning, operation and maintenance of the measuring system must only be carried out by specially trained technical personnel.
 - ▶ The technical personnel must be authorized for the specified activities by the system operator..
 - ▶ Electrical connection must only be carried out by a certified electrician.
 - ▶ The technical personnel must have read and understood these Operating Instructions and must follow the instructions they contain.
 - ▶ Measuring point faults may only be rectified by authorized and specially trained personnel.
- i** Repairs not described in the enclosed Operating Instructions may only be carried out directly at the manufacturer's or by the service organization.

1.2 Designated use

CYH112 is designed as a modular retainer system for sensors and assemblies in open basins, channels and tanks.

Any use other than that described here compromises the safety of persons and the entire measuring system and is therefore not permitted.

The manufacturer is not liable for damage resulting from improper or non-designated use.

NOTICE

Off-specification use

Can result in incorrect measurements, faults and even the failure of the measuring point

- ▶ Only use the product as defined in the product specifications.
- ▶ Pay attention to the technical data on the nameplate.

1.3 Occupational safety

As the user, you are responsible for complying with the following safety conditions:

- Installation instructions
- Local prevailing standards and regulations

1.4 Operational safety

- ▶ Before commissioning the entire measuring point, make sure all the connections are correct. Ensure that electrical cables and hose connections are not damaged.
- ▶ Do not operate damaged products, and secure them against unintentional commissioning. Mark the damaged product as defective.
- ▶ If faults cannot be rectified, the products must be taken out of service and secured against unintentional commissioning.

1.5 Product safety

The product is designed 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.

Relevant regulations and European standards have been met.

2 Incoming acceptance and product identification

2.1 Incoming acceptance

- Make sure the packaging is undamaged!
- Notify the supplier of any damage to the packaging. Keep the damaged packaging until the matter has been settled.
- Make sure the contents are undamaged!
- Notify the supplier of any damage to the delivery contents. Keep the damaged products until the matter has been settled.
- Check that the delivery is complete and nothing is missing. Compare the scope of delivery against the delivery papers and your order.
- Pack the product for storage and transportation in such a way that it is reliably protected against impact and moisture. The original packaging offers the best protection. Furthermore, the permitted ambient conditions must also be observed (see "Technical data").
- If you have any questions, contact your supplier or your local sales center.

2.2 Product identification


2.2.1 Nameplate

You can find the following information on the nameplate:

- Manufacturer details
- Order code
- Extended order code
- Serial number
- Operating conditions
- Safety information symbols

Compare the order code on the nameplate with your order.

2.2.2 Identifying the product

-  To establish your product version, enter the order code from the nameplate into the search field at the following address:
www.products.endress.com/order-ident

2.3 Scope of delivery

The delivery comprises:

- Ordered version of the assembly holder
- Operating Instructions in English.

2.4 Certificates and approvals

Explosion protection

The CYH112 holder may also be used in hazardous areas, Zone 1 and 2.

The holder does not fall under the scope of ATEX Directive 94/9/EC as it does not have its own potential source of ignition. Consequently, the holder does not bear ATEX identification marking. Potential equalization must be carried out as described in the "Installation conditions" section.

3 Installation

3.1 Installation conditions

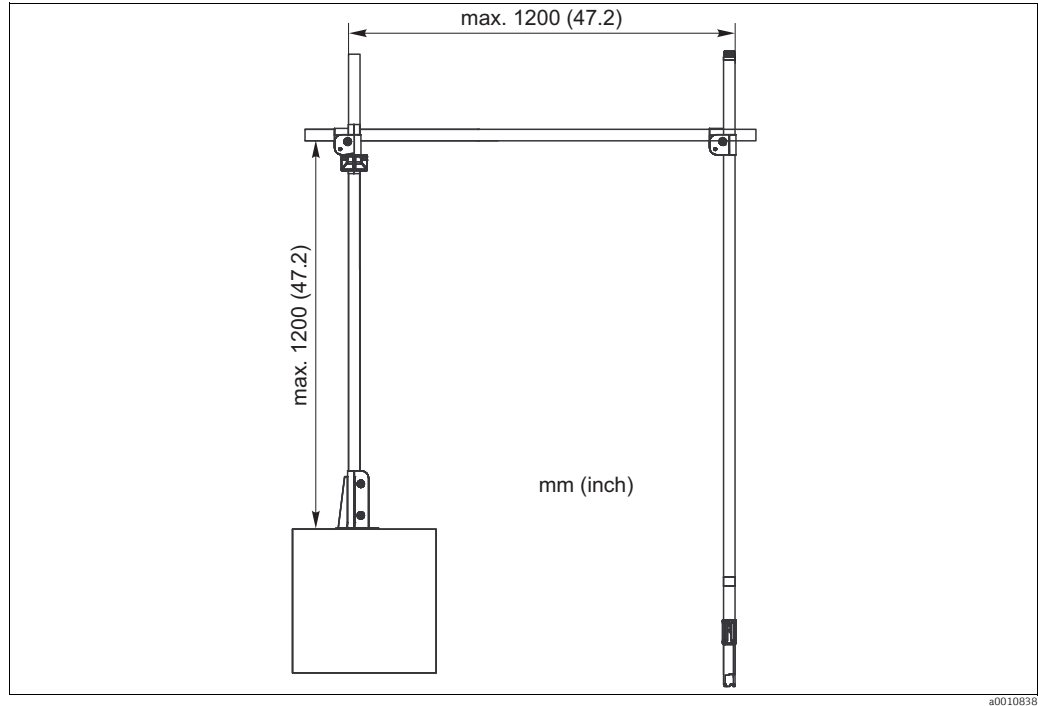


Fig. 1: Maximum extension

The values indicated apply to situations when mounting to floors, walls or railings. The maximum extension depends on the suspended load (weight of immersion tube, assembly and cable). See the following diagram:

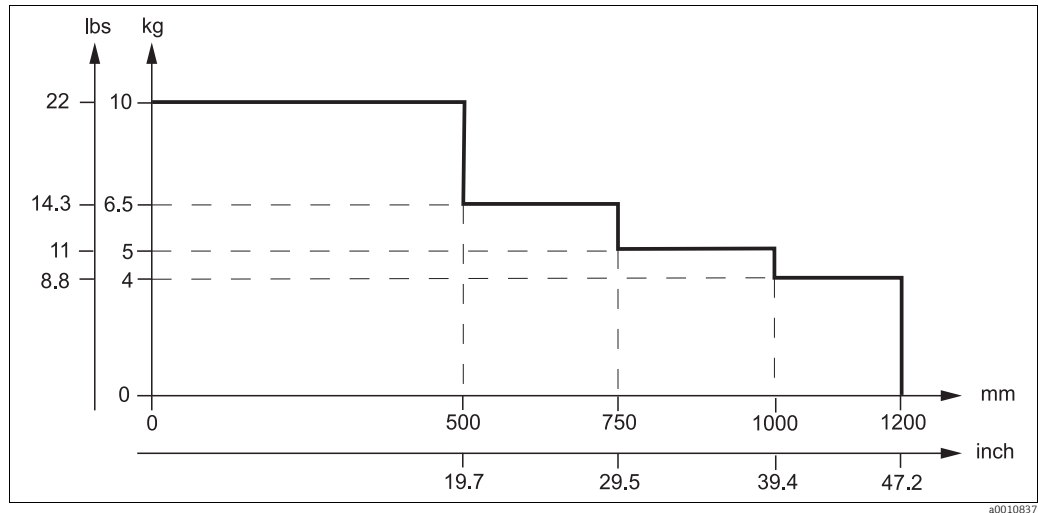


Fig. 2: Extension as a function of the suspended load

The maximum permitted load when mounting on railings and using a pendulum holder is 5 kg (11 lbs).

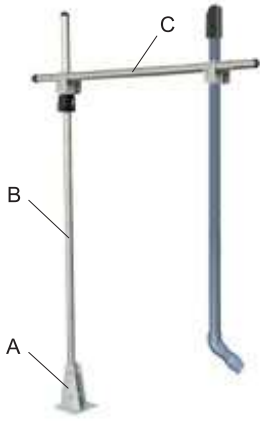
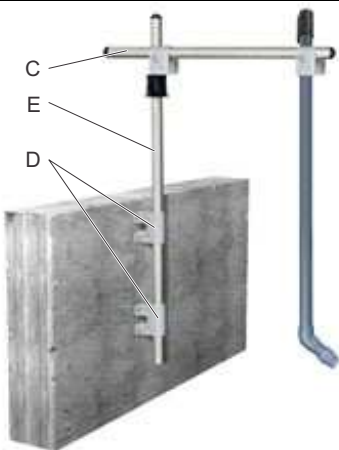
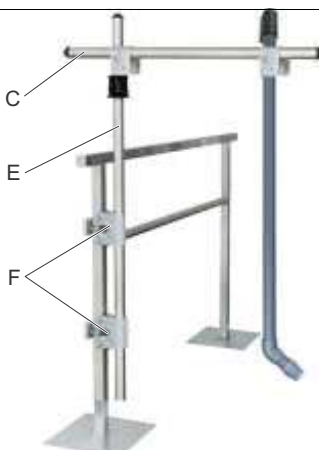
Potential matching must take place at the place of installation. All electrically conductive parts must be interconnected.



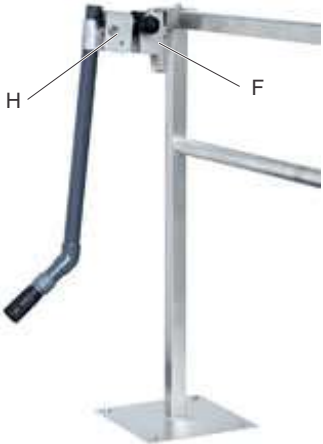
3.2 Installation instructions

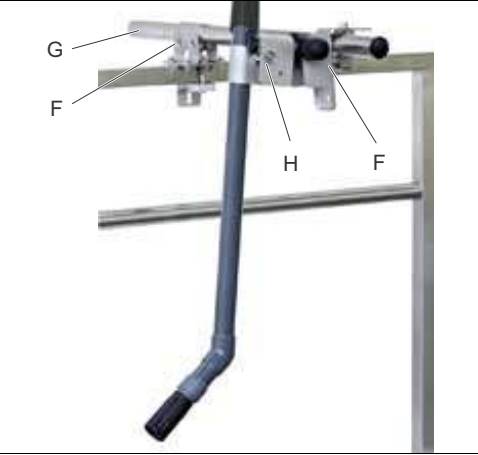
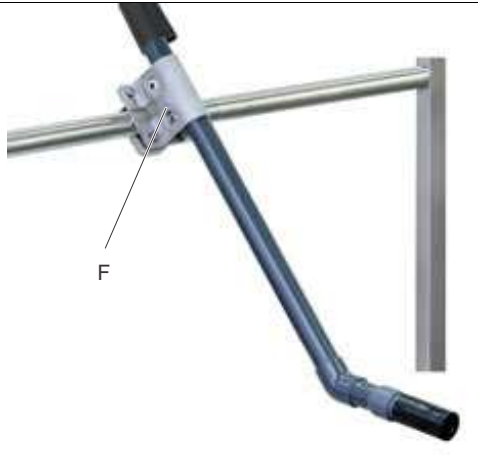
The table below contains the following information:


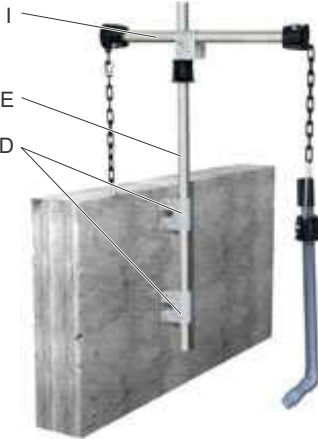

- Possible versions are listed in the left-hand column
- The sequence of the associated installation steps is explained in the right-hand column.


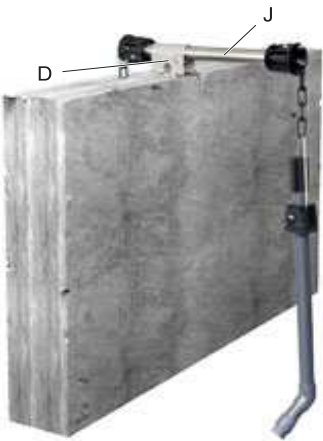
Installation steps A to K are described at the end.

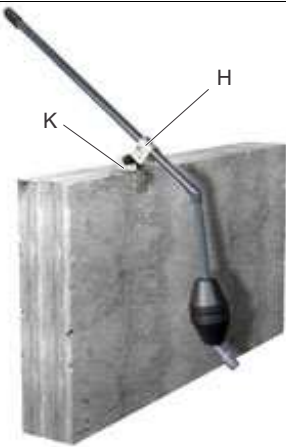
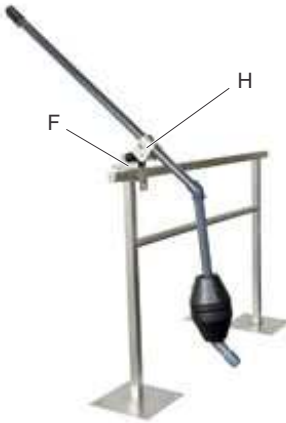
Version	Installation steps (steps A-K are described in the sections that follow)
 <p style="text-align: right; font-size: small;">a0022600</p>	<p>Ground mounting with main pipe and transverse pipe</p> <ol style="list-style-type: none"> 1. Installation of the base (A) 2. Installation of the main pipe in the base (B) 3. Installation of the transverse pipe for fixed-installation assemblies (C)
 <p style="text-align: right; font-size: small;">a0022604</p>	<p>Wall mounting with main pipe and transverse pipe</p> <ol style="list-style-type: none"> 1. Installation of the wall and capstone fastener (D) 2. Installation of the main pipe for wall and rail mounting (E) 3. Installation of the transverse pipe for fixed-installation assemblies (C)
 <p style="text-align: right; font-size: small;">a0022605</p>	<p>Rail mounting with main pipe and transverse pipe</p> <ol style="list-style-type: none"> 1. Installation of the railing bracket, pendulum holder and immersion tube tray (F) 2. Installation of the main pipe for wall and rail mounting (E) 3. Installation of the transverse pipe for fixed-installation assemblies (C)

Version	Installation steps (steps A-K are described in the sections that follow)
 <p style="text-align: right; font-size: small;">a0022606</p>	<p>Fastening with transverse pipe on a rail</p> <ol style="list-style-type: none"> 1. Installation of the railing bracket, pendulum holder and immersion tube tray (F) 2. Installation of the transverse pipe on the railing or capstone for fixed-installation assemblies (G)
 <p style="text-align: right; font-size: small;">a0022607</p>	<p>Fastening with transverse pipe on a capstone</p> <ol style="list-style-type: none"> 1. Installation of the wall and capstone fastener (D) 2. Installation of the transverse pipe on the railing or capstone for fixed-installation assemblies (G)
 <p style="text-align: right; font-size: small;">a0022608</p>	<p>Pendulum holder on railing</p> <ol style="list-style-type: none"> 1. Installation of the railing bracket, pendulum holder and immersion tube tray (F) 2. Installation of the cross clamp on the pendulum holder (H)

Version	Installation steps (steps A-K are described in the sections that follow)
 <p style="text-align: right; font-size: small;">a0022609</p>	<p>Holder on railing with transverse pipe and pendulum holder</p> <ol style="list-style-type: none"> 1. Installation of the railing bracket, pendulum holder and immersion tube tray (F) 2. Installation of the transverse pipe on the railing or capstone for fixed-installation assemblies (G) 3. Installation of the railing bracket, pendulum holder and immersion tube tray (F) 4. Installation of the cross clamp on the pendulum holder (H)
 <p style="text-align: right; font-size: small;">a0022610</p>	<p>Railing mounting (circular pipe) with immersion tube at an angle in the water</p> <ol style="list-style-type: none"> 1. Installation of the railing bracket, pendulum holder and immersion tube tray (F)

Version	Installation steps (steps A-K are described in the sections that follow)
 <p style="text-align: right; font-size: small;">a0022611</p>	<p>Ground mounting with main pipe and transverse pipe</p> <ol style="list-style-type: none"> 1. Installation of the base (A) 2. Installation of the main pipe (B) 3. Installation of the transverse pipe for assembly chain retainer (I)
 <p style="text-align: right; font-size: small;">a0022612</p>	<p>Wall mounting with main pipe and transverse pipe</p> <ol style="list-style-type: none"> 1. Installation of the wall and capstone fastener (D) 2. Installation of the main pipe for wall or rail mounting (E) 3. Installation of the transverse pipe for assembly chain retainer (I)
 <p style="text-align: right; font-size: small;">a0022621</p>	<p>Rail mounting with main pipe and transverse pipe</p> <ol style="list-style-type: none"> 1. Installation of the railing bracket, pendulum holder and immersion tube tray (F) 2. Installation of the main pipe for wall or rail mounting (E) 3. Installation of the transverse pipe for assembly chain retainer (I)

Version	Installation steps (steps A-K are described in the sections that follow)
 <p style="text-align: right; font-size: small;">a0022622</p>	<p>Fastening with transverse pipe on a rail</p> <ol style="list-style-type: none"> 1. Installation of the railing bracket, pendulum holder and immersion tube tray (F) 2. Installation of the transverse pipe for assembly chain retainer without main pipe (J)
 <p style="text-align: right; font-size: small;">a0022623</p>	<p>Fastening with transverse pipe on a capstone</p> <ol style="list-style-type: none"> 1. Installation of the wall and capstone fastener (D) 2. Installation of the transverse pipe for assembly chain retainer without main pipe (J)

Version	Installation steps (steps A-K are described in the sections that follow)
 <p style="text-align: right; font-size: small;">a0022624</p>	<p>Fastening on a capstone</p> <ol style="list-style-type: none"> 1. Installation of the pendulum holder on the capstone (K) 2. Installation of the cross clamp on the pendulum holder (H)
 <p style="text-align: right; font-size: small;">a0022625</p>	<p>Fastening on a rail</p> <ol style="list-style-type: none"> 1. Installation of the railing bracket, pendulum holder and immersion tube tray (F) 2. Installation of the cross clamp on the pendulum holder (H)

3.2.1 Installation of the base (A)

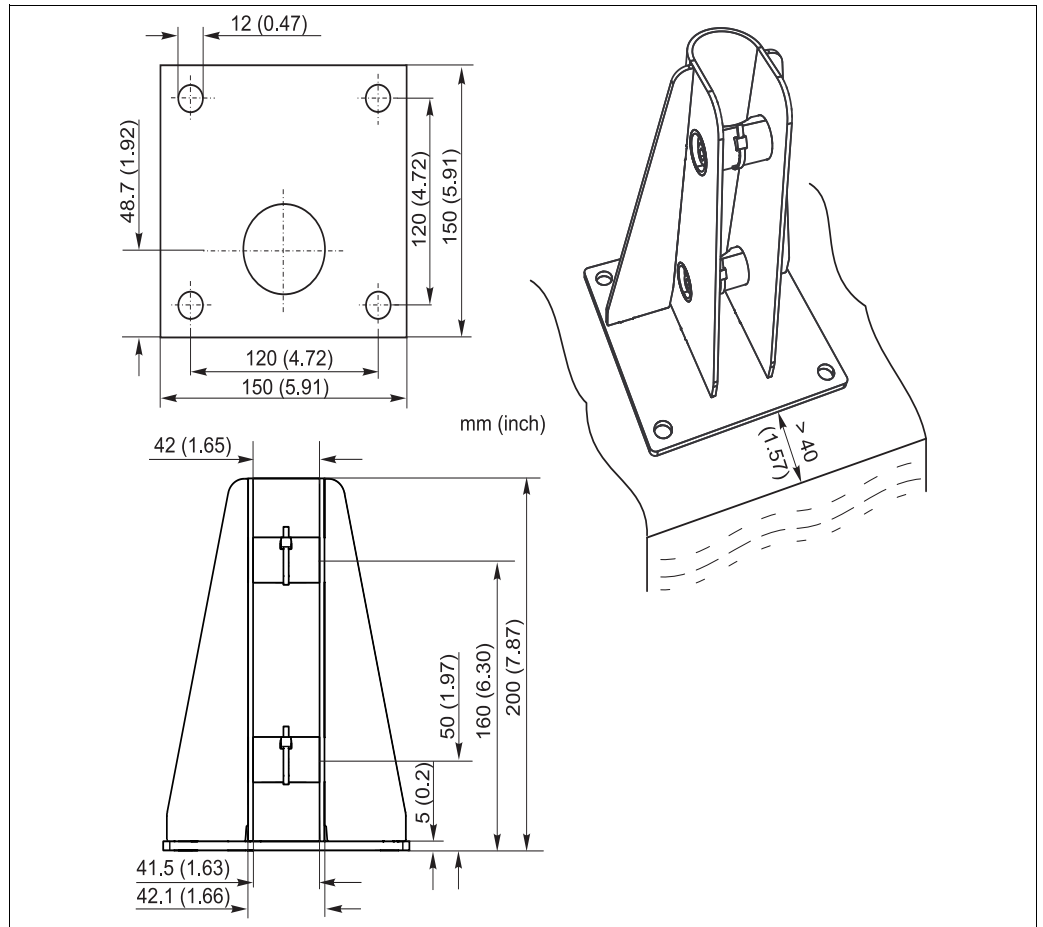


Fig. 3: Drilling dimensions for base


i Use M10 chemical anchors to mount the base on a concrete floor.

Mount the base as follows:

1. Set the base in position with the open part facing the basin rim. The minimum distance between the bores and the basin rim is 40 mm (1.57").
2. Mark the securing holes for the base on the floor.
3. Drill the securing holes with a 12 mm drill.
4. Install the four chemical anchors.
5. Firmly screw down the base.
6. Ground the base with a ground cable ($\geq 4 \text{ mm}^2$ ($\geq 12 \text{ AWG}$)).

3.2.2 Installation of the main pipe (B)

Mount the main pipe as follows:

1. With the funnel-shaped side pointing downwards, attach the multifunctional clamp ring to the main pipe. The distance between the upper edge of the multifunctional clamp ring and the base plate should not be exceeded 1100 mm (43.3") (see installation conditions).
The multifunctional clamp ring acts as an anti-slip lock here.
2. Firmly screw down the multifunctional clamp ring.
3. Adjust the clamps in the base (→  4).
4. Insert the main pipe into the base.
5. Lift the main pipe approx. 5 mm (0.2") and bolt it down. In this way, no backwater can form in the main pipe.
6. Attach the protection cap to the upper end of the main pipe.

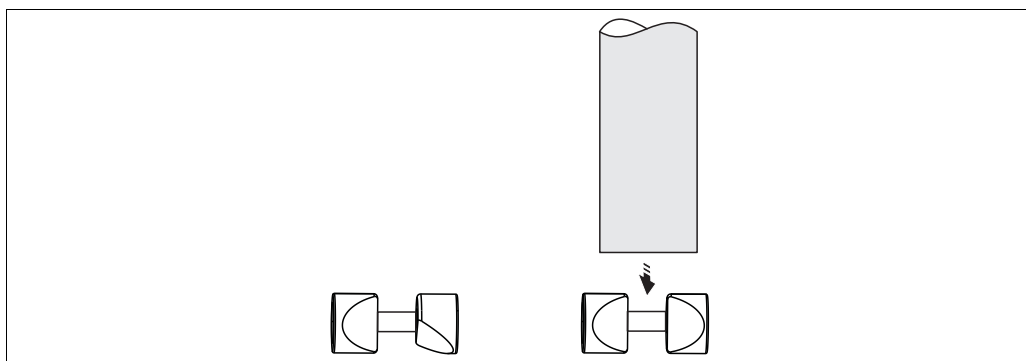


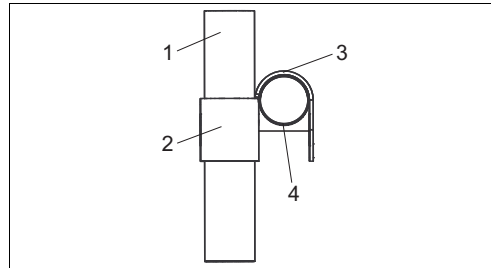
Fig. 4: Adjusting the clamps

0014991

3.2.3 Installation of the transverse pipe for fixed-installation assemblies (C)

Mount the transverse pipe as follows:

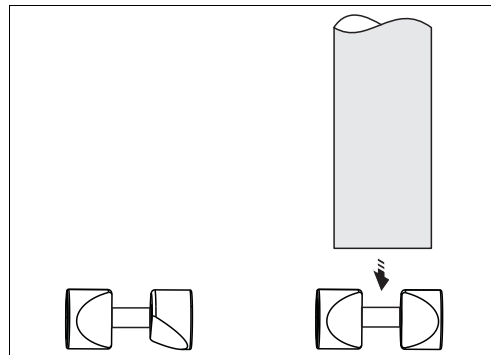
1. If you have not done so already, attach the protection cap to the upper end of the main pipe.



- 1 Main pipe
- 2 Cross clamp, closed side to basin
- 3 Cross clamp, closed side at top
- 4 Transverse pipe




a0011292

Fig. 5: Mounting the cross clamp



a0014991

Fig. 6: Adjusting the clamps

2. Adjust the clamps on the cross clamp (→  6).
3. Slide the cross clamp over the transverse pipe. Make sure that the closed side of the cross clamp is at the top (→  5).
4. Attach the cross clamp, along with the transverse pipe, to the main pipe. Make sure that the closed side of the cross clamp faces the basin (→  5).
5. Now mount the cross clamp for the assembly on the transverse pipe. Make sure that the closed sides are pointing upwards and to the basin.
6. Align the holder.
7. Tighten the clamping screws.

3.2.4 Installation of the wall and capstone fastener (D)

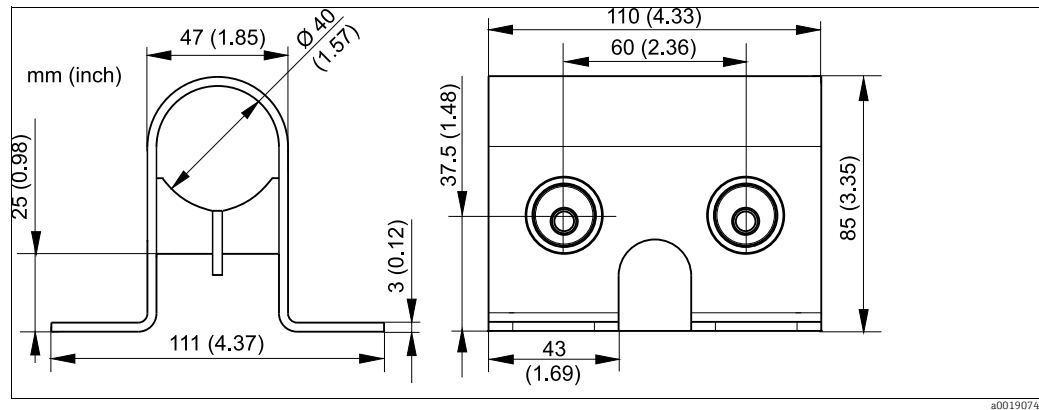


Fig. 7: Dimensions for wall and capstone fastener

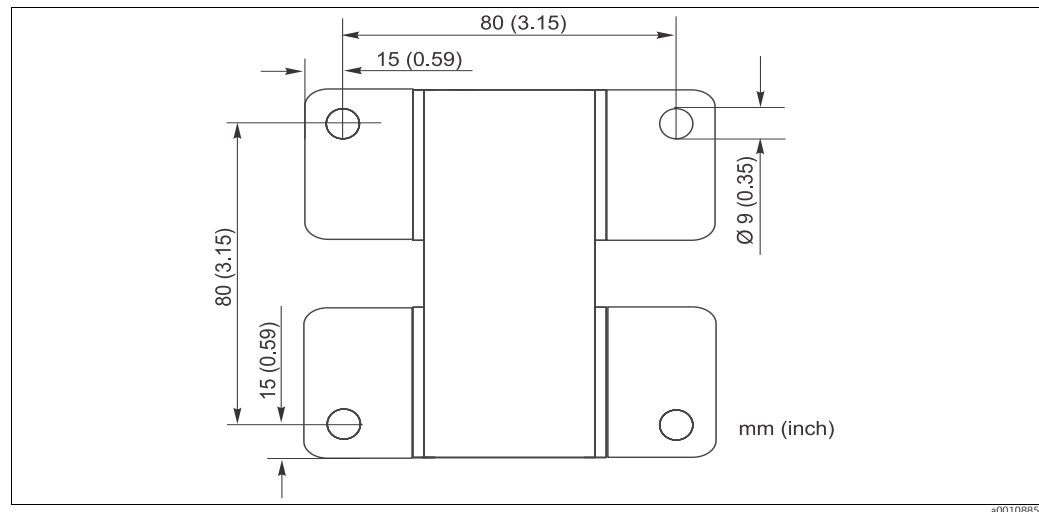


Fig. 8: Dimensions of bores for wall or capstone fastener


i Use M8 chemical anchors for mounting on a concrete floor or concrete wall.

Mount the holders for wall or capstone mounting as follows:

1. Mark the securing holes on the concrete.
2. Drill the securing holes with a 10 mm drill.
3. Install the chemical anchors.
4. Firmly screw down the holder.
(In the case of wall mounting with two wall fasteners, only screw on the holders loosely. This makes it easier to install the main pipe if the wall is uneven. Do not forget to tighten the two holders afterwards.)
5. Ground the holder with a ground cable ($\geq 4 \text{ mm}^2$ ($\geq 12 \text{ AWG}$)).

3.2.5 Installation of the main pipe for wall or rail mounting (E)

Mount the main pipe as follows:

1. With the funnel-shaped side pointing downwards, attach the multifunctional clamp ring to the main pipe.
The multifunctional clamp ring acts as an anti-slip lock here.
2. Firmly screw down the multifunctional ring.
3. Adjust the clamps in the wall or rail fastener (→  9).
4. Insert the main pipe through the wall or rail fastener.
5. Align the main pipe.
6. Tighten the clamping screws.
7. Attach the protection cap to the upper end of the main pipe.

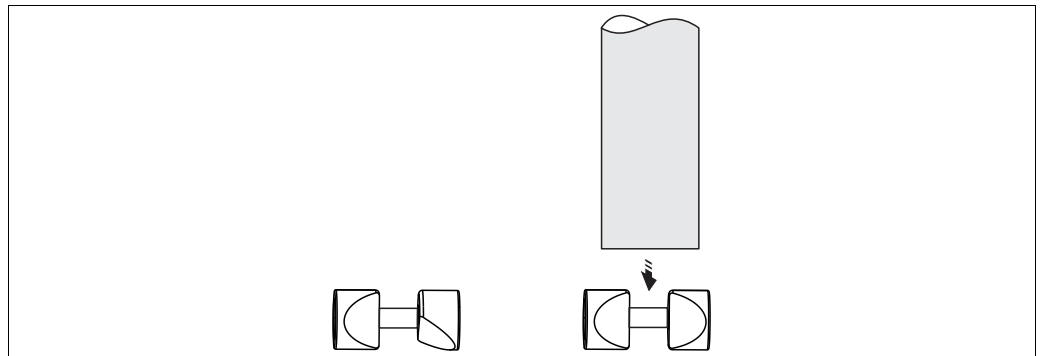


Fig. 9: Adjusting the clamps

3.2.6 Installation of the railing bracket, pendulum holder and immersion tube tray (F)

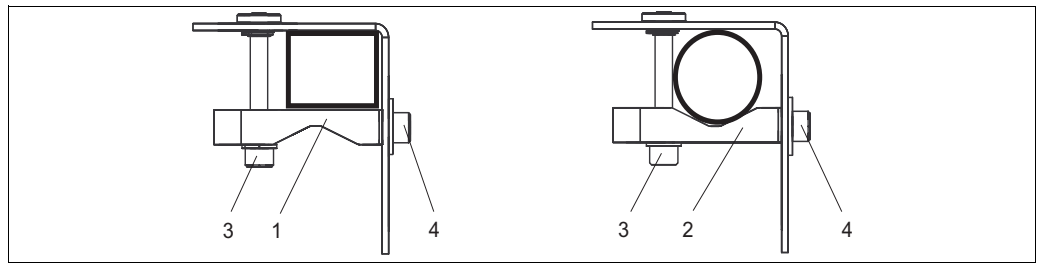



Fig. 10: Installing the railing bracket, pendulum holder and immersion tube tray

- 1 Mounting on rectangular pipes
- 2 Mounting on circular pipes
- 3 Securing screw
- 4 Securing screw in clamping jaw

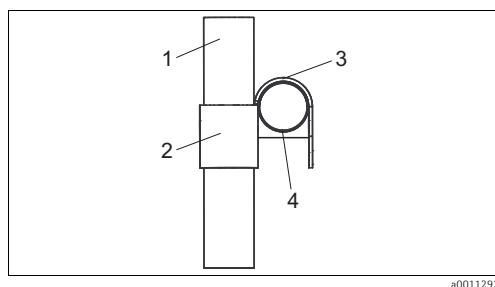
 In the case of rectangular pipes, mount the clamping jaw with the V-notch facing outwards. In the case of circular pipes, mount the clamping jaw with the V-notch facing inwards.

Mount the holder as follows:

1. Screw in securing screws 3 and 4 such that they sit loosely.
2. Press the clamping jaw against the pipe and ensure that the clamping jaw is aligned parallel to the holder.
3. Tighten securing screw 4.
4. Position securing screw 3 close to the pipe.
5. Tighten securing screw 3.

3.2.7 Installation of the transverse pipe on the railing or capstone for fixed-installation assemblies (G)

Mount the transverse pipe as follows:



- 1 Assembly
- 2 Cross clamp, closed side to basin
- 3 Cross clamp, closed side at top
- 4 Transverse pipe

Fig. 11: Mounting the cross clamp

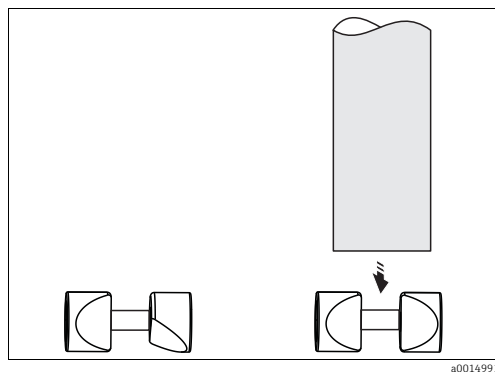
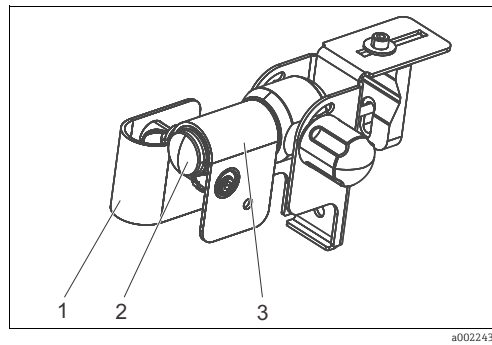


Fig. 12: Adjusting the clamps

1. Adjust the clamps on the cross clamp (→ Fig. 12) and on the capstone or rail fastener.
2. Mount the cross clamp for the assembly on the transverse pipe. Make sure that the closed sides are pointing upwards and to the basin (→ Fig. 11).
3. Push the transverse pipe through the capstone or rail fastener.
4. Align the holder.
5. Tighten the clamping screws.

3.2.8 Installation of the cross clamp on the pendulum holder (H)

Mount the cross clamp as follows:



- 1 Cross clamp, closed side to basin
- 2 Pendulum holder
- 3 Cross clamp, closed side at top

Fig. 13: Mounting the cross clamp

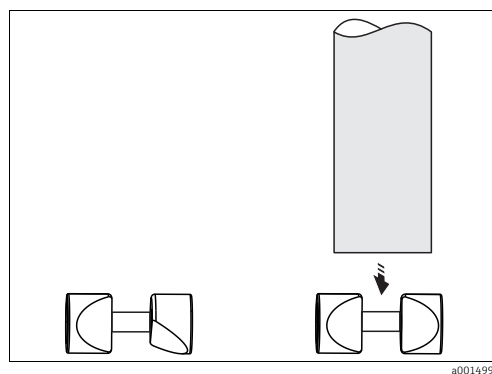





Fig. 14: Adjusting the clamps

1. Adjust the clamps on the cross clamp (→  14).
2. Mount the cross clamp on the pendulum holder. Make sure that the closed sides are pointing upwards and to the basin (→  13).
3. Tighten the clamping screws.

 The method of operating the pendulum holder is described in the "Operation options" section.

3.2.9 Installation of the transverse pipe for assembly chain retainer (I)

Prepare the main pipe as follows:

1. With the funnel-shaped side pointing downwards, attach the multifunctional clamp ring to the main pipe. The distance between the upper edge of the multifunctional clamp ring and the base plate should not be exceeded 1100 mm (43.3") (see installation conditions).
2. Firmly screw down the multifunctional clamp ring.
3. If you have not done so already, attach the protection cap to the upper end of the main pipe.

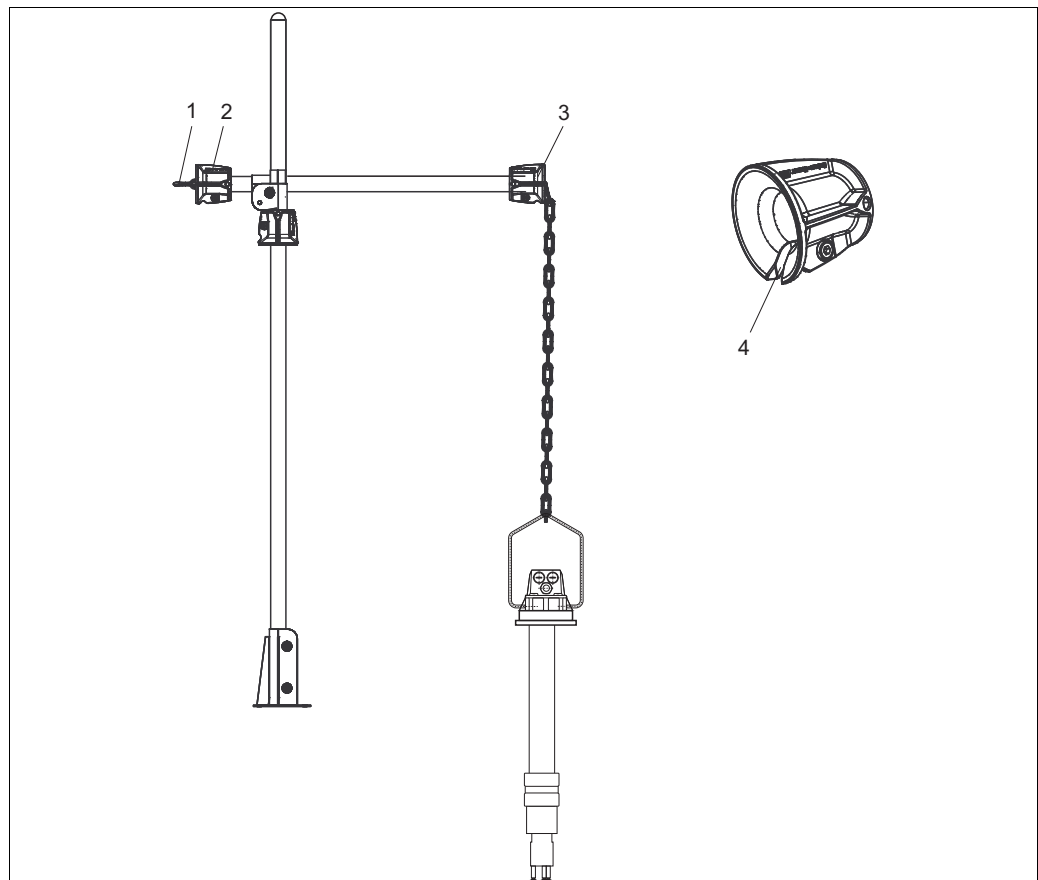


Fig. 15: Mounting the multifunctional clamp rings on the transverse pipe

- 1 Triangular carabiner as anti-slip lock for the chain
- 2 Multifunctional clamp ring (stand side), slot at bottom
- 3 Multifunctional clamp ring (basin side), slot at top
- 4 Slot in multifunctional clamp ring

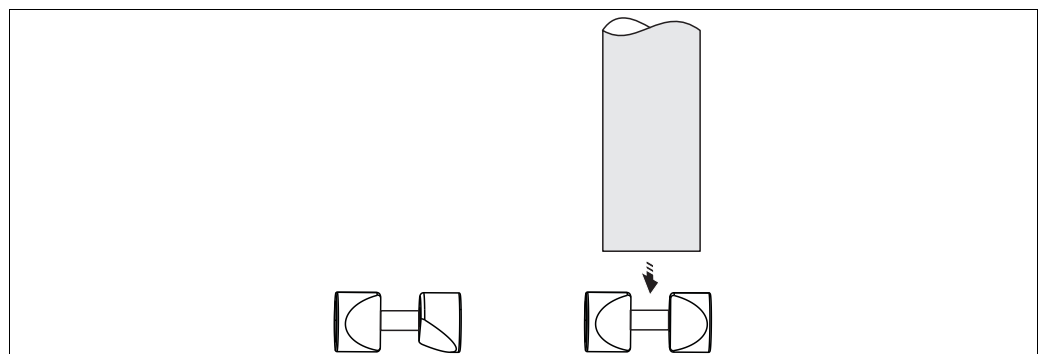





Fig. 16: Adjusting the clamps

Mount the transverse pipe as follows:

1. Adjust the clamps on the cross clamp (→  16).
2. Slide the cross clamp over the transverse pipe. Make sure that the closed sides of the cross clamp are pointing upwards and to the basin.
3. Mount a multifunctional clamp ring at either end of the transverse pipe (funnel-shaped sides facing outwards).
4. Adjust the multifunctional clamp rings (the slot should be at the bottom on the stand side and at the top on the basin side (→  15).
5. Guide the chain through the transverse pipe.
6. Slide the chain into the slot of the multifunctional clamp ring (on the stand side) and secure the chain on both sides with the triangular carabiner (item 1 →  15).
7. Attach the cross clamp, along with the transverse pipe, to the main pipe.
8. Align the holder.
9. Tighten the clamping screws.

3.2.10 Installation of the transverse pipe for assembly chain retainer without main pipe (J)

Install the transverse pipe as follows:

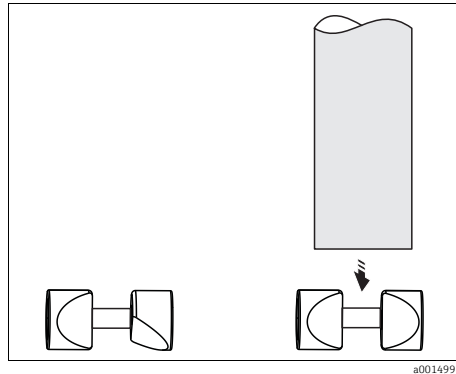




Fig. 17: Adjusting the clamps

1. Adjust the clamps (→ ) on the capstone or rail fastener (→  item 1).
2. Mount the multifunctional clamp ring (item 3) on one end of the transverse pipe (item 2) with the funnel-shaped side facing outwards.
3. Push the transverse pipe (item 2) through the capstone or rail fastener.
4. Mount the second multifunctional clamp ring (item 4) on the other end of the transverse pipe with the funnel-shaped side facing outwards.
5. Guide the chain (item 5) through the transverse pipe.
6. Secure the chain with the triangular carabiner (item 6).
7. Align the transverse pipe, making sure that the slot (item 7) on the multifunctional clamp ring is pointing upwards on the basin side (item 3) and downwards on the stand side (item 4).
8. Tighten the clamping screws.

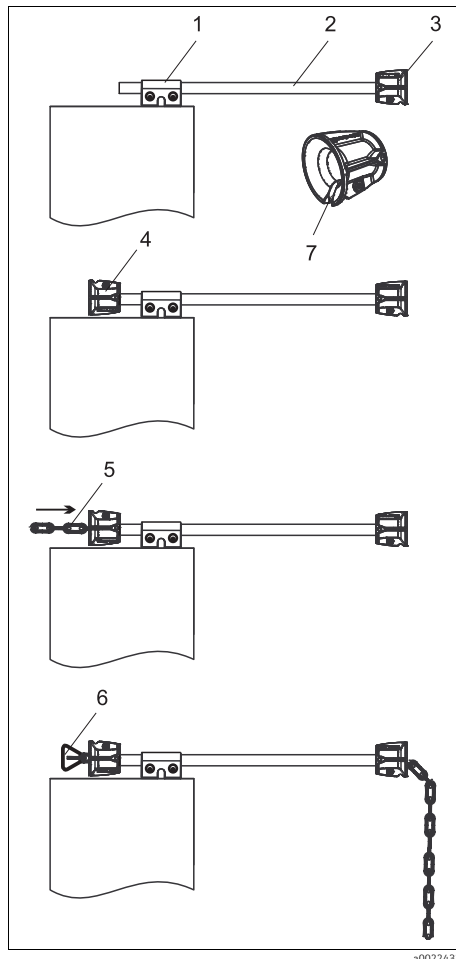


Fig. 18: Installation on capstone

- 1 Capstone fastener
- 2 Transverse pipe
- 3 Multifunctional clamp ring (basin side), slot at top
- 4 Multifunctional clamp ring (stand side), slot at bottom
- 5 Chain
- 6 Triangular carabiner
- 7 Slot in multifunctional clamp ring

3.2.11 Installation of the pendulum holder on the capstone (K)

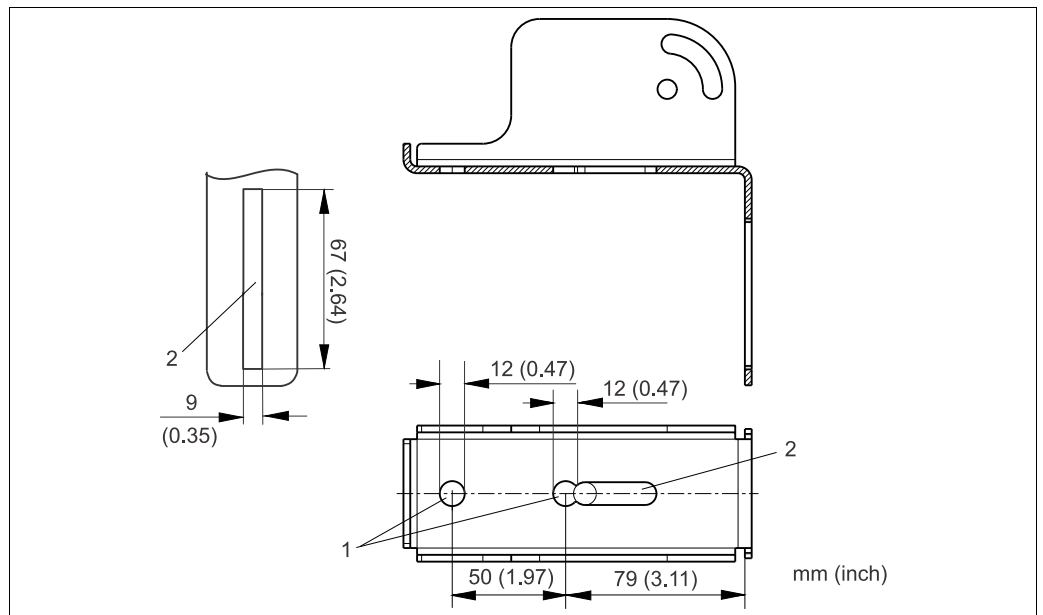


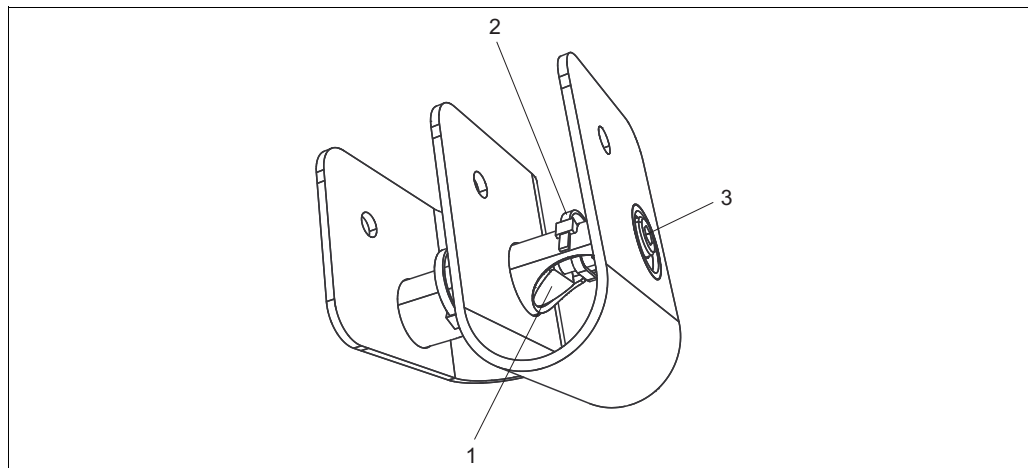
Fig. 19: Dimensions of bores for pendulum holder on capstone

i Use M10 chemical anchors to mount the pendulum holder on a capstone.

Mount the pendulum holder as follows:

1. Mark the securing holes for the pendulum holder on the floor.
2. Drill the securing holes with a 12 mm drill.
3. Install the two chemical anchors.
4. Firmly screw down the pendulum holder.
5. Ground the pendulum holder with a ground cable (4 mm² (≥12 AWG)).

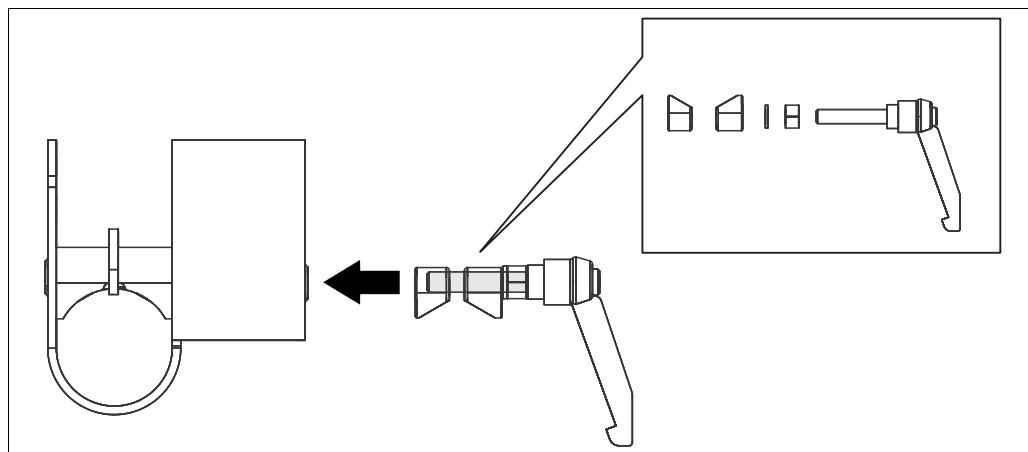
3.2.12 Installing the quick-action clamp



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Fig. 20: Clamping unit

- 1 Clamps
- 2 Cable tie
- 3 Locking screw



a0011403

Fig. 21: Mounting the quick-action clamp

Mount the quick-action clamp as follows:

1. Cut off the cable tie (→ ☒ 20, item 2) used to secure the clamps provided.
2. Remove the clamping unit.
3. Insert the quick-action clamp.
4. Adjust the clamps.
5. Secure the quick-action clamp with a cable tie.
6. Mount the second quick-action clamp in the same way.

3.3 Post-installation check

- After mounting, check whether all the screws are tightened correctly.
- If mounting using a pendulum holder, ensure the assembly has sufficient clearance.

4 Operation options

▲ WARNING

There is a risk of infection when working with wastewater!

- For this reason, always wear protective gloves, goggles and protective clothing.

4.1 Setting the assembly to the service position (fixed installation)

Set the assembly to the service position as follows:

1. Release the screws on the cross clamp.
2. Move the transverse pipe with the assembly to the stand side (rotational movement 2).
3. Turn the transverse pipe 90° (rotational movement 1, assembly tilts upwards).
4. Move the transverse pipe over the basin rim and the railing.
5. Move the transverse pipe back until the desired service position is reached.

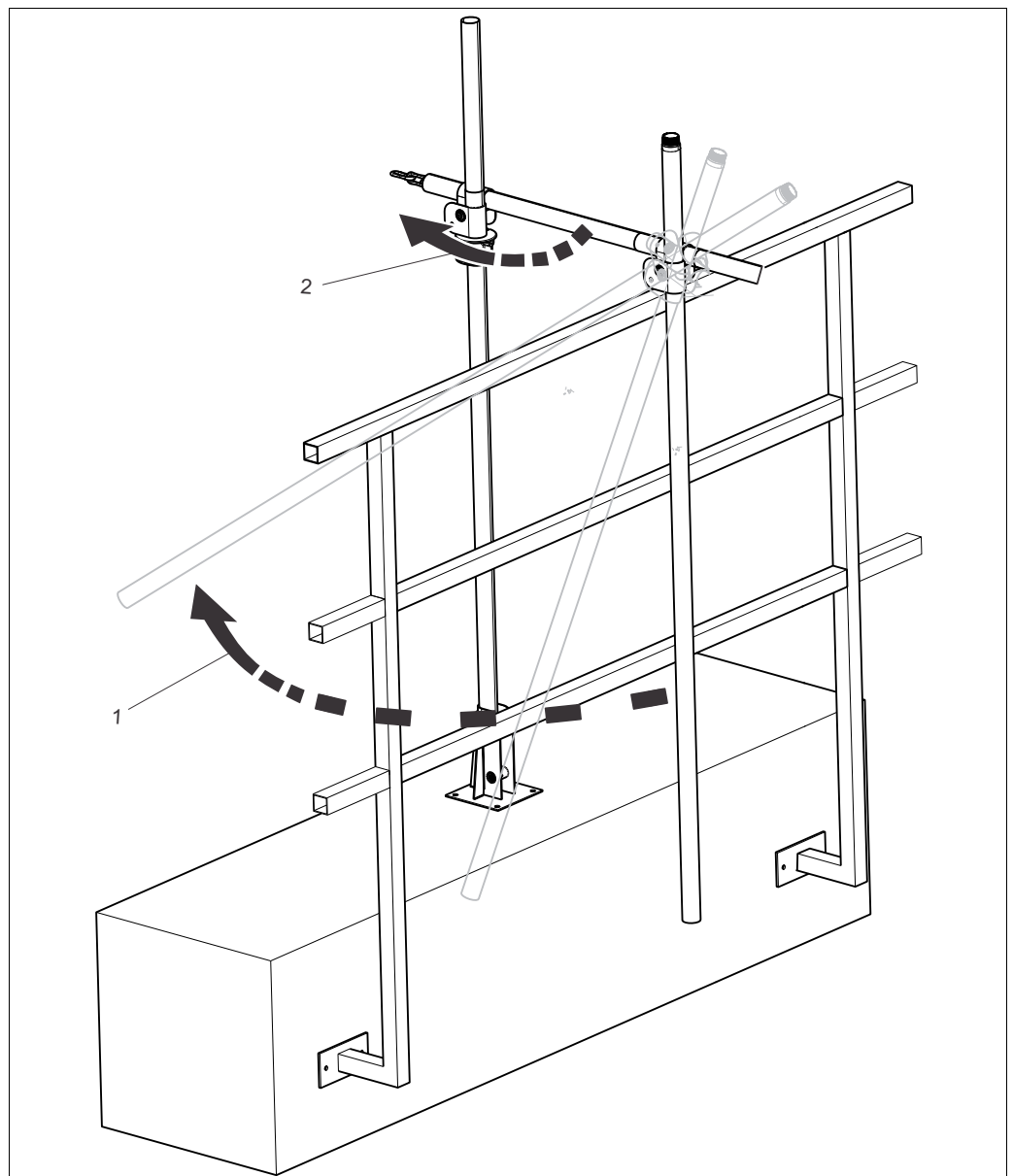


Fig. 22: Setting the assembly to the service position

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4.2 Setting the assembly to the service position (chain retainer)

Set the assembly to the service position as follows:

1. Pull up the assembly as far as possible by the chain.
2. Suspend the chain from the multifunctional clamp ring and secure the chain with the triangular carabiner.
3. Release the screws on the cross clamp.
4. Move the transverse pipe with the assembly to the stand side to the desired service position (if necessary, raise the assembly over the railing).

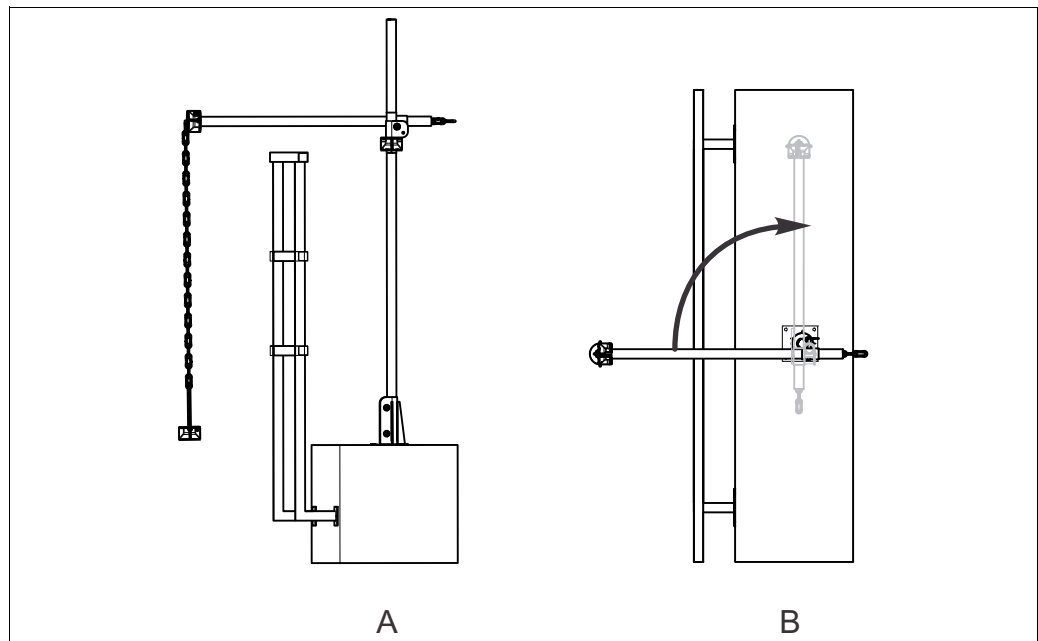


Fig. 23: Setting to the service position

- A Measuring position
B Service position

4.3 Operating the pendulum holder

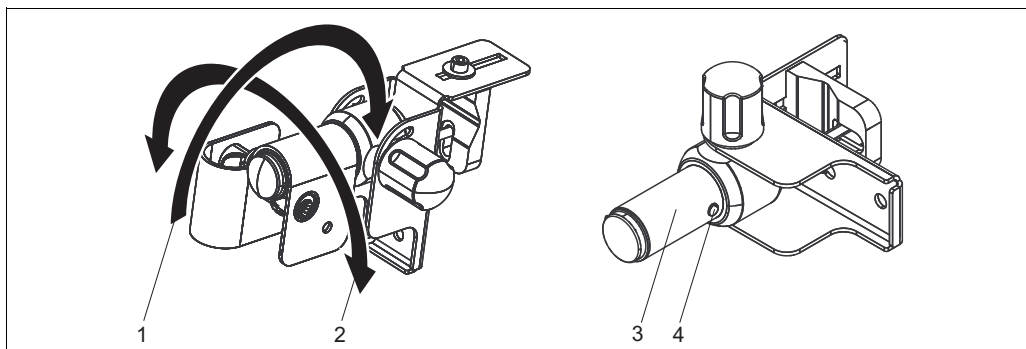



Fig. 24: Specifying the swing axis

- 1 Swing axis with rotating sleeve blocked
- 2 Swing axis with rotating sleeve not blocked
- 3 Rotating sleeve
- 4 Blocking screw for rotating sleeve

You can determine the swinging direction (swing axis) at the pendulum holder by blocking the rotating sleeve (→  24, item 3) (item 1) or not blocking the rotating sleeve (item 2).

To specify swinging direction "1", proceed as follows:

1. Unscrew the cross clamp from the pendulum holder.
2. Unscrew the blocking screw (item 4) slightly until the rotating sleeve can no longer rotate.
3. Reattach the cross clamp to the pendulum holder and screw it tight.
4. Release the locking lever.
5. Press the locking button to release the square head bolt on the opposite side.

To specify swinging direction "2", proceed as follows:

1. Unscrew the cross clamp from the pendulum holder.
2. Screw the blocking screw into the plastic body until the rotating sleeve can rotate slightly.
3. Reattach the cross clamp to the pendulum holder and screw it tight.
4. Tighten the locking lever.

4.4 Assembly anti-slip lock for rail mounting

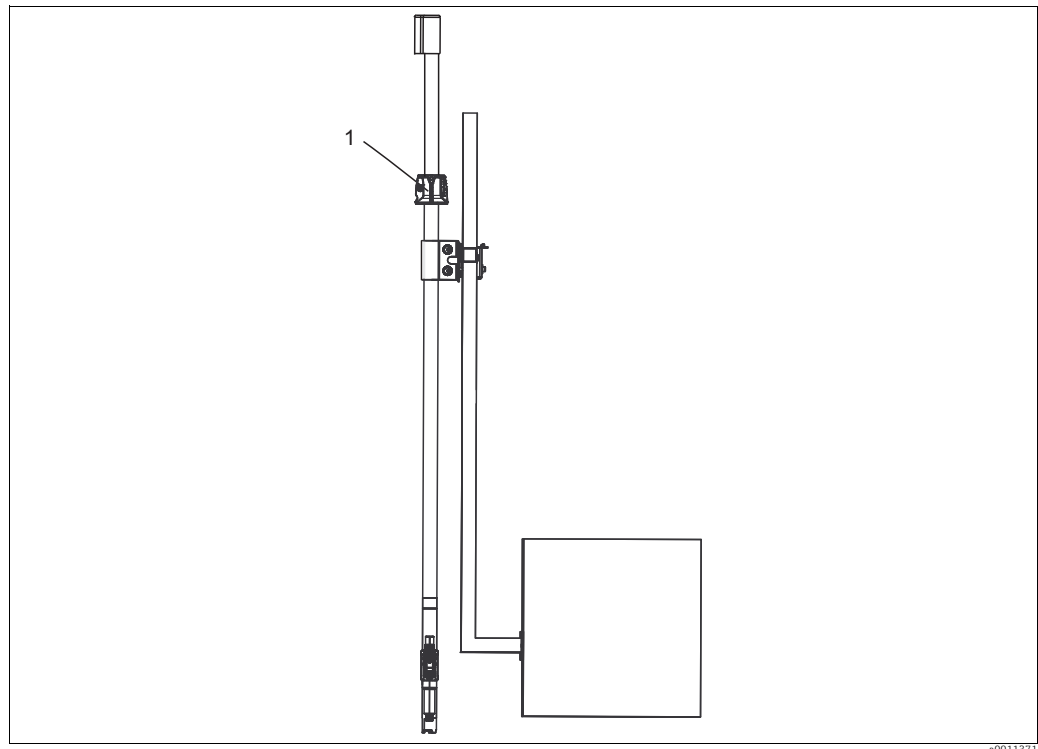


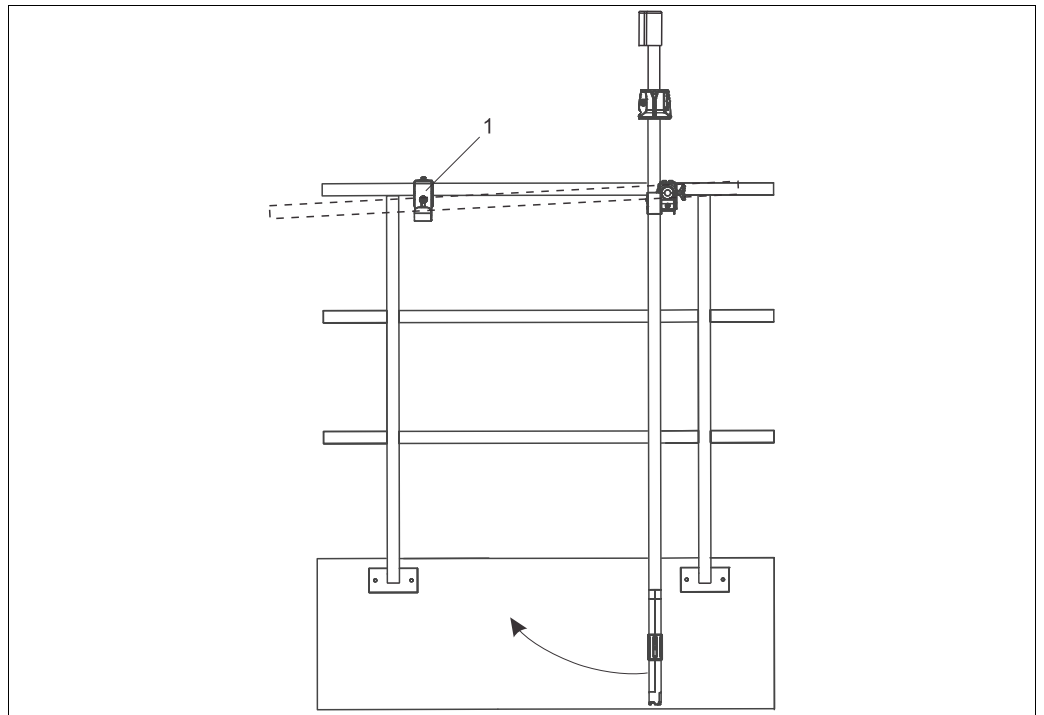
Fig. 25: Anti-slip lock for rail mounting

1 Multifunctional clamp ring

The multifunctional clamp ring acts as an anti-slip lock for rail mounting. The multifunctional clamp ring is available as an accessory. Mount the multifunctional clamp ring at the desired height.

4.5 Immersion tube tray

The immersion tube tray makes it easier to perform maintenance tasks with rail mounting involving a pendulum holder and cross clamp.



a0011372

Fig. 26: Immersion tube tray for assembly service position

1 Immersion tube tray

5 Maintenance

▲ WARNING

There is a risk of infection when working with wastewater!

► For this reason, always wear protective gloves, goggles and protective clothing.

Lubricate the clamping systems and threads at regular intervals.

Proceed as follows to do so:

1. Clean the clamps and threads with soapy water.
2. Dry the clamps and threads.
3. Provide the cleaned parts with a thin film of lubricant (e.g. Syntheso Glep1).

6 Repair

6.1 Return

The measuring device must be returned if repairs or a factory calibration are required, or if the wrong product has been ordered or delivered. According to legal regulations Endress+Hauser, as an ISO-certified company, is required to follow certain procedures when handling returned products that are in contact with the medium.

To ensure the safe, reliable and professional return of your product to the manufacturer, visit our website to obtain information about the procedure and basic conditions.
www.services.endress.com/return-material

6.2 Disposal

Please comply with local regulations when disposing of the product.

7 Accessories

Multifunctional clamp ring

- In the case of a chain retainer, the rear multifunctional clamp ring keeps the chain locked in place.
- In the case of main and transverse pipes, you use the multifunctional clamp ring to set the working height on the main pipe.
- The multifunctional clamp ring acts as an anti-slip lock on transverse pipes, main pipes and on assemblies.
- Material: POM - GF
- Order number: 71092049

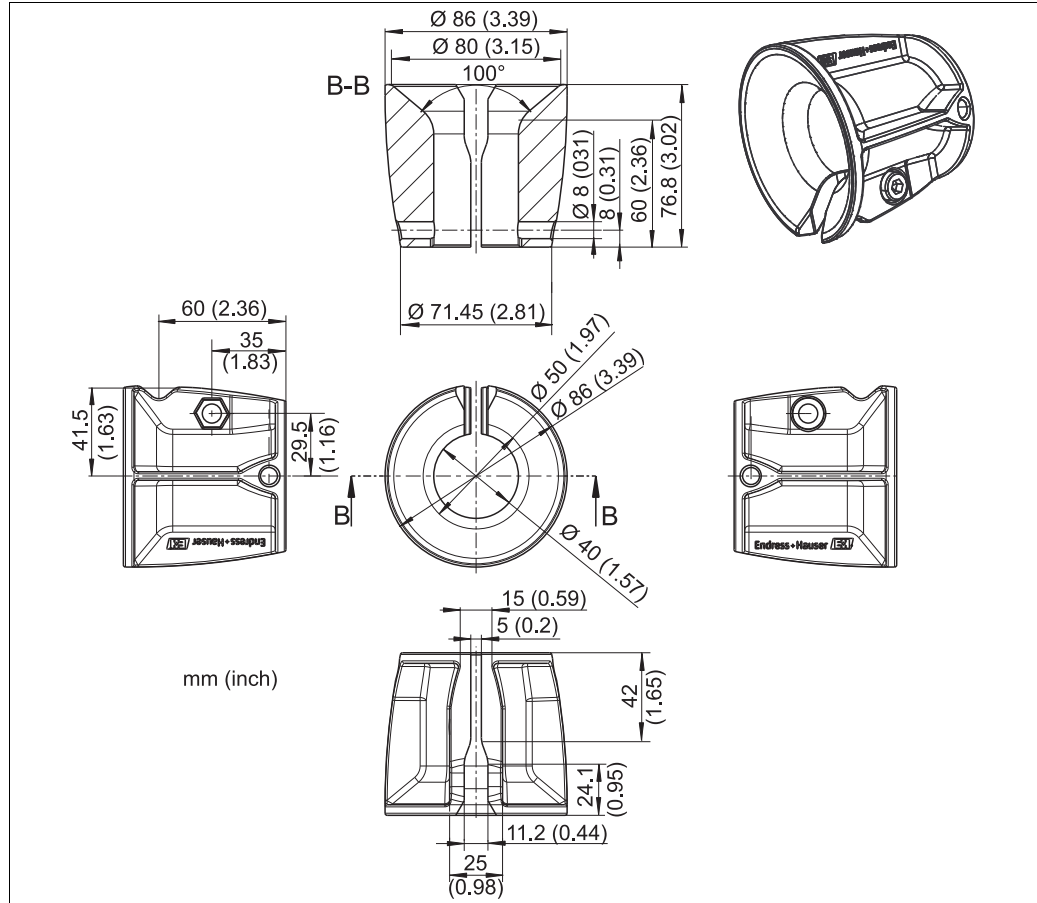


Fig. 27: Multifunctional clamp ring

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Immersion tube tray

- Is used as a holder for the immersion tube during maintenance tasks
- Material: stainless steel 1.4404 (AISI 316L)
- Order number: 71092054

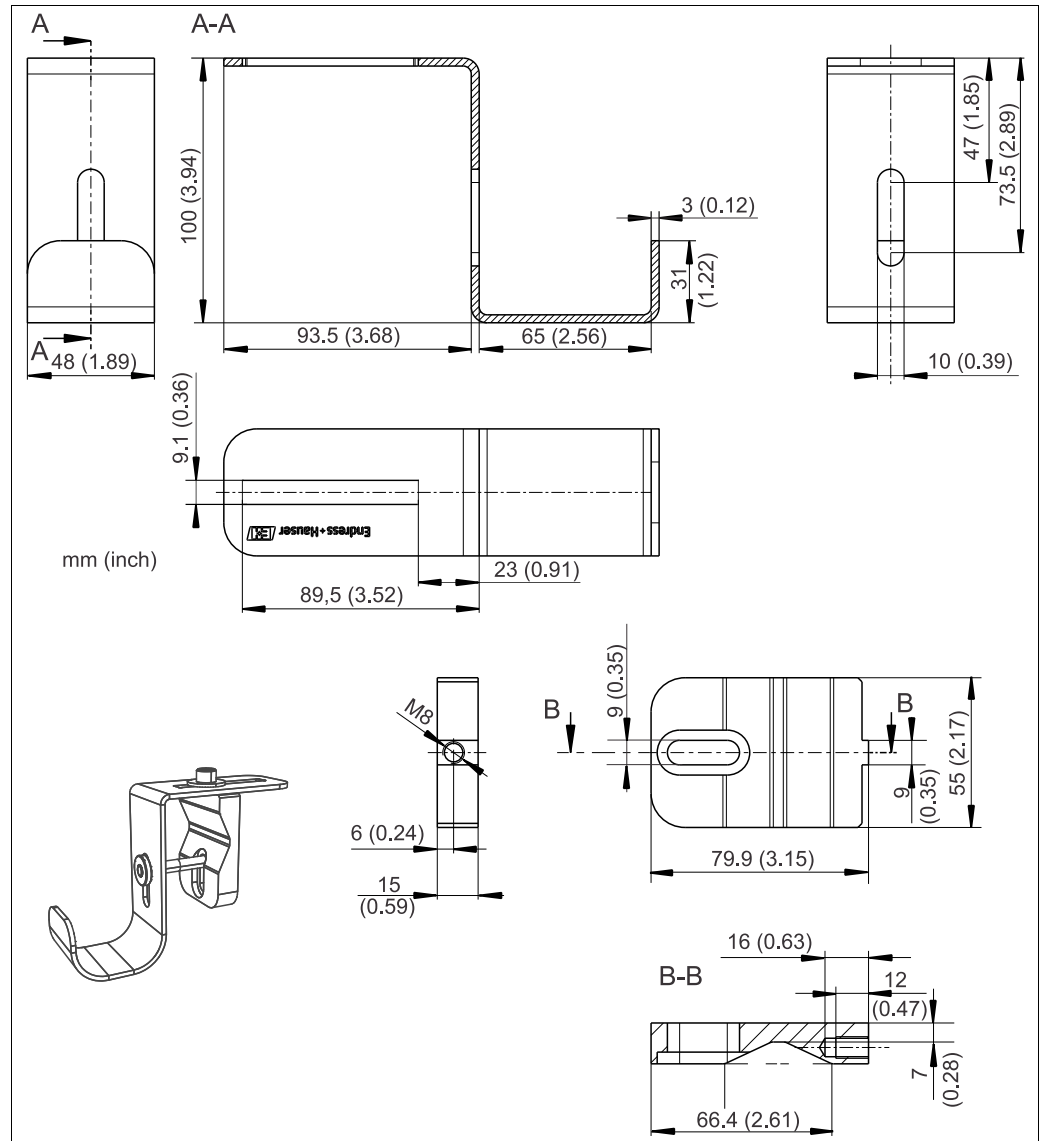


Fig. 28: Immersion tube tray

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Quick-action clamp (2-piece set)

- Replaces the screw connection
- Material: stainless steel 1.4301 (AISI 304); lever: PA
- Order number: 71092050

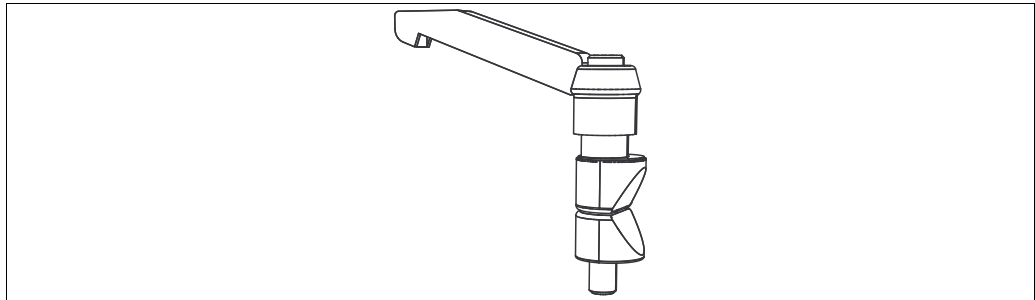


Fig. 29: Quick-action clamp

Triangular carabiner

- Is used to secure chains
- Material: stainless steel
- Order number: 71092052

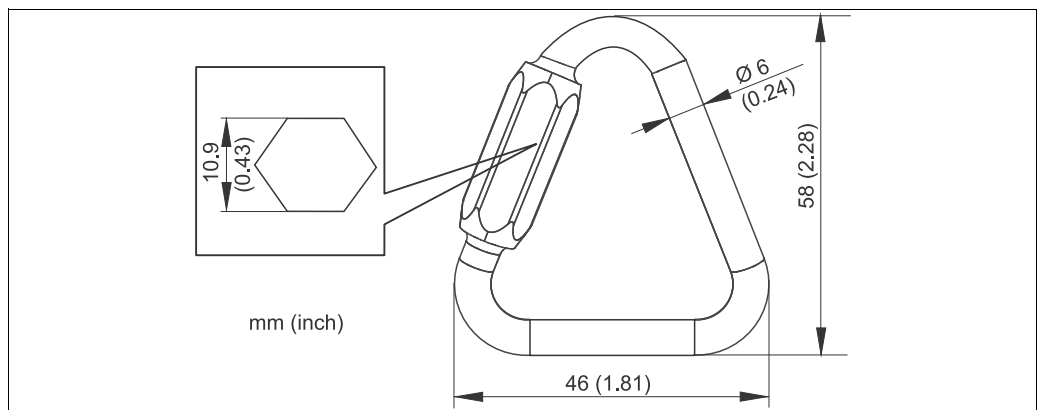


Fig. 30: Triangular carabiner

Hook-and-loop cable ties (4-piece set)

- Is used to secure cables
- Material: PE / PA (polyethylene / polyamide)
- Order number: 71092051

Allen key

- Across flats: AF 6
- Order number: 71092057

Pipe protection cap

- Material: PE (polyethylene)
- Order number: 71092053

Weather protection cover CYY101 for field devices, absolutely essential if operating the unit outdoors

- Material: stainless steel 1.4301 (AISI 304)
- Order No. CYY101-A

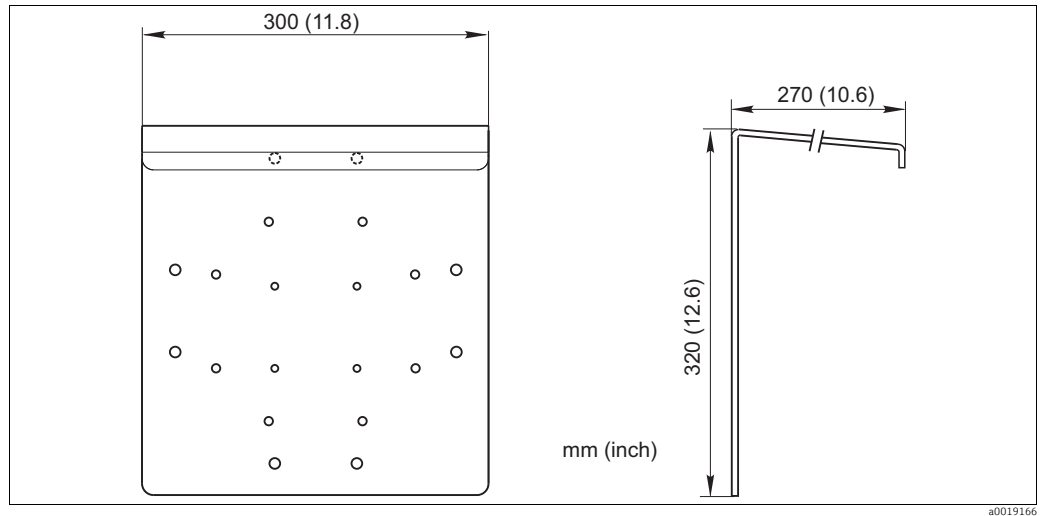


Fig. 31: Weather protection cover for field devices

- Mounting kit for securing the weather protection cover CYY101 to vertical or horizontal pipes with diameters up to 62 mm (2.44")
Order No. 50062121

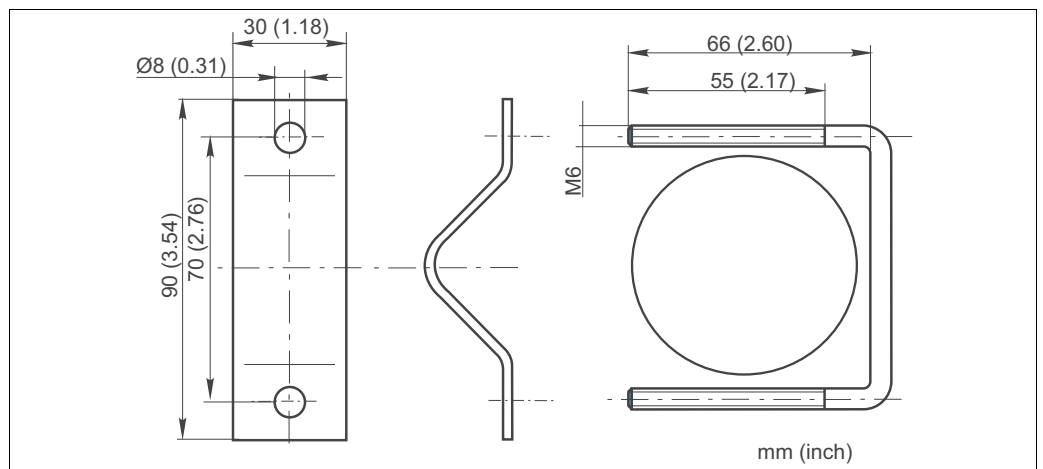


Fig. 32: Circular post mounting for CYY101

Overvoltage protection

- Overvoltage protection HAW56X
- And related installation material

8 Technical data

8.1 Environment

Air temperature -20 to +60 °C (-4 to 140 °F)

8.2 Mechanical construction

Dimensions	Main pipe:	Ø 40 mm (1.57"), length: 500, 1000 and 1800 mm (19.7", 39.4" and 70.9")
	Transverse pipe:	Ø 40 mm (1.57"), length: 500, 1000 and 1500 mm (19.7", 39.4" and 59")
	Chain:	5 m (16.4 ft)

Weight	Main pipe (length 1 / 2 / 3):	0.7 / 1.5 / 2.6 kg (1.5 / 3.3 / 5.7 lbs)
	Transverse pipe (length 1 / 2 / 3):	0.7 / 1.5 / 2.2 kg (1.5 / 3.3 / 4.9 lbs)
	Wall retainer:	0.7 kg (1.5 lbs)
	Cross clamp:	0.7 kg (1.5 lbs)
	Base clamping element:	1.75 kg (3.86 lbs)
	Pendulum holder:	1.1 kg (2.4 lbs)
	Chain (plastic):	0.7 kg (1.5 lbs)
	Chain (stainless steel):	2.15 kg (4.7 lbs)
	Multifunctional clamp ring:	0.15 kg (0.33 lbs)

Materials	Main pipe:	Stainless steel 1.4404 (AISI 316L)
	Transverse pipe:	Stainless steel 1.4404 (AISI 316L)
	Wall retainer:	Stainless steel 1.4404 (AISI 316L) *
	Cross clamp:	Stainless steel 1.4404 (AISI 316L) *
	Base clamping element:	Stainless steel 1.4404 (AISI 316L) *
	Pendulum holder:	Stainless steel 1.4404 (AISI 316L) */ POM / thermoplastic
	Chain (plastic):	PA (polyamide) UV-resistant, tensile-tested
	Chain (stainless steel):	Stainless steel 1.4401 (AISI 316)
	Multifunctional clamp ring:	POM - GF
	Cap for end of pipe:	PE
	Quick-action clamp lever:	PA

* The wall retainer, cross clamp and base clamping element are made from the material indicated with the exception of the clamps in the clamping device. These are made of stainless steel 1.4301 (AISI 304). The pendulum holder is made from the material indicated with the exception of the shaft and the clamps in the clamping device. These are made of stainless steel 1.4301 (AISI 304).

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