KERN & Sohn GmbH

Installation Instructions
Analogue module

KERN KUM-08

Type TYKUM-08-A
Version 1.2
2025-01
GB

TYKUM-08-A-IA-e-2512

GB

Analogue module

Version 1.2 2025-01

Installation Instructions

Contents

1 Scope of delivery

- Analogue module
- Ferrite core

2 General and safety information

⚠ DANGER

Electrical shock caused by touching live components

An electrical shock results in serious injury or death.

⇨ Before opening the device, disconnect it from the power source.

⇨ Only perform installation work on devices that are disconnected from the power source.

NOTICE

Electrostatically endangered structural components

Electrostatic Discharge (ESD) can cause damage to electronic components. A damaged component may not always malfunction immediately but may take some time to do so.

Make sure to take precautions for ESD protection before removing hazardous components from their packaging and working in the electronic area:

⇨ Ground yourself before touching electronic components (ESD clothing, wristband, shoes, etc.).

⇨ Only work on electronic components at suitable ESD workplaces (EPA) with suitable ESD tools (antistatic mat, conductive screwdrivers, etc.).

⇨ When transporting electronic components outside the EPA, only use suitable ESD packaging.

⇨ Do not remove electronic components from their packaging when they are outside the EPA.

3 Installation

INFORMATION

- It is important to follow the instructions in this manual before starting work.
- The illustrations shown are examples and may differ from the actual product (e.g. positions of the components).

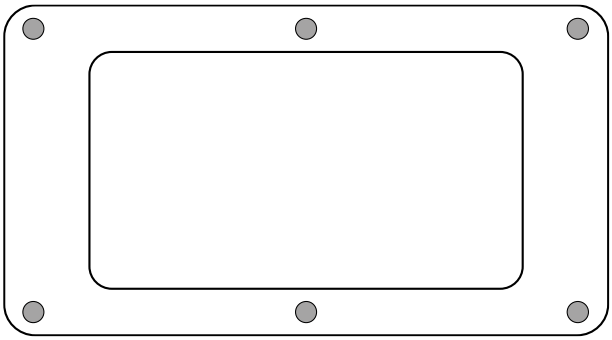
NOTICE

⇨ Make sure that the interface cable you are using has a minimum diameter of 6 mm. Before fixing the interface cable, check whether the sealing cap can close tightly on the cable (see Chap. 3.3). Only when the sealing cap fits tightly to the interface cable can a liquid be prevented from entering the unit.

⇨ Use shrink tubing if necessary to increase the diameter of the interface cable.

3.1 Opening the terminal

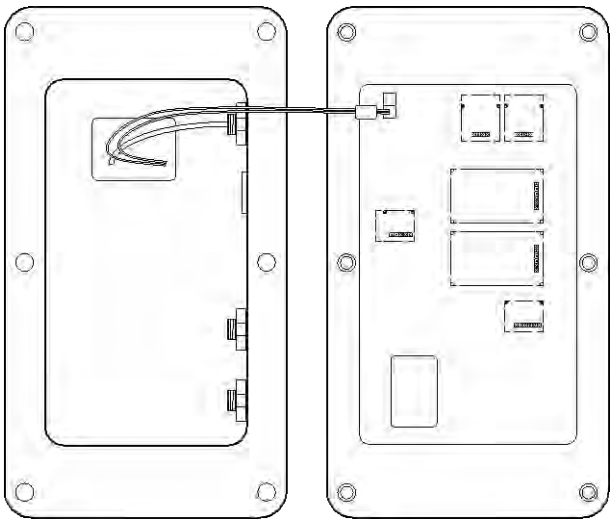
1. Disconnect the device from the power source.
2. Loosen the screws on the back of the terminal.



3. **NOTICE**

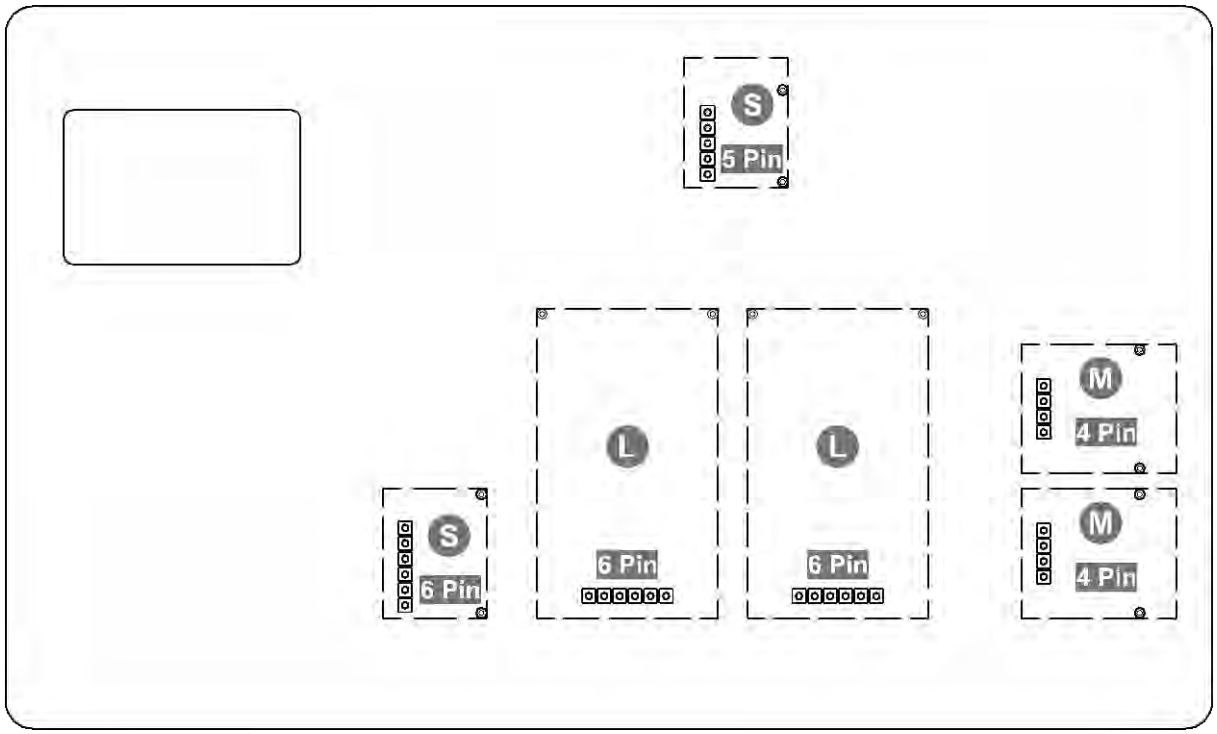
⇨ Make sure that you do not damage any cables (e.g. by tearing them off or pinching them).

Carefully open both halves of the terminal.



3.2 Overview of the circuit board

The circuit board of certain display devices offers several slots for KERN accessories, which allow you to extend the range of functions of your device if necessary. Information on this can be found on our homepage: **www.kern-sohn.com**



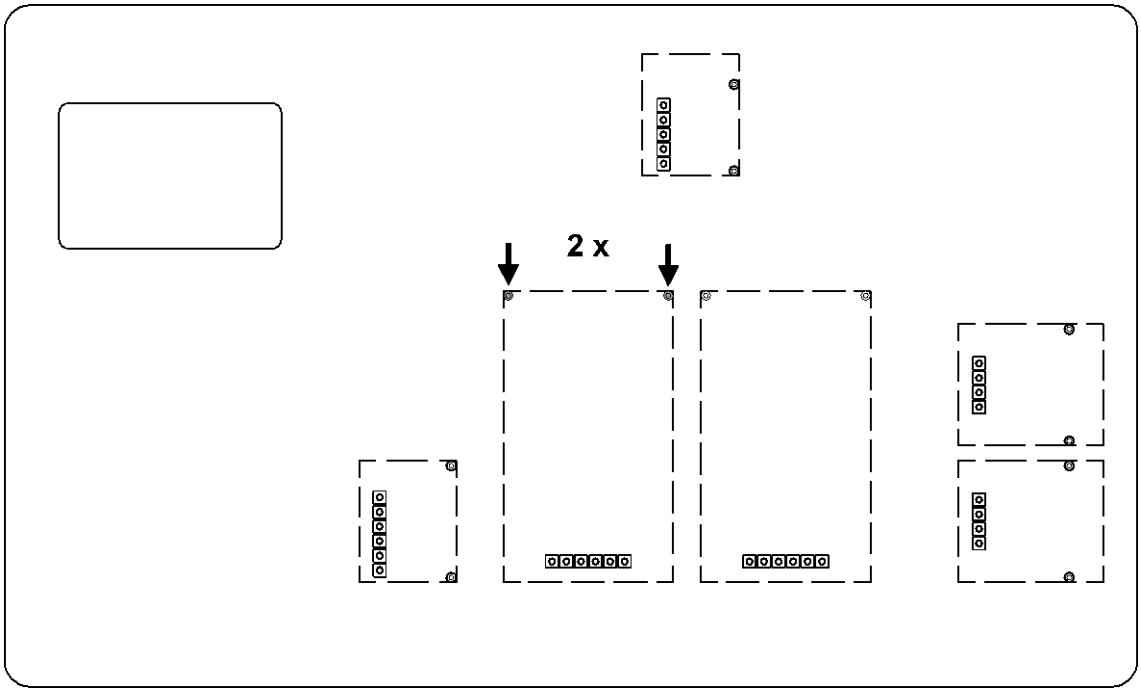
The illustration above shows examples of the various slots. There are three slot sizes for optional modules: S, M, L. These have a certain number of pins.

The correct position for your module is determined by the size and number of pins (e.g. size L, 6 pins), which is described in the respective installation steps.

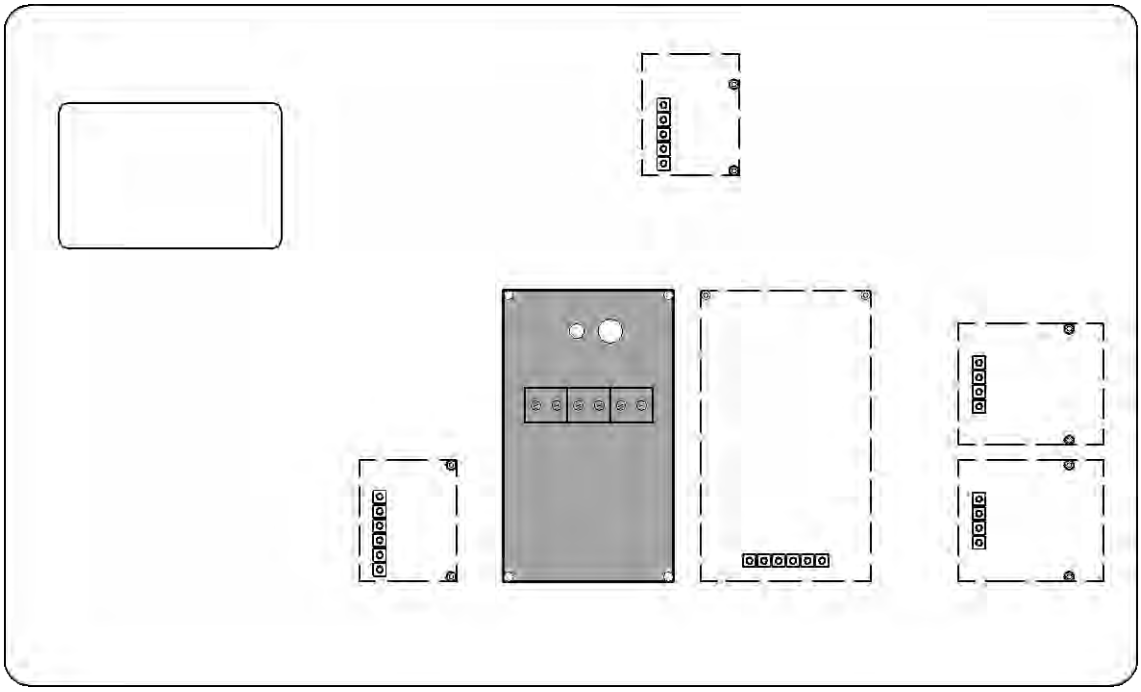
If you have several identical slots on the board, it does not matter which slot you select from these. The device automatically recognises which module it is.

3.3 Installing the module

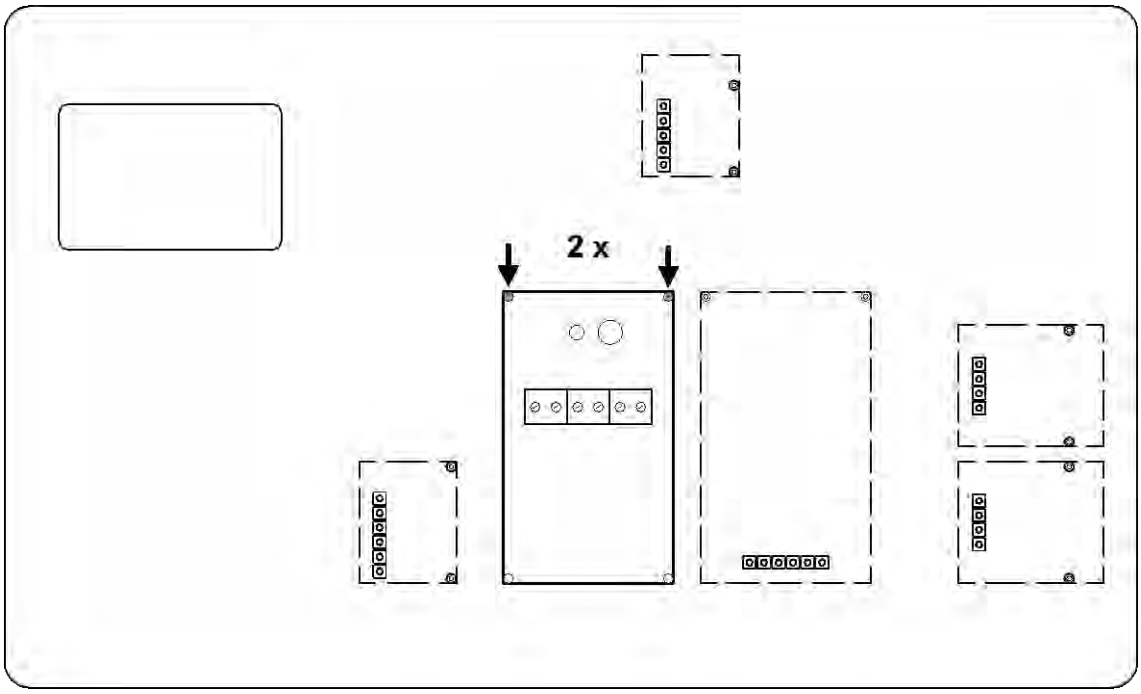
1. Open the terminal (see chapter 3.1).
2. Remove the module from the packaging.
3. Remove the screws from the sleeves of the slot **size L, 6 pin**.



4. Insert the module.



5. Secure the module with the screws.



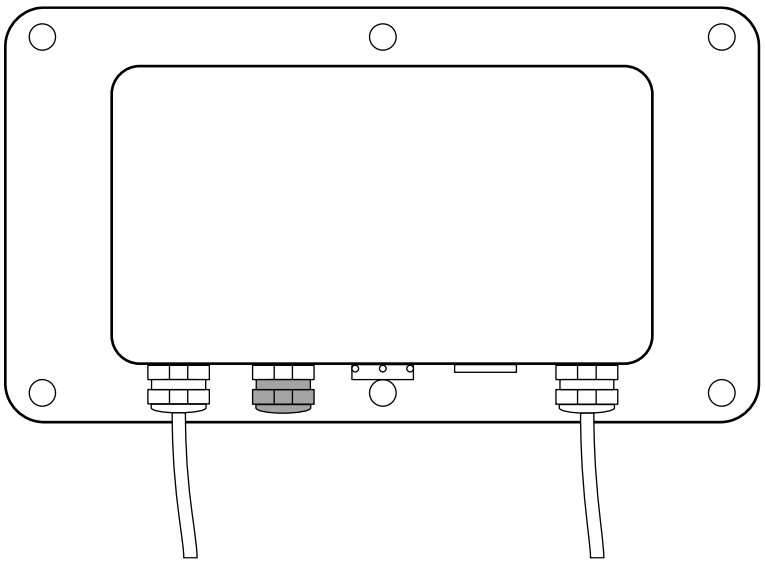
6.

NOTICE

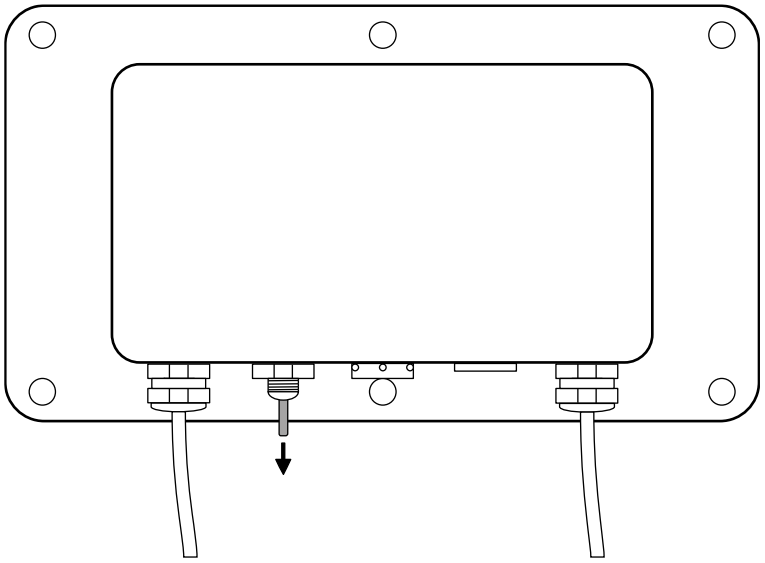
⇨ Do not open the pressure compensation screw on the terminal. This can be recognised by the condensation holes in the screw head. Removing it can lead to moisture in the device and therefore to damage.

Open a free sealing cap of a cable gland on the back of the terminal.

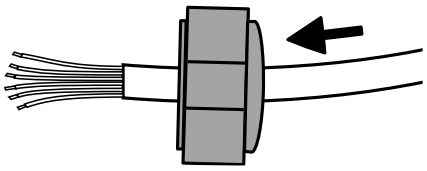
The standard version of the terminal has a free prepared cable feed-through with a sealing cap. An additional cable feed-through is closed with a screw. In order to use this cable gland, it is necessary to have optional accessories. Information on this can be found on our homepage: **www.kern-sohn.com**



7. Remove the sealing pin of the cable gland.



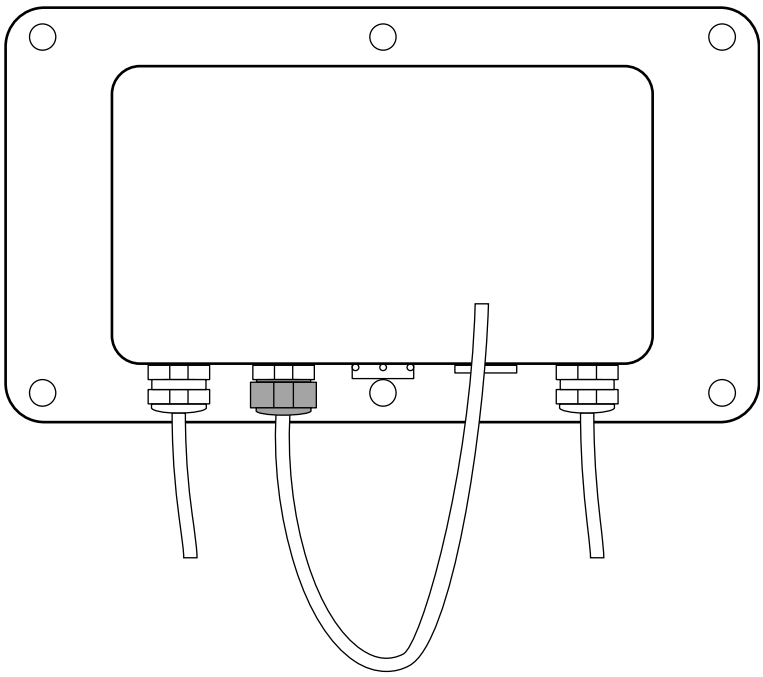
8. Use the cable cores to guide the interface cable through the sealing cap.



9. Use the cable cores to lead the interface cable through the cable gland from the outside so that the cable cores are inside the enclosure.

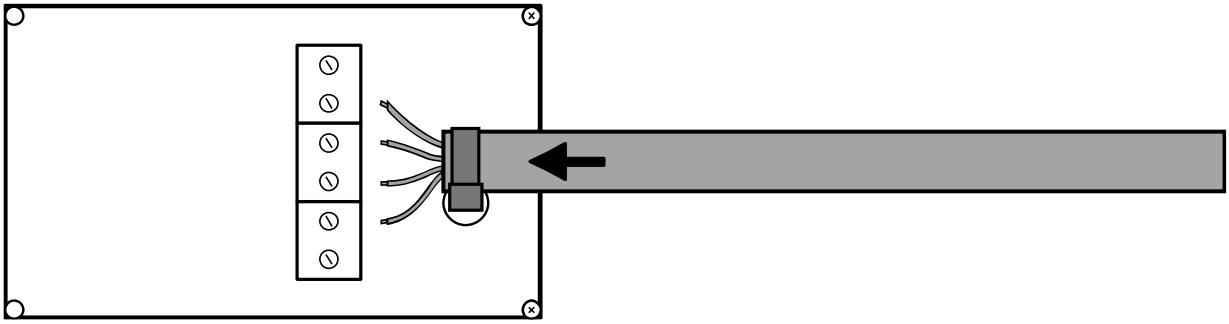
10. Insert about 15 cm of the interface cable into the enclosure.

11. Tighten the sealing cap of the cable gland.



12. Secure the cable tie to the module so that the interface cable fits through.

13. The interface cable must be passed through the module's cable tie.



14.

NOTICE

- ⇨ Make sure that the supply voltage does not fall below or exceeds 15 VDC.
- ⇨ Make sure that any 2-way cable clamp used is properly connected to the ground.

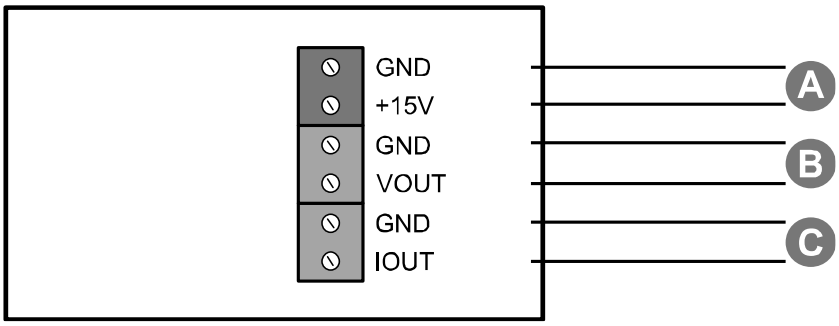
Plug the line cores of the interface cable into the cable clamps of the module.

A: Supply voltage

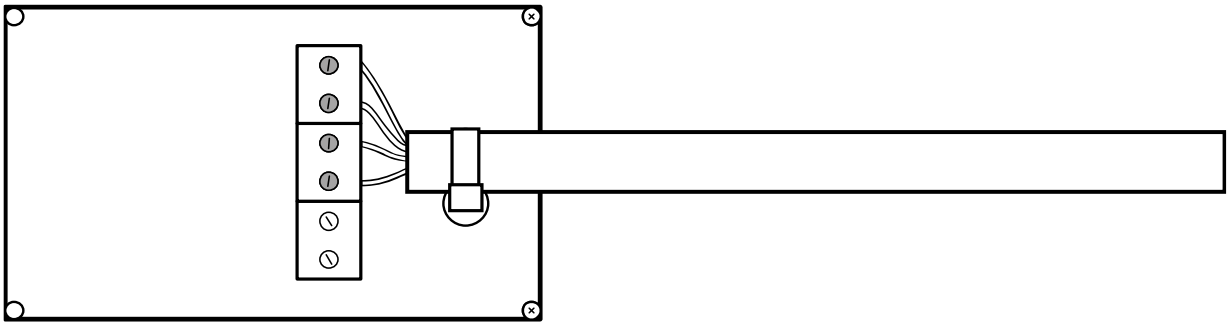
B: Analogue-Output 0 – 10 VDC

C: Analogue Output 4 – 20 mA

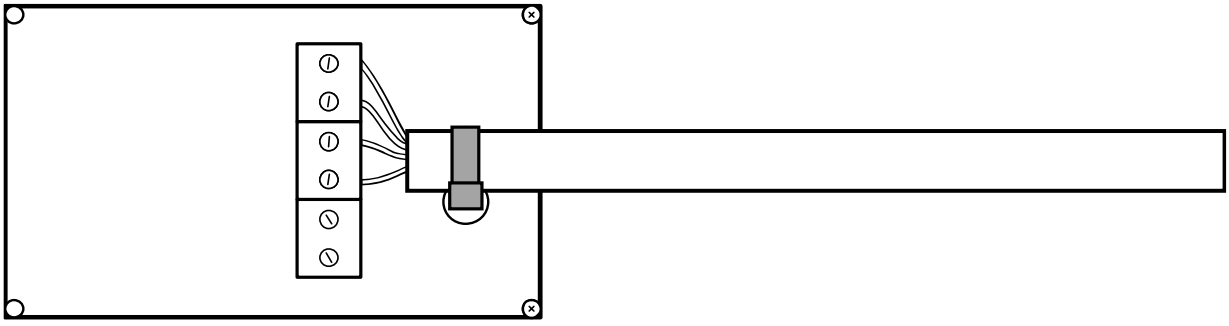
Connections **B** and **C** can be used as parallel connections. You can set on the scale whether B or C is to be used.



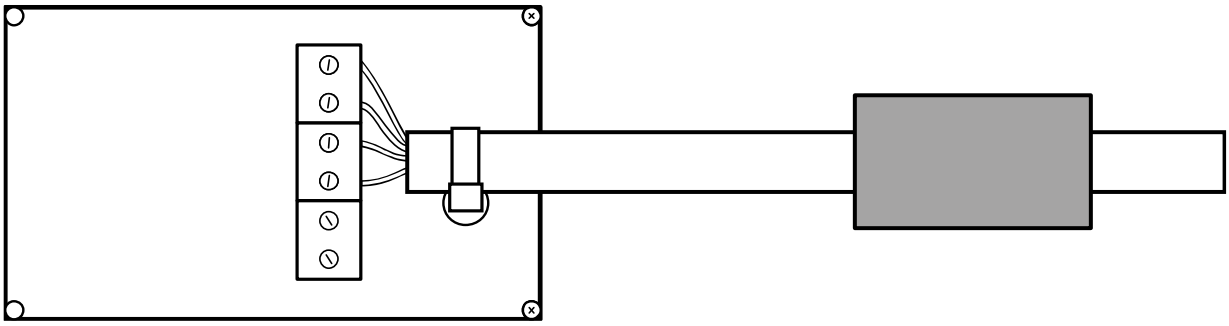
15. Carefully tighten the screws of the cable clamps so that the contact tips are fixed.



16. Close the cable tie.



17. Place the ferrite core around the cable and close it.



18. The module has been installed.

3.4 Closing the terminal

1. Check the module for a tight fit.

2.

NOTICE

⇨ Make sure that you do not damage any cables (e.g. by tearing them off or pinching them).

⇨ Make sure that any existing seals are in their intended place.

Carefully close both halves of the terminal.

3. Close the terminal by screwing it together.