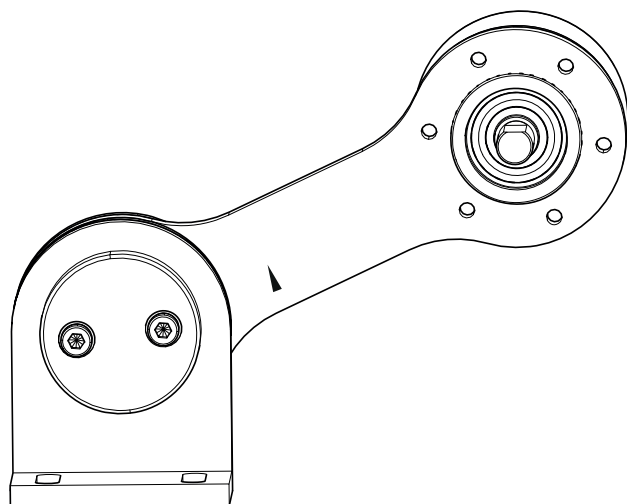


Operating instructions
Spring arm for encoders
with clamp flange
E61438

UK

80293157/00 04/2020



Contents

1 Preliminary note.....	3
2 Safety instructions	3
2.1 Symbols used	4
3 Functions and features	4
4 Installation.....	4
4.1 Structure of the device.....	5
4.2 Align the mounting bracket	6
4.3 Changing the direction of the pre-tensioning.....	7
5 Changing the spring force.....	9
5.1 Adjusting the pre-tensioning	10
6 Maintenance, repair, disposal.....	10

1 Preliminary note

You will find instructions, technical data, approvals and further information using the QR code on the unit / packaging or at www.ifm.com.

2 Safety instructions

- The device described is a subcomponent for integration into a system.
 - The system architect is responsible for the safety of the system.
 - The system architect undertakes to perform a risk assessment and to create documentation in accordance with legal and normative requirements to be provided to the operator and user of the system. This documentation must contain all necessary information and safety instructions for the operator, the user and, if applicable, for any service personnel authorised by the architect of the system.
- Read this document before setting up the product and keep it during the entire service life.
- The product must be suitable for the corresponding applications and environmental conditions without any restrictions.
- Only use the product for its intended purpose (→ Functions and features).
- If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.
- The manufacturer assumes no liability or warranty for any consequences caused by tampering with the product or incorrect use by the operator.
- Installation, electrical connection, set-up, programming, configuration, operation and maintenance of the product must be carried out by personnel qualified and authorised for the respective activity.
- Protect units and cables against damage.

UK

2.1 Symbols used

- ▶ Instructions
- > Reaction, result
- Cross-reference
-  Important note
Non-compliance may result in malfunction or interference.
-  Information
Supplementary note

3 Functions and features

The spring arm is designed for the use of measuring wheels on encoders.

- Diameter of the encoder: 58 mm
- Circumference of the measuring wheel: 300...500 mm

4 Installation

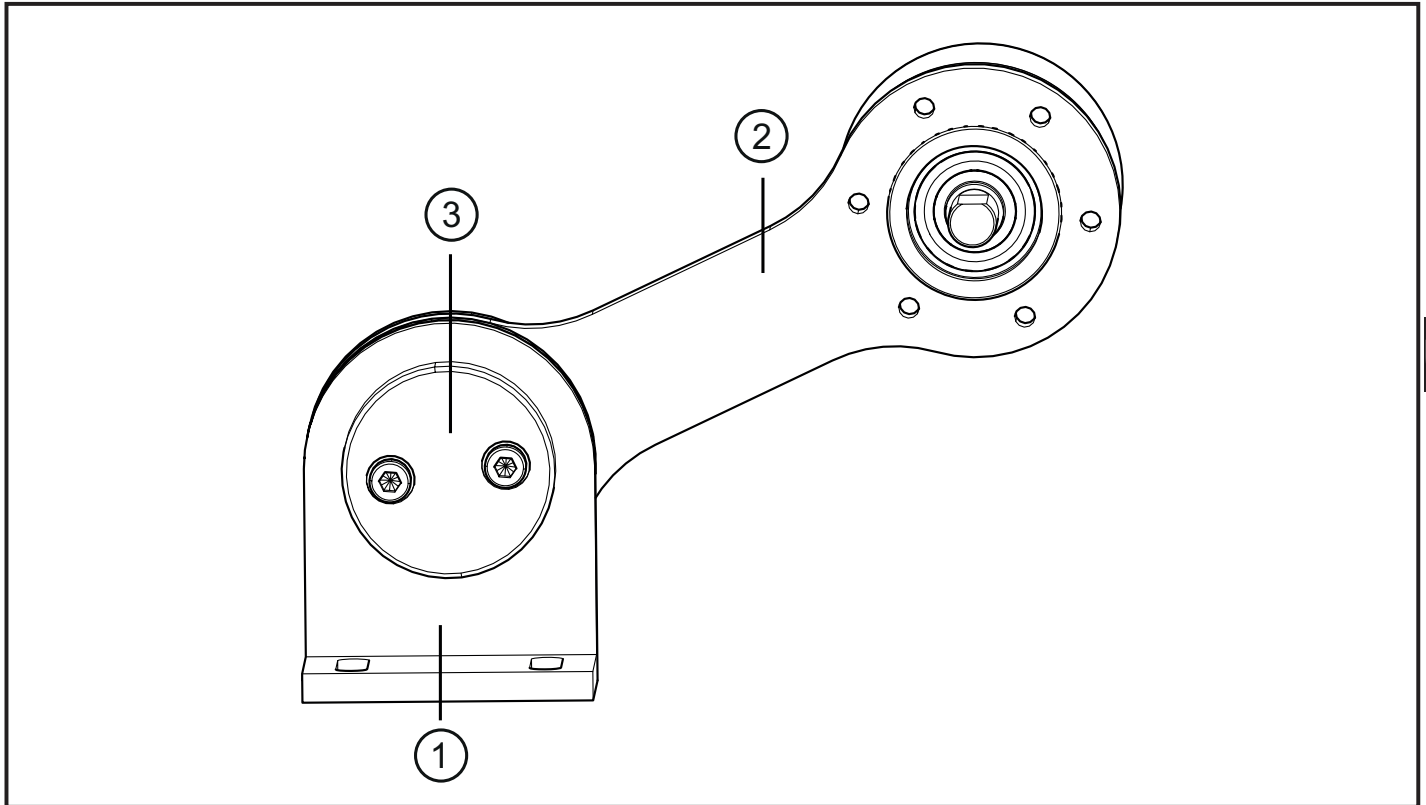
 The encoder can be attached to the spring arm from both sides and can be mounted over 360° thanks to its modular design.

The contact pressure direction of the spring arm can be changed easily and quickly. Installation is possible either from below or above the pipe length.

- ▶ Ensure that the machine stands still.
- ▶ Do not start the drive during installation.
- ▶ It is not permitted to open the spring unit by means of the centre screw (risk of injury caused by springs jumping out).
- ▶ Only change the spring force when the spring arm is firmly mounted (risk of injury).
- ▶ Mount the encoder and measuring wheel on the pitch circle with 6 holes.

The spring arm is set at the factory with downward contact pressure direction.

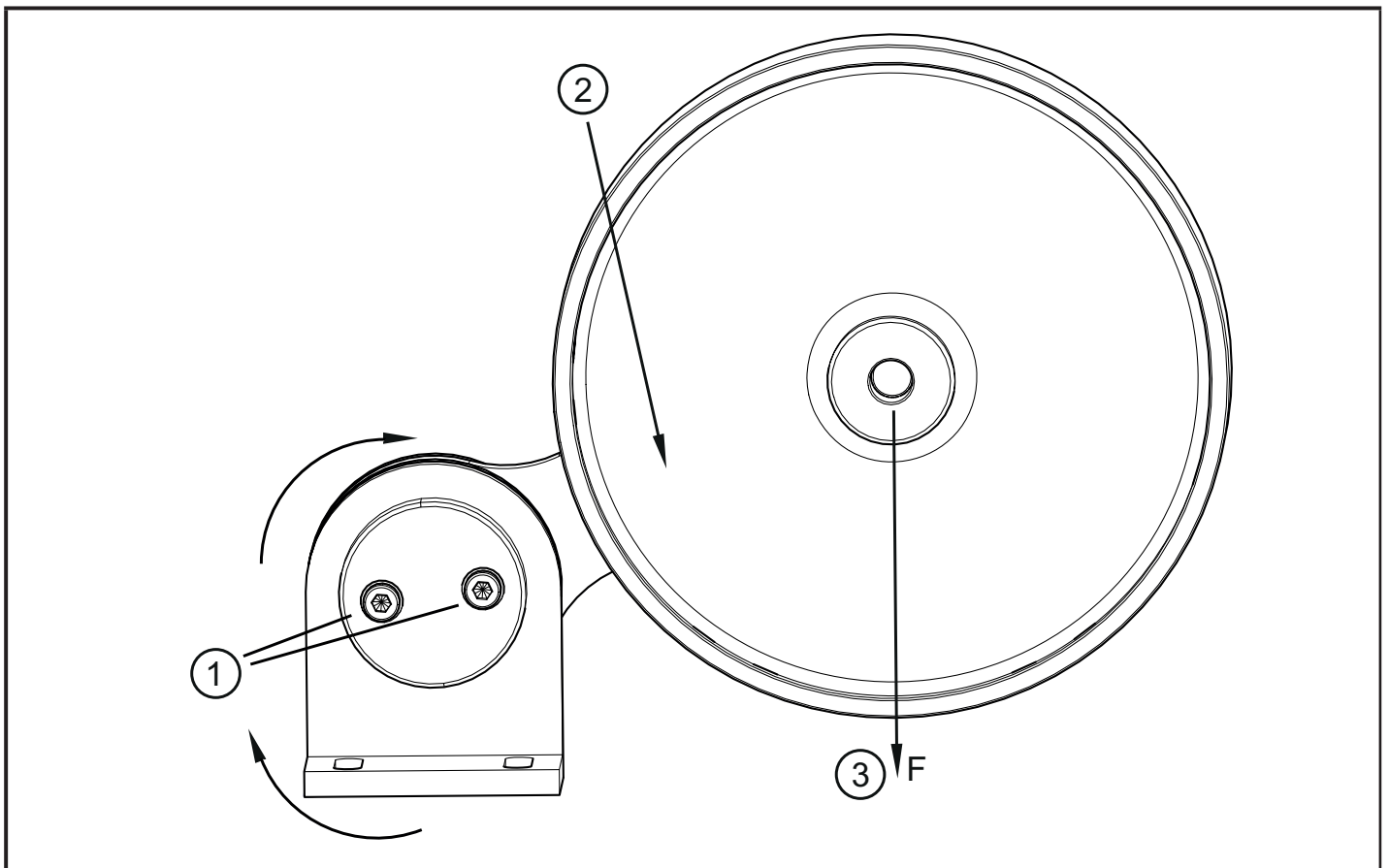
4.1 Structure of the device



- 1: L mounting bracket
- 2: Spring arm with spring unit
- 3: Clamping cap

4.2 Align the mounting bracket

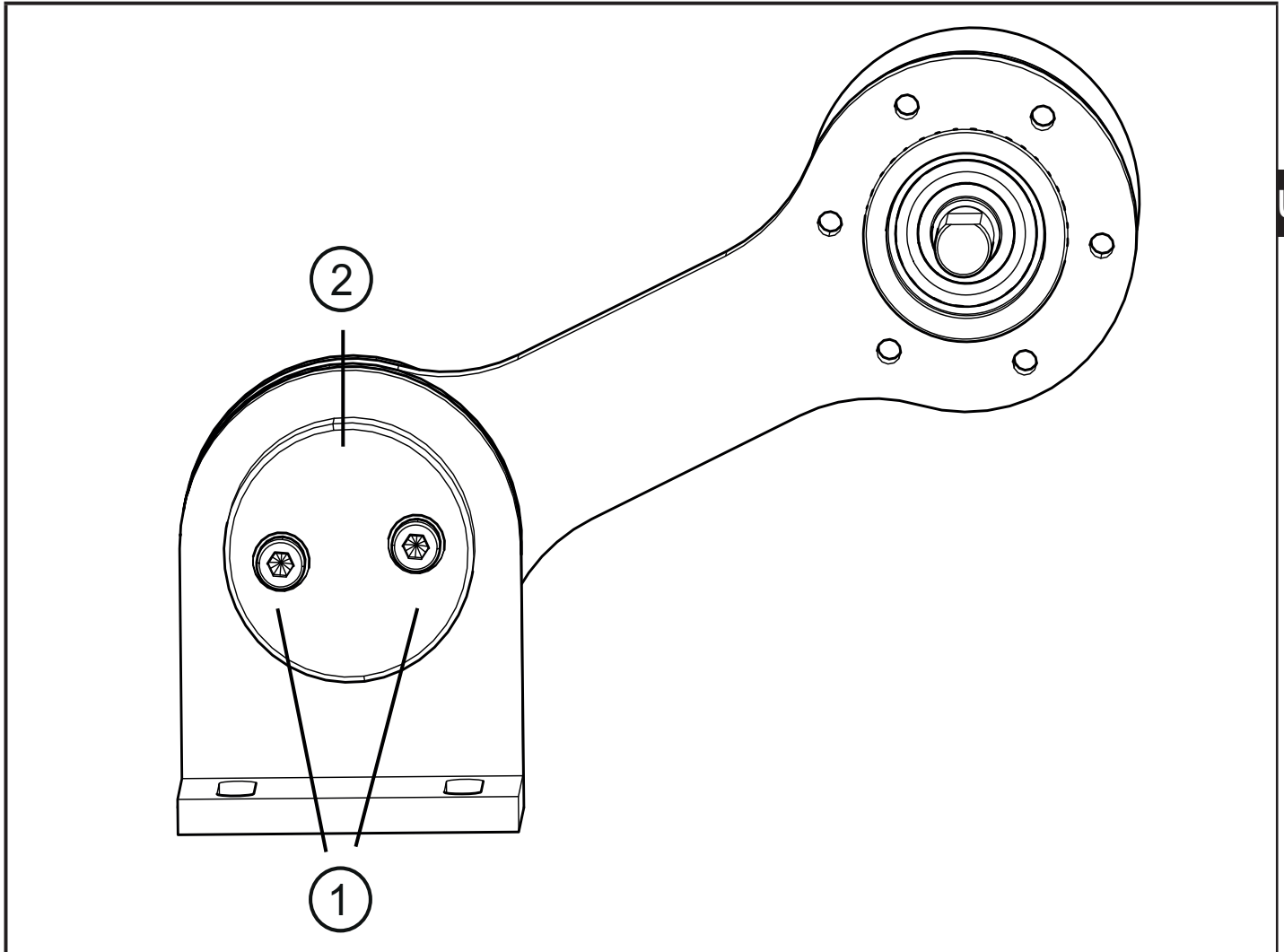
- ▶ The mounting bracket can be mounted at any angle between 0° and 360°.
- ▶ Loosen both screws (1) (5 mm Allen key).
- ▶ Select the required position and tighten the screws (1) (tightening torque 2.0 Nm).
- ▶ The contact pressure for the measuring wheel (2) is in the direction of the arrow.
- ▶ Mount the spring arm at the intended location.



- 1: Cylinder screws
- 2: Measuring wheel
- 3: Direction of force of the contact pressure

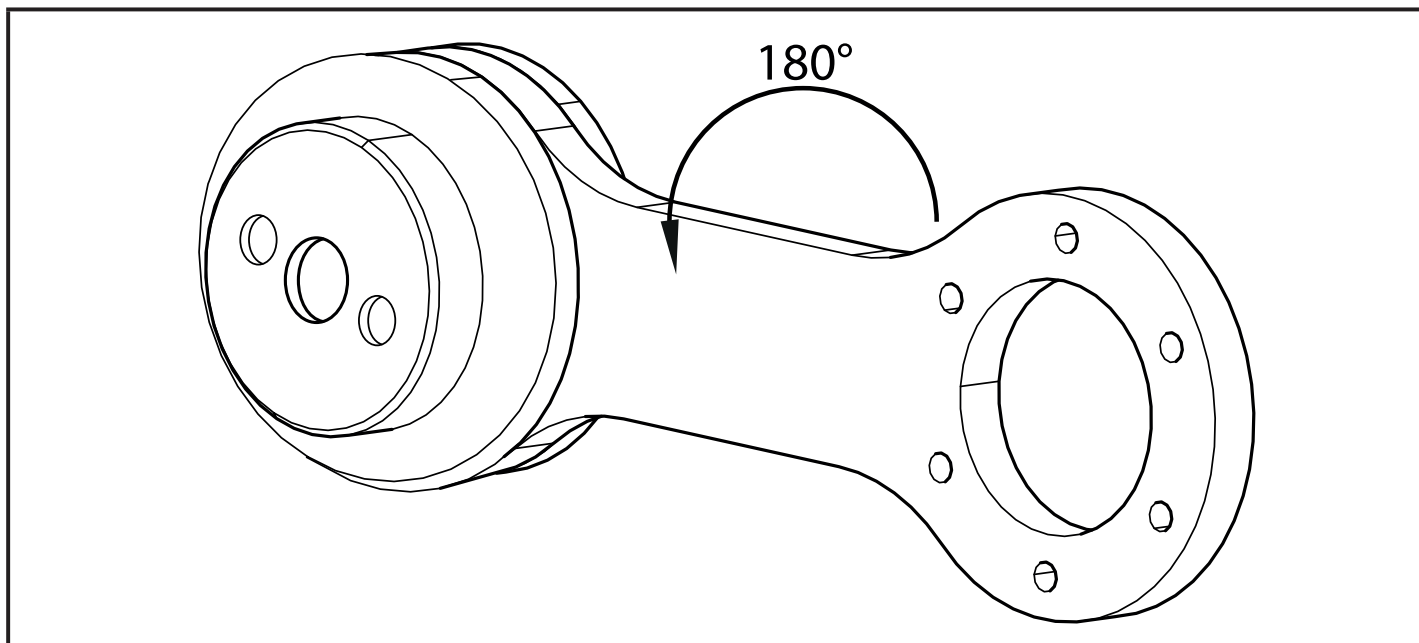
4.3 Changing the direction of the pre-tensioning

- ▶ Loosen both screws
- ▶ Remove the clamping cap.

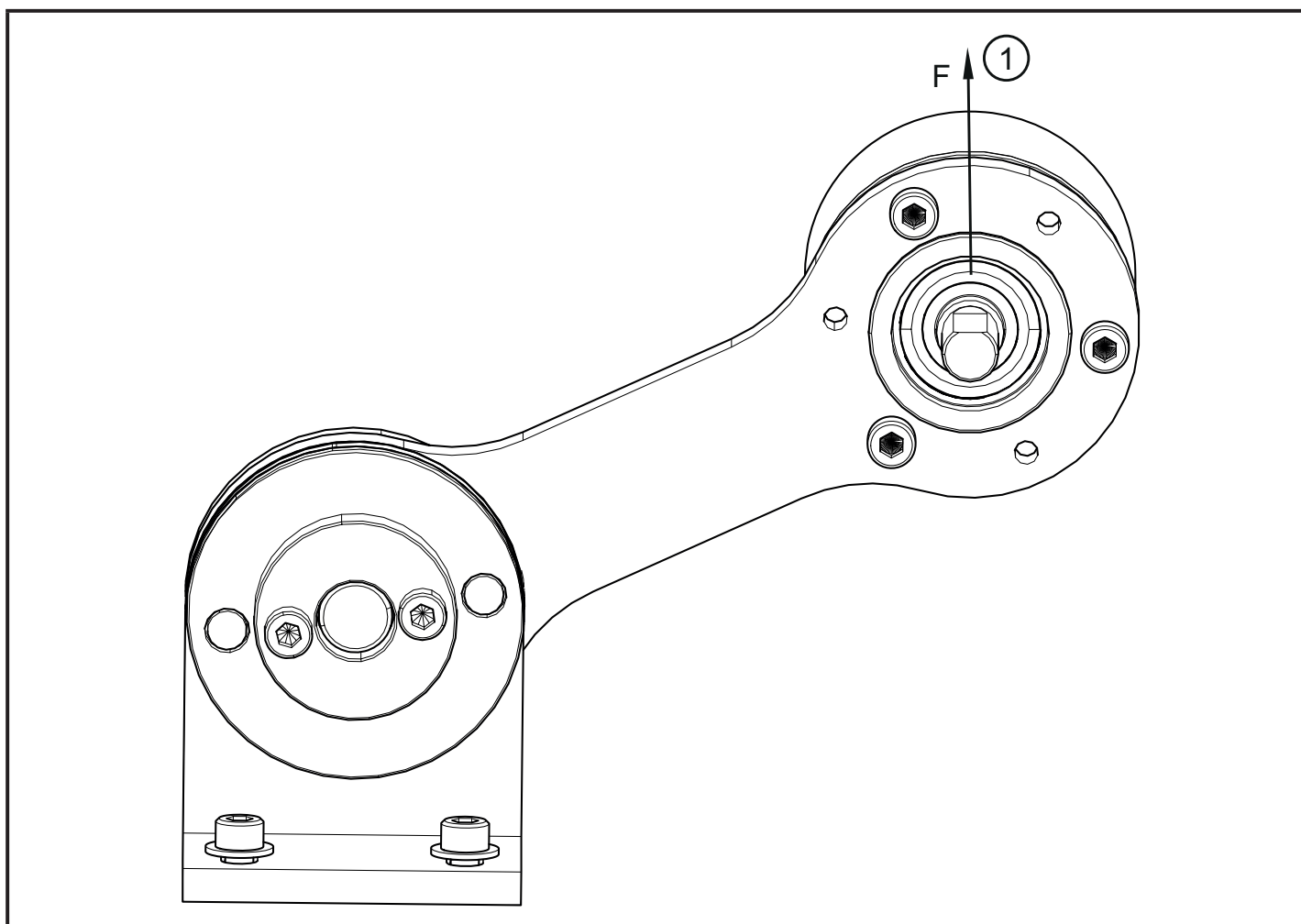


- 1: Cylinder screws
2: Clamping cap

- Rotate the spring arm by 180° to change the direction of the pre-tensioning.



- Reassemble the bracket and the clamping cap.
- Adjust the required bracket position.



- 1: Direction of force of the contact pressure
- > The contact pressure is now directed upwards.

5 Changing the spring force

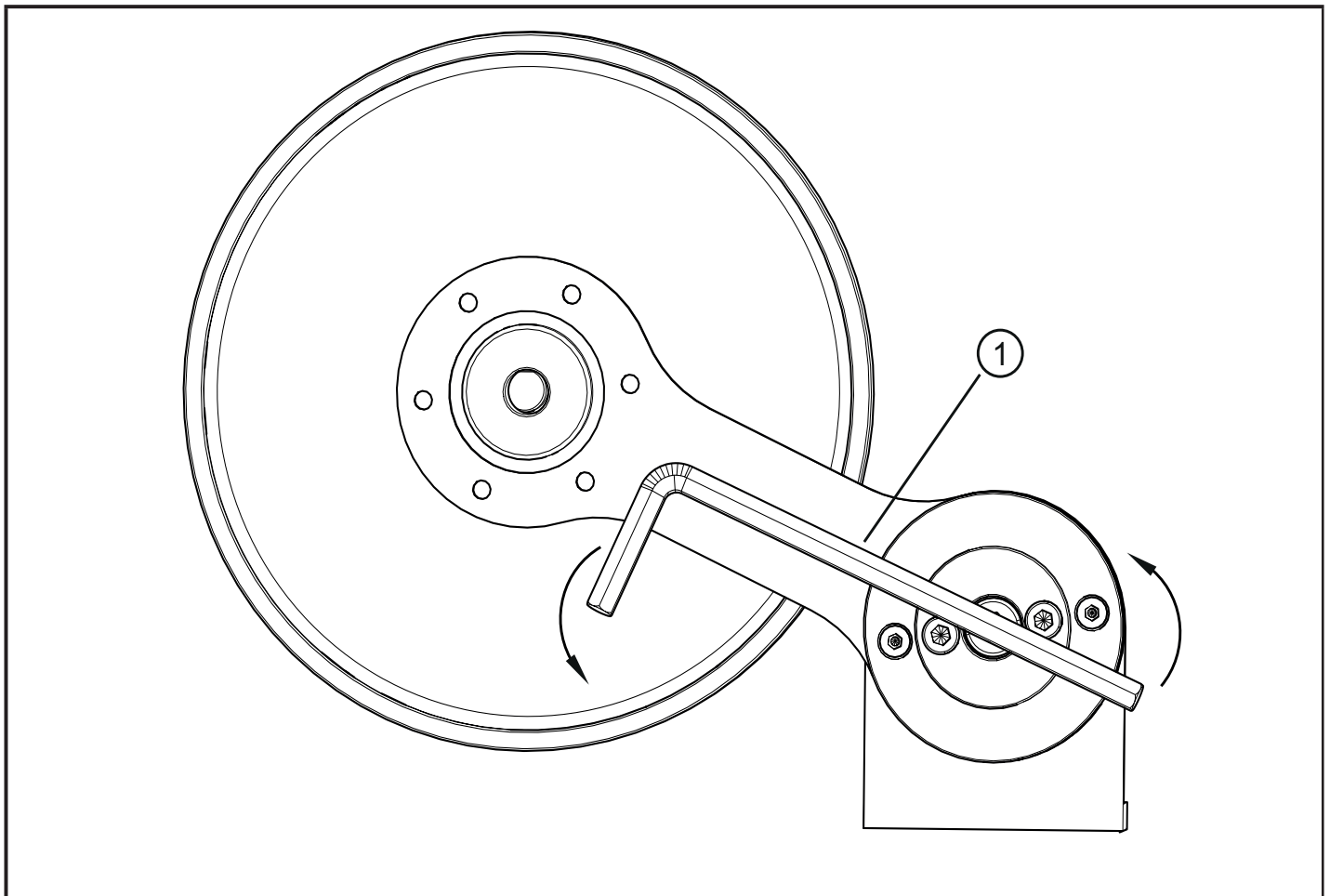
 Adjust the spring force (contact pressure) when the measuring wheel is in contact with the object. Otherwise, the contact pressure will increase.

 The pre-tensioning should be about 15 Nm and is adjusted to our measuring wheels with PU coating. The spring force can be adjusted according to the application.

If the deviation from the specified pre-tensioning is too significant, no warranty can be assumed for the measuring accuracy.

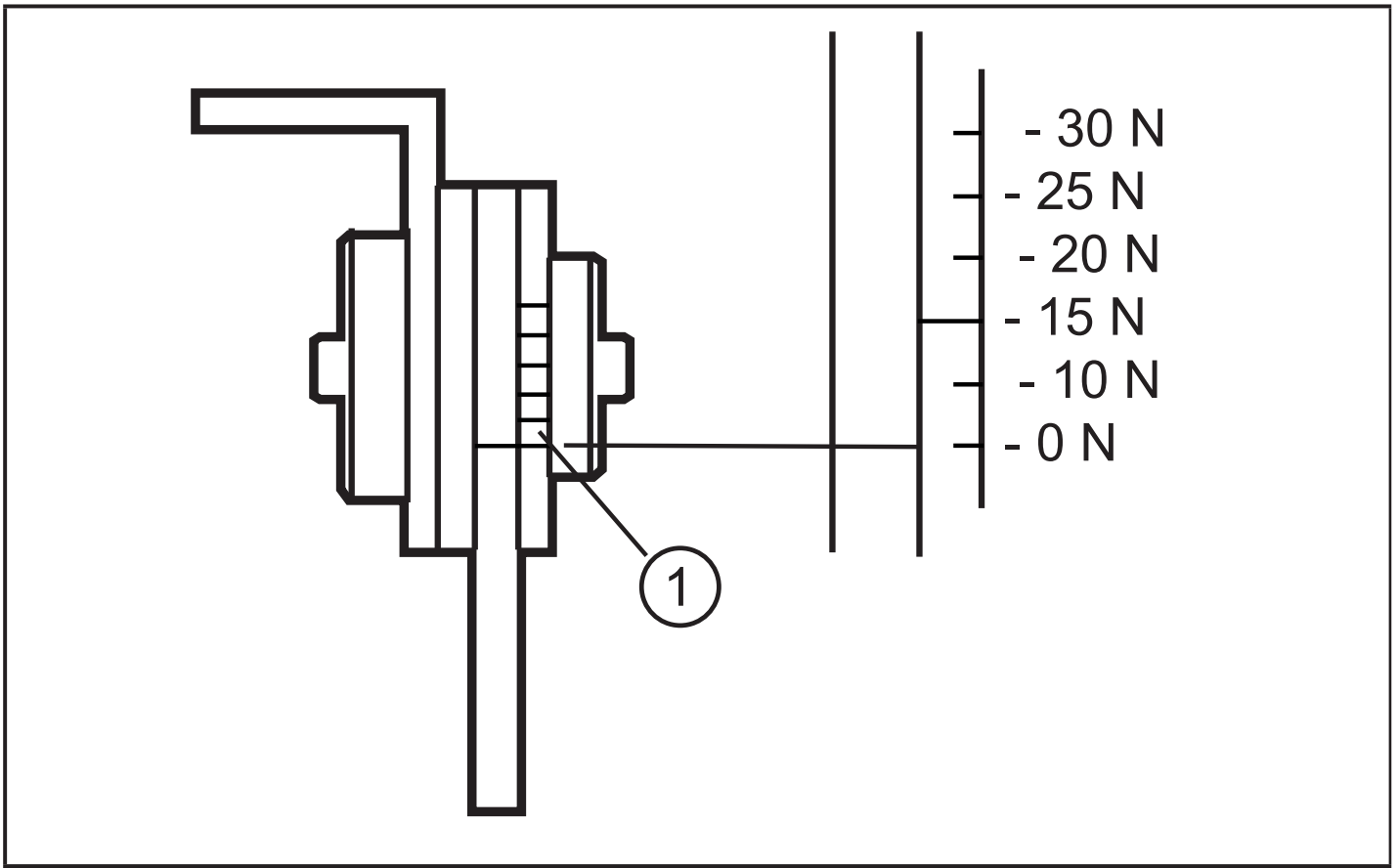
High contact pressure will lead to increased wear of the tread surface of the measuring wheel.

- ▶ Loosen the silver screws on the clamping cap.
- ▶ Use a suitable tool between the two black screws on the opposite side to turn in the direction of the measuring wheel until the desired pre-tensioning is reached.



1: Use Allen an wrench or another suitable tool

5.1 Adjusting the pre-tensioning



1: Setting scale for the pre-tensioning

► Retighten the screws to fix the pre-tensioning.

6 Maintenance, repair, disposal

The operation of the unit is maintenance-free. It is not possible to repair the unit. Dispose of the unit in an environmentally friendly way in accordance with the applicable national regulations when it is no longer used.

