

Installation Instructions



WAREMA articulated arm awning Terrea
700S

Der SonnenLichtManager

For qualified technicians only

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1 Safety and product information



Warnings are marked in the instructions with this symbol.



- Read through the product instructions before use.
- Observe all safety and setting instructions.



The basic safety instructions can be viewed under (www.warema.de/Sicherheitshinweise).

Target group

These instructions are intended for use by qualified specialists and fitters.

Permissible activities

Performing tasks on the product that are not described in these instructions is not permissible. No other alterations are to be carried out on the product other than as described in these instructions without the written approval of WAREMA.

If any questions arise before or during installation, please send an e-mail to service@warema.de or call +49 9391 20-9333.

Intended use

The following details apply to the following product: articulated arm awning Terrea 700S

The product is an external sun shading system that may be used for thermal protection and glare control.

Parts description

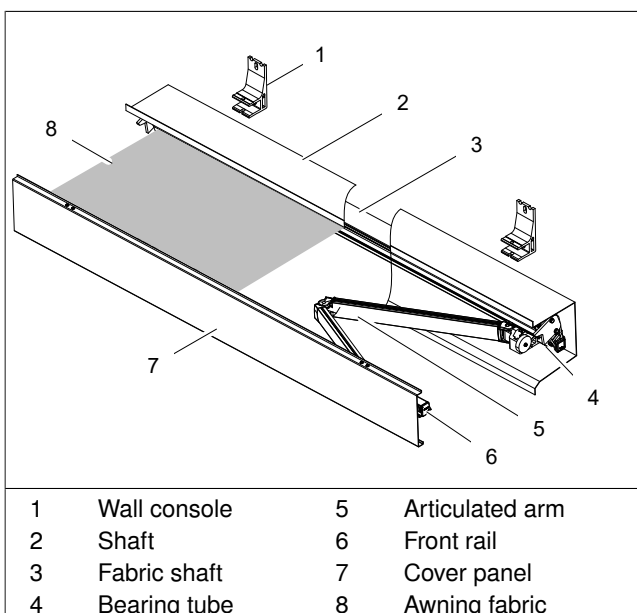


Fig. 1: Overview of the articulated arm awning Terrea 700 S

Wind resistance

The maximum permitted wind speed (wind speed limit) for the product when it is extended is: 10 m/s (Beaufort 5)

If the maximum permitted wind speed is exceeded, the product must be retracted. The type of installation and the mounting substructure may reduce the maximum permissible wind speed.

The installed product will meet the requirements of the specified wind speed if the instructions below are followed during the installation:

- The type and number of consoles
- The fixing material used must be suitable for the mounting substructure (the fitter is responsible for the right selection).
- The screw anchor pull-out forces specified by the manufacturer must be taken into account.
- The installation specifications from the fixing material manufacturer must be adhered to (the fitter is responsible for adherence).

Depending on the substructure, the unit may have a different maximum permitted wind speed (wind speed limit) as a result of the variability in the building material.

Rain class

The product fulfils performance class 2 starting at an inclination angle of 10°.

Electric drive data



INFO

Observe the separate instructions for the motor.

2 Installation



INFO

The fixation and the fixing material must be suitable for the existing mounting substructure and must be designed according to the applicable regulations.



INFO

- Perform the installation with at least two persons! WAREMA recommends using the mounting aid for patio awnings to simplify installation.



INFO

The fabric is handled with care during the entire manufacturing sequence to prevent stains and damage. A 100% final inspection takes place. Liability will not be accepted for soiling that takes place afterwards.

- During installation, protect the fabric against dirt.
- Do not cause any kinks or scratches (e. g. by pulling it over surfaces or edges).

Installation



DANGER

Electric shock!



When working in the immediate vicinity of potentially live parts, such as on-site connecting lines, contact may result in an electric shock.

- Check that the on-site connecting line is de-energised.
- Before installation, de-energise the on-site connecting line and secure it against being switched on again.



WARNING

Risk of injury from a falling product!

The product only meets the requirements of the specified maximum permissible wind speed when installed under certain conditions.

- The specified number of fixations and fixing points must be adhered to.
- Observe the guidelines provided by the screw anchor manufacturer when installing the product.



INFO

The point of reference for instructions indicating a side or view is looking from the outside to the inside.

2.1 Unpacking the product



WARNING

Risk of suffocation from carelessness!

Plastic film, polystyrene parts, small parts, etc., can be very dangerous for children to play with.

- Keep children away from small parts.
- Do not leave the packaging material lying around in disorderly fashion.



INFO

Dispose of the packaging material properly after the unit is unpacked.

- Place the awning packaging on the ground with the back of the awning facing the installation surface. The label on the packaging indicates the correct position.
- Use care when unpacking the product and components.



CAUTION

Risk of injury from a falling product!

Use of the wrong procedure when pulling the product up to a higher level with the aid of cables may result in the product falling down.

- Take the product out of the packaging.
- Attach the cables to the product in such a way that they cannot slide off.
- The product must be horizontal while it is being raised.

2.2 Scope of delivery



INFO

- Check the scope of delivery against the delivery note.
- Check all parts to make sure they are not damaged.
- Compare the situation on-site with the order data.
- If any items are damaged or do not match the order data, discontinue installation and contact WAREMA.

2.3 Product position



INFO

Align and install the consoles in accordance with the information contained in the appendix.

When installing 2 consoles: use either dimension B or dimension C. Dimension B is preferable.

When installing 4 consoles: all specified dimensions apply.

Use either dimension D or dimension E for a 3rd and 5th console. Dimension E is preferable.

In series-mounted units, be sure to maintain the central distance.

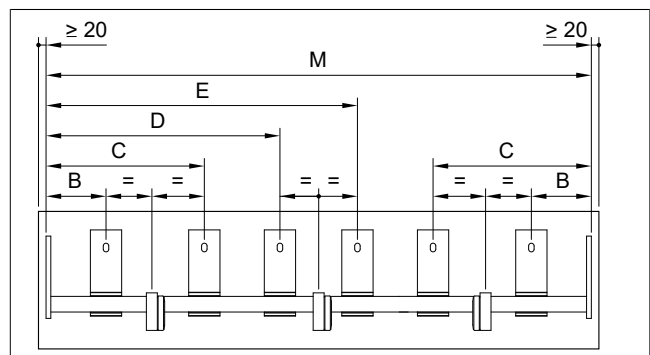


Fig. 2: Console position (all measurements in mm)

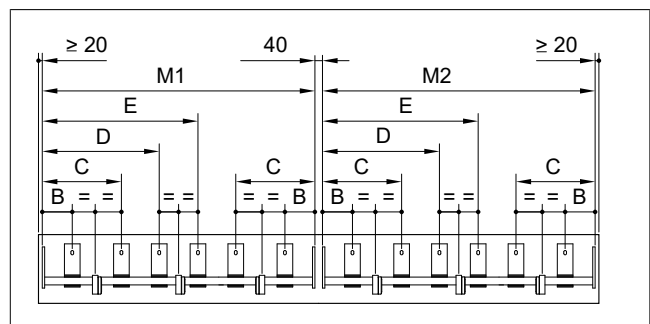


Fig. 3: Console position for series-mounted unit (all measurements in mm)

2.4 Installing the consoles

Marking and drilling the fixing points of the consoles



INFO

Pencil in the fixing positions centrally to allow corrections later on.

Wall installation	
	<ul style="list-style-type: none"> Mark the position of the consoles on the mounting substructure (see Fig. 2/Page 4 or see Fig. 3/Page 4). Make sure the height is the same. Hold the consoles against the marking, properly aligned both vertically and horizontally. Transfer the fixing template. Drill the fixing holes.

Attaching and aligning the consoles



INFO

- Check the mounting substructure for unevenness.
- Correct any unevenness.

Wall installation	
	<ul style="list-style-type: none"> Attach the consoles. Align the consoles with one another.

2.5 Installing the awning

Mounting the awning



WARNING

Risk of injury from a falling product!

The awning is not secured against detachment and may fall off.

- Do not operate an awning that has not been secured.

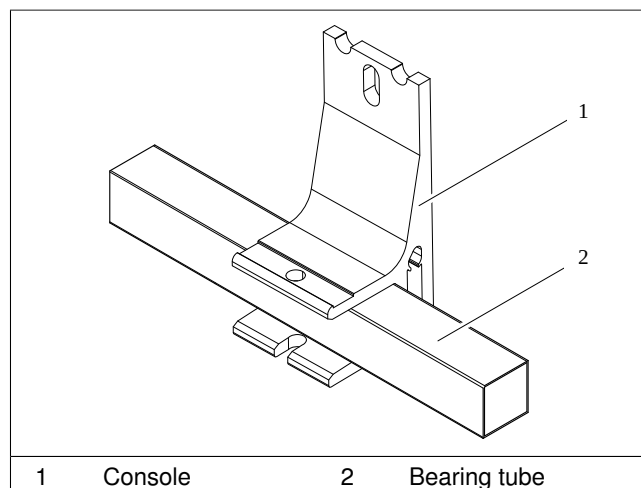


Fig. 4: Mounting the awning

- Mount the bearing tube [2] in the opening of the consoles [1].

Securing the awning

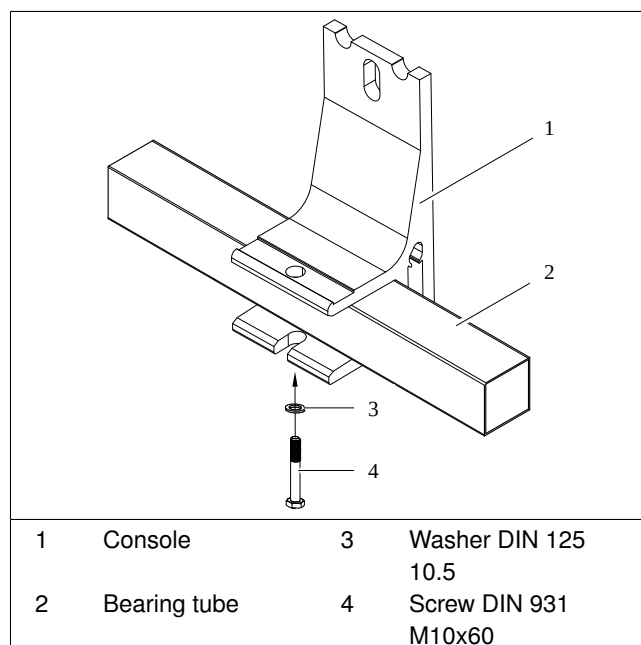


Fig. 5: Securing the awning

- Screw the screws [4] with the washers [3] into the console openings [1]. It should still be possible to slide the bearing tube.



INFO

The awning is now secured and can be operated.

Installation

- Shift the awning laterally until the protrusions (e.g. dimension B) match the dimensions in the appendix.

i INFO

Observe the tightening torque specifications (min. tightening torque = 25 Nm/max. tightening torque = 30 Nm).

- Tighten the screws [4].

2.6 Installing the brackets for the cover panel and the cover panel (optional)

Installing the brackets

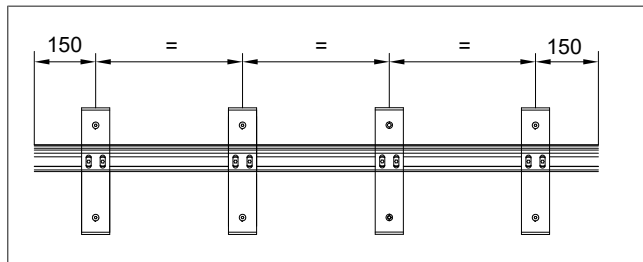


Fig. 6: Position of the brackets for the cover panel (all dimensions in mm)

Awning width [mm]	Number of brackets
Up to 2000	2
2001 to 3000	3
3001 to 4000	4
4001 to 5000	5
5001 to 6000	6

Tab. 1: Number of brackets depending on the awning width

Installing the bracket subassembly

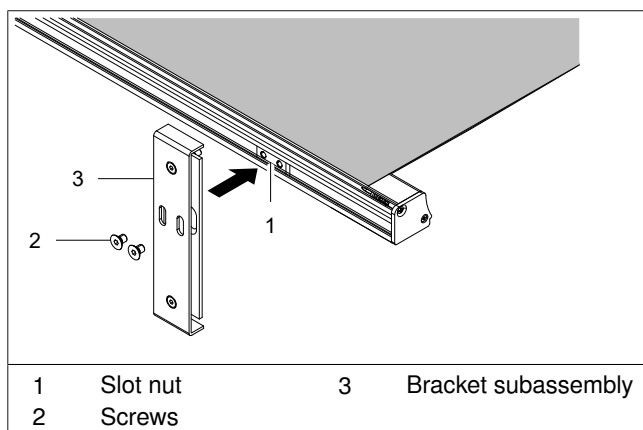


Fig. 7: Installing the bracket subassembly

- Position the slot nuts [1] into the front rail.
- Fasten the bracket subassemblies [3] to the slot nuts [1] using screws [2]. The screws must be inserted in the subassembly to screw the parts together.

Aligning the brackets

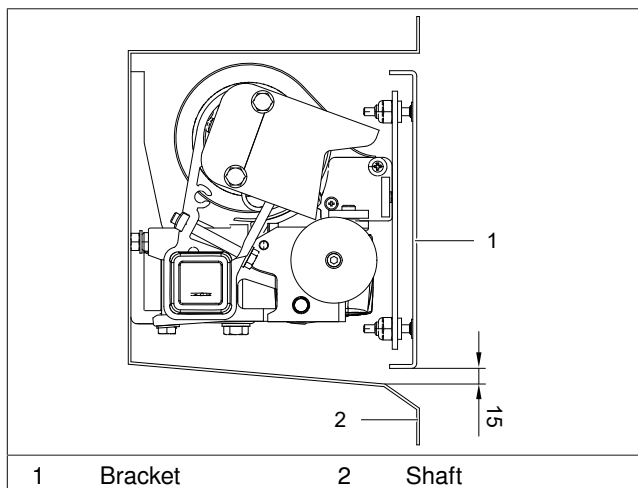


Fig. 8: Aligning the brackets to the shaft (all dimensions in mm)

- Align the two outer brackets [1]. The distance between the bottom edge of the bracket and the shaft opening [2] is 15 mm.
- String up a guideline to align all remaining brackets on it.

Installing the cover panel



CAUTION

Risk of injury and property damage!

The cover panel weight must not exceed 2 kg/m.
The product is not designed for a high load.

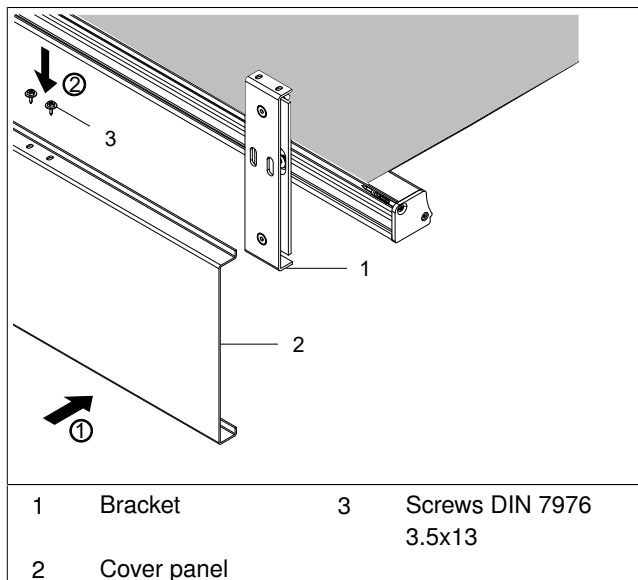


Fig. 9: Installing the cover panel

- Hold the cover panel [2] in place.
- Pencil in the drilled holes and drill them (bracket $\varnothing 2.8$ mm, cover panel $\varnothing 4.0$ mm).
- Slide the cover panel [2] onto the brackets [1] and attach using screws [3].

Aligning the cover panel



CAUTION

Risk of injury and product damage from falling cover panel.

- Do not fully unscrew the socket head screw beyond the limit stop.

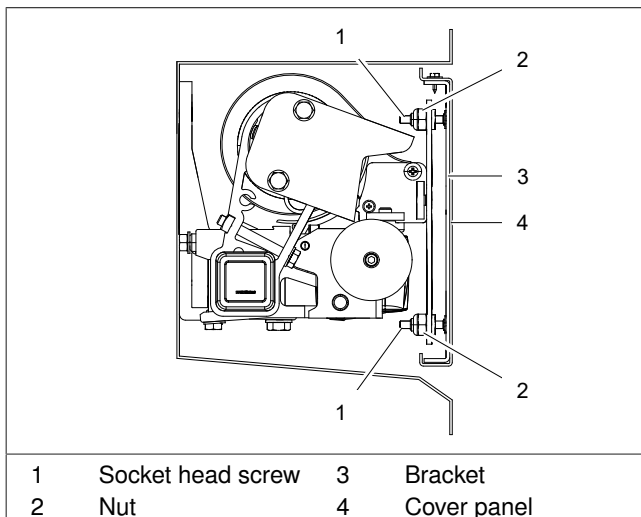


Fig. 10: Aligning the cover panel

- Extend the awning by approx. 500 mm.
- Release the nuts [2] on the bracket.
- Adjust the bracket [3] by turning the socket head screws [1] to align the cover panel [4].
- Tighten the nuts [2] again.

2.7 Performing a functional check



CAUTION

Risk of crushing from failure to exercise care during operation.

Persons who are located within the projection area may be injured.

- Keep the path of the product clear of people.
- Keep children away from the operating elements.



INFO

The limit positions are preset at the factory. Despite this, the limit positions still need to be checked.

- Connect the motor line to the programming cable/test cable. If necessary, an adapter can be connected between them.
- Connect the programming cable/test cable to the power supply.



INFO

of the motors used are not intended for continuous operation.

The integrated thermal protection switches the motor off after approx. 4 minutes. The product will be ready again for use after 10 to 15 minutes.

- When using the product, avoid operating the motor continuously over a lengthy period.

Test steps

- Extend and retract the awning several times. Check the front and rear limit positions. Readjust the limit positions if necessary ([see Chapter 2.9/Page 7](#)).
- Check the awning's inclination angle. Readjust the inclination angle if necessary ([see Chapter 2.10/Page 8](#)).
- Check the position of the articulated arms if the inclination angle has been readjusted. Readjust the connection between the articulated arm and front rail if necessary ([see Chapter 2.13/Page 9](#)).
- Check the articulated arms for synchronous operation. If the articulated arms do not retract evenly, readjust them so they run synchronously ([see Chapter 2.11/Page 8](#)).
- Retract the awning approx. 100 to 300 mm short of the rear limit position and check the height difference of the articulated arms. Readjust the height of the articulated arms if necessary ([see Chapter 2.12/Page 8](#)).
- If using automatic control systems, readjust the limit value based on the inclination angle as needed ([see Page 10](#)).

2.8 Connecting the motor on-site



INFO

- Note the "Setting instructions and wiring diagram" included with the drive.
- When using a control: follow the separate instructions.

- Connect the motor line to the on-site connection.



WARNING

Risk of electric shock from insufficient care!

The line can be damaged by moving parts!

- Keep the line away from all moving parts.

2.9 Troubleshooting: Readjusting the limit positions of the awning

Cause	Remedy
The motor has not been programmed correctly	<ul style="list-style-type: none"> Program the motor (see separate instructions).

Installation

2.10 Troubleshooting: readjusting the inclination angle

Adjusting the inclination angle between 5° and 20° (without a turning gear)



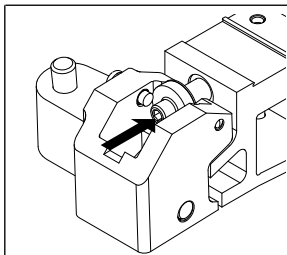
INFO

Articulated arm awnings 700S meet the requirements of rain class 2 starting at an inclination angle of 10° (to determine the inclination angle, see [see Page 10](#)).



INFO

The awning is delivered with an inclination angle of 10°. If necessary, the inclination angle at the articulated arm seat can be adjusted within the range of 5° to 20°.



INFO

Adjust the inclination by turning the spindle.

- ▶ Less inclination: turn clockwise
- ▶ Greater inclination: turn anti-clockwise

- Extend the awning.



NOTICE

Damage to the adjusting screw/spindle

Turning the adjusting screw/spindle under load may damage the thread.

- Lift and support the articulated arm to prevent the screw/spindle from seizing.



INFO

Adjust the articulated arm seat on both sides.



INFO

- Check the inclination angle.
- Readjust the limit positions of the awning if necessary ([see Page 7](#)).

2.11 Troubleshooting: Adjusting the articulated arms to run synchronously

Cause	Remedy
Path of fabric on the shaft	■ Shift the fabric on the shaft.



INFO

While the awning is being retracted, the two articulated arms do not retract at the same time. The position of the fabric on the shaft causes the articulated arms to move unevenly.

- ▶ The right articulated arm retracts first → The fabric winds to the left
- ▶ The left articulated arm retracts first → The fabric winds to the right

- Extend the awning completely.
- Retract the awning and observe which articulated arm retracts first.
- Extend the awning again.
- Grab the fabric on the side and pull it in the direction of the articulated arm that retracts first.
- Retract the awning and observe its behaviour. Repeat if necessary.

2.12 Troubleshooting: adjusting the height of the articulated arm (centre joint)

Cause	Remedy
The centre joints of the articulated arms are not at the same height.	■ Adjust the height of the centre joint.



INFO

The height of the centre joint can be adjusted by turning the threaded pin.

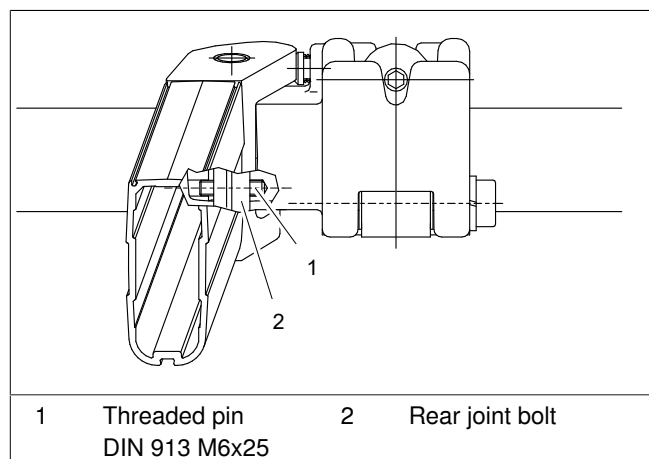


Fig. 11: Adjusting the height of the articulated arm

- Extend the awning until the threaded pin [1] is accessible.

Adjusting the centre joint upward

- Turn the threaded pin [1] clockwise by 1/4 turns.

Adjusting the centre joint downward

- Turn the threaded pin [1] anticlockwise by 1/4 turns.

Completing the adjustment

- Extend and retract the awning.

2.13 Troubleshooting: articulated arm is protruding from under the front rail

Cause	Remedy
Depending on the inclination angle and the size of the articulated arm awning, the articulated arms will protrude from under the front rail.	<ul style="list-style-type: none"> ■ Readjust the connection between the articulated arms and the front rail.

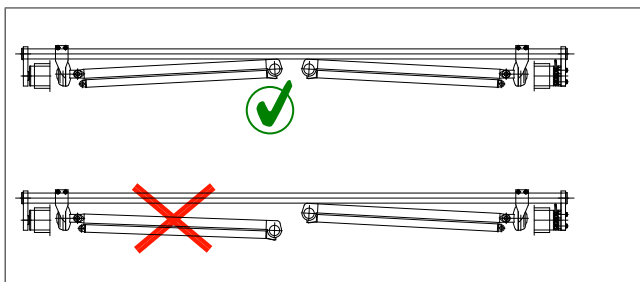


Fig. 12: Adjusting the connection of the arms

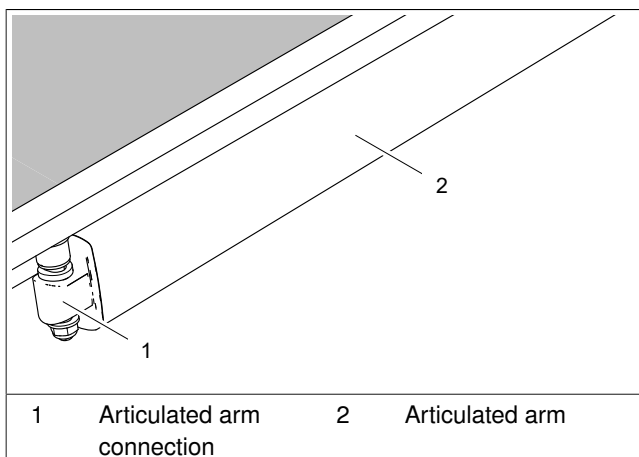


Fig. 13: Adjusting the articulated arm connection

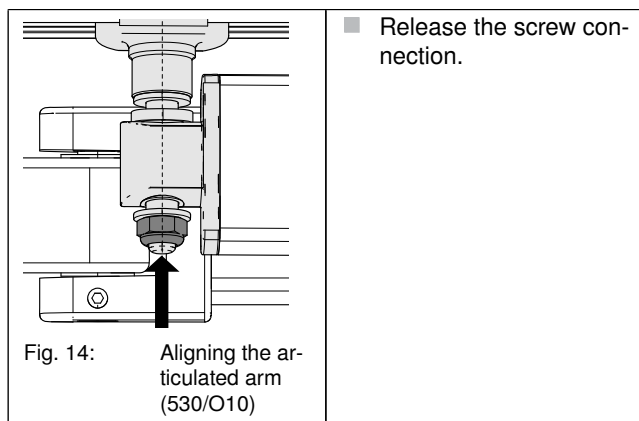


Fig. 14: Aligning the articulated arm (530/O10)

- Release the screw connection.

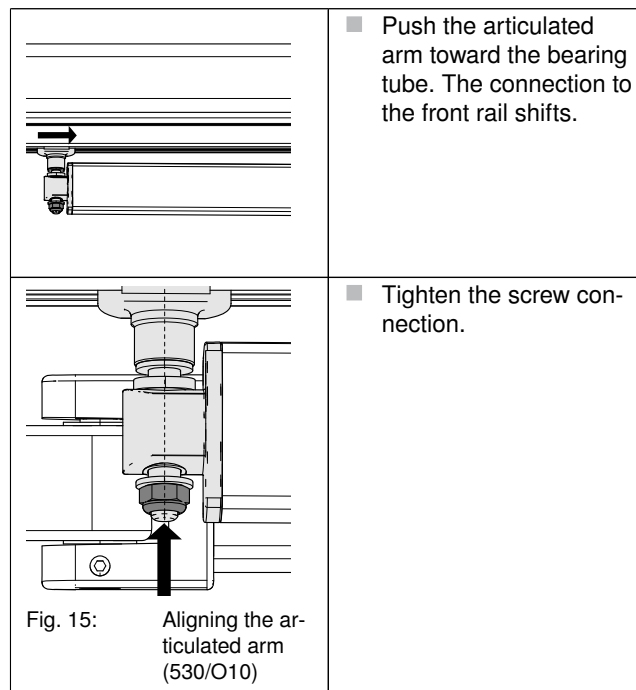


Fig. 15: Aligning the articulated arm (530/O10)

- Push the articulated arm toward the bearing tube. The connection to the front rail shifts.
- Tighten the screw connection.

2.14 Finishing the installation

Installing the WMS Wind sensor (optional)

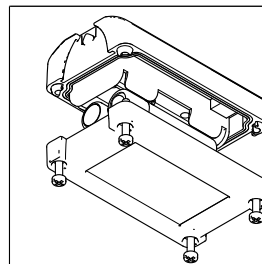


INFO

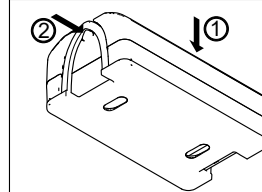
The mounting plate is installed on the front rail of the awning at the factory if the WMS Wind sensor was ordered along with the awning.

Note the documentation supplied for the WMS Wind sensor.

- Extend the awning by approx. 100 mm.



- Place the supplied batteries into the battery compartment of the wind sensor.



- Press the wind sensor onto the mounting plate until it engages.

Installation

Setting the control system



NOTICE

Damage to the product from a differing wind class value!

- Set the automatic control to the wind class value attained after installation.

Any automatic controls such as integrated wind sensor, comfort control, WMS comfort control or Wisotronic need to be set to the wind class value achieved after installation (please refer to the corresponding instructions).

The wind resistance class is dependent on the installation and mounting substructure. The class of the order in question can be obtained from the documentation.

Checking the inclination angle

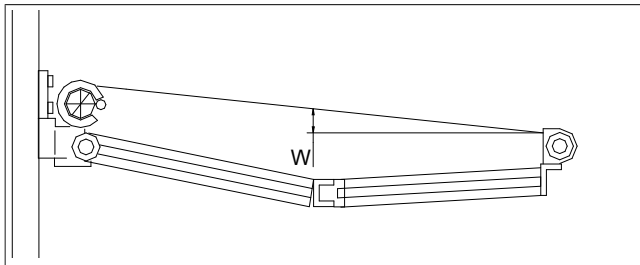


Fig. 16: Reading off the inclination angle

- Hold the protractor laterally against the awning fabric.
- Read off the angle from the protractor. Observe the specifications for the permissible rain class ([see Page 3](#)).

Training and documents

- Hand the documentation over to the operator.
- Instruct the operator on how to use this product.
- Complete and issue the handover report.