

## Installation instructions AZ024

**Anchor plate with placement hinge, to be dowelled into a concrete base:  
type ALBATROS.**

The following instructions include all information necessary for the installation and operation of this anchor tube. To avoid any misunderstanding we advise you to read these instructions carefully and then keep them for later reference.



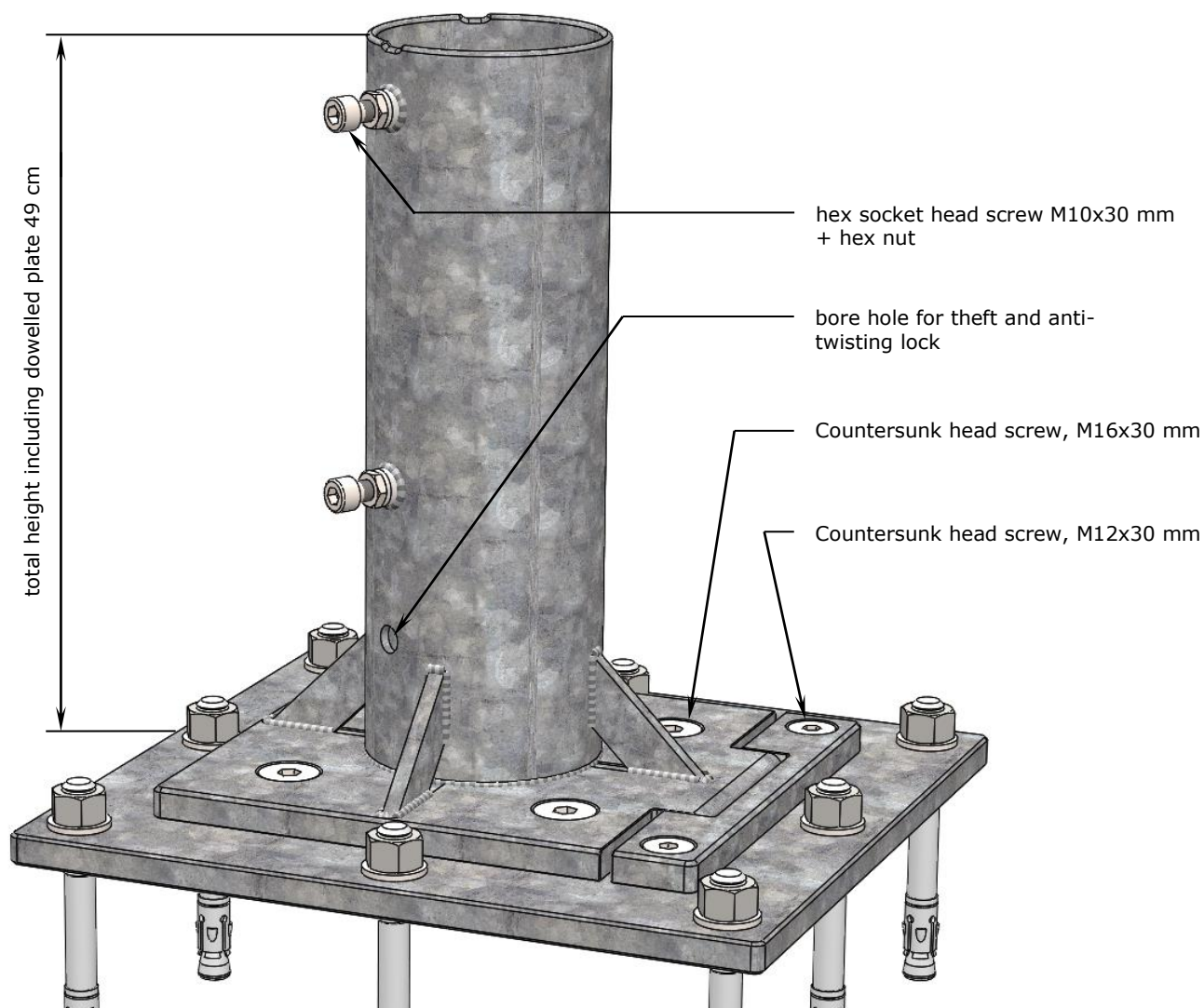
**Caution**

**Non-observation of operating instructions can result in personal injuries or damage to property.**

Please note that if these instructions are not observed, the manufacturer cannot assume any liability or guarantee.

- Always follow the safety regulations.
- Should you not understand any part of these installation instructions, please contact your MAY dealer.

### Installation diagram



## Determining the location for the anchor plate

1. Allow sufficient space between sunshades or between the wall of the house and the sunshade.



**Caution**

### Sunshades that are located too close together wear sooner.

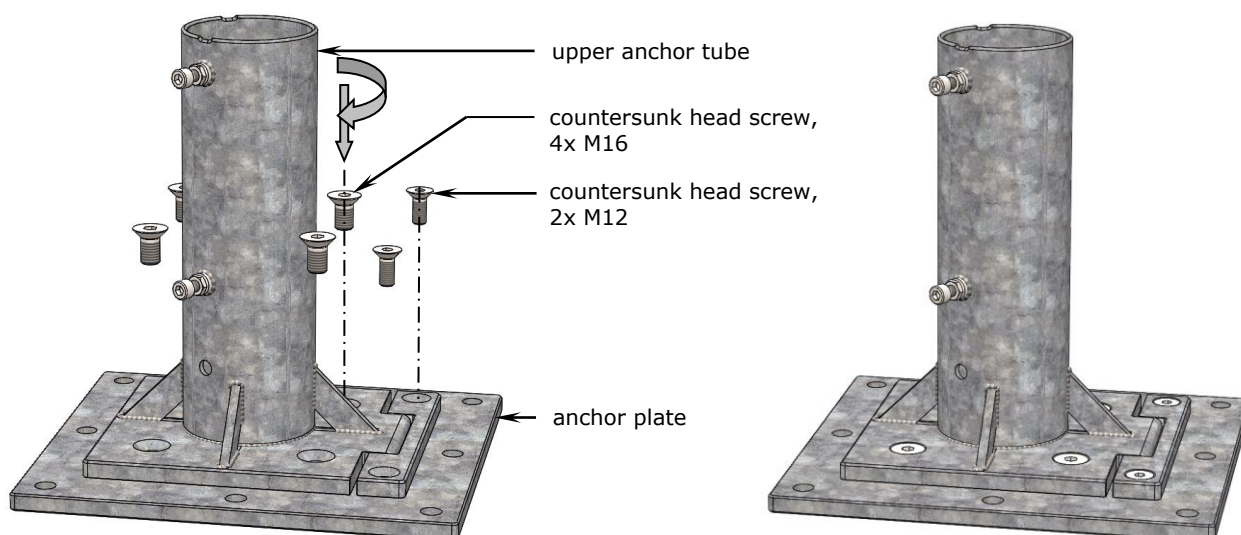
Sunshades may sway slightly. If there is not enough space between them, they may touch and abrade or scour the canopy fabric at the spoke ends.

- Make sure that there is a clearance of approx. 30 cm between the sunshades (or between a sunshade and the wall of the building).

2. We would like to stress that uneven patios are no problem for us. We are able to compensate any unevenness of the ground by adjusting the height of each individual sunshade. Extra length upper anchor tubes are available at 10 cm gradation and can be adjusted and accommodated on location.

## Dowelling the anchor plate into concrete

1. Screw the upper anchor tube onto the anchor plate (cf. illus.). Use the four M16 x 30 mm countersunk screws and the two M12 x 30 mm countersunk screws and tighten them. Tighten all screws using the 10 mm and 8 mm hex keys provided.



**Caution**

### Screws that are not tightened correctly will work loose.

If screws are not tightened firmly enough, there will not be sufficient tensile force to trigger self-locking. If the screws are tightened too firmly and over-stressed, the screw connection may slacken.

- Tighten the M16 screw manually using the enclosed hex key and extension. Exert as much force as possible. With the enclosed tools there is virtually no risk of over-stressing.
- The correct torque for a torque wrench for M16 is 150 Nm, for M12 it is 70 Nm.

2. If not already there, lay a concrete foundation. The depth of the foundation will depend on how sensitive the ground is to frost. We recommend a depth of at least 60 cm.



**Danger**

**A falling sunshade can cause serious or even fatal injury.**

If the foundation is not dimensioned to match the size of the umbrella, the sunshade may fall and cause injuries.

- Keep to the dimensions specified above.
- If in doubt, lay a new foundation.
- In case of poor-quality soil, opt for a larger-size foundation (from soil class 4: medium-textured soil, sand-gravel-silt-clay mixture acc. to DIN 18300).



**Caution**

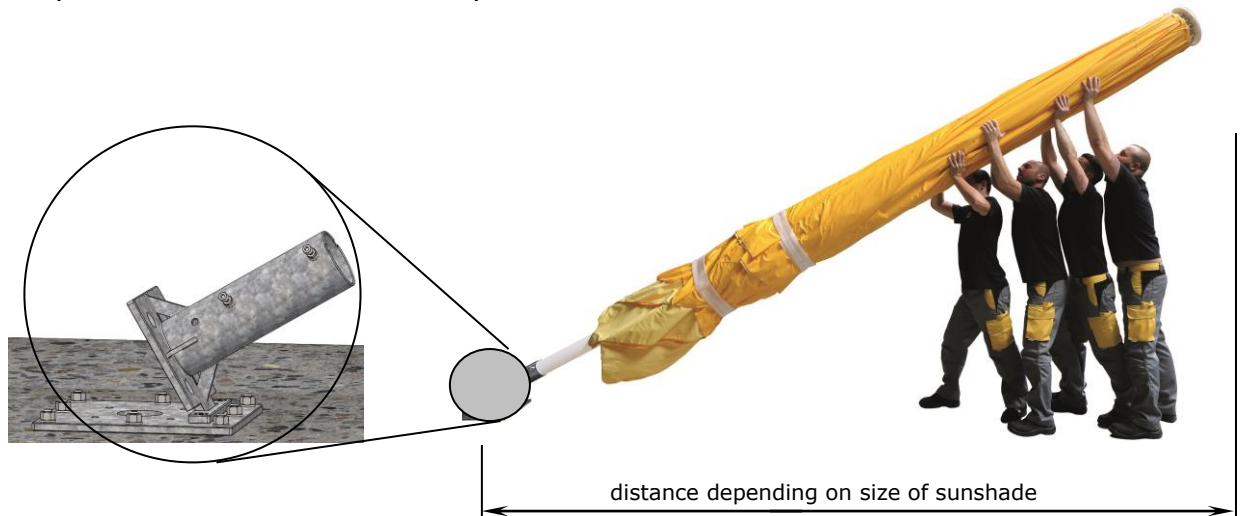
**The concrete foundation can be damaged by frost.**

Temperatures below freezing point may have a negative impact on the concrete foundation.

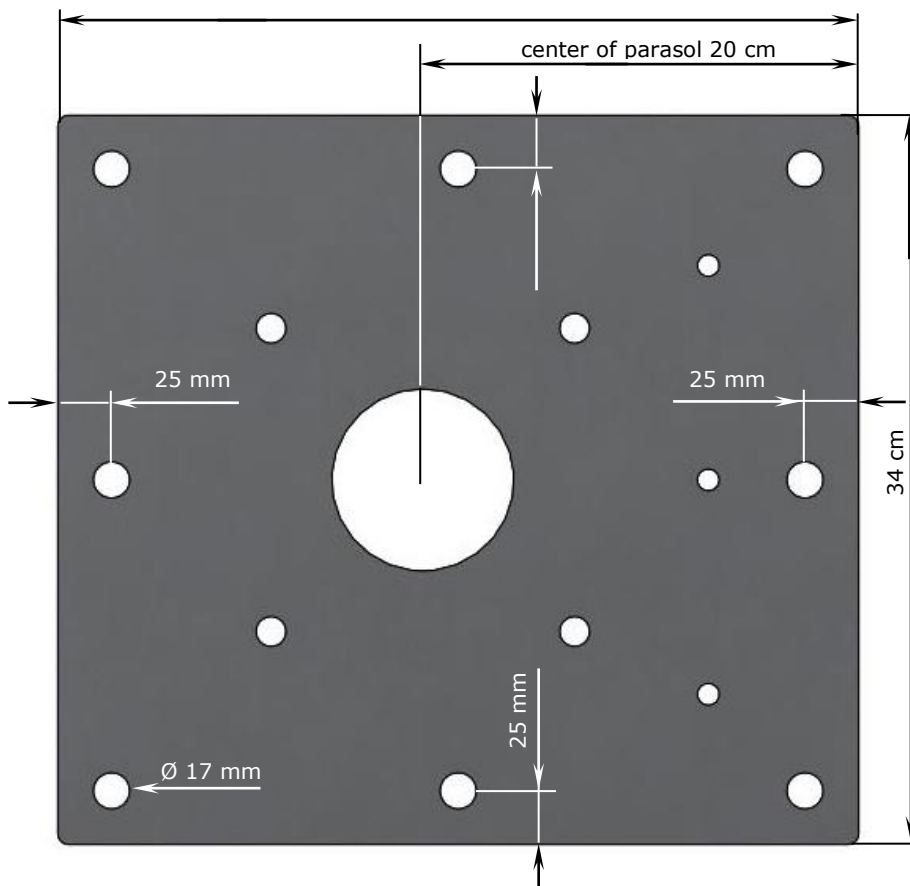
- Inquire up to what depth the ground of the designated sunshade location is frost-proof and choose the size of the concrete foundation accordingly.

Size of sunshade	Foundation (minimum depth 60cm) width / length
Ø 4m, 3x3m, 3.5x3.5m, 3x4m	60 cm / 60 cm
Ø 4.5m, 4x4m 8 segments, 4x4.5m, 4x5m	65 cm / 65 cm
Ø 5m, Ø 5.5m, 4x4m 12 segments	70 cm / 70 cm
Ø 6m, 4.5x4.5m 8 segments, 3x6m, 3.5x5m, 3.5x5.5m, 5x7.5m	75 cm / 75 cm
Ø 6.5m, 4.5x4.5m 12 segments, 5x5m 8 segments, 5.5x5.5m 8 segments, 6x6m 8 segments, 3.5x7.5m, 4x6m, 4x7m, 4x8 m, 4.5x5m, 4.5x7.5m, 5x5.85m, 5.5x6m, 6x7m, 6x8m	80 cm / 80 cm
Ø 7m, Ø 8m, 5x5m 12 segments, 5.5x5.5m 12 segments, 6x6m 12 segments, 6.5x6.5m, 7x7m, 3.5x7m, 4.5x5.5 m, 4.5x6m	85 cm / 85 cm
Ø 9m	95 cm / 95 cm
Ø 10m	100 cm/ 100 cm
7x8m	105 cm/ 105 cm

3. When choosing the location for the anchor plate, take into consideration that there must be sufficient space to erect and dismantle your sunshade.



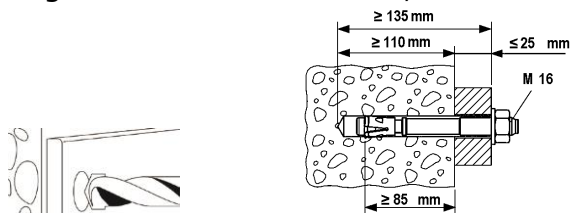
4. The hole pattern of the anchor plate can be seen from the diagram below.



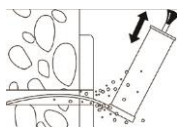
5. Screw the anchor plate onto the foundation. If you use anchor bolts provided by other manufacturers, please observe their instructions. Anchor bolts supplied by MAY should be mounted as follows:

Order No. 200900, 2 packages, threaded bolt with nut, stainless steel A4:

- Using a 16 mm hammer drill, drill a min. 110 mm-deep hole into the concrete.



- Clean the bore hole with compressed air.



- Drive the anchor bolt into the hole. Before doing so, be sure to position the hex nut correctly. (The drive-in pin of the threaded bolt should jut out of the hex nut approx. 2 - 3 mm.)



6. Check that the anchor plate is straight, using a spirit level. (cf. illus.).

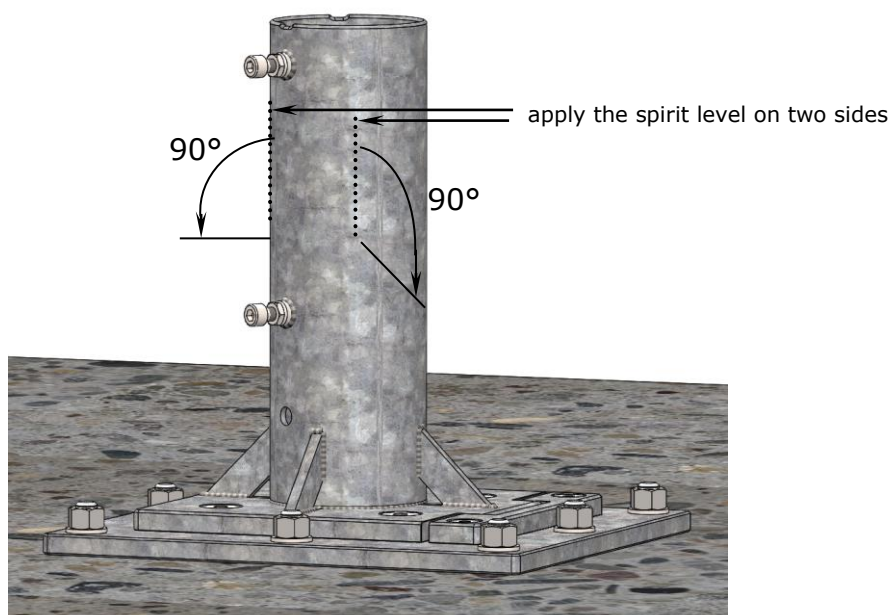


Attention

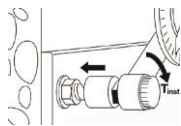
**If the sunshade is to be in a vertical position, the anchor plate must be embedded in the concrete absolutely vertically.**

If necessary, align the anchor tube with the help of washers.

- Apply the spirit level on two sides.



7. Use a torque wrench to tighten the nut with 110 Nm.



**Danger**

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**A falling sunshade can cause serious or even fatal injury.**

If the dimensions of the anchor bolts do not match the size of the umbrella, the sunshade may fall and cause injuries.

- Always determine the appropriate bolt size with the help of a specialist.
  - Anchor bolts of May company are approved for cracked and non-cracked concrete C20/25 to C50/60. Also suitable for concrete C12/15 and natural stone with dense structure.
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## Power supply (optional)

1. The connection of ground cable and power supply for the umbrella must be absolutely waterproof. The ground cable (for heavy current: min. 5-pole, min. 4 mm<sup>2</sup>, cable cross section) must be laid to suit the electric load and the length of the lead wire by a qualified electrician.



**Danger**

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**Electric installation work should be carried out solely by a certified electrician. Disregarding this warning may result in serious personal injuries.**

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**Danger**

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**To avoid personal injury in case of faults.**

Water in the plug connector can lead to a short circuit. Protect the connector against any water.

- Secure umbrella with a 30 mA RCBO protective switch.
  - According to law, the functioning of protective switches must be checked at least every six months.
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**Caution**

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**Danger of short circuit.**

Water in the plug connector can lead to a short circuit. Protect the connector against any water.

- Make sure that the plug connector remains above the ground when the sunshade is erected, or seal the connector with silicon (or the like) to make it 100% waterproof.
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2. Wire colours:
- |              |                     |
|--------------|---------------------|
| green-yellow | = protection        |
| blue         | = neutral           |
| brown        | = light (if used)   |
| black        | = heating (if used) |
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## Storage / Dismounting

1. Lift the closed sunshade out of the anchor plate.
2. Fold down the upper anchor tube. Disconnect the underground cable from the cable in the sunshade pole. Lift the sunshade out of the anchor foot.



**Danger**

**Electric installation work should be carried out solely by a certified electrician. Disregarding this warning may result in serious personal injuries.**

- First unplug the sunshade, then disconnect the ground cable from the umbrella power cable.

3. Remove the upper anchor tube completely by screwing it off.
4. Screw the enclosed set screws into the bore holes. Make sure that they are completely flush. (cf. illus.)

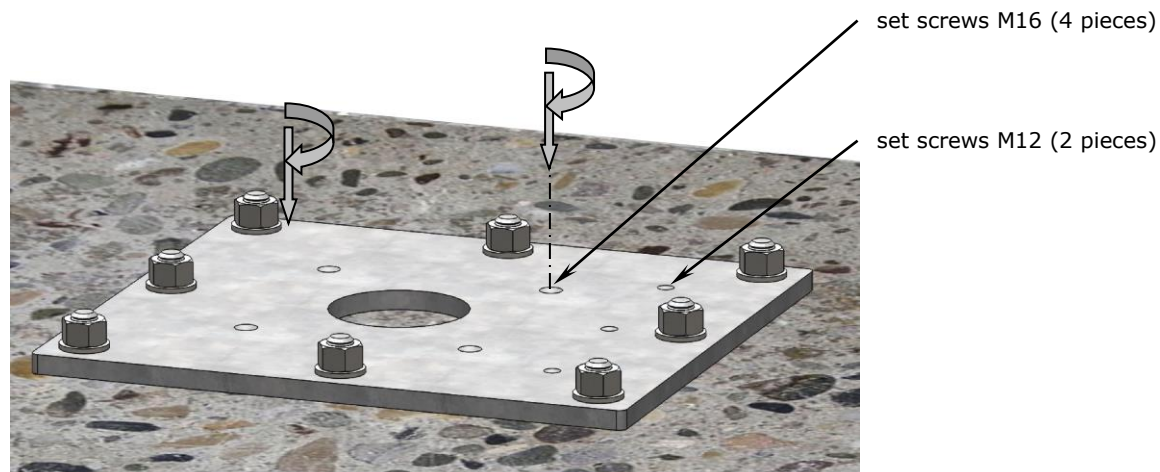


**Caution**

**The thread can get damaged.**

If the top plate is not mounted, sand may get washed into the flanks of the thread. As sand is harder than steel, the thread may get damaged when the screw is turned.

- The set screws must be screwed flush with the ground.





5. If you have two or more sunshades, it is advisable to mark them and their accessories (e.g. with metal-stamped numerals or using a waterproof marker) as soon as they have been dismantled (e.g. for winter storage).

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**Marking saves a lot of time and helps to keep things in order.**

**Tip**

If clearly marked, each sunshade can easily be assigned to its proper location and re-erected parallel to the wall of the house or next to the others.

- For clear and easy later assignment use the same number to mark the support pole, the upper anchor tube and the anchor plate. For example, for sunshade No. 1, all three parts should carry number 1, all three parts of sunshade No. 2 should be marked with a 2, etc.

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6. Grease the screws regularly to prevent them from rusting.