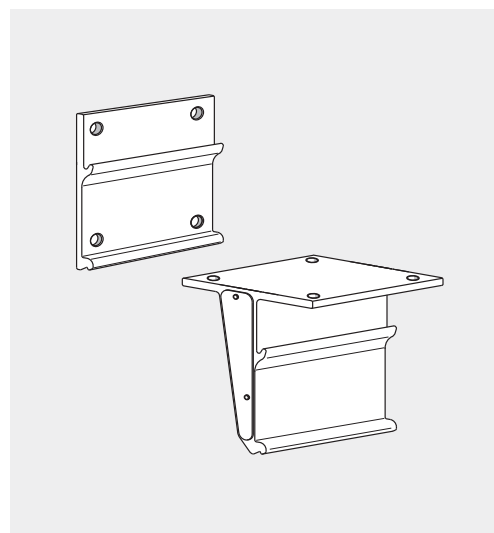
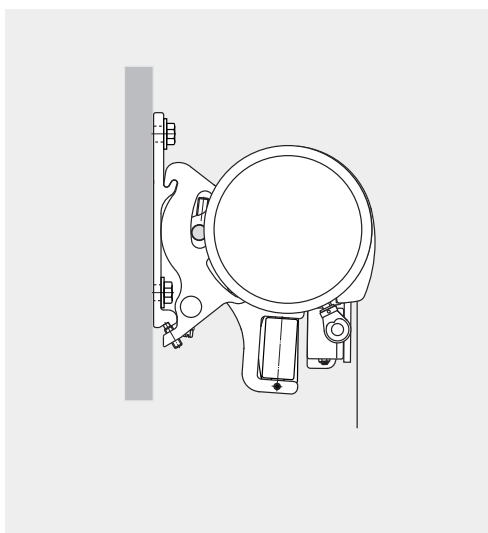
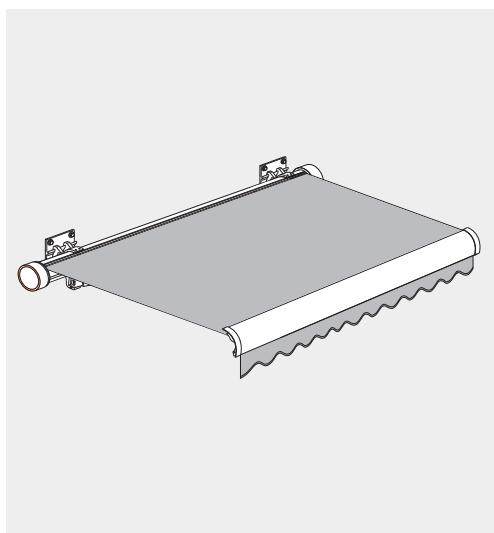


# Installation instructions

Edition 10.2020

## nova\_02 tube awning






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## Important safety instructions for the installation


## 1. Reading the installation and operating instructions

 The operating instructions must be read prior to installation. Any failure to do so absolves the manufacturer of any duty of liability

## 1.1. Safety notes and warnings relating to installation instructions

Safety notes can be found throughout the text. They are marked with a symbol and a note:


 **Important safety information:**  
Notes that are important for the functioning of the product and can result in serious injury or death in the event of improper use are marked with this warning triangle.

 **Important safety information:**  
This warning triangle indicates notes that are important for the functioning of the product and that if not followed represent a risk of electrocution that can result in serious injury or death.


## 1.2. Qualification

These installation instructions are aimed exclusively at qualified fitters with sound knowledge in the following areas:

- Health and safety at work and accident prevention regulations
- Handling of ladders and scaffolding
- Handling and transport of long, heavy components
- Working with tools and machines
- Attaching fasteners Assessing the fabric of buildings Commissioning and operating the product

 In the absence of any of these qualifications, a specialist fitting company must be employed to install the product.


Electrical work:

 The permanent electrical installation must be carried out by a qualified electrician in accordance with the national regulations. Installation instructions are enclosed with the electrical appliances supplied with the awning. These must be followed.

## 1.3. Goods acceptance

The delivery must be inspected immediately upon receipt for any damage sustained in transit. In addition, the contents of the shipment must be checked against the delivery note.


## 1.4. Transport

 The permitted axle load and permitted total weight of the transport vehicle may not be exceeded. Loading can effect the vehicle's handling.

The goods being transported are to be tied down and properly secured. The shade system packaging is to be protected against moisture. Any soaked packaging may disintegrate and result in accidents. Packaging opened for the purpose of goods receipt inspection must be properly taped up for further transportation.

After the awning is unloaded, it is to be transported to the installation site the right way up and in the proper installation position so that it does not have to be manoeuvred through tight spaces.  
The note on the position and side information on the awning box is to be adhered to.

## 1.5. Pulling up with ropes

 If the awning system needs to be pulled up to a higher position with the help of ropes, the awning is to be

- taken out of the packaging,
- fastened to the hoisting ropes in such a way that they cannot slip off, and
- pulled up smoothly in a vertical position.

The same applies to taking down the awning.

## 1.6. Mounting brackets

 Before starting installation, check

- that the type and number of fitting brackets supplied match the order
- that the details given with the order about the substructure to which the awning is to be fixed match the actual substructure found at the installation site.

If any variances that impair safety are identified, the installation may not be carried out.




Important safety instructions for the installation

NB:


Supplied without installation materials (available as accessories). Installation materials need to be matched by the fitter to the given installation substructure.  
Where fastening materials ordered with the system are used we do not simultaneously assume liability for proficient installation. The installer is exclusively liable for determining if the fastening materials for the respective masonry are suitable and for the installation being performed properly. The wall plug manufacturers' respective fitting guides must be followed.

1.7. Fasteners

 The awning fulfils the requirements of the wind resistance category specified in the CE conformity mark (see operating instructions). In installed condition, this requirement is only met if:


- the awning is installed using the type and number of brackets recommended by the manufacturer (see point 1.17 on page 6+7)
- the awning is installed taking account of the wall plug extraction forces specified by the manufacturer (see point 1.17 on page 6+7)
- that during installation attention has been paid to the guidance of the manufacturer of the wall plugs used.

Example of a CE Conformity Mark in the accompanying document:


①	
②	MHZ Hachtel GmbH & Co. KG Sindelfinger Straße 21 D-70771 Leinfelden-Echterdingen Germany
③	2018 LE-001
④	EN 13561:2015 art_01, art_02, VEGAS, nova_02 CLASSIC, CLASSIC MAXIMA Use on the outside of buildings and other structures Resistance to wind loads: Class 1 * Total energy transmittance $g_{tot}$ : NPD  * For awnings mounted on wooden substructures and/or to rafters, and for awnings in special sizes or finishes, it is not possible to state wind resistance classes (class 0).

- ① CE conformity mark, consisting of the CE mark defined in Directive 93/68/EEC.
- ② Name or identification code and the registered address of the manufacturer.
- ③ The year that the CE mark was issued.  
Declaration of performance reference number.
- ④ Number of the European standard applied, as given in the EU's Official Journal.  
Product type's unique identifying code.  
Product's intended purpose, as specified in the European norm.  
Level and class of the stated power output.


1.8. Climbing aids

 Climbing aids may not be attached to or leant against the awning. They must be steady and provide adequate grip. Only use ladders that are certified for the proper load bearing weight.


1.9. Fall protection equipment

 There is a risk of falling when working at any significant height. The appropriate fall protection equipment is to be used to guard against falls


1.10. Electrical connection

 The awning may only be connected if the electric motor's specifications match the electricity source (see operating instructions). The electrical component installation notes supplied with the unit must be followed.

 The unit is to be protected with an upstream FI circuit breaker in accordance with VDE regulations.


 Only cables and connectors with a protection class of a minimum of IP 54 may be used to supply power.

1.11. Partially assembled awnings

 Where awnings are partially assembled at the factory, e.g. linked systems with no fabric, the spring-loaded parts (see marking on the product) are secured against inadvertent opening. The securing device must not be removed until the blind has been completely installed.

These marked, spring-loaded blind components present a high risk of injury!

1.12. Intended use


 Awnings may be used only for the purpose defined for them in the operating instructions. Changes, such as attachments and modifications not intended by the manufacturer may only be carried out with the manufacturer's written consent.

Additional loading of the awnings by attaching objects or by cable tensioning or the like can result in damage to the awning or to it falling down; this is not permitted.



## Important safety instructions for the installation


### 1.13. Unsupervised operation

 When working in the extension area of the awning, the automatic controller must be turned off. There is a risk of crushing or falling.

In addition, ensure that the system cannot be unintentionally manually operated. For this purpose, the power is to be cut, e.g. take out the fuse or disconnect the plug. Furthermore, in the case of manual operating systems the operating crank must be removed and securely stored.

If the awning is used by several users, a priority locking system (controlled external electricity turn-off switch) must be used, which makes the retraction and extension of the awning impossible during cleaning and maintenance work.


### 1.14. Trial run

 The first time the system is extended, no one is permitted in the extension area of or under the awning. A visual check must be made of the fasteners and brackets after the first trial run.

During trial runs the automatic control or switch may not be used if the awning is out of the operator's sight (there is a risk of unintended extension/retraction). The use of a test cable to turn on the motor is recommended.

The installation and adjustment instructions included with the awning from the manufacturers of the motor, switch and controller must be followed.


### 1.15. Crush and shear zones

 There are crush and shear zones between drop bar and tube/cassette and/or covers near the joint arm and moving sections. Clothing i.e. body parts can be pulled into the system!

If the awning is being installed at a height of less than 2.5 metres above accessible thoroughfares, it may be turned on only by a push button switch from which there is a view of the moving parts. Electrical controllers, radio drives with latching function, latching switches, etc. are not permissible in this case.

The push-button switch must be fitted within sight of the drop bar but away from the moving parts. Ideally it should be fitted at a height of 1.3 metres (national regulations relating to the disabled must be observed).

### 1.16. Handover

 All operating instructions as well as the installation and adjustment instructions issued by the motor, switch and controller manufacturers are to be handed over to the user with an induction session. The user is to be instructed comprehensively on safety and on use of the awning. Failure to follow the instructions or any incorrect operation can cause accidents and damage to the awning.

All instructions are to be kept by the customer for future reference and must be passed on to the new owner if the awning is sold.

Based on knowledge of the particular circumstances at the site and the finished installation, the installation firm will tell the user whether the wind resistance class specified by the manufacturer has been achieved in the installed condition. If not, the installation company must document the wind resistance class actually attained.

Recommendation:

If you are the fitter, have the awning's correct installation and set-up, the time of installation and details of the acceptance meeting, including that you explained the safety information, confirmed in writing.



## Important safety instructions for the installation

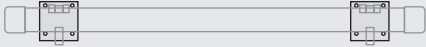
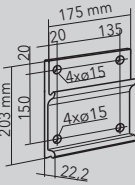
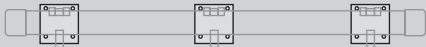
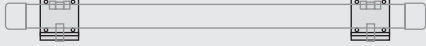
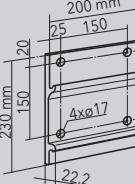

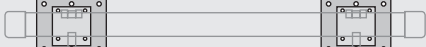
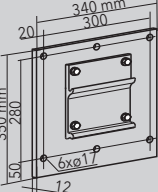


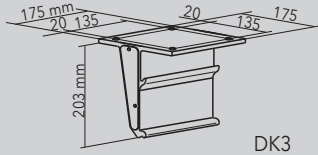
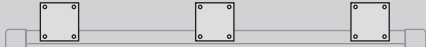
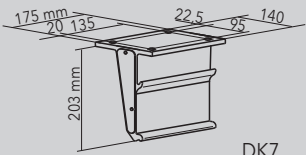
## 1.17. Bracket arrangement and extraction forces



Be sure to take note of all key installation information!

All brackets supplied with the product must be used and they must be fitted using all fixing points.

Pay attention to the extraction forces (see p. 7).

B-set	Description	Bracket arrangement	Fixing points	Illustration
HF	Standard wall bracket set consisting of 2-off WK6		8	 WK6
HH	Standard wall bracket set consisting of 3-off WK6		12	
KF	Wall bracket set consisting of 2-off WK8 for installation on difficult substructures		8	 WK8
KH	Wall bracket set consisting of 3-off WK8 for installation on difficult substructures		12	
HI	Wall bracket set consisting of 2-off WK10 (1 each of WK6 and steel plate *1) for fixing to critical substructures		12	 WK10
HK	Wall bracket set consisting of 2-off WK10 (1 each of WK6 and steel plate *1) and 1-off WK11 (1 each of WK6 and steel plate *1) for fixing to critical substructures		14	
KS	Ceiling bracket set consisting of 2-off DK3		8	 DK3
KU	Roof rafter bracket set *2 consisting of 2-off DK7			
KT	Ceiling bracket set consisting of 3-off DK3		12	 DK7
KV	Roof rafter bracket set *2 consisting of 3-off DK7			

B-set = bracket set; WK = wall bracket; DK = ceiling bracket

\*1 Galvanised, powder-coated in frame colour

\*2 Bracket set in combination with roof rafter bracket


Note: Brackets must be installed on the arm bracket.  
Pay attention to the centre-to-centre distance.



## Important safety instructions for the installation

**EXTRACTION FORCES AND BRACKET SETS** for wind resistance class 1

Extraction forces in Newton (N) per fastening screw

 So that the wind resistance class specified by us is valid, the fasteners must be matched to the existing substructure by the fitter. Where orders are received without specification of the installation substructure, you will receive mounting brackets for mounting on concrete C 20/25. Please note that these brackets may not be suitable for installation on other substructures. In order to satisfy DIN EN 13561, it is necessary to fit the type and number of brackets recommended for each product. It is essential to observe the defined wall plug extraction forces as well as the mounting and installation instructions given by the manufacturer of the fasteners (including the edge and hole distances). Precise extraction forces in relation to the thickness of the insulating plaster and the desired bracket set as well as to installation on other substructures on request. Coupled systems are counted as two individual systems (system width = 1/2 total width). The bracket set (K set) is required twice.

**WALL installation on concrete (C20/25)**

Width in cm	Projection in cm							
	150		200		250		300	
	N	B-Set	N	B-Set	N	B-Set	N	B-Set
250	359	HF	556	HF				
300	413	HF	639	HF	911	HF		
350	467	HF	723	HF	1.029	HF	1.391	HF
400	521	HF	806	HF	1.148	HF	1.550	HF
450	575	HF	890	HF	1.267	HF	1.710	HF
500	629	HH	973	HH	1.385	HH	1.869	HH
550	683	HH	1.057	HH	1.504	HH	2.272	HH
600	737	HH	1.140	HH	1.622	HH	2.454	HH

**WALL installation on brick ≥ MZ 12**

Width in cm	Projection in cm							
	150		200		250		300	
	N	B-Set	N	B-Set	N	B-Set	N	B-Set
250	307	KF	476	KF				
300	354	KF	548	KF	782	KF		
350	401	KF	621	KF	884	KF	1.196	KF
400	447	KF	693	KF	987	KF	554	HI
450	494	KF	765	KF	1.090	KF	611	HI
500	541	KH	838	KH	1.193	KH	669	HK
550	588	KH	910	KH	535	HK	813	HK
600	635	KH	983	KH	581	HK	879	HK

**WALL installation on hollow brick ≥ HLZ 12**

Width in cm	Projection in cm							
	150		200		250		300	
	N	B-Set	N	B-Set	N	B-Set	N	B-Set
250	307	KF	476	KF				
300	354	KF	548	KF	782	KF		
350	401	KF	621	KF	884	KF	1.196	KF
400	447	KF	693	KF	987	KF	554	HI
450	494	KF	765	KF	1.090	KF	611	HI
500	541	KH	838	KH	1.193	KH	669	HK
550	588	KH	910	KH	539	HK	813	HK
600	635	KH	983	KH	581	HK	879	HK

**WALL installation on cellular concrete ≥ PB2**

Width in cm	Projection in cm							
	150		200		250		300	
	N	B-Set	N	B-Set	N	B-Set	N	B-Set
250	307	KF	476	KF				
300	354	KF	548	KF	782	KF		
350	401	KF	621	KF	884	KF	497	HI
400	447	KF	693	KF	987	KF	554	HI
450	494	KF	765	KF	453	HI	611	HI
500	541	KH	838	KH	496	HK	669	HK
550	588	KH	910	KH	539	HK	813	HK
600	635	KH	983	KH	581	HK	879	HK

**CEILING installation on concrete (C20/25)**

Width in cm	Projection in cm							
	150		200		250		300	
	N	B-Set	N	B-Set	N	B-Set	N	B-Set
250	491	KS	727	KS				
300	568	KS	839	KS	1.164	KS		
350	646	KS	952	KS	1.318	KS	1.751	KS
400	723	KS	1.064	KS	1.473	KS	1.954	KS
450	800	KS	1.176	KS	1.627	KS	2.157	KS
500	877	KT	1.289	KT	1.781	KT	2.360	KT
550	954	KT	1.401	KT	1.936	KT	2.854	KT
600	1.031	KT	1.514	KT	2.090	KT	3.085	KT

N = extraction force in Newtons (N) per fastening screw; K set = specified bracket set (see overview on page 6)

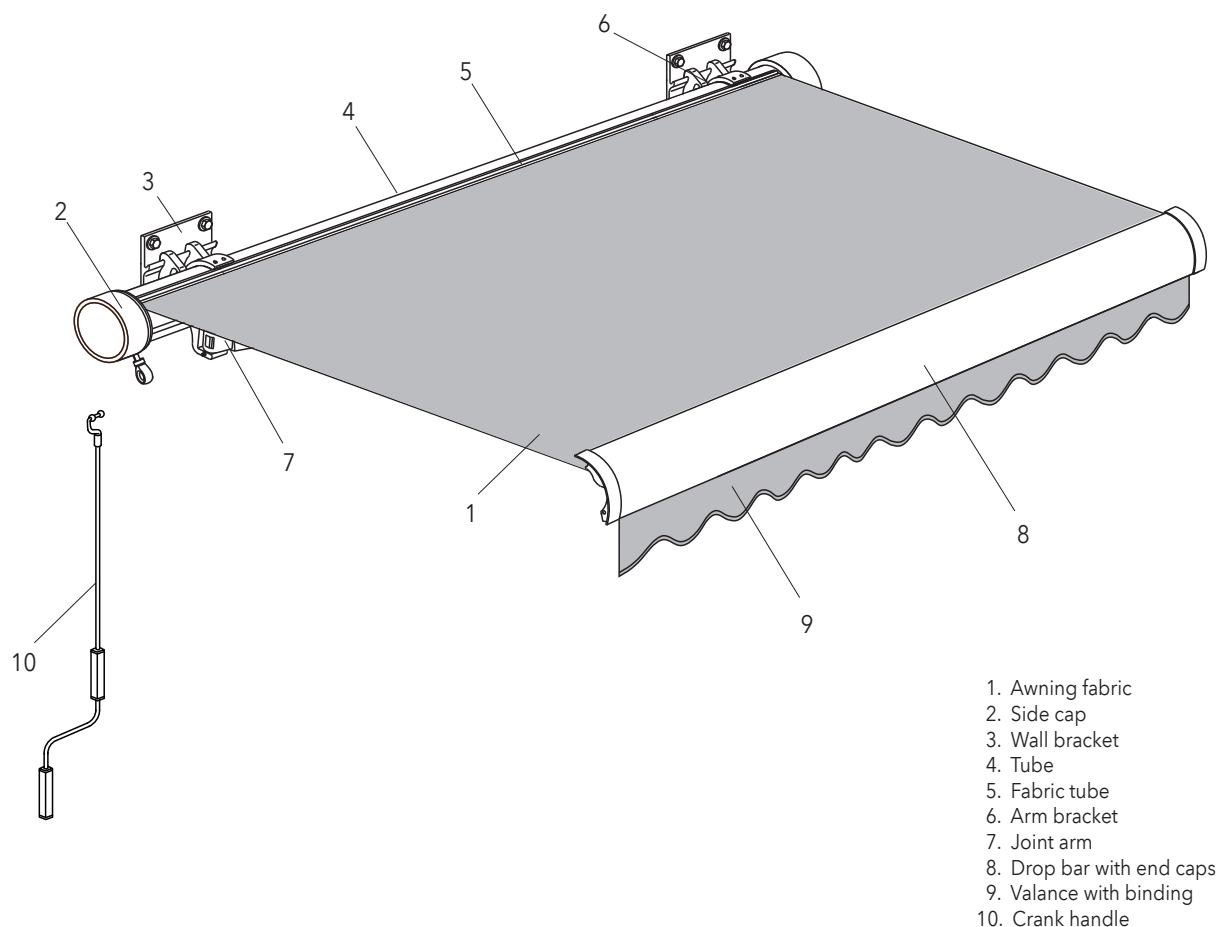






# INSTALLATION INSTRUCTIONS

## nova\_02 tube awning



Check delivery at once for any damage caused in transit. The contents of the shipment must be checked against the delivery note.

**Caution:**  
**Supplied without fastening materials.**  
The fasteners must be matched by the fitter to the given installation substructure.

**! Important:**  
The extraction forces for the fastening screws must be defined on the basis of  $70\text{N/m}^2$  related to the awning fabric surface area.

**Operating note:**  
An awning is a sunshade, not a shield from all forms of weather. In the event of wind, storms, snow or rain, it must be retracted. If the awning is equipped with an automatic controller (e.g. wind and sun sensor), this must be switched off over the winter (danger of icing up).

**Give the user of the awning the accompanying operating instructions and explain to them in detail all the guidance on awning use and safety.**

MHZ awnings require in the main no maintenance. If any faults do arise, notify your specialist retailer.

**Required tools:**

- Phillips screwdriver size 2
- Allen wrench SW 2, 3, 4 + 6
- Box spanner SW 17
- SW8 socket wrench or SW8 socket spanner with flexible shaft
- Spirit level

**If electrically operated:**

1 adjustment cable for SunTop drives (prod. no. 99-1085) or  
1 adjustment cable for RTS or io wireless drives (prod. no. 99-4196) Adjustment cables can be used only for the installation!

**Caution:** For motor settings please follow the setting instructions for electric drives, p.19, 20 + 21.



Technical data

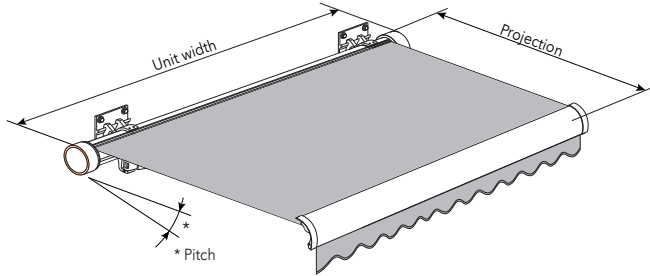
Unit width: from 190 cm to 600 cm  
coupled from 601 cm to 1200 cm

Projection: 150 / 200 / 250 / 300 cm

Arm bracket: pitch adjustable from 5° bis 28°

Type of installation: wall / ceiling / rafter

from unit width of 451 cm: **Central support bracket**



1. Attaching the brackets

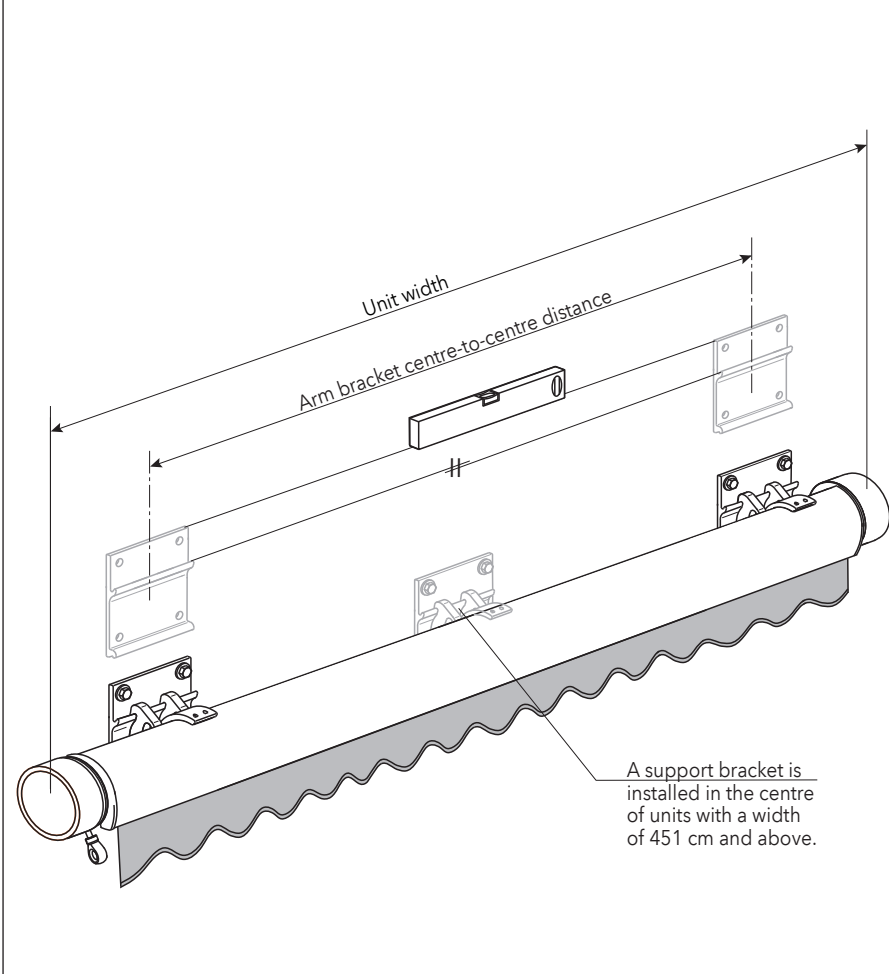
Mark out the full awning width (unit width) on the wall or ceiling.

Specify the alignment with the guide (horizontal).

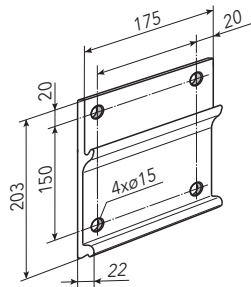
Measure the awning's centre-to-centre distance, i.e. the measurement from the centre of the arm bracket to the centre of the arm bracket, and transfer to the awning width marked on the wall or ceiling. Align the brackets on the wall or ceiling and attach with screws.

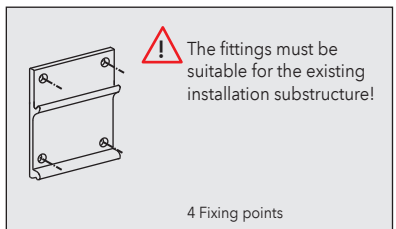
Caution: The brackets must always be aligned vertically and horizontally.

1.1. Wall installation



A support bracket is installed in the centre of units with a width of 451 cm and above.



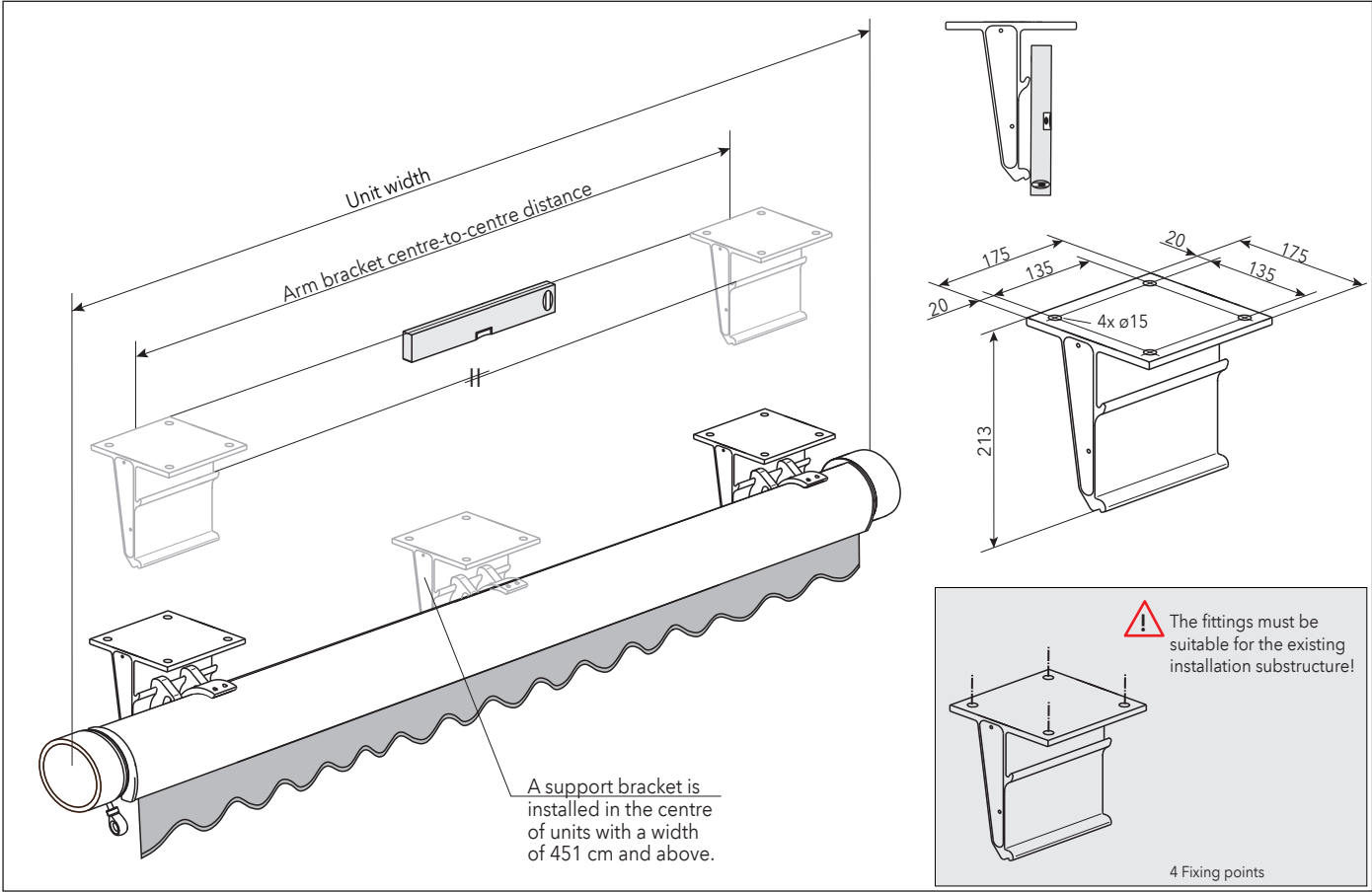


The fittings must be suitable for the existing installation substructure!

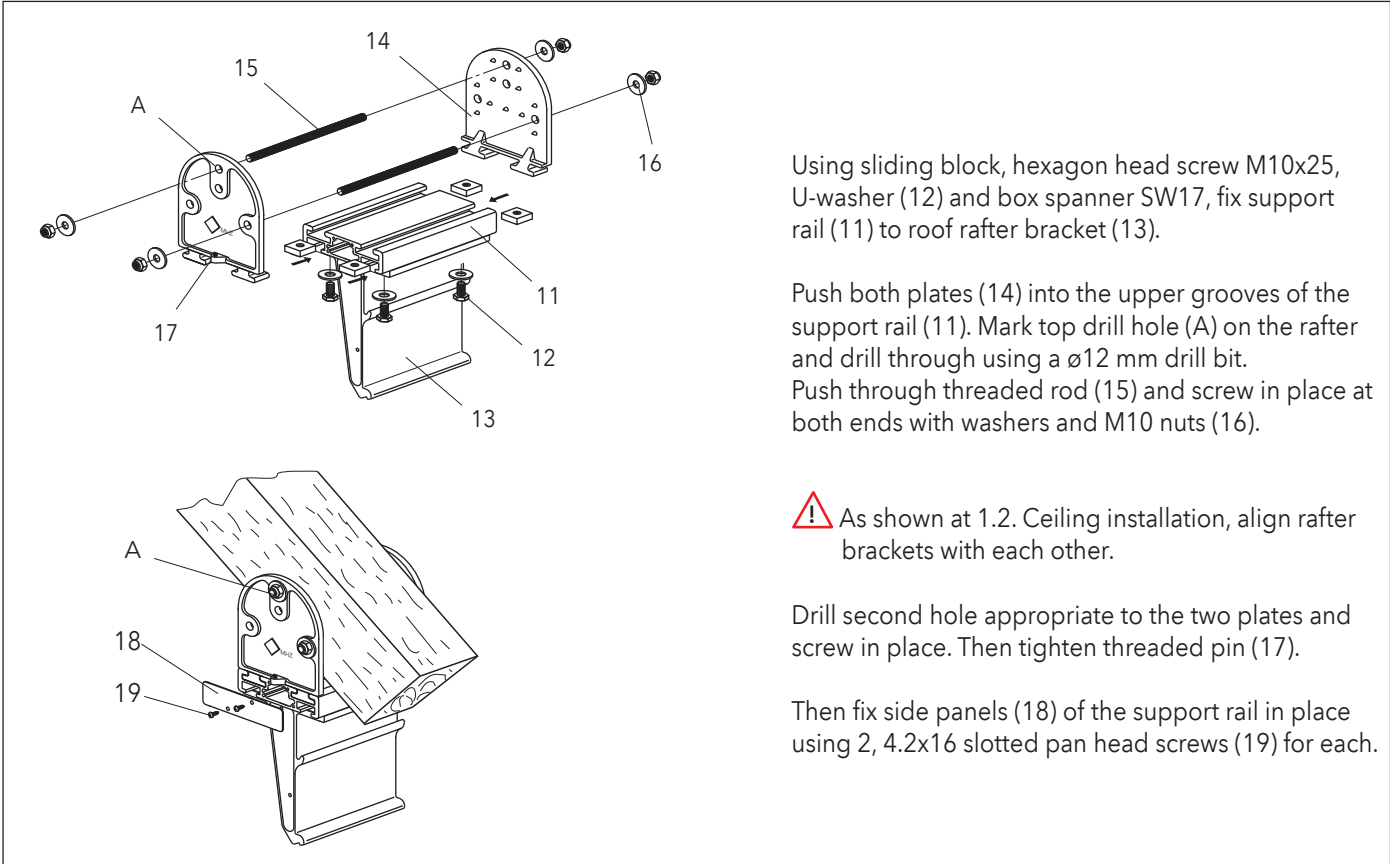
4 Fixing points



1.2. Ceiling installation

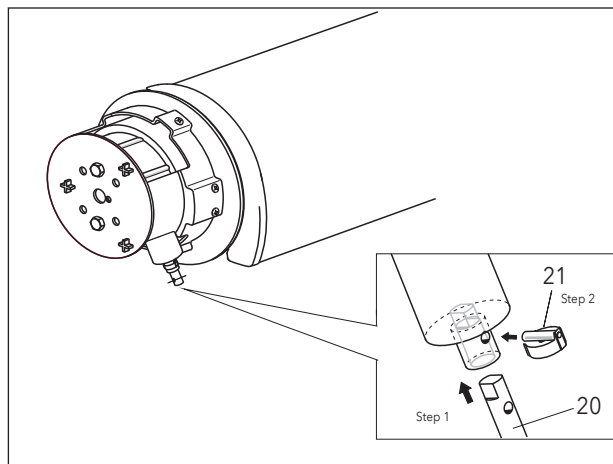


1.3. Roof rafter installation (accessory)





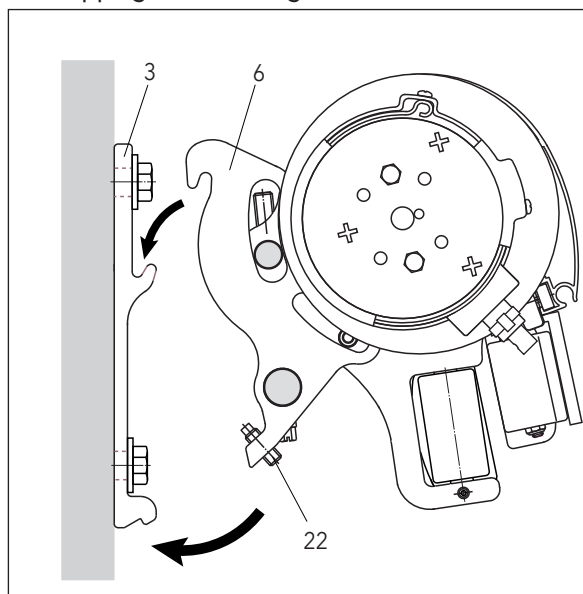
## 2. Installing the gear eyelet extension



Before mounting the awning in the brackets, the extension for the connecting rod eyelet must be installed.

Place the extension (20) in the bevel gear support and secure with the locking bolt (21).

## 3. Dropping in the awning

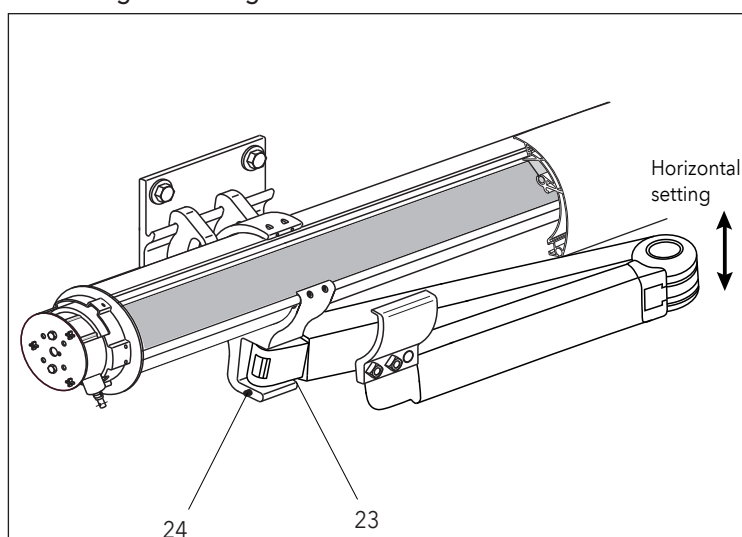


Mount the awning in the bracket (3) using the arm brackets (6) and attach to the brackets with the two M8x25 threaded pins (22) (SW4 Allen key).

**Note:**

Always tighten the two outer threaded pins (22) on the brackets first and then the inner ones.

## 4a. Setting the awning arms to be horizontal



If with the awning retracted the arms are not horizontal, proceed as follows:

Extend the awning approx. 20 cm.

Loosen the M6x16 threaded pin (23) pointing towards the centre of the awning in the arm bracket arm slot (SW3 Allen key).

Move the arm into a horizontal position by tightening or loosening the opposite outer threaded pin (24) in the arm bracket.

**Note:**

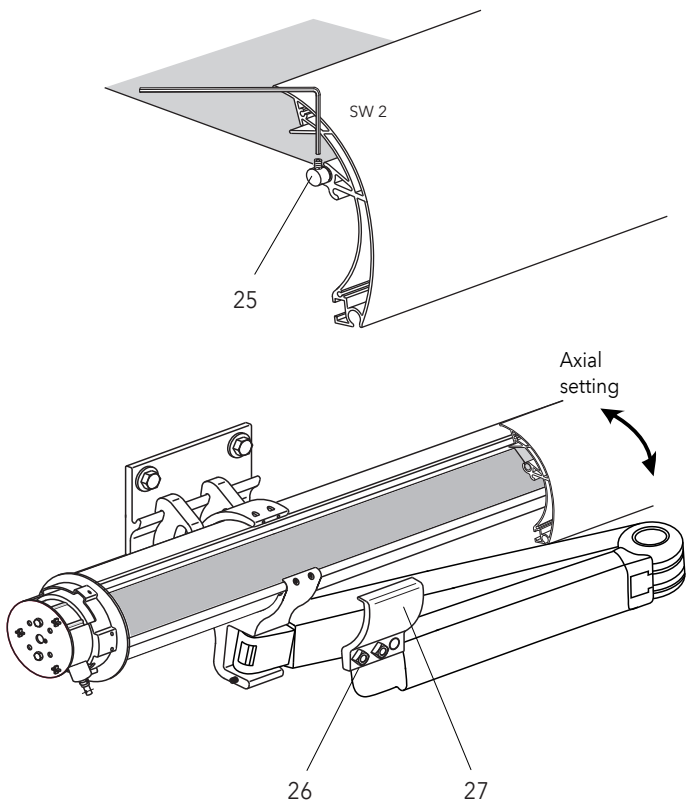
- Tightening the threaded pin:  
Arm moves up
- Loosening the threaded pin:  
Arm moves down

After adjusting the arms, both threaded pins (23, 24) must be tightened again.

Extend and retract the awning and check the setting.

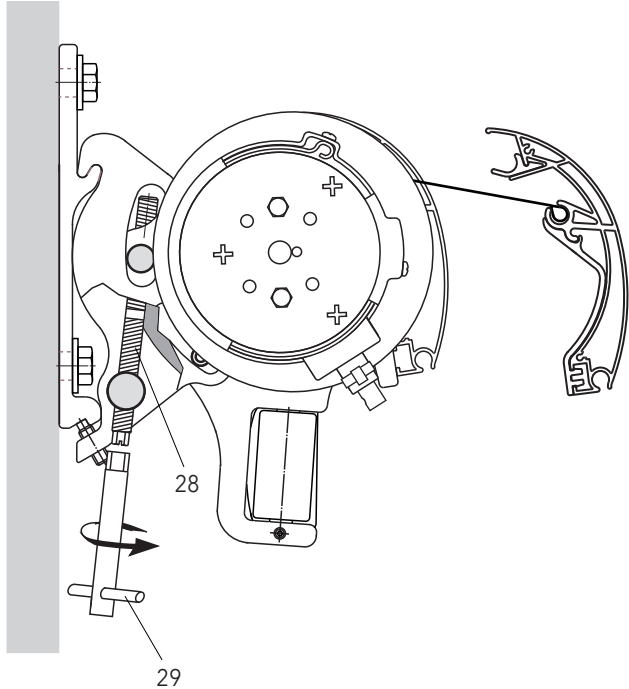


## 4b. Aligning the awning arms by their axis



If the arms tilt out towards the wall when the awning is retracted (axial setting), proceed as follows:  
 Extend the awning approx. 10 cm.  
 To be able to centre the awning fabric in the drop bar, loosen the threaded pin on the left and right of the piping clip (25) (SW2). Loosen the cylinder head screws (26) on the left and right of the suspension bracket (27) using a SW6 Allen key.  
 Almost close the awning.  
 Centre the drop bar and awning fabric. Align the left and right arm axially (place arm on the front arm stop).  
 Mark the new left and right position of the suspension bracket on the drop bar with a pencil.  
 Extend the awning approx. 10 cm.  
 Secure the cylinder head screws (26) in the new position on the left and right of the suspension bracket (27). Secure the awning fabric on the left and right again using the piping clips (25).  
 Extend and retract the awning and check the settings.

## 5. Pitch adjustment




Extend awning fully.  
 Use the SW8 Allen key (29) provided to twist the spindle (28) until the desired incline is achieved.  
 Horizontally align the drop bar.

Tip: For easier adjustment of the pitch slightly raise arms

Turning right = steeper pitch  
 Turning left = shallower pitch

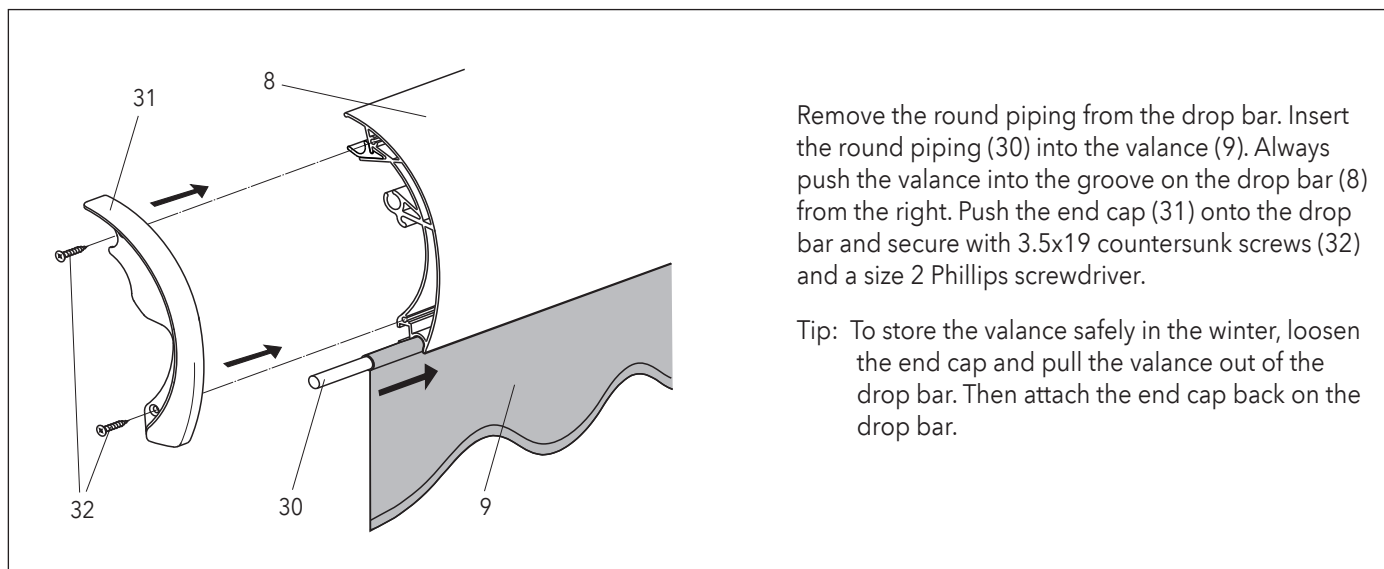
Adjustment range of 5° - 28°

Installation tip:  
 SW8 socket spanner with flexible shaft

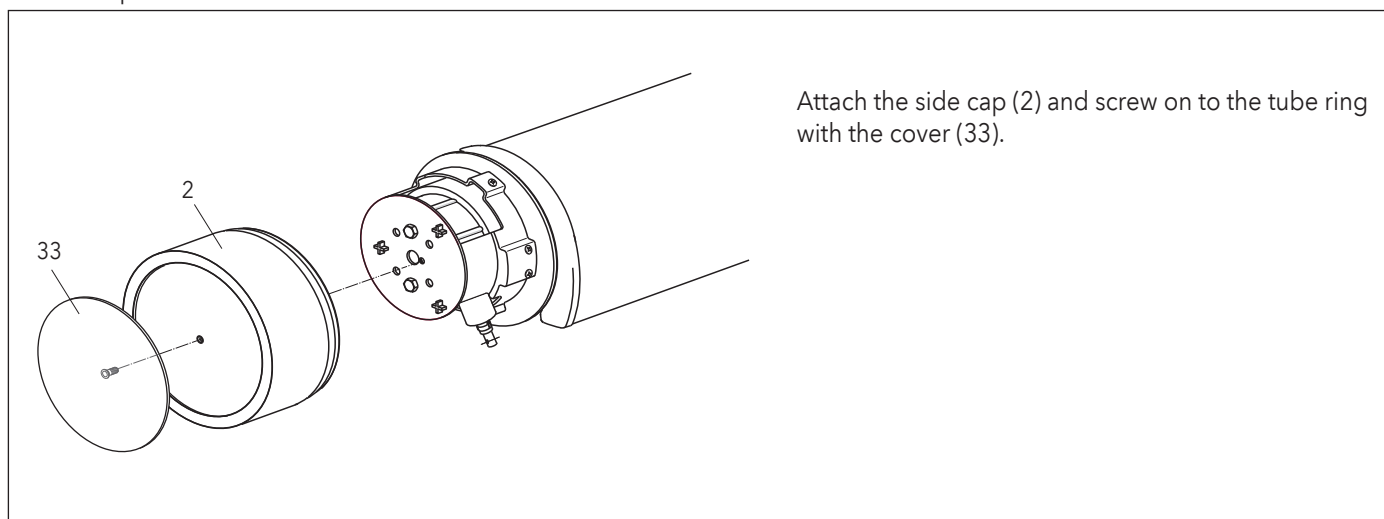




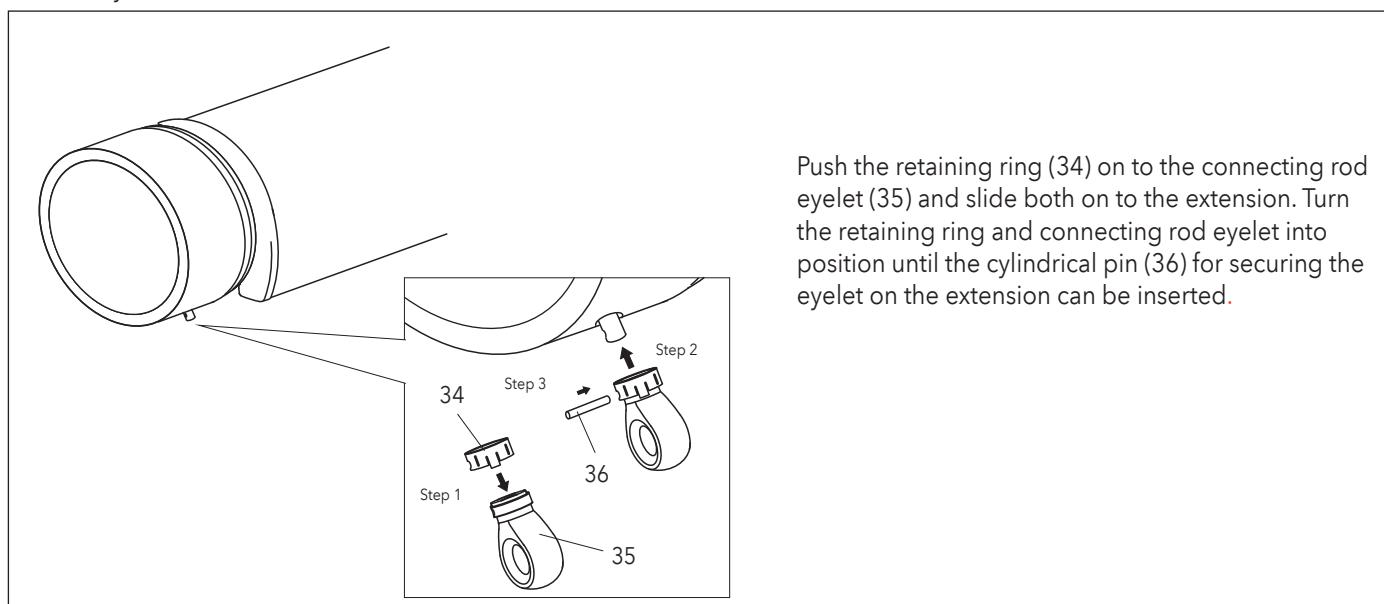
## 6. Valance



## 7. Side cap installation

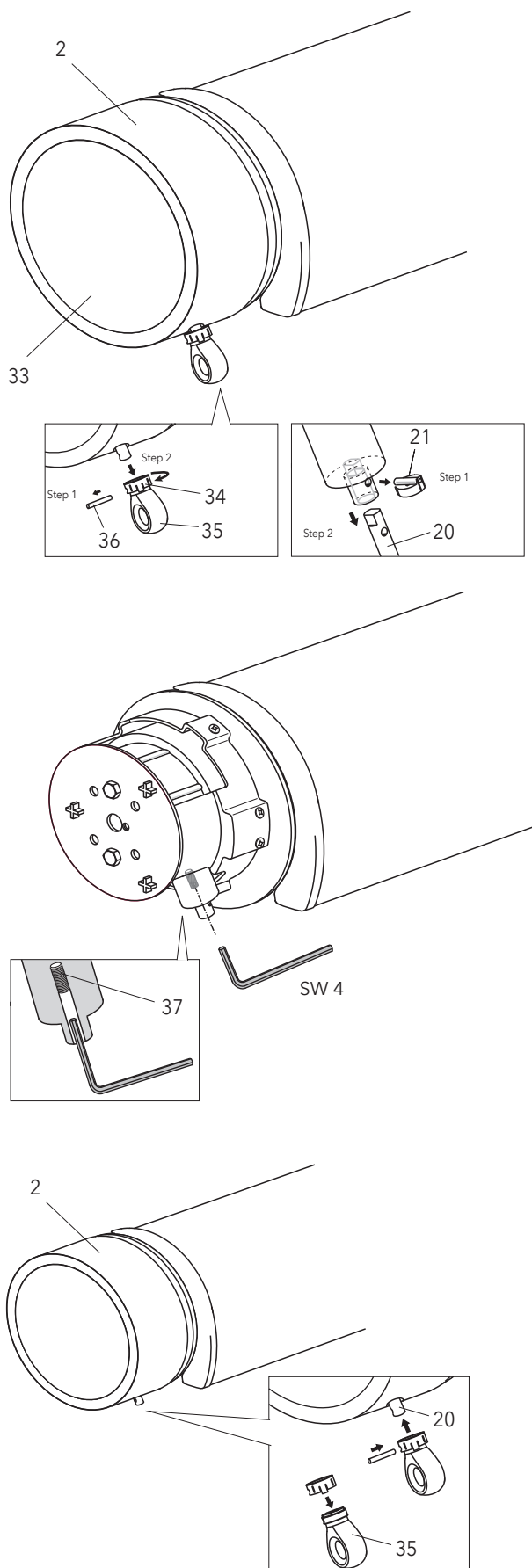


## 8. Gear eyelet installation





## 9. Gear adjustment



The gear's end setting is set at the factory. If you do, nevertheless, want to change the end setting, proceed as follows:

Extend awning until the free-wheel clutch activates (clear 'click' sound). Then retract awning c. 1 to 2 cm.

Twist the retaining ring (34) on the connecting rod eyelet (35) until the cylindrical pin (36) for removing the connecting rod eyelet is visible. Remove the cylindrical pin. Remove the side cap (2) after unscrewing the cover (33).

To set the gearing, take off extension (20). Remove bolt lock (21) and pull extension (20) out of the bevel gear's mount.

### Gear adjustment:

Using an SW 4 Allen key, loosen the internal securing screw (37) by three rotations. Fit extension (20) and plastic eyelet (35) again.

### When adjusting the end stop outwards (projection becomes greater):

Using the crank handle, slightly wind the awning in (c. 1 cm) in order to take pressure off the end stop. Then wind out to the desired end position.



This short movement prevents any damage to the adjustment cogging.

### When adjusting the end stop inwards (projection becomes smaller):

Using the crank handle, wind the awning in to the desired end position.

Take off eyelet and extension and tighten securing screw (37) again.

Then fit extension (20), plastic eyelet (35) and side cap (2) again.

Check setting by retracting by c. 50 cm and then extending until the free-wheel clutch activates (clear 'click' sound).

### Note:

Wind in UP direction (wall direction)

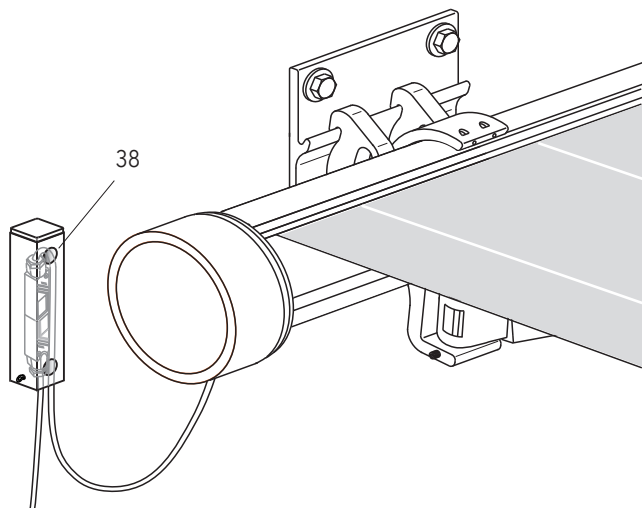
= projection gets smaller

Wind in DOWN direction (projection direction)

= projection gets bigger

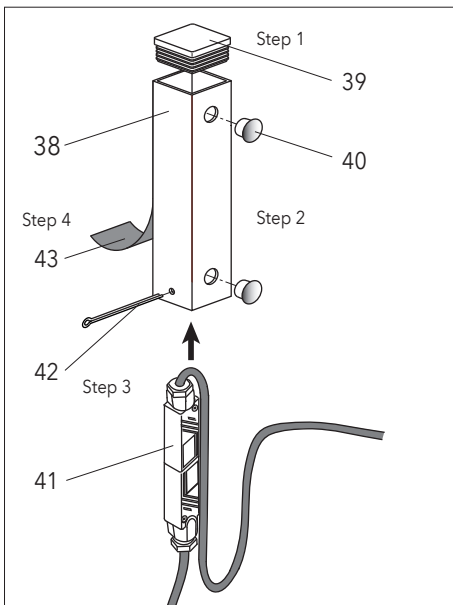


10. Protective sleeve installation for Hirschmann coupling (accessories)

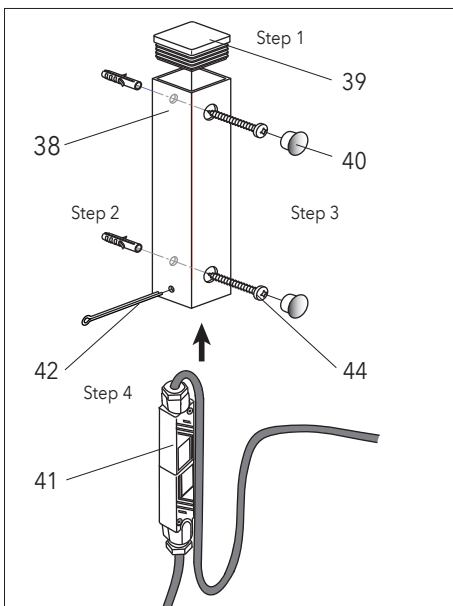


Protective sleeve for Hirschmann coupling (accessories)

The protective sleeve (38) for a Hirschmann coupling can be screwed to the wall or ceiling. It should be installed with the open side facing down. This ensures that any incoming water or rain can drain away.



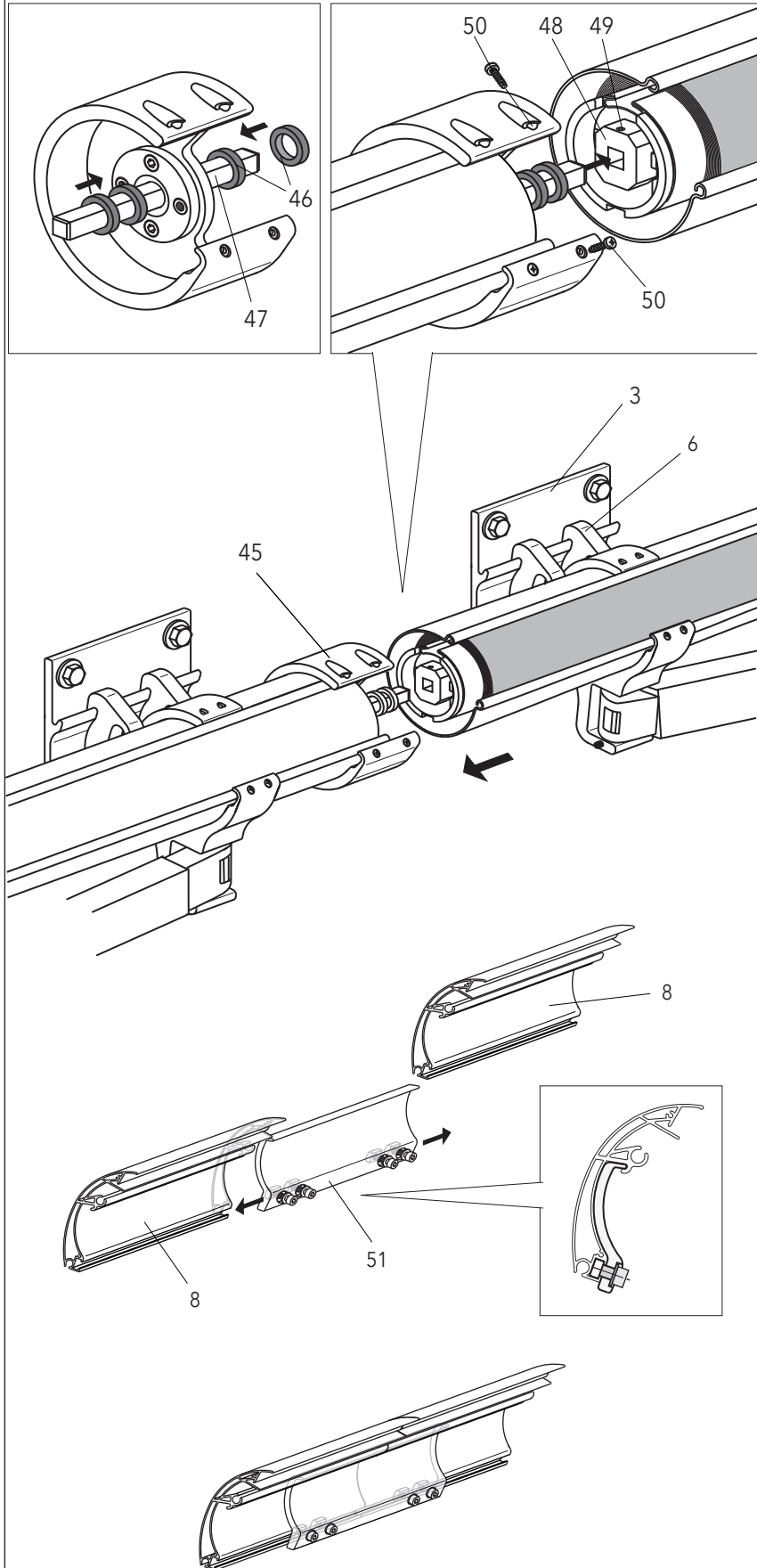
1. The protective sleeve can be secured to even and smooth surfaces, such as a powder-coated carrier bar, coated metal, and to stable and smooth plastic substructures using adhesive. Substructures such as plaster, concrete or wood, and structured substructures, are not suitable for adhesive. Insert the plug-in caps (39) at the top of the protective sleeve (38). Insert the two decorative plugs (40) into the unused holes. Insert the Hirschmann plug (41) into the protective sleeve from below and secure with the splint (42). Remove the protective film from the adhesive tape (43) on the back of the protective sleeve. Stick the protective sleeve in the required position on the designated substructure and press down firmly



2. Screw fitting  
Insert the plug-in caps (39) at the top of the protective sleeve (38). Attach the protective sleeve to the wall or ceiling using the S6 dowel and a Ø5x50 chipboard screw (44). Then insert the two decorative plugs (40) into the holes. Insert the Hirschmann plug (41) into the protective sleeve from below and secure with the splint (42).



## 11. Coupling


**Caution:**

Only remove the arms' securing tapes after the fabric tube's coupling.

Here is a lot of tension on the joint arms - Risk of injury!

Install the awning section with the drive in the same way as a single unit. Hook the joint arm brackets (6) of the field, that is being connected, in to the brackets (3) and push on to the coupling bracket (45).

**1. Connecting the fabric tube**

 Push the two spacers (46) on to the coupling square (47). The fields, that are being connected, must have the same number of fabric layers and the piping channels on the fabric tubes must be aligned.

When sliding on the field, that is being connected, the coupling square (47) must be pushed into the fabric tube insert (48) on the field being connected. Do not forget the spacers (46). Press the tube together gently and push into the coupling bracket (45).

Secure the square with the threaded pin (49) (SW3). Fix in place with a 3.9x14.5 countersunk self-tapping screw (50) and a size 2 Phillips screwdriver.

2. Secure the connected awning section to the brackets using the threaded pins on the arm bracket (see installation instructions p. 12, point 3) (SW4 Allen key).

3. Remove the retaining straps from the joint arms.

**4. Extend the awning fully.**

Check that the drop bars for both fields are at the same height horizontally. If they are not level, proceed as described in the installation instructions, p. 13 "Tilt setting".

**Important for tension-free installation!**

**5. Retract the awning.**

Check the fabric spacing. The spacing to the left and right of the coupling bracket must be the same.

Adjust if not.

**6. Extend the awning fully.****7. Connecting the drop bar**

Push in the top connector profile with the sliding block (51) facing downwards until it is halfway into the drop bar (8) groove. Then repeat this process for the drop bar that is being connected. Align the connector profile in the **centre** and screw tight (SW6 Allen key).

8. Push the valance into the drop bar groove. Push the end cap onto the drop bar and secure with countersunk screws.







Adjustment instructions for Elero SunTop drives

A. Note for the electrical installer

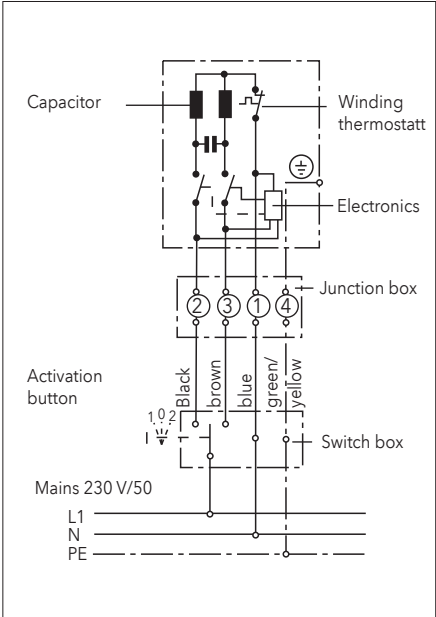
This awning must not be connected with the power live. Take fuse out beforehand!  
There is a risk of the electronic end position setting being deleted. Resetting this is possible only with the special Elero setting cable (prod. no. 99-1085).  
The system is to be protected with an upstream FI circuit breaker in accordance with VDE regulations. Only cables and connectors with a protection class of a minimum of IP 54 may be used to supply power

B. Important Notice

- This unit is fitted with an electronic SunTop motor. The special Elero setting cable has to be used to set the end positions. A conventional test cable can be used to operate the unit, but not to set it!
- The electronics within the drive unit function only when built into the fabric tube!
- Work on the mains power may be carried out only by authorised specialists!
- After setting the drive's end positions, secure these installation instructions to the cable for the electrician!
- When using your own control systems not included with the product (e.g. wind/sun sensors or similar), you must ensure that a switch-over pause from retract to extend command of at least 0.5 seconds is set in the controller.  
Where operation is via switches, only push-button switches with a 'dead-man' circuit are permissible and they must mutually disable each other.  
In accordance with VDE regulations, the motor may not be supplied with continuous current. Otherwise the SunTop drive cannot be guaranteed to function reliably!

Note: It is possible to connect multiple SunTop drives in parallel (max. 430 W per drive).  
If doing so, pay attention to the switching point's maximum switching capacity.

C. Connection example



D. End position setting

The end position setting of the SunTop drive is set at the factory and does not normally need any correction. If you do, nevertheless, want to set the drive's end positions differently, please note the following points:

1.)

Connect the Elero setting cable to the drive's Hirschmann coupling and run the unit out 30 cm. At the same time, press both buttons on the setting cable. After c. 5 seconds, the drive goes briefly up and down. The end positions have now been deleted and can be reset.

2.)

Press the UP button again. Move up to the top end stop. When the stop is reached, the drive automatically switches off.

3.)

Press the DOWN button until the drive automatically stops. The top end position has now been set.

4.)

Press the DOWN button again. Run out the awning to just before the desired bottom end position. The drive starts with a short STOP.

5.)

Move to the desired bottom end position. Corrections can be made via the buttons.

6.)

Press the UP button until the drive automatically stops. The bottom end position has now been set and the programming finished.

The end positions are now set as wished and the drive moves into the respective end position. Connect the Hirschmann coupling to the control line again. With this new drive there is no need to simultaneously press the UP and DOWN buttons after resetting the end positions. Pressing both buttons simultaneously would put the drive back into programming mode (see point 1).



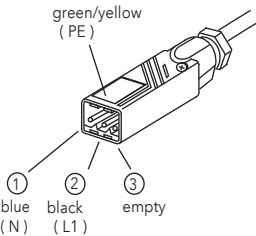
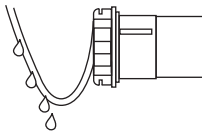
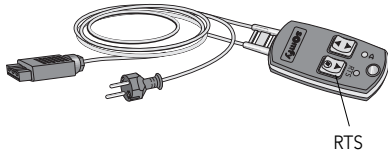
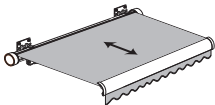
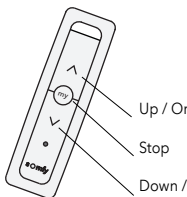
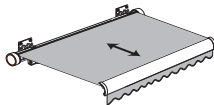
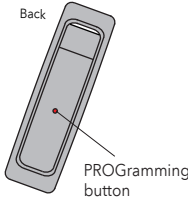
NB: The awning's end positions are set at the factory. No alteration is necessary unless you want to reset the bottom end position.

<b>Electrical connection</b>	
	<p>The OREA RTS must be connected according to the terminal assignments.</p> <p>When making connections ensure that there is no supply of power. (Remove the fuse!)</p> <p>Note: An electrician must perform the on-site connection of drive system and controller.</p> <p>The system is to be protected with an upstream FI circuit breaker in accordance with VDE regulations. Only cables and connectors with a protection class of a minimum of IP 54 may be used to supply power.</p> <p>In order to prevent water running along it into the motor, the connection cable should always be laid with a downward loop.</p>
<b>Special features of radio control systems</b>	<p>Radio control systems' range is limited by the statutory regulations for wireless equipment and the structural circumstances.</p> <p>The control system should not be installed in the immediate vicinity of any metallic surfaces. Strong local transmitter units (e.g. wireless headphones) that have a transmission frequency identical to the control system can have an influence on its function. The transmission range is up to 300 metres in the open and c. 20 metres inside buildings. The operating instructions of the Somfy radio transmitters being used must be followed.</p>
<b>Features of the radio transmitters</b>	<p>All suitable Somfy radio transmitters can be paired with and operate the OREA RTS drive, e.g.: Telis 1 RTS, Telis 4 RTS, Telis Soliris RTS, Centralis RTS.</p> <p>A maximum of 12 transmitters (including a maximum of 3 Sensor RTS transmitters) can be paired with each OREA RTS drive.</p>
<b>Installation</b>	
	<p>In order to be able to operate the awning during installation, the drive must be connected to the Somfy test cable. For power to be supplied to the drive, the test cable's 'Up' button has to be pressed. The drive can then be operated via the hand-held radio remote control unit supplied with it.</p> <p>The remote control unit has been paired with the drive. The top and bottom default end positions have also been set at the factory and do not need any further programming. In the top end position the drive automatically switches off when it reaches a set level of rated torque.</p>
Product no. 99 - 4196	
<b>Changing the lower end position</b> (Only necessary if the factory setting is to be altered)	<b>Pair further transmitters</b> (Or delete paired transmitters)
<p>The top and bottom end positions are set at the factory and do not normally need any further programming. If necessary, the bottom end position can be changed (the top end position always stays the same).T.</p> <ol style="list-style-type: none"><li>1. Via the 'DOWN' button, extend the awning completely (drive switches off automatically).</li><li>2. Press the 'UP' and 'DOWN' buttons simultaneously for c. 5 seconds until the unit briefly moves back and forth.</li><li>3. Via the 'UP' or 'DOWN' buttons set the awning's new, desired end position.</li><li>4. Press the middle 'Stop' button until the unit again briefly moves back and forth.</li><li>5. The bottom end position has now been reprogrammed.</li><li>6. Trial run</li></ol>	<p>A maximum of 12 transmitters (including a maximum of 3 Sensor RTS transmitters) can be paired with the OREA RTS radio-controlled drive. In order to pair further transmitters (or to delete them), you always need a transmitter that has already been paired. If no such transmitter is available to you, contact your specialist retailer to get further information.</p> <ol style="list-style-type: none"><li>1. On the back of the transmitter already paired with the radio-controlled drive press the PROGramming button for c. 2 seconds. The unit briefly moves and is thus 'Ready for Pairing'</li><li>2. Briefly press the PROGramming button of the transmitter to be newly paired (or deleted). The unit again moves briefly back and forth.</li><li>3. The new transmitter has now been paired (or deleted).</li><li>4. Trial run</li></ol>



Adjustment instructions for all Sunea io radio-controlled drives from Somfy

NB: The awning's bottom end position is set at the factory. The top end position does not get set, as it gets moved to via torque. No alteration is necessary unless you want to reset the bottom end position

<div>Electrical connection</div> <div><div></div><div><p><b>⚠</b> The connecting cable must have a length of at least 30 cm left over. If the length left over is shorter, the integrated antenna can get damaged and there may be reception problems.</p><p>The Sunea io must be connected according to the clamp assignments.</p><p>When making connections ensure that there is no supply of power. (Remove the fuse!)</p><p>The system is to be protected with an upstream FI circuit breaker in accordance with VDE regulations.</p><p>Only cables and connectors with a protection class of a minimum of IP 54 may be used to supply power.</p></div><div><p>Note: On-site connection of drive and control system must be done by a specialist electrical firm.</p><p>Lay the drive's connection cable in a downward loop so that no water can get into the drive.</p><p>- Damage to the internal electronics in the drive system.</p></div></div>	
<div>Características de mandos a distancia inalámbricos</div> <div>Frecuencia de radio: 868,25 MHz</div>	<p>El control no debe instalarse muy cerca de superficies metálicas. Los emisores locales fuertes (p. ej., auriculares inalámbricos) cuya frecuencia de emisión es idéntica a la del control pueden afectar su funcionamiento.</p>
<div>Características de los mandos a distancia inalámbricos</div> <div>1 W: unidireccional (one Way, solo pueden emitir)</div> <div>2 W: bidireccional (two Way, pueden emitir y recibir)</div>	<p>El alcance de emisión en el transmisor unidireccional (1W) es de 15 metros sin muro de hormigón. Con transmisor bidireccional (2W) hasta 20 metros con dos paredes de hormigón.</p> <p>Los siguientes transmisores son unidireccionales (1W): Situo Mobile io, Smoove 1 io, Smoove Origin io y Smoove A/M io.</p> <p>En cada accionamiento Sunea io drive se pueden aprender máx. 9 transmisores unidireccionales (1W), de os cuales máx. 3 sensores de viento, p. ej., Eolis 3D WireFree io, Eolis WireFree io. Los transmisores bidireccionales (2W) se pueden aprender tantos como se desee en el accionamiento Sunea io.</p> <p>Los accionamientos Sunea io no pueden operar con un mando a distancia inalámbrico RTS (433,42 MHz). Asimismo, los accionamientos RTS no pueden operar con un mando a distancia inalámbrico io (868,25 MHz).</p>
<div>Montaje</div> <div></div> <div>Art. n.º 99 - 4196</div> <div>RTS</div> <p>In order to be able to operate the awning during installation, the drive system must be connected to the Somfy universal adjustment cable. For power to be supplied to the drive, the test cable's 'RTS' button has to be pressed (supplies the Sunea io drive with continuous current). The drive can then be operated via the hand-held radio remote control unit supplied with it.</p> <p>The remote control unit has been paired with the drive. The top and bottom default end positions have also been set at the factory and do not need any further programming. In the top end position the drive automatically switches off when it reaches a set level of rated torque.</p>	
<div>Changing the bottom end position</div> <div>(Only necessary if the factory setting is to be altered)</div> <p>The awning's bottom end position is set at the factory. The top end position does not get set, as it gets moved to via torque. No alteration is necessary unless you want to reset the bottom end position.</p> <p>If necessary, the bottom end position can be changed. To do this, use a control unit with no data feedback (1W), e.g. Situo Mobile io.</p> <div></div> <ol style="list-style-type: none"><li>1. Via the 'DOWN' button, move the awning into the bottom end position. Drive automatically switches off.</li><li>2. Press the 'UP' and 'DOWN' buttons simultaneously for c. 5 seconds until the unit briefly moves back and forth.</li><li>3. Via the 'UP' or 'DOWN' buttons set the awning's new, desired end position.</li><li>4. Press the middle 'Stop' button until the unit again briefly moves back and forth.</li><li>5. The bottom end position has now been reprogrammed.</li><li>6. Trial run</li></ol>	<div>Pair further control units without data feedback (1W) (or delete paired control units without data feedback (1W))</div> <p>A maximum of 9 control units without data feedback (1W) can be paired with each Sunea io drive. Up to 3 of them can be wind sensors, e.g. Eolis 3D WireFree io, Eolis WireFree io.</p> <p>In order to pair further transmitters (or to delete them), you always need a transmitter that has already been paired.</p> <p>If no such transmitter is available to you, contact your specialist retailer to get further information.</p> <div></div> <ol style="list-style-type: none"><li>1. On the back of the transmitter already paired with the radio-controlled drive press the PROGramming button for c. 2 seconds. The unit briefly moves and is thus 'Ready for Pairing'</li><li>2. Briefly press the PROGramming button of the transmitter to be newly paired (or deleted). The unit again moves briefly back and forth.</li><li>3. The new transmitter has now been paired (or deleted).</li><li>4. Trial run</li></ol>











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