

1 Face fixture



1 Face fixture maximum pitch of 25°



1 Top fixture



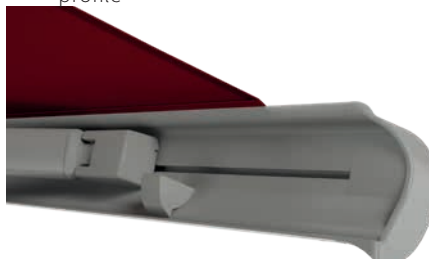
2 Arm bearing with tilt-lock device technology, integrated windlock mechanism



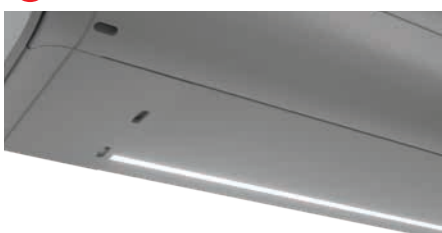
3 Bionic tendon made of high-tech fibres for optimum power transference



4 Folding arm connection in the front profile



5 LED-Line recessed in the cassette ¹⁾



5 LED-Spots underneath the cassette ¹⁾



6 Gutter with lateral water spouts



1) Optional configuration

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Explanation of the signal words



DANGER

Marks an imminent danger that leads to death or serious injuries.



ATTENTION

Marks important information that must be taken into account.



WARNING

Marks a possible imminent danger from **electrical current** that can lead to death or serious injuries.


markilux important notes


Important information for the users of markilux awnings

1. Manufacturing number

Every markilux awning was produced individually according to your guidelines and has a fabrication number on it, through which this product becomes a unique product identifiable at any time.

2. Marking of important safety instructions

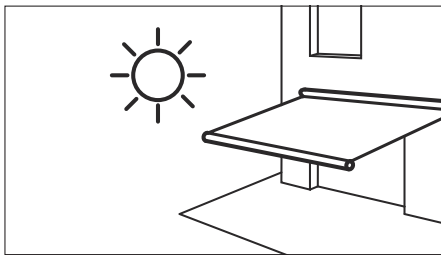
 With this triangular warning, notes regarding dangers are marked which can result in bad injuries or even death. Furthermore it marks important information on the function of the awning!

 With this triangular warning, notes are marked which respond to dangers by electric shock resulting in bad injuries or even death.

3. Reading of "Important Instructions" and the "Operating Instructions"

The instructions handed by the authorized markilux specialist must be read before the first awning use. It is important to read all instructions for the safety of persons. All instructions are to be stored by the customer and have to be handed over to the new owner in case of an eventual transfer of the awning to Third Parties.

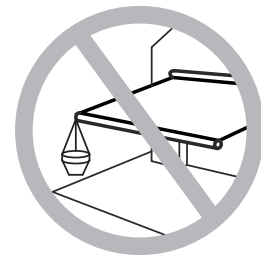
4. Proper use of an awning



The awning is a sun protection construction. Improper use may lead to significant hazards.



If the awning inclination is less than 25% = 14° measured at the horizontal or the awning is not extended entirely, then it must not be burdened by rainwater. If this is the case, there is a risk of the formation of water troughs in the awning cover and the awning may become damaged or even detached from the wall.



Alterations like rebuilding or enlargements which are not intended by the manufacturer may only be carried out with the markilux manufacturers written approval. Additional awning burdens by means of object attachments or rope wearing can result in damage or dropping of the awning and are therefore not allowed.

5. Wind resistance class

Wind resistance class	0	1	2	3
Wind speed V (km/h) maximum values	< 28	28	38	49
Wind speed V (m/s) maximum values	< 7.8	7.8	10.6	13.6

wind resistance class 2

markilux 6000, 5010, 3300, 970, 990, 1700, 1710, 1600, 930, 1300, MX-1 compact, MX-2, MX-3
710, 730, 740, 893, 8850

wind resistance class 3

markilux 620 tracfix, 770 / 870, 7800 / 8800

wind resistance class 2 or 3

markilux 625 tracfix (depending on the size), 776 (depending on the size) / 876 (depending on the size), 779 (depending on the size) / 879 (depending on the size)

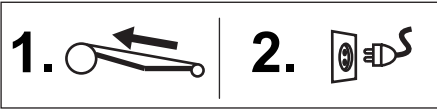


The awning meets the requirements of the above stated wind resistance class. **Explanation see "Handover certificate from the specialist dealer"**. The CE indicates that correspondence with the requirements of the applicable European directives is proven. The corresponding declarations of performance and EU declarations of conformity can be requested through the markilux specialist dealer.

6. Use in case of snow, ice, thunderstorm, storm and absence, also with automatic control

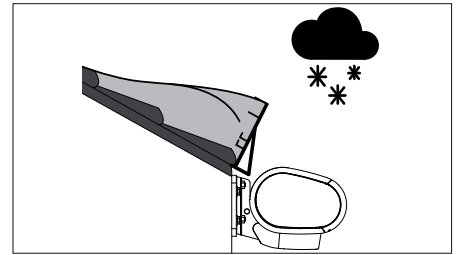


The awning must not be extended at snowfall or risk of frost. There is risk of the awning to be damaged or crash down. When a storm or bad weather front is approaching, severe gusts of wind can occur suddenly to which even an automatic control mechanism cannot react with sufficient speed. An automatic control enhances the awning comfort, but does not excuse from the duty of care! During absence for longer periods, e.g. holidays or during the night, an automatic control system does not guarantee an enduringly faultless operation of your awning.



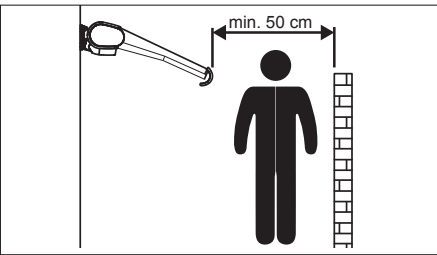
⚠ Attention! It is recommended to retract the awning before freezing wetness starts, at approaching storm respectively bad weather fronts or at absences. A possibly existing automatic function is to switch off!

7. Leaves, snow and foreign bodies



Foliage and other foreign objects located on the awning cover, inside the awning box and in the guidance bars are to remove immediately. There is risk of the awning to be damaged or crash down. Snow accumulation behind the awning must be avoided by installing a snow guard (snow fence or similar) or by regularly removing the snow load.

8. Obstacles

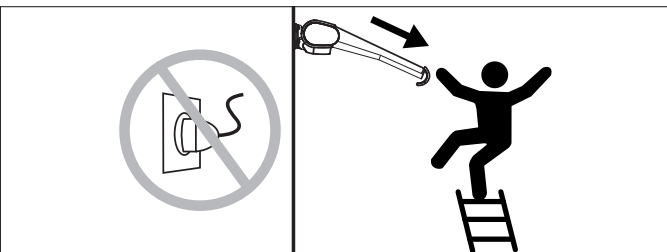


In the awning extension area, no obstacles may be located. There is danger for persons to be squashed in there. In order to avoid this, a safety distance of at least 50 cm has to be observed.

9. Motor in the event of a power-cut

A motor-driven awning cannot be retracted without electricity. In very windy areas with frequent power cuts the use of an emergency power supply should be considered. Otherwise always retract the awning if the power is scheduled to be cut!

10. Uncontrolled operation during cleaning and maintenance jobs



⚠ Attention! When working in operation radius (e.g. cleaning or service works), make sure the awning to be currentless (e.g. power switch off, remove plug coupling at drive cable, ...) There is risk of squeezing and falling down.

There is a risk of crushing body parts and falling. For works on manually operated units the crank should be removed and stored safely. If awnings are operated by various persons, a locking device switching of prime importance (controlled circuit breakers from outside) must be actuated, so that every awning retraction and extension is made impossible. Persons not familiar with proper awning use must not operate them.

11. Repair and spare parts

The awning is to check regularly for signs of wear or damage at covering, frame and its fixtures (with electric connection: also the power supply lines). The durability of the fixtures should be checked on an annual basis by means of a visual inspection or by an annual servicing of the markilux specialist dealer. If damages occur, an authorised markilux specialist dealer is to be entrusted with the adjustment. Only spare parts released by the manufacturer may be used.

⚠ Attention! Risk of injury! Please never try to repair disorders on your own! Awnings which need to be fixed must not be used. Talk to your authorized markilux specialist about a preventive maintenance agreement!

12. Crushing and shearing zones

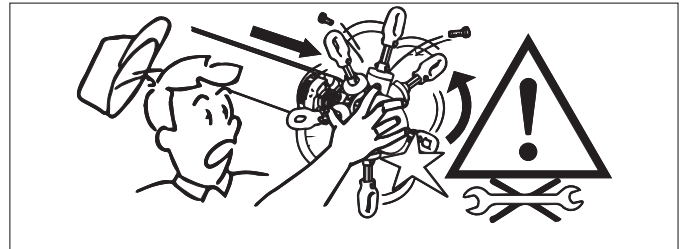
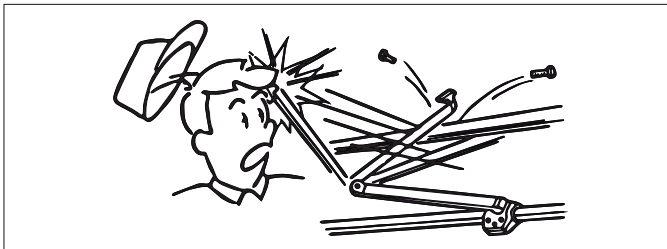


⚠ Attention! Depending on the type of awning there are crush and shear zones, e.g. between front profile and cassette and between moving parts. Items of clothing or limbs can be grabbed by the unit and pulled in. If the awning is assembled at a height less than 2,5 metres above accessible traffic ways, then the awning may only be actuated by a pushbutton switch which allows viewing the moving parts. Electric controls, radio-controlled motors with click in-switches are not permitted for such installations.

13. Metallic and pearl glimmer coatings of the awning frame

The look of plastic coatings of metal and plastic parts in metallic and/or pearl glimmer colour vary. These visual differences concern in particular the intensity and characteristic of the metallic effect, which may also lead to a change in the perception of the basic shade.

14. Disassembly and disposal



⚠ Attention: Risk of injury! When disassembling and disposing of the shading system, the parts under tension (e.g. folding-arms, counter tension systems or servo gear unit) have to be relaxed completely or secured beforehand. A markilux specialist should be commissioned for this!

15. Maintenance and care, characteristics cover and awning frame

Whether a cleansing is necessary or not depends strongly on environmental influences (traffic, air pollution, industrial gases etc.). Depending on the degree of pollution, a regular cleansing is recommended.

⚠ Attention! Always use an appropriate ascending aid and never rest again or attach to the awning!

15.1 Awning cover in wet condition

If possible, retract the awning when it is dry only! If the awning must be retracted wet, it has to be extended as soon as possible in order to dry. By the cover permanent weight, a deflection is possible which increases in wet condition. This occurrence does not influence the awning function and running qualities.

15.2 Cleaning the awning cover



The awning cover is equipped with special impregnation which reduces at every cleansing. For post-impregnation, commercial tent impregnation can be used. By re-impregnation, no new condition of the cover can be achieved yet.

Remove dust periodically with a soft brush in dry condition. Remove leaves, twigs and similar debris immediately. Remove small stains on the awning cover with commercial, preferably liquid mild detergent added to water (water temperature approx. 30°C, soap solution 5 %). Rinse thoroughly with water until all traces of the detergent have been removed.

15.3 Cleaning the awning frame



For cleansing of the awning frame, use commercial detergent for sensitive surfaces (pH-value between 5 and 8). Aggressive acids and scraping materials (like grinding fleece, emery, sand, pumice, etc.) are not allowed because they could alter the surface totally.

15.4 Characteristics resulting from the production and manufacture of awning fabrics



Awning covers are industrially manufactured textile products which serve both a functional and a decorative purpose. Although only first-class, quality controlled fabric is used in production, there are limits to the degree of perfection that can be achieved. Awning owners occasionally complain about certain imperfections in the fabric due to lack of knowledge. Defects actually to complain are only those which influence the cover life span. The following specified imperfections influence the awning cover durability and usage practicality in no way.

• Dogleg and wrinkle creases

At processing, like e.g. trimming, sewing and winding up of the cover onto the awning frame, dogleg traces can result which can not be avoided. Viewed against the light, the user of the awning has the impression that he sees dark stripes.

• Chalk and write effect

As with the previously mentioned processes, the cover may show a light change in colour (pigment shifting) at folded spots caused by kinking the fibre.

• Winding folds / waviness

Winding folds/rippling: This occurs due to the permanent coiling and uncoiling of the cover on the roller. This effect can be explained by the fact, that the material is thicker close to the seams, coils more loosely between the seams of the cover. This effect can occur both directly next to the seam as well as also in the middle of web.

• Other irregularities

Irregularities caused by the production process which cannot be avoided, such as

- Knots, thread thickening and thinning, which can be seen in the cloth as points of light or as nubs
- Colour deviations in cloths produced in webs (e.g. in triangular shades)
- Individual thread breakages and expansions at the seams with resulting sagging
- Sagging of the cloth due to its own weight or after the formation of a "water sack".

can occur, and are unavoidable in production.

15.5 Flexing of the awning frame

The profile of the wider systems' awning frame can flex as well because of own weight. This occurrence does not influence the awning function and running qualities.

16. Tested awning cover

The „Oeko-Tex Standard 100“ certificate guarantees that markilux awning fabrics do not contain any dyes or chemicals that are hazardous to health.

Sunvas and sunsilk fabrics generally achieve the highest possible sun protection factor for textiles (UPF 50 +). The UPF (Ultraviolet Protection Factor) indicates how much longer you can be exposed to the sun with sun protection. Fabrics with a sun protection factor UPF 50 + allow, in purely mathematical terms, fifty times longer sunbathing without getting sunburned, taking into account the individual skin's own protection time.


sunvas and sunsilk are innovative awning fabrics with a self-cleaning effect when it rains (minimum 14 degree tilt angle of awning required for rain run-off). The highly dirt-repellent finish ensures that the colours will remain bright for years.



17. Legal disclaimer

The graphics and text sections in these instructions have been created with care. No liability can be borne for any errors and their effects. We reserve the right to undertake technical modifications to the product and to these instructions! The instructions contain copyright-protected information. All rights reserved! The listed product or trade names are copyright trademarks.

1 Reading the instructions

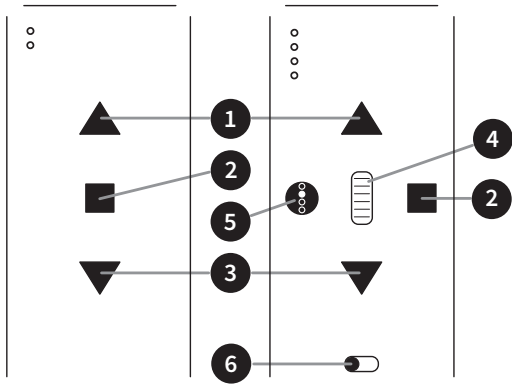
 Read the operating instructions and all documents pertaining to the product (handover protocol, important notes etc.) carefully and in their entirety before using the product.

2 Awning with motorised operation

markilux hand-held remote control io (868 MHz)

io 1-channel

io 5-channel

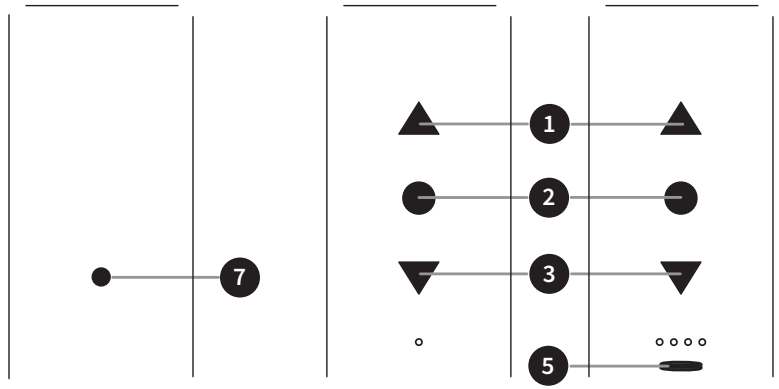


markilux hand-held remote control RTS (433 MHz)

RTS 1-channel

RTS 4-channel

io / RTS
back



- 1** = UP- button
- 2** = STOP- button
- 3** = DOWN- button
- 4** = Scroll wheel

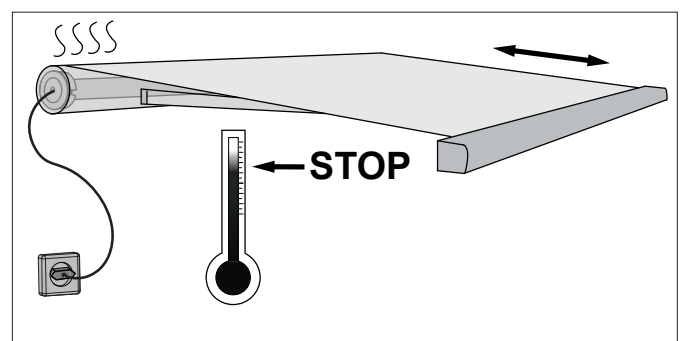
- 5** = Channel selection button
- 6** = AUTO / MANU- switch
- 7** = PROG- button


Extend the awning by pressing the buttons button for extension / retraction. With radio-controlled operation, your markilux specialist must exactly explain the functions on the radio remote control to you, since, depending on the equipment, he can set these for you individually.

Observe here the separate operating instructions of the motor and, if available, of the controller manufacturer. The end stop for extension / retraction of the awning is limited. The end stop for the extension direction will be set by your specialist dealer.

Protection against overheating:

Multiple extension and retraction of the awning in rapid succession results in an automatic motor switch-off to preserve it from overheating. After cooling down the motor switches itself on again in operating readiness.



 In partially extended position and flat pitches (less than 14°) there is the increase risk of water collecting on the cover surface. The optimum cover tension is achieved when the awning is extended.


3 Modification or retrofitting

The following modifications can be carried out retrospectively on your awning by your markilux specialist.

- Replacement of the awning cover
- Retrofitting an automatic control system. Ask your specialist dealer about sun and wind sensors, remote control, Vibrabox etc.

4 Maintenance and care

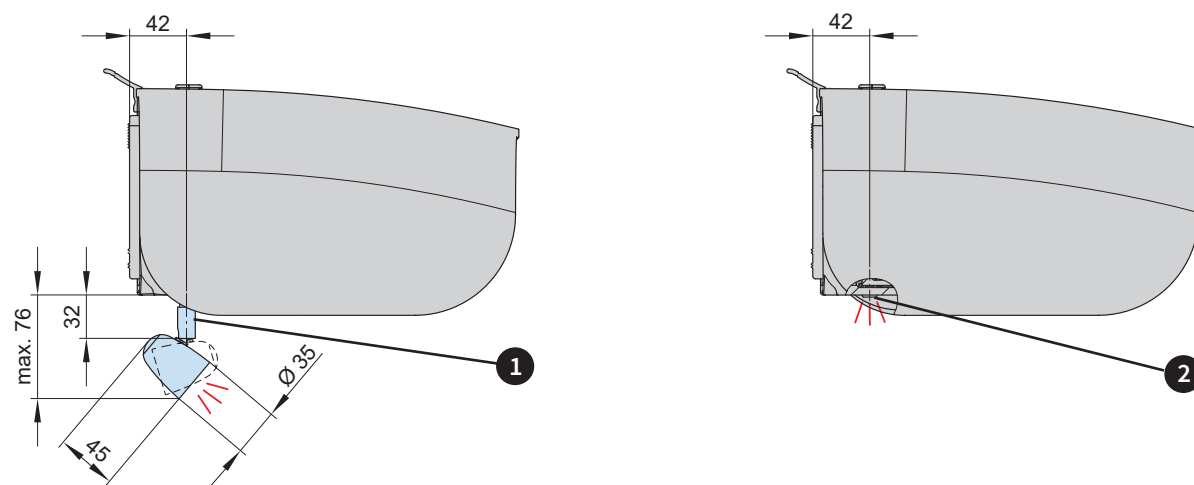
For proper cleaning of the awning cover and the awning frame of your markilux awning, kindly pay close attention to the cleaning instructions in chapter "Important notes".

 Dirty cover profiles must always be cleaned with water. Use mild soaps or detergents suitable for delicate fabrics in lukewarm water. Abrasive cleaners, strong detergents, spray cleaner for glass, scouring cloths or brushes as well as solvents such as acetone, carbon tetrachloride, paint thinner or alcohol mixtures with more than 5% alcohol content may be aggressive to the surface and should never be used.

5 What you should also know

Due to the compact awning construction and depending on the width and the projection, contact between cover and folding arms may occur during extension and retraction. This has no detrimental effect on the functionality and / or operating life of the awning.


6 Awning with lighting (optional)




1 LED-Spots (optional)

2 LED line (optional)


 The LED lighting can heat up a lot! The lighting has to be switched off for some minutes to cool down before you touch the individual lamps.

 Never hang objects or similar in front of the lighting and it should be ensured that there are no objects directly under the front profile when the awning is retracted and extended.

Observe in particular the safety clearances in "Important notes".

 Do not grab or pull the mains leads (230 V) and cables visible at every movement point of the folding arm! Do not suspend any objects from these mains leads!

The mobility of the mains lead is limited in temperatures below zero. Therefore it has to be ensured, whether the electrician has protected the connection of your lighting via an RCCB (30mA), so that any eventual cable breakage does not pose any hazard.


 For safety reasons, the electronic transformer switches off automatically at a temperature of 80°C and on again after an appropriate cooling down phase.

Automatic switchoff: Thanks to the integrated timer, the spotlights switch off automatically (IO home control technology: after **6 hours**; radio technology Somfy technology: after **24 hours**). The lighting can be reactivated by double-clicking either the switch or the remote control.


The **radiation intensity** of these LED lamps is harmless to people and underruns the RG 2 area acc. EN 62471. However, it is suggested not to look for a long time at the centre of the light source.


7 Replacement of a faulty illuminant for lighting

These instructions for the replacement of defective illuminants at your markilux folding-arm awning are to be read and observed. Exclusively LED lights, which have a very long operating life are used for the lighting of your markilux MX-2.

 Regularly check the awning for signs of wear and damage to cables and lamps. If damages occur, an authorised markilux specialist dealer is to be entrusted with the adjustment.

Awnings which need to be fixed must not be used. Only spare parts released by markilux may be used.

 Electrical installation or repairs must be carried out according to the installation specifications DIN VDE 0100 by a qualified electrician only.

 The lighting system must be disconnected from the electricity supply during work on the system (unplug, switch off fuse). Switch on the lighting only when all cable connections have been established completely.

In case of a defective LED-Line, kindly contact your specialist dealer.

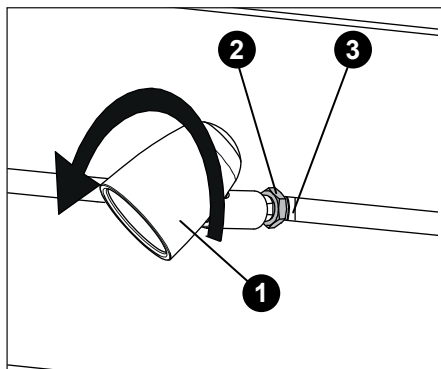
If an LED-Spot is defective you can change it yourself.

7.1 Overview spare parts lighting LED-Spots

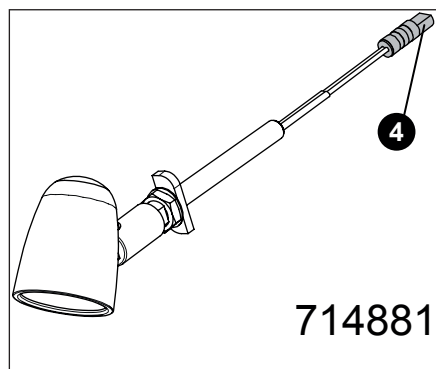
The following replacement parts are available via your markilux specialist dealer:

chapter	Lighting type	Article no.
7.2	1 Piece LED spot with plug underneath the cassette	714881

7.2 LED spotlights underneath the cassette

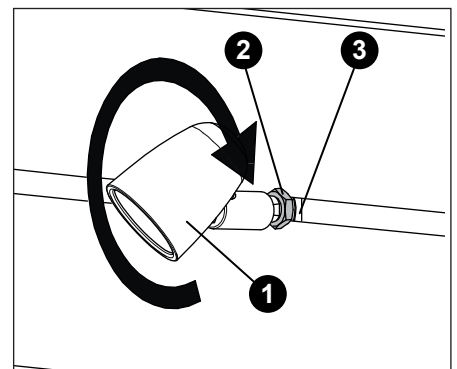


1. Loosen the hexagon nut (2) with an AF 13 spanner. Afterwards turn the defective LED spotlight (1) by 90° to the left to bring the pincher carriage (3) direction of the groove and pull it out.



2. Disconnect the plug (4) of the defective spot light from the mains and plug in the new spot light.

Item no. new LED spotlight with plug: **714881**



3. Insert the new LED spotlight (1) into the track and turn by 90° clockwise to hook the pincher carriage (3) into the groove. Subsequently retighten the hexagon nut (2).

8 Disassembly and disposal

8.1 Dismantling

The awning must be removed only by a markilux specialist company.

8.2 Disposal

Packaging

The packaging protects the product from transport damage. The packaging materials are selected according to environmental and disposal aspects and are therefore recyclable.

Returning the packing to the materials circuit saves raw materials and reduces the accumulation of waste.

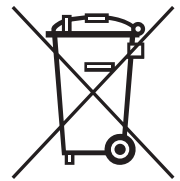
It is therefore essential that you dispose of packaging materials that are no longer required in accordance with the applicable legal regulations.



Electrical units

Electrical units are not worthless waste. Valuable raw materials can be recovered through environmentally friendly disposal.

This product is marked in accordance with Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE)



At the end of its service life, this product must not be disposed of with normal household waste, but must be taken to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, the instructions for use or the packaging indicates this.

By reusing, recycling or other forms of recycling electrical units, you make an important contribution to the protection of our environment.

It is therefore essential that you dispose of electrical units in accordance with the applicable legal regulations.

Batterien

Batteries and battery packs can contain toxins that are harmful to the environment. Batteries and battery packs must not be disposed of in normal household waste

It is therefore essential that you dispose of batteries and battery packs in accordance with the applicable legal regulations.

