Cassette awning

markilux MX-4

Avant-garde cassette awning - both functional and attractive - with varied modern lighting technology.

Separate lighting

markilux MX-4 wall light

Modern outdoor light in a design perfectly coordinated with the markilux MX-4.
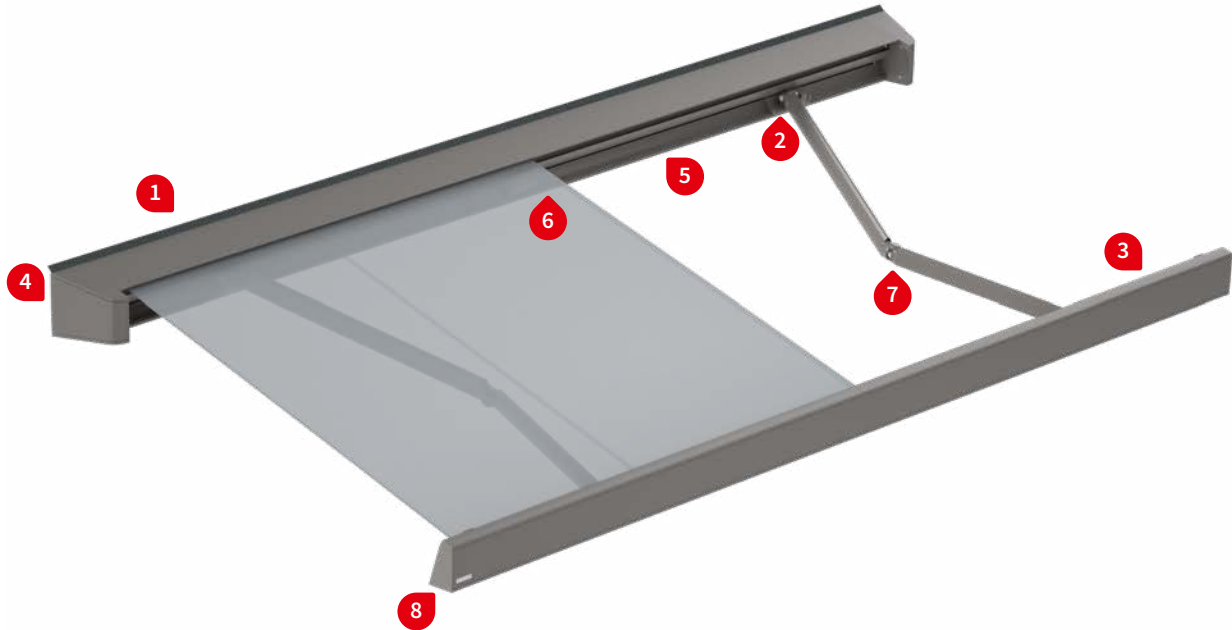
reddot winner 2023

iF DESIGN AWARD 2023

GERMAN INNOVATION AWARD '23 WINNER

markilux.com

markilux

safe timeless beautiful

01

Product Characteristics

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1 Face fixture, bracket concealed

2 arm bearer with tilt device technology, integrated windlock mechanism

markilux MX-4 wall light, perfectly coordinated design

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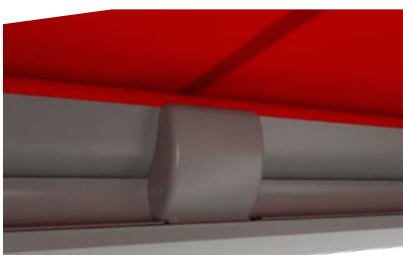
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3 LED Spots in the front profile [1]

4 LED Spots in the end caps of the cassette, on both sides[1]

5 LED-Line in the cassette [1]

6 rolltex bearing for the roller tube, used in larger awning widths

7 bionic tendon and hidden cable duct in the arms

8 concealed gutter with water drainage holes to the side

1) Optional accessories

Product Characteristics

Description
- cassette awning in avant-garde design with clear lines and multiple lighting options in warm white and coloured, suitable for shading large areas

Special features
- radio-controlled motor io technology as standard
- combinable lighting options in the awning: LED-Spots WW or RGB-WW in the front profile, LED-Spots WW or RGB-WW in the side caps bottom / top or both (always the same on both sides), LED-Line WW or RGB-WW below the cassette, Philips Hue Spots RGB-WW in the side caps bottom / top or both (always the same on both sides)
- separate MX-4 wall light in perfectly coordinated design as supplementary lighting option: markilux Spots WW bottom / top or both, markilux Spots RGB-WW bottom / top or both, Philips Hue Spots RGB-WW bottom or top
- individual combination of awning colour and screen profile colour possible
- almost invisible wall mounting brackets ensure an optically flush cassette connection to the building
- the tilt device technology with integrated windlock mechanism on the folding arms ensures the awning closes cleanly whatever the pitch

Dimensions
- cassette in the standard version: depth 275 mm, height 235 mm
- single system: minimum width 217 cm with smallest projection 150 cm, maximum width 600 cm with greatest projection 400 cm or 700 cm x projection 350 cm
- also available as linked awning up to 3 fields with junction roller, optionally with continuous fabric (max. 2 fields / 15° inclination / projection 350 cm)

Roller tube and lateral bearings
- round roller tube Ø 85 mm with keyway, galvanised steel – excellent stability, ensures near perfect cover performance even at the largest widths
- lateral bearing cassette made of die-cast aluminium, powder coated

Awning profiles
- extruded aluminium, in façade quality, powder coated
- one-piece cassette with integrated groove for lighting equipment
- integrated fabric cover – optimum protection of the awning fabric against the effects of the weather
- front profile with integrated rain gutter and screen

Folding arms
- profiles in extruded aluminium, in façade quality, powder coated
- moving parts made of drop-forged aluminium – the arms are therefore extremely fracture resistant
- pivot bolts in stainless steel run in Teflon-coated bronze bushes - practically maintenance free, virtually silent and extremely hard wearing
- power transference for fabric tensioning by innovative markilux Bionic tendon in the elbow joint, high tensile high-tech fibre – low-friction, noiseless, insensitive to corrosion and UV-resistant

End caps
- side caps cassette and integrated end cap inserts made of die-cast aluminium, powder-coated
- end caps of the front profile made of die-cast aluminium, powder-coated, with water drainage

Fixture brackets
- face fixture
- extruded aluminium, powder coated
- awning pitch adjustment range 5° to 25°
- spacer plates, stand-off brackets and other accessories are available

Frame and end cap colours

markilux frame colours without surcharge

traffic white, RAL 9016

metallic aluminium, RAL 9006

grey brown, similar to RAL 8019

off-white textured finish, 5233 [1]

stone grey metallic, 5215 [1]

anthracite metallic, 5204 [1]

havana brown textured finish, 5229 [1]

Non-standard powder-coated finish

Bespoke frame colours incur a surcharge – matt, metallic, finely textured and pearl finishes as well as other colour ranges (DB, Tiger etc.) on request. All frame colours are available at a surcharge with enhanced corrosion protection.

Colours may differ slightly from those depicted in both hue and finish.

1) textured finish

Combination options

All standard front panel colours can be freely combined with the standard frame colours.

Frame traffic white, RAL 9016
Styling panel / end cap insert metallic aluminium, RAL 9006

Frame havana brown textured finish 5229
Styling panel / end cap insert off-white textured finish 5233

Frame anthracite metallic 5204
Styling panel / end cap insert stone grey metallic 5215

Frame stone grey metallic 5215
Styling panel / end cap insert anthracite metallic 5204

Dimensions and configuration options

Single unit

Order dimensions H	Overall awning width										Minimum awning width — Motor			
	250 217–250	**300** 251–300	**350** 301–350	**400** 351–400	**450** 401–450	**500** 451–500	**550** 501–550	**600** 551–600	**650** 601–650	**700** 651–700	(2 std)	(+2)	(3 std)	(+3)
150	1)										230	217	480	467
200	—	1)									280	267	530	517
250	—	—	1)								330	317	580	567
300	—	—	—	1)							380	367	630	617
350	—	—	—	—	1)				—	1)	444	431	—	667
400	—	—	—	—	—	1)			—	—	494	481	—	—

Dimensions in cm

1) = please note the minimum widths!
H = projection

■ = 2 folding arms
    2 brackets

■ = 2 folding arms
    3 brackets, 1 rolltex bearing

■ = 3 folding arms
    4 brackets, 2 rolltex bearings

2̶2̶ = 2 standard arms

⁺2̶2̶ = 2 bespoke arms
      (surcharge)

3̶3̶ = 3 standard arms

⁺3̶3̶ = 3 bespoke arms
      (incurs a surcharge
      except for 700 x 350 cm)

Operation	standard	optional
crank handle	—	—
spring-assisted crank handle	—	—
hard-wired motor	—	✓
silentec motor (optionally with an externalio / RTS receiver) [1]	—	—
radio-controlled motor io, 868MHz	✓	—
radio-controlled motor RTS, 433MHz	—	✓
868Mhz radio-controlled motor io with manual override [1]	—	—

1) For awnings with a maximum of 2 arms

Coupled Awning (only with motor drive) [1]

2 fields, 1 motor, maximum width 1400 cm
3 fields, 1 motor, maximum width 1950 cm
junction roller
optional One-piece cover (maximum 2 fields / 15° pitch / 350 cm projection)

1) N.B! Important background information can be found in the chapter
"General Information", in the section "Coupled Awnings"

Awning cover	fabric pattern no.	standard	optional
sunvas	300.. – 315..	✓	—
sunsilk	324.. / 328.. / 369..	✓	—
sunbow	411.. - 427..	✓	—
smart art	340..	—	✓
perla FR	371.. / 372..	—	✓

Shadeplus

not available

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Optional accessories

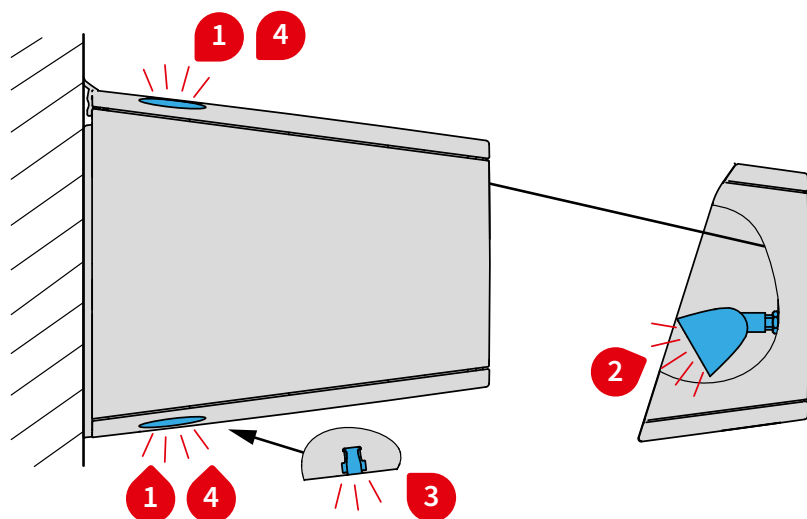| |
|---|
| LED-Line WW or RGB-WW in the cassette |
| LED-Spots WW or RGB-WW in the side caps bottom / top |
| Philips Hue Spots RGB-WW in the side caps bottom / top |
| LED-Spots WW or RGB-WW in the front profile |
| markilux MX-4 wall light |
| Infrared heater 2500 W |
| Infrared heater 2500 W with integrated radio-controlled receiver 868 MHz io |

Fixture options

face fixture bracket 200 mm	62143.
face fixture bracket A 300 mm	60775.
fixture plate B 300 × 400 × 12 mm	75327.
markilux panel 250 × 230 × 49 mm	76308.
markilux panel continuous	701104
stand-off bracket 80–300 mm	77970.
spacer plate wall 180 x 150 x 12 mm	74989.
spacer plate wall 180 x 150 x 20 mm	749881.
cover plate for spacer plate and stand-off brackets in the case of external insulation 320 x 210 x 2 mm	71842.

Lighting options

The light sources WW and RGB-WW can be ordered individually for every lighting option. When there are several lighting options, one standard control technology must be ordered per awning.

Note: With a 5-channel remote control io, a maximum of 2 RGB-WW lighting options can be controlled alongside the io motor of the awning because for each lighting option, an individual channel is required both for coloured light (RGB) and for warm white (WW).

Lighting options

1	LED-Spots WW in side caps, bottom/top [1]
1	LED-Spots RGB-WW in side caps, bottom/top [1]
2	LED-Spots WW in the front profile
2	LED-Spots RGB-WW in the front profile
3	LED-Line WW in the cassette
3	LED-Line RGB-WW in the cassette
4	Philips Hue Spots RGB-WW in side caps, bottom/top [1]

1) Always the same on both sides
WW = Warm white
RGB-WW = RGB colour light change and warm white

Controls

	Standard	Optional
radio-controlled dimmer io 868 MHz [1]	✓	—
radio-controlled dimmer RTS 433 MHz	—	✓
dimmer app (Zigbee) [1]	—	✓

 1) For RGB-WW light sources including control

Please note:

1) The control of the lighting options is primarily based on the radio technology of the awning motor.

2) Light sources in WW and RGB-WW can always be controlled with Zigbee-capable components regardless of RTS or io technology for the awning motors.

3) In the case of the radio-controlled motor RTS 433 MHz, only WW light sources with RTS technology can be controlled. In this case, RGB-WW light sources have to be controlled with Zigbee-capable components.

Lighting options

The light sources WW and RGB-WW can be ordered individually for every lighting option. When there are several lighting options, one standard control technology must be ordered per awning.

Note: With a 5-channel remote control io, a maximum of 2 RGB-WW lighting options can be controlled alongside the io motor of the awning because for each lighting option, an individual channel is required both for coloured light (RGB) and for warm white (WW).

❶ / ❷ Technical specification LED-Spots

|	
operating voltage	230 V / 50 Hz
power output of one LED spotlight	5 W
light source	LED (24 V)
number of transformers	1 unit
light temperature (WW)	Warm white
light temperature (RGB-WW)	RGB colour light change and warm white
IP protection class	IP 44
service life	approx. 20.000 h
plug connection (WW)	SK2
plug connection (RGB-WW)	Mizu-P25

❹ Technical details LED-Spots Philips Hue

Operating voltage	230 V / 50 Hz
Power output of one LED spotlight	5,7 W
Light source	LED (230 V)
Number of transformers	1 unit
light temperature	RGB colour light change and white to warm white
IP protection class	IP 44
Service life	approx. 15.000 h
Plug connection	GU10

For the version with Phillips Hue, a ZigBee-capable "bridge" is required on site.

❸ Technical details LED-Line in the cassette

operating voltage	230 V / 50 Hz
power output per metre (WW)	7 W / metre
power output per metre (RGB-WW)	11 W / metre
number of LEDs per metre (WW)	160 LEDs/ metre
number of LEDs per metre (RGB-WW)	144 LEDs/ metre
light source	LED (24 V)
number of transformers	1 unit
light temperature (WW)	Warm white
light temperature (RGB-WW)	RGB colour light change and warm white
IP protection class	IP 44
service life	approx. 15.000 h

Distance bewteen the side caps and the LED-Line
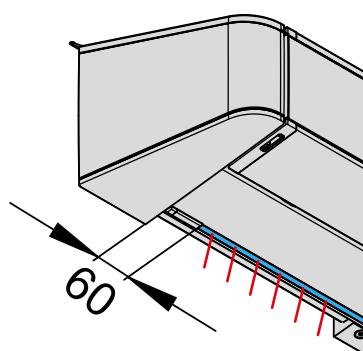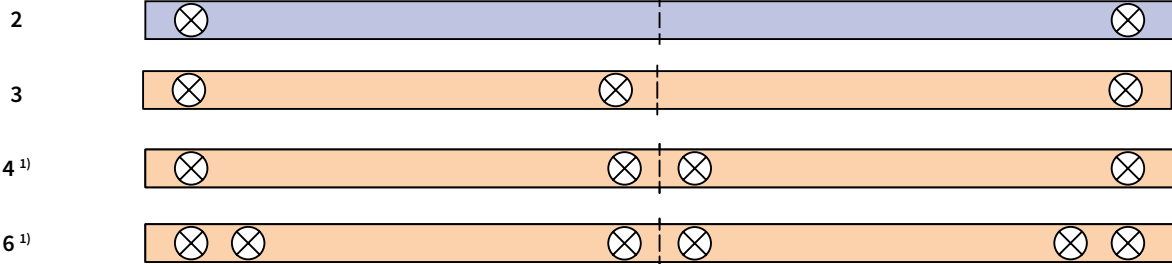

LED-Line WW
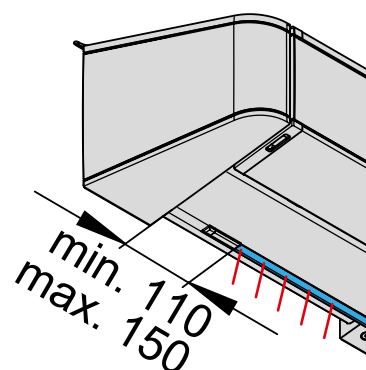
LED-Line RGB-WW

Dimensions in mm

Lighting options

LED spotlight distribution in the front profile

Number of the LED spotlights

2 folding arms

2

3

4 [1]

6 [1]

3 folding arms

4

6 [1]

Number and distribution of the LED spotlights in the front profile

Overall awning width	Projection					
	150	200	250	300	350	400
243–250	2	—	—	—	—	—
251–263	—	—	—	—	—	—
264–292	2	—	—	—	—	—
293–300	2	2	—	—	—	—
301–313	3 / 4 [1]	2	—	—	—	—
314–343	3 / 6 [1]	2	—	—	—	—
344–350	3 / 6 [1]	2	2	—	—	—
351–363	3 / 4 [1]	3 / 4 [1]	2	—	—	—
364–392	3 / 6 [1]	3 / 6 [1]	2	—	—	—
393–400	3 / 6 [1]	3 / 6 [1]	2	2	—	—
401–413	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	—	—	—
414–450	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	2	—	—
451–463	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	—	—
464–500	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	2	—
501–513	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	—
514–550	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	2
551–600	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]
601–650	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	3 / 6 [1]	—	—
651–674	4 / 6 [1]	4 / 6 [1]	4 / 6 [1]	—	—	—
675–700	4 / 6 [1]	4 / 6 [1]	4 / 6 [1]	4 / 6 [1]	—	—

1) optional

Dimensions in cm

Electrical connection

Depending on the accessories one to two power supply cables (awning motor / lighting)
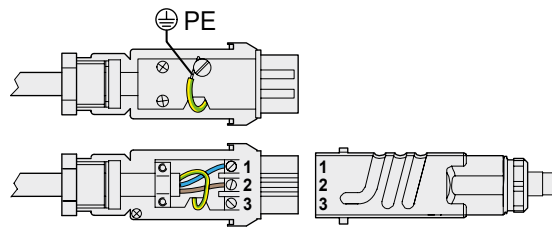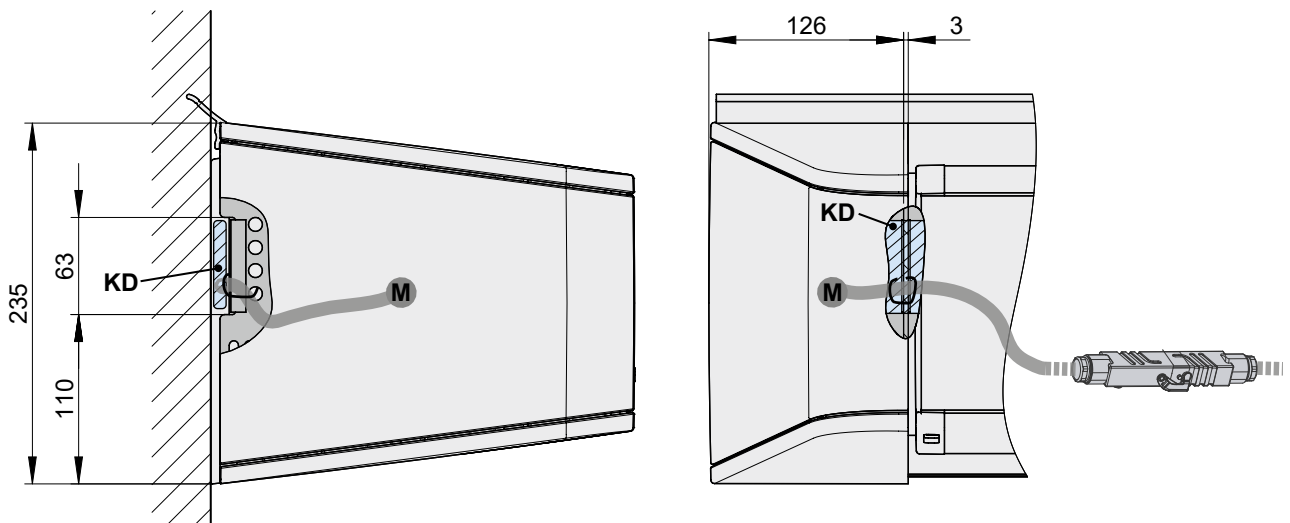
3 × 1.5 mm^2
1 = Neutral N (blue)
2 = Live L (brown)
3 = Free
PE = Earthing equipment (green / yellow)

Plug coupling

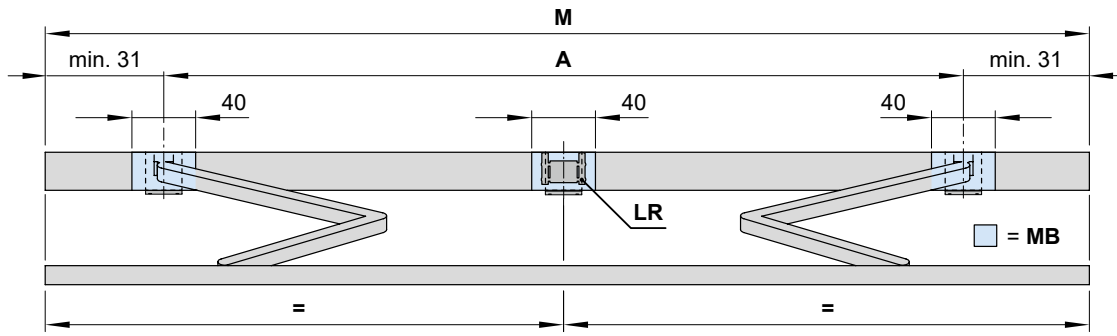# Motor cable exit point

126 3

235 63 110

KD M

KD M

KD = Cable outlet

M = Motor

Dimensions in mm

Bracket fixture range

Awning with 2 folding arms

dimensions in cm

		Awning width								
		250	**300**	**350**	**400**	**450**	**500**	**550**	**600**	**650**
Order dimensions		217 — 250	251 — 300	301 — 350	351 — 400	401 — 450	451 — 500	501 — 550	551 — 600	601 — 650
		Arm position A								
H	**150**	169 [1]	190	220	270	300	350	400	450	500
	200	—	219 [1]	220	270	300	350	400	450	500
	250	—	—	269 [1]	270	300	350	400	450	500
	300	—	—	—	319 [1]	340	350	400	450	500
	350	—	—	—	—	383 [1]	390	400	450	—
	400	—	—	—	—	—	433 [1]	440	450	—

	BHT	No. of brackets | No. of fixing points								
W	20	2 | 8						3 | 12		
BP		**A** 2 | 16 **B** 2 | 8						**A** 2 | 16 and 1 × 62143. | 4 **B** 3 | 12		

dimensions in cm

1) Dimension **A** is only valid for standard arms! In the case of bespoke arms: **A** – 13 cm. please note the minimum widths!
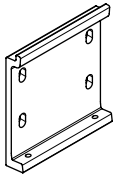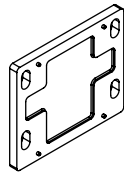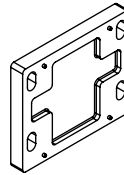If the brackets cannot be positioned in accordance with this table, make sure the actual dimensions are noted on the order form!

A   = arm position
**BHT** = bracket width
BP   = spreader plate **A** or **B** ,to be positioned behind the folding arm
H   = **order dimension** = projection
LR   = a rolltex bearing with accompanying bracket is always placed under a central seam (depends on the awning size)
M   = **order dimension**= overall awning width
MB   = bracket fixture range
W   = face fixture

Bracket fixture range

Awning with 3 folding arms
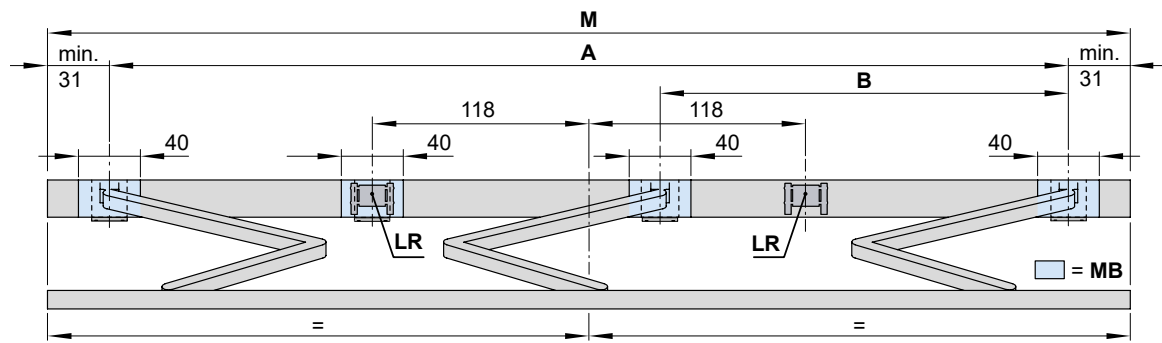
dimensions in cm

Overall awning width					
700					
651 — 674		675 — 700		667 — 700	
Arm position					
A	B	A	B	A	B
570	250	590	260	—	—
570	235	590	245	—	—
570	220	590	230	—	—
570	210	590	220	—	—
—	—	—	—	606	220
—	—	—	—	—	—

Order dimensions

H: 150, 200, 250, 300, 350, 400

BHT	No. of brackets | No. of fixing points	
W 20	4 | 16	
BP	**A** 3 | 24 und 1 × 62143. | 4	**B** 4 | 16

Dimensions in cm

If the brackets cannot be positioned in accordance with this table, make sure the actual dimensions are noted on the order form!

A   = arm position
B   = arm position
BHT = bracket width
BP = spreader plate **A** or **B**, to be positioned behind the folding arm
H   = **order dimension =** extension
LR = a rolltex bearing with accompanying bracket is always placed under a central seam (depends on the awning size)
M   = **order width** = awning width
MB = bracket fixture range
W   = face fixture

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Face fixture

Fixtures, fittings and accessories
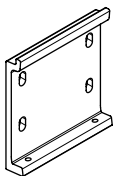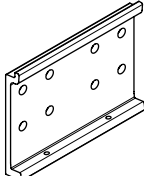
face fixture bracket 200 mm	spacer plate for face fixture 180 × 150 × 12 mm
62143.	**74989.**

spacer plate for face fixture
180 × 150 × 20 mm

N.B.!
Stack to a max. height of 200 mm

749881
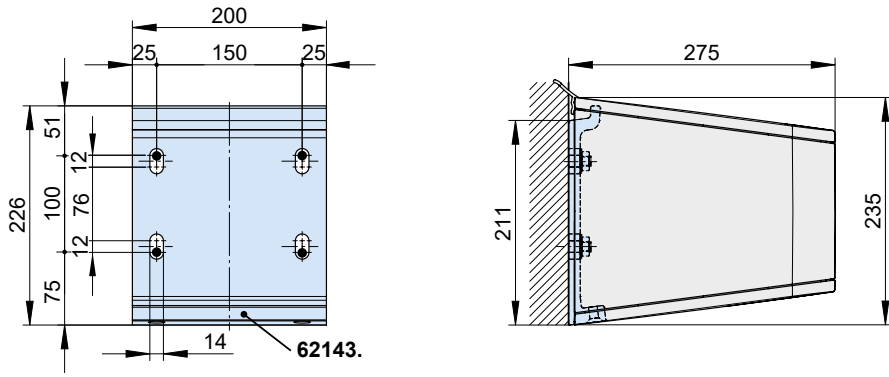
dimensions in mm

Face fixture with wall bracket A

Fixtures, fittings and accessories

face fixture bracket 200 mm	face fixture A 300 mm
62143.	**60775.**

Position of face fixture brackets in the case of 2 folding arms

Position of face fixture brackets in the case of 3 folding arms
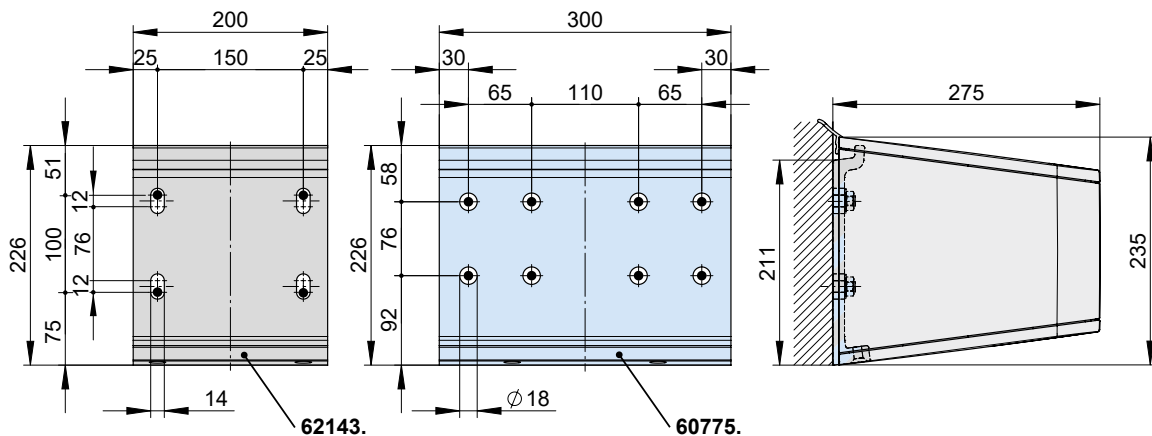
dimensions in mm

Face fixture with spreader plate B

Fixtures, fittings and accessories
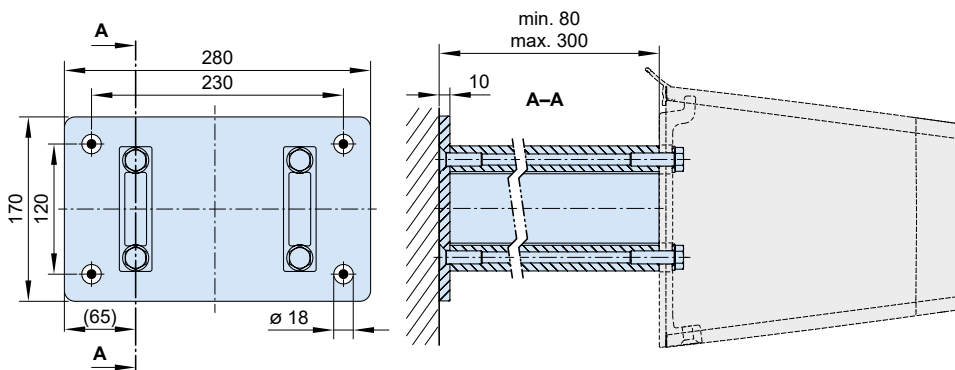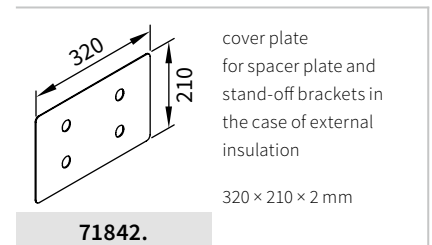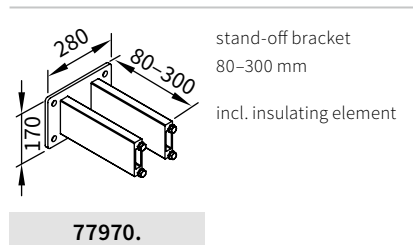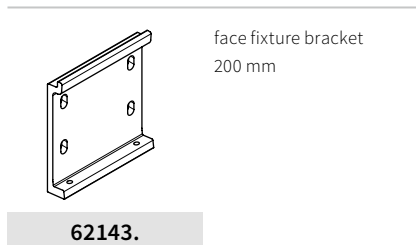
face fixture bracket
200 mm

62143.

spreader plate B
300 × 400 × 12 mm

75327.
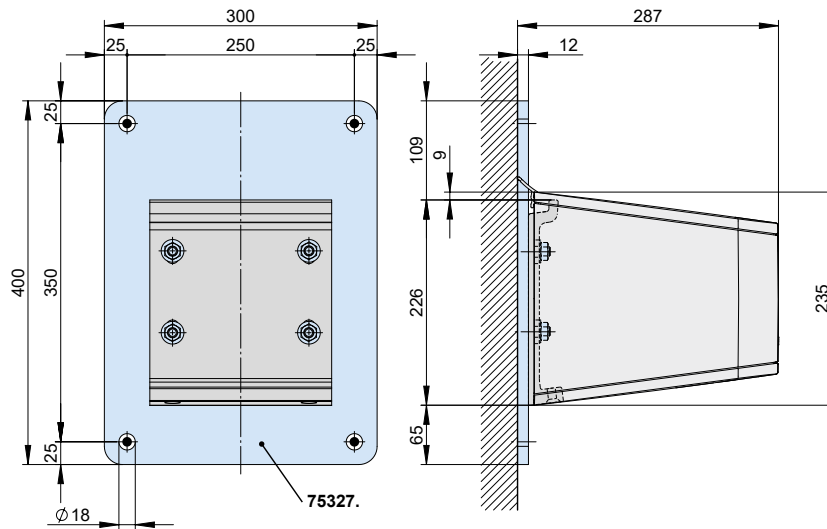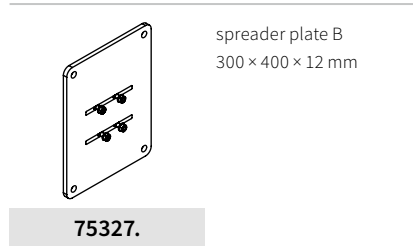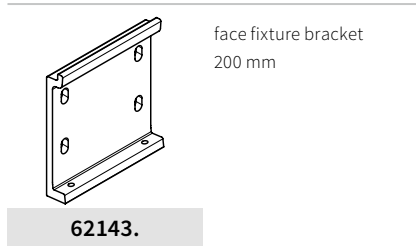
dimensions in mm

Face fixture with stand-off bracket

Fixtures, fittings and accessories

face fixture bracket
200 mm

62143.

stand-off bracket
80–300 mm

incl. insulating element

77970.

cover plate
for spacer plate and
stand-off brackets in
the case of external
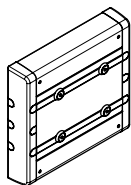insulation

320 × 210 × 2 mm

71842.

dimensions in mm

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Face fixture using the markilux panel 250 mm wide
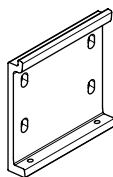
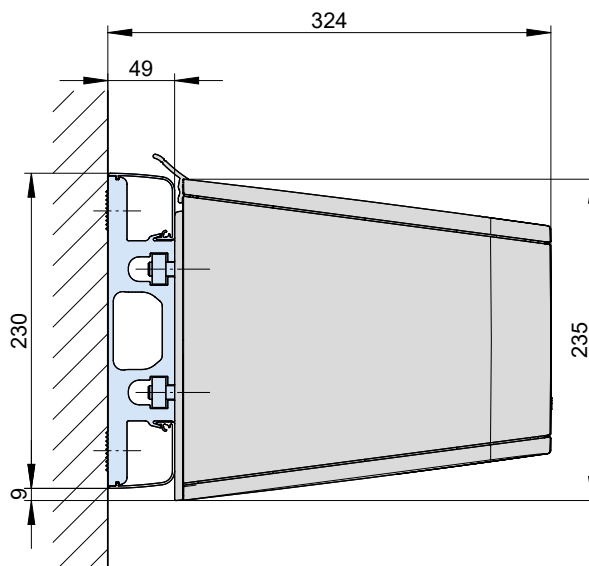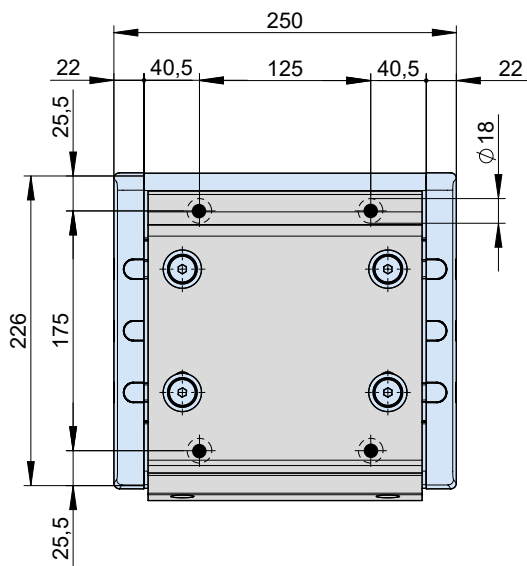**Fixtures, fittings and accessories**

markilux panel
250 × 230 × 49 mm

with decorative profiles
and end caps

76308.

face fixture bracket
200 mm

62143.

250

22   40,5   125   40,5   22

25,5

⌀ 18

226   175

25,5

324

49

230

9

235

dimensions in mm

Face fixture with markilux panel continuous

Fixtures, fittings and accessories

markilux panel
continuous

with decorative profiles
and end caps

701104

face fixture bracket
200 mm

62143.
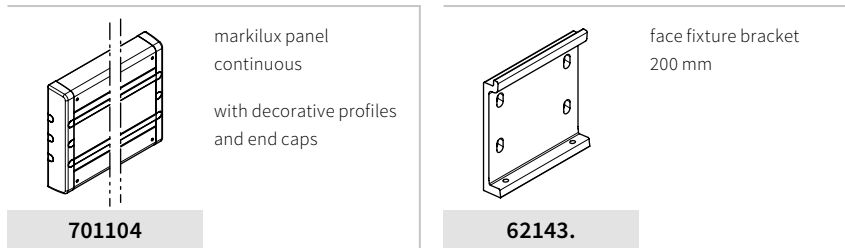
As a **continuous fixture profile** the markilux panel will always be supplied to order on the basis of a technical drawing prepared in the factory in accordance with the awning specification.

L
X × 125
22
125
22
230
226
175
Ø 18

324
49
230
235
9
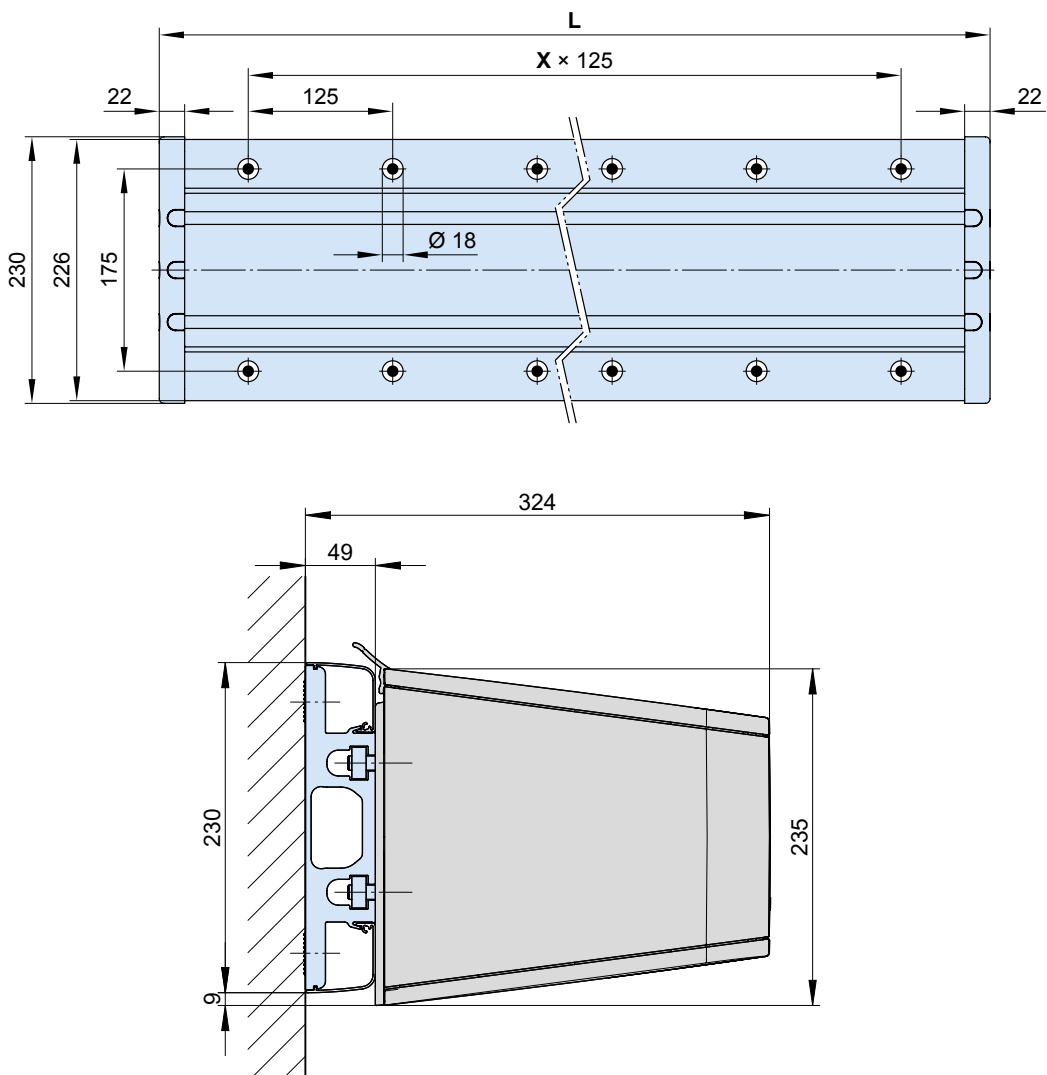
L = individual width, max. 7000 mm
x = fixing point separation, **by way of example**

dimensions in mm

01

02

03

04

05

06

07

08

09

10

11

12

13

14

15

16

17

markilux MX-4 wall light

∅ 43

62

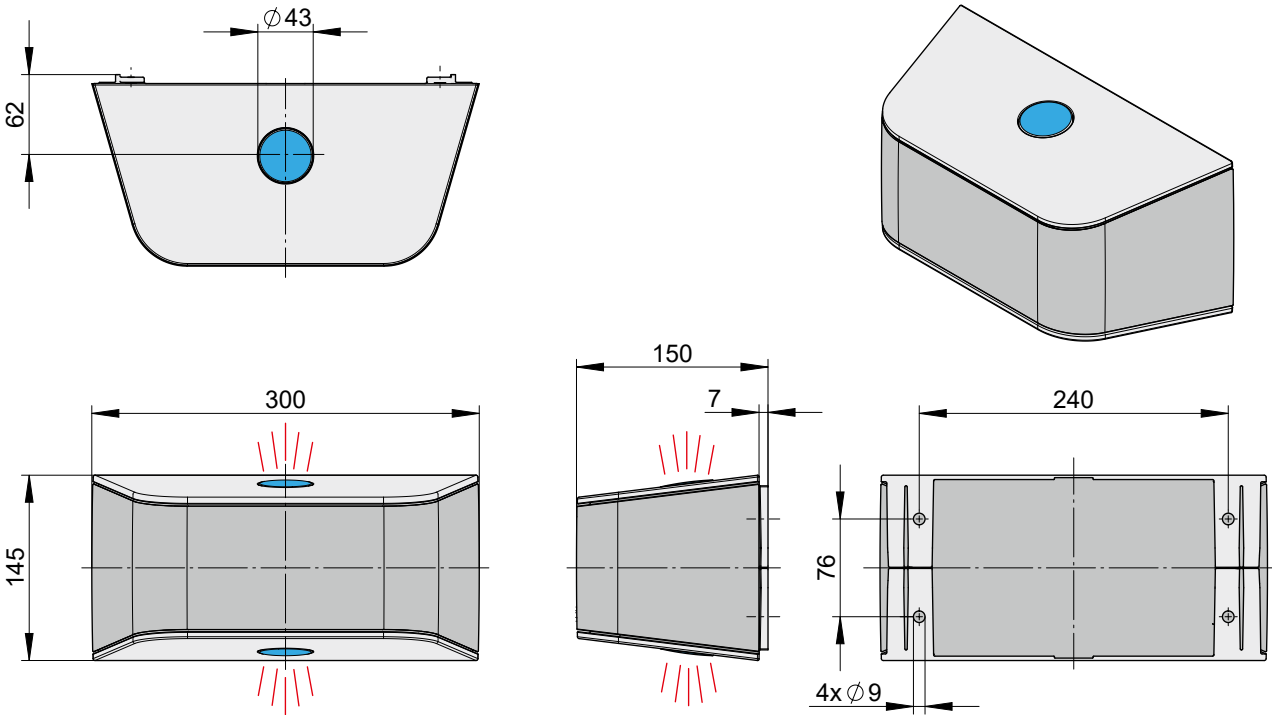150

7

300

145

76

240

4x ∅ 9

Note: standard frame colours, see page 40

dimensions in mm

markilux MX-4 wall light lighting options

LED-Spots WW in the side caps bottom / top
LED-Spots RGB-WW in the side caps bottom / top
Philips Hue Spots RGB-WW in the side caps bottom or top

Technical details LED-Spots

operating voltage	230 V / 50 Hz
power output of one LED spotlight	5 W
light source	LED (24 V)
number of transformers	1 unit
light temperature (WW)	Warm white
light temperature (RGB-WW)	RGB colour light change and warm white
IP protection class	IP 44
service life	approx. 20.000 h
plug connection (WW)	SK2
plug connection (RGB-WW)	Mizu-P25

Technical details LED-Spots Philips Hue

operating voltage	230 V / 50 Hz
power output of one LED spotlight	5,7 W
light source	LED (230 V)
number of transformers	1 unit
light temperature	RGB colour light change and white to warm white
IP protection class	IP 44
service life	approx. 15.000 h
plug connection	GU10