



Cassette awning

markilux MX-1 compact

A compact designer cassette awning that meets the highest architectural demands.



reddot design award
winner 2015



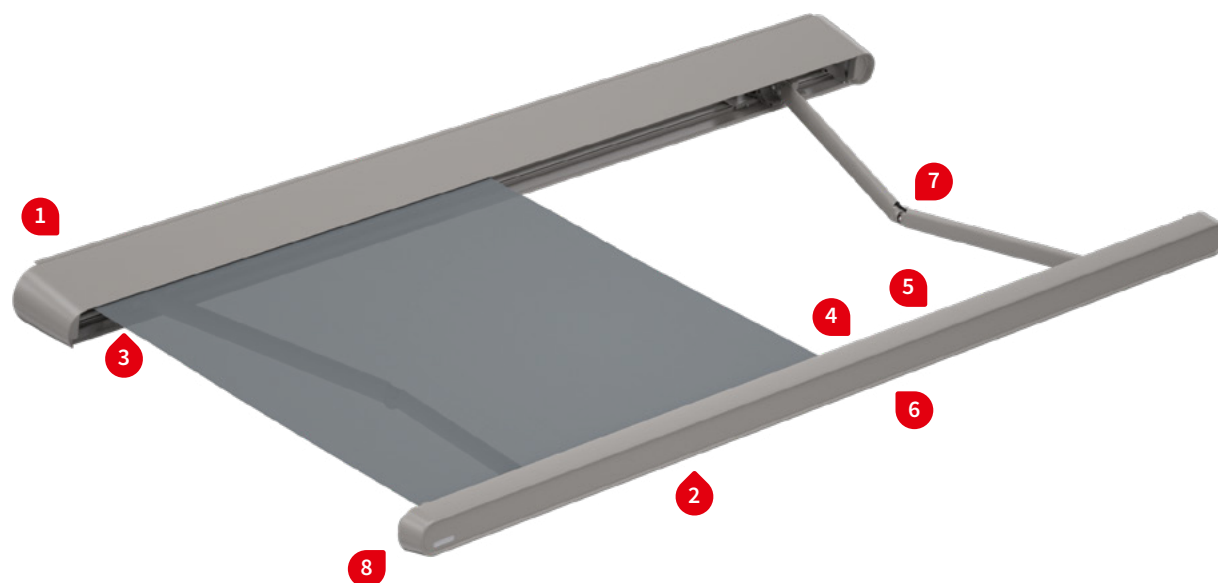
markilux.com

markilux
safe timeless beautiful

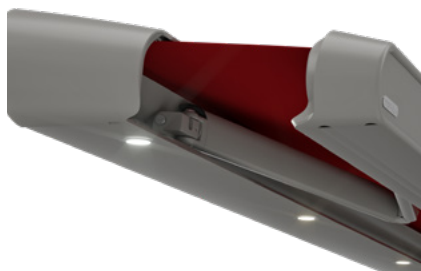
Product characteristics

Wind resistance class 2

Beaufort 5 → 7.5–10.4 m/s → 28–37 km/h → 17–23 mph



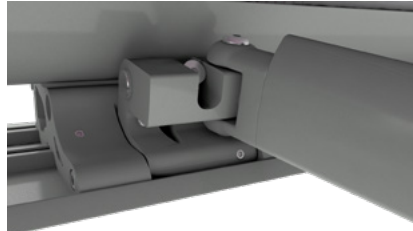
1 face fixture, LED-Spots in the cassette ¹⁾



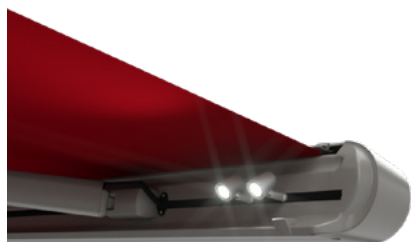
2 drop valance, during extension ¹⁾



3 arm bearer with tilt device technology, integrated windlock mechanism



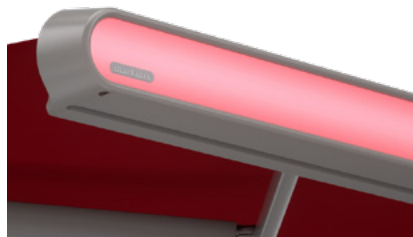
4 LED spotlights in the front profile ¹⁾



5 LED-Line in the front profile ¹⁾



6 LED ambient lighting in the front profile in 5 colour shades ¹⁾



7 bionic tendon and hidden cable conduits in the arms



8 hidden gutter with lateral water spouts



¹⁾ optional configuration

Product characteristics

Description

- full cassette awning with harmoniously crafted features and a multitude of accessory options that provide both light and shade.

Special features

- radio-controlled motor io as standard
- option of shadeplus up to a projection of 365 cm – vertical protection against low-lying sun and inquisitive glances integrated into the front profile, can be operated by radio remote control
- lighting options can be combined: LED-Spots at the bottom of the housing, directional LED-Spots or an LED-Line light tube in the front profile, LED ambient lighting behind the front panel – individual lighting options for an appealing atmosphere in the evening
- various screen profile and awning colours can be combined
- screen profile also available with exclusive coating in the “Selection MX colour selection”
- option of a silentec motor – motor noise is appreciably reduced
- the tilt device technology with integrated windlock mechanism functioning as arm bearers ensures the awning closes cleanly regardless of the pre-set pitch
- awning fits flat against the wall

Dimensions

- cassette in the standard version: depth 376 mm, height 214 mm
- single unit: minimum width 201 cm at the smallest projection of 165 cm, maximum width 700 cm at the largest projection of 415 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
- the inside of the cassette side cap functions as the bearing for the roller tube, made of aluminium, powder coated

Awning profiles

- extruded aluminium, in façade quality, powder coated
- cassette in two parts with continuous fixture keyways
- Front profile with rain gutter and smooth front panel
- screen profile made of aluminium, powder coated, or of high quality perspex, transparent and dyed all the way through

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 cover tension via the innovative markilux bionic tendon at the elbow joint, made of high tensile, high tech fibres – low in friction, noiseless, insensitive to corrosion and UV resistant, tested by the Fraunhofer Institute

Side caps

- the designer end caps for the cassette are made of high-quality plastic, powder coated
- the designer end caps for the front profile are made of high-quality plastic, powder coated, with water drainage holes

Fixture brackets

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

01 **Frame and front panel colours**

02 markilux frame colours without surcharge

03 traffic white RAL 9016

metallic aluminium RAL 9006

grey brown, similar to RAL 8019



05 off-white textured finish, 5233 ¹⁾

06 stone grey metallic, 5215 ¹⁾

07 anthracite metallic, 5204¹⁾



10 Havana brown textured finish, 5229 ¹⁾



Non-standard powder-coated finish

Bespoke frame colours at a surcharge – matt, metallic 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

12 **Combination Possibilities**

13 All standard or ambiente lighting front panel colours can be freely combined with the standard frame colours.



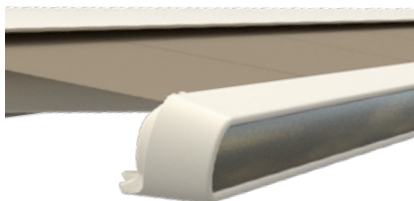
Additional Selection MX screen profile colours

Recommended colour combinations

SMX-01 Copper green patinated
Frame Anthracite metallic 5204
Awning cover 310 58



SMX-02 Brass dark-patinated
Frame Off-white textured finish 5233
Awning cover 324 49



SMX-03 Bronze dark-patinated
Frame Havana brown textured finish 5229
Awning cover 309 47



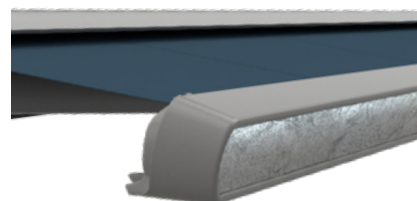
SMX-04 Matt black/silver effect paint
Frame Anthracite metallic 5204
Awning cover 310 28



SMX-05 Matt white/silver effect paint
Frame Off-white textured finish 5233
Awning cover 310 09



SMX-06 Silver grey effect paint
Frame Stone grey metallic 5215
Awning cover 310 18



SMX-07 Amber orange metallic matt
Frame Havana brown textured finish 5229
Awning cover 314 83



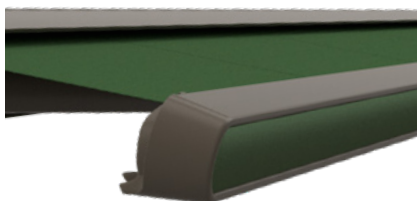
SMX-08 Pebble beige metallic matt
Frame Off-white textured finish 5233
Awning cover 314 87



SMX-09 Ruby red metallic matt
Frame Anthracite metallic 5204
Awning cover 325 13



SMX-10 Emerald green metallic matt
Frame Havana brown textured finish 5229
Awning cover 325 16



Notes on selecting colours from markilux Selection MX

With its coating, every screen profile in the Selection MX colour range is unique. In a complex procedure, an exclusive look is created with several layers of paint. During the process, the resulting colour and colour structure are influenced by different factors.

For technical reasons, slight shading, deviations in the degree of shine and colour as well as slight colour variations between coats of paint in the same tone can occur. The colour structure is always individual particularly in the case of multi-layer coatings. The mixed colour tone SMX-10 Emerald green-metallic is an interference colour, which has an iridescent effect depending on the incidence of light and the viewing angle.

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

LED ambient lighting

During the daytime, switched off

light ivory, similar to RAL 1015

yellow, similar to RAL 1003

red, similar to RAL 3003



traffic white, similar to RAL 9016

yellow green, similar to RAL 6018

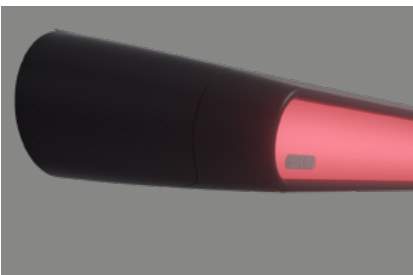
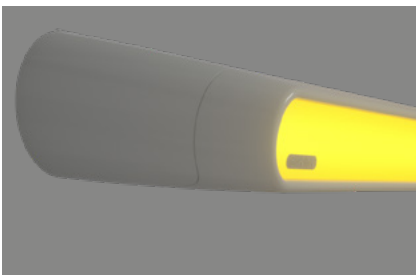
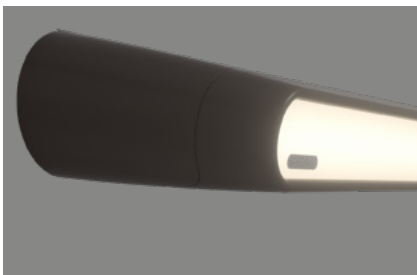


During the evening, switched on

light ivory, similar to RAL 1015

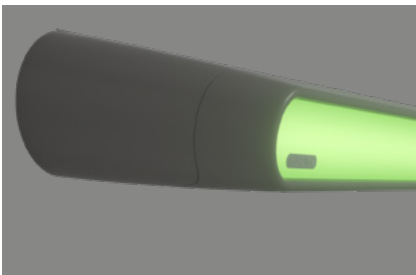
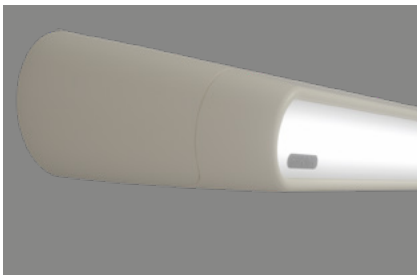
yellow, similar to RAL 1003

red, similar to RAL 3003



traffic white, similar to RAL 9016

yellow green, similar to RAL 6018



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

Dimensions and configuration options

Single unit

Order dimensions		Overall awning width										Minimum width			
		250	300	350	400	450	500	550	600	650	700	Motor			
		201 250	251 300	301 350	351 400	401 450	451 500	501 550	551 600	601 650	651 700				
H	165	1)										214	201	—	—
	215	—	1)									264	251	—	—
	265	—	—	1)								314	301	—	—
	315	—	—	—	1)							364	351	—	—
	365	—	—	—	—	1)				1)		427	414	661	648
	415 ²⁾	—	—	—	—	—	1)		—	—	1)	477	464	—	698

dimensions in cm

1) = please note the minimum widths!

2) = drop valance not available

H = extension

 = 2 folding arms, 2 brackets

 = 2 folding arms, 3 brackets, 1 rolltex bearing

 = 3 folding arms, 4 brackets, 2 rolltex bearings

 = 2 standard arms

 = 2 bespoke arms (surcharge)

 = 3 standard arms

 = 3 bespoke arms (surcharge)

Operation

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

1) for awnings with a maximum of 2 arms

Coupled Awning

not available

Awning cover

	fabric range no.	standard	optional
sunvas	301.. / 309..–315..	✓	—
perla	370 ..	—	✓
sun silk	324.. / 325.. / 328.. / 369..	✓	—
perla FR	374.. / 375..	—	✓
perfortex	331.. / 332..	—	—
transolair	338..	—	—
vuscreen Alu	317..	—	—
Soltis Perform 92	92-20..	—	—
glass fibre screen	272..	—	—
valance ¹⁾ , height 20 cm		—	✓

1) only for drop valance

Shadeplus / drop valance ¹⁾

	standard	optional
height 170 cm		
max. projection 365 cm		
crank handle	—	—
hard-wired motor	—	✓
radio-controlled motor io, 868 MHz	✓	—
radio-controlled motor RTS, 433 MHz	—	✓
cover	sunvas / sun silk / transolair / vuscreen Alu	

1) Only available in plain seamless fabrics (oversized, fabric width > 120 cm) or in plains with a horizontal joint (fabric width 120 cm).

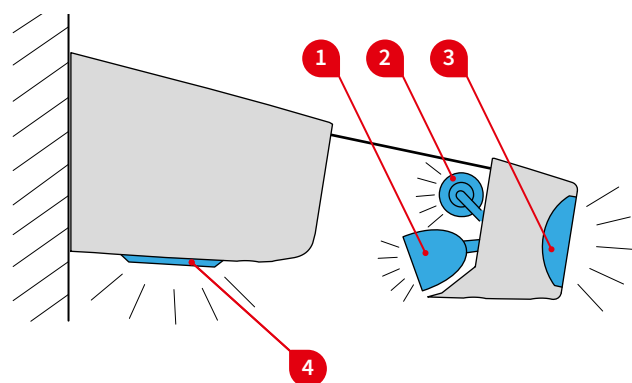
Optional accessories

drop valance, motor operation
LED-Spots in the cassette
LED-Line ¹⁾ in the front profile
LED-Spots ¹⁾ in the front profile
LED-ambiente lighting in the front profile
valance
infrared heater 2000 W / 2500 W

Infrared heater 2500 W with integrated radio-controlled receiver 868 MHz io

1) LED-Line and LED-Spots cannot be combined with one another.

N.B! Important background information can be found in the chapter "Optional Accessories".

Lighting options**Fixture options**

face fixture bracket 280 × 180 mm	72611.
face fixture bracket A 300 × 180 mm	72714.
spreader plate B 300 × 400 × 12 mm	75327.
stand-off bracket 80–300 mm	77970.

Lighting options

1) LED-Spots ¹⁾ in the front profile
2) LED-Line ¹⁾ in the front profile
3) LED-ambiente lighting in the front profile
4) LED-Spots in the cassette

1) LED-Line and LED-Spots cannot be combined with one another.

Control	standard	optional
on/off switch	—	✓
radio-controlled dimmer io 868 MHz	✓	—
radio-controlled dimmer RTS 433 MHz	—	✓

1) / 4) Technical specification LED-Spots

Operating voltage	230 V, 50 Hz
Power output of one LED spotlight	5 W
Light source	LED (12 V)
Number of transformers	1 unit
Light temperature	warm white
IP protection class	IP 44
Service life	approx. 20.000 h

2) / 3) LED-Line / ambient lighting

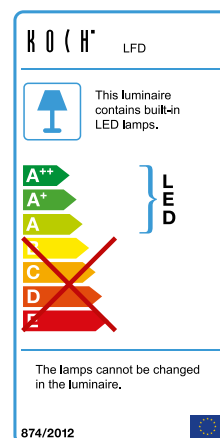
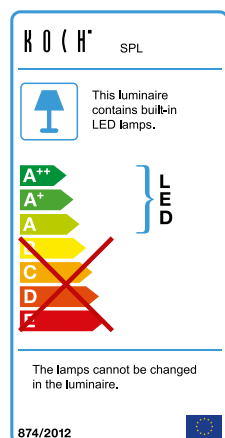
Operating voltage	230 V, 50 Hz
power output per metre	10 W ¹⁾
Light source	LED (12 V)
number of LEDs	120 pieces / m ²⁾
Number of transformers	1 unit
Light temperature	warm white
IP protection class	IP 44
Service life	approx. 15.000 h ³⁾

In the case of LED ambient lighting in awning widths > 600 cm:

1) 9 W / m

2) 90 pcs / m

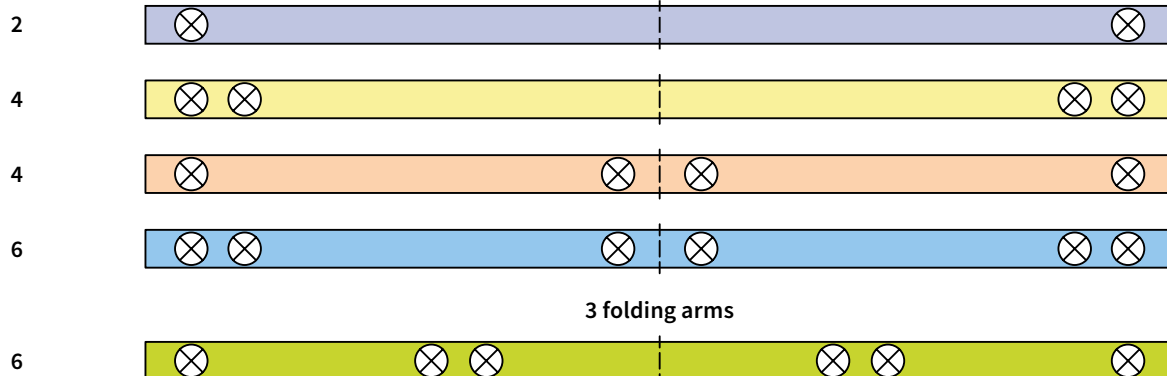
3) approx. 20.000 h



1 LED spotlight in the front profile – distribution table

Number of the LED spotlights

2 folding arms



1 Number and distribution of the LED spotlights in the front profile

Overall awning width	Drop					
	165	215	265	315	365	415
228–247	2	—	—	—	—	—
248–250	4	—	—	—	—	—
251–262	—	—	—	—	—	—
263–277	4	—	—	—	—	—
278–282	4	2	—	—	—	—
283–297	6	2	—	—	—	—
298–300	6	4	—	—	—	—
301–312	—	—	—	—	—	—
313–327	4	4	—	—	—	—
328–332	4	4	2	—	—	—
333–347	6	6	2	—	—	—
348–350	6	6	4	—	—	—
351–358	—	—	—	—	—	—
359–378	4	4	4	—	—	—
379–397	6	6	6	2	—	—
398–400	6	6	6	4	—	—
401–418	4	4	4	2	—	—
419–440	6	6	6	4	—	—
441–450	6	6	6	4	2	—
451–458	4	4	4	4	2	—
459–460	6	6	6	6	2	—
461–490	6	6	6	6	4	—
491–500	6	6	6	6	4	2
501–518	4	4	4	4	4	2
519–550	6	6	6	6	6	4
551–568	4	4	4	4	4	—
569–600	6	6	6	6	6	—
601–650	6	6	6	6	—	—
651–700	6	6	6	—	—	—

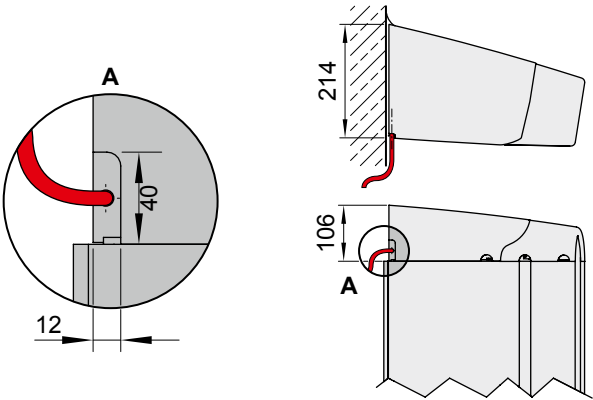
dimensions in cm

4 Number and distribution of the LED-Spots in the cassette

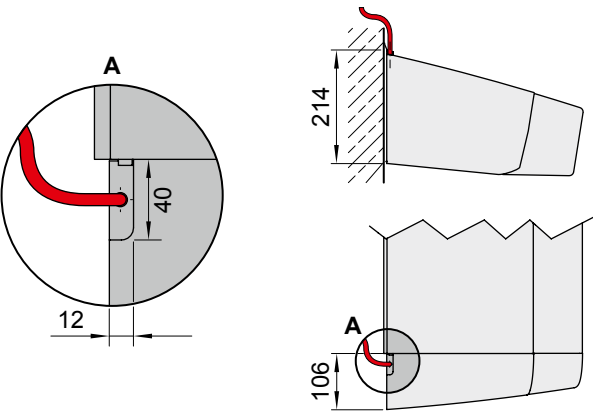
Overall awning width	No. of spotlights	LA	LA (g)
203-250	2	103	103
251-300	3	82	164
301-350	3	103	206
351-400	4	82	246
401-450	4	103	309
451-500	4	103	309
501-550	6	82	410
551-600	6	82	410
601-650	6	103	515
651-700	6	103	515

dimensions in cm

Cable exit point at bottom (standard)



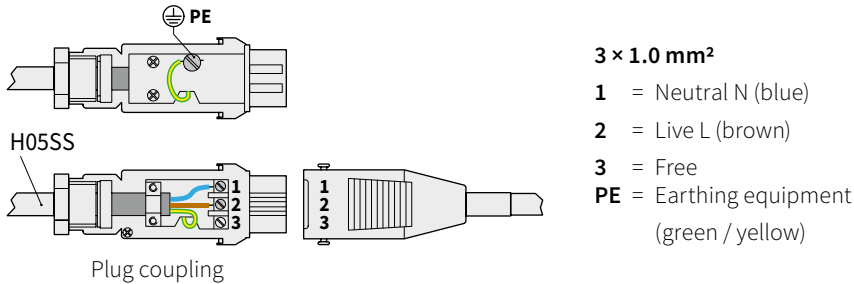
Cable exit top, optional



dimensions in mm

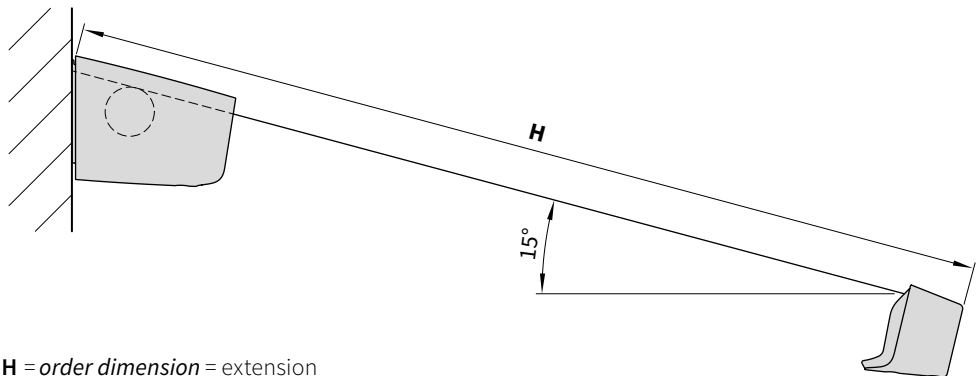
Electrical connection

The awning is connected with **a cable** (also with optional equipment with illumination and shadeplus) via plug coupling.



Definition of unit height

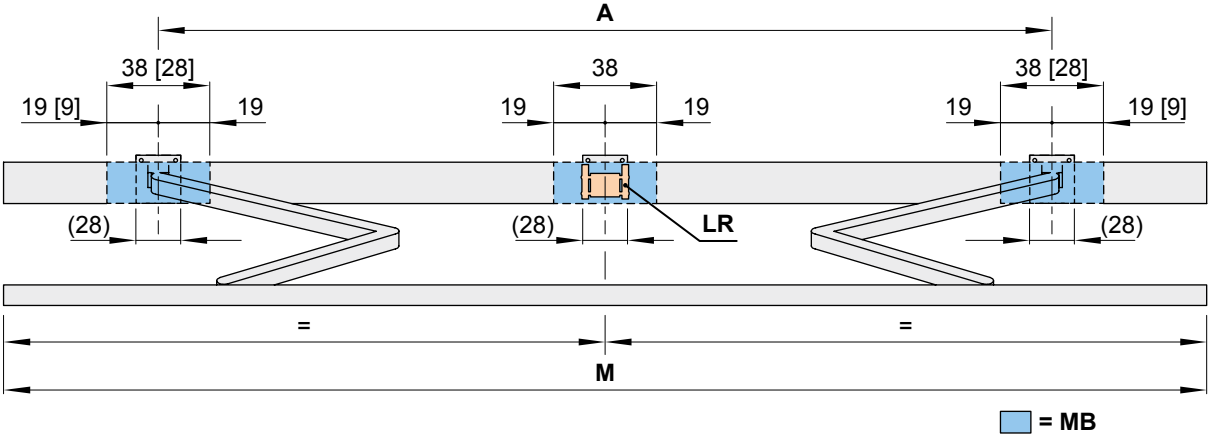
The nominal projection is measured with the awning extended at a pitch of approx. 15° from the back of the fixture brackets over the cover to the leading edge of the front profile. For the tolerances in the extension is + 40 / - 40 mm.



dimensions in mm

Bracket fixture range

Awning with 2 folding arms



dimensions in cm

		Overall awning width								
		250	300	350	400	450	500	550	600	650
Order dimensions		201	251	301	351	401	451	501	551	601
		250	300	350	400	450	500	550	600	650
		Arm position A								
H	165	169 ¹⁾	204	254	300	340	380	440	490	510
	215	—	219 ¹⁾	254	300	340	380	440	490	510
	265	—	—	269 ¹⁾	300	340	380	440	490	510
	315	—	—	—	319 ¹⁾	340	380	440	490	510
	365	—	—	—	—	382 ¹⁾	390	440	490	—
	415	—	—	—	—	—	432 ¹⁾	440	—	—
BHT		No. of brackets No. of fixing points								
W	28	2 8				3 12				
BP		A 2 16		B 2 8		A 2 16 und 1 × 72611. 4		B 3 12		

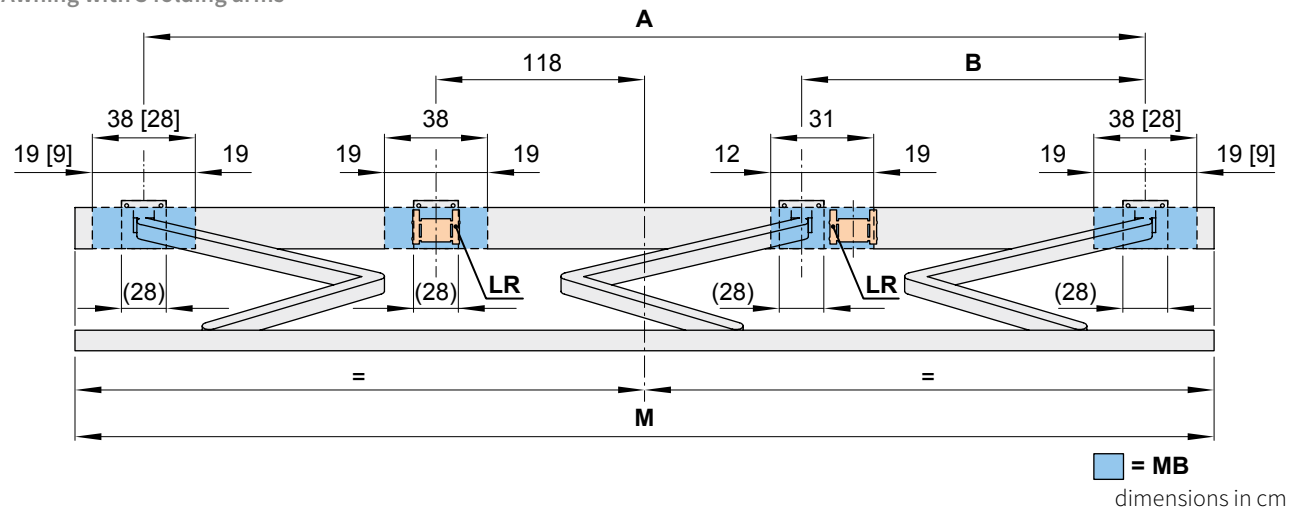
dimensions in cm

1) Dimension A is only valid for standard arms! Dimension A is 13 cm smaller in the case of bespoke arms. Please note the minimum width! If the brackets cannot be positioned in accordance with this table, make sure the actual measurements are noted on the order form!

- [...] = dimensions only apply with minimum widths
- (...) = width of standard fixture brackets
- A = 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 dimension* = awning width
- MB = bracket fixture range
- W = face fixture

Bracket fixture range

Awning with 3 folding arms



		Overall awning width									
		650		700							
Order dimensions		648 650		651 674		675 700		651 660		661 700	
		Arm position									
		A	B	A	B	A	B	A	B	A	B
H	165	—	—	570	184	590	194	—	—	—	—
	215	—	—	570	184	590	194	—	—	—	—
	265	—	—	570	184	590	194	—	—	—	—
	315	—	—	570	184	590	194	—	—	—	—
	365	603 ¹⁾	200 ¹⁾	—	—	—	—	606 ¹⁾	202 ¹⁾	616	207
	415	—	—	—	—	—	—	—	—	653 ¹⁾	226 ¹⁾
BHT		No. of brackets No. of fixing points									
W	28	4 16									
BP		A 3 24 und 1 × 72611. 4					B 4 16				

1) Please note the minimum widths! If the brackets cannot be positioned in accordance with this table, make sure the actual measurements are noted on the order form!

[...] = dimensions only apply with minimum widths

(...) = width of standard fixture brackets

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)

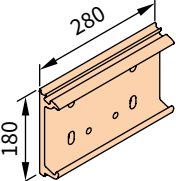
M = order dimension = awning width

MB = bracket fixture range

W = face fixture

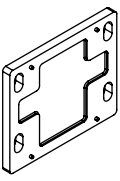
Face fixture

Fixtures, fittings and accessories



face fixture bracket
280 mm

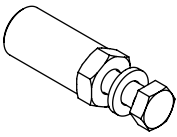
72611.



spacer plate for
face fixture
180 × 150 × 12 mm

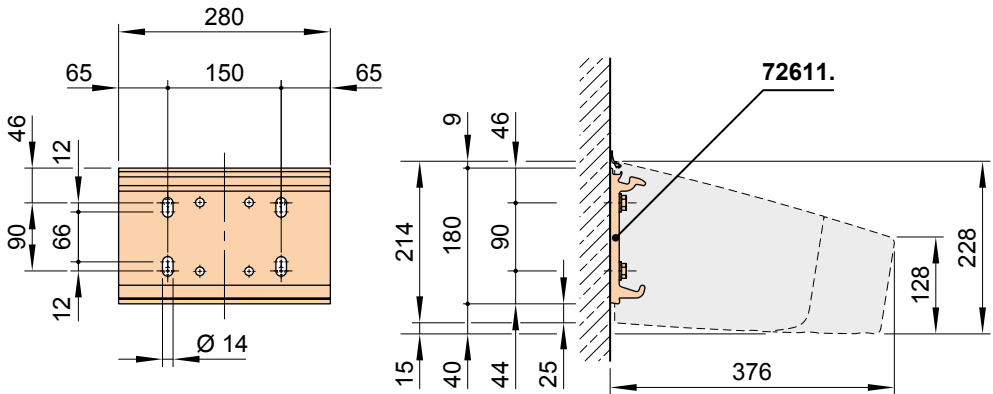
74989.

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



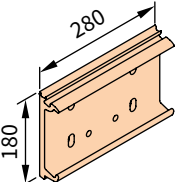
bolt reduction assembly
pack 10 pcs

M 16 → M 12 | M 16 → M 10 | M 12 → M 10 | M 10 → M 10



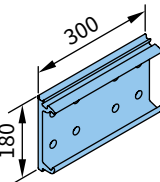
Face fixture with wall bracket A

Fixtures, fittings and accessories



face fixture bracket
280 mm

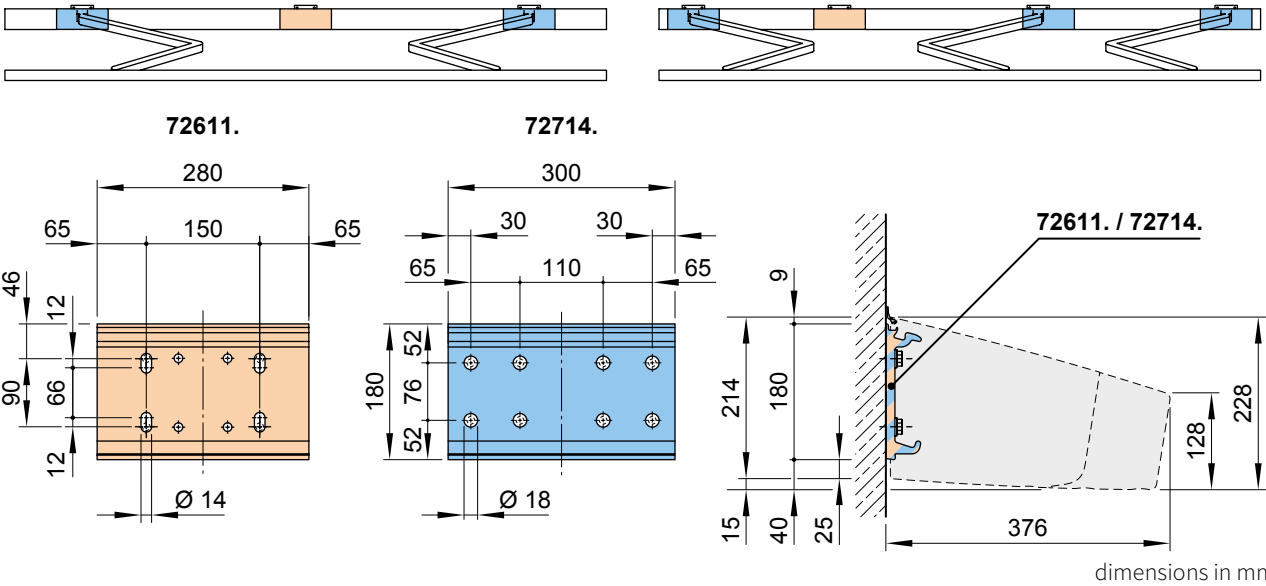
72611.



face fixture A
8-hole
300 mm

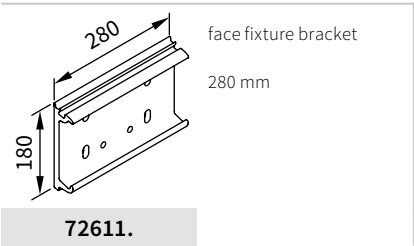
72714.

Position of face fixture brackets in the case of 2 folding arms Position of face fixture brackets in the case of 3 folding arms



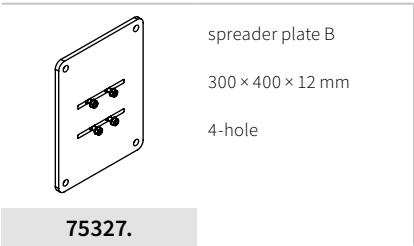
Face fixture with spreader plate B

Fixtures, fittings and accessories



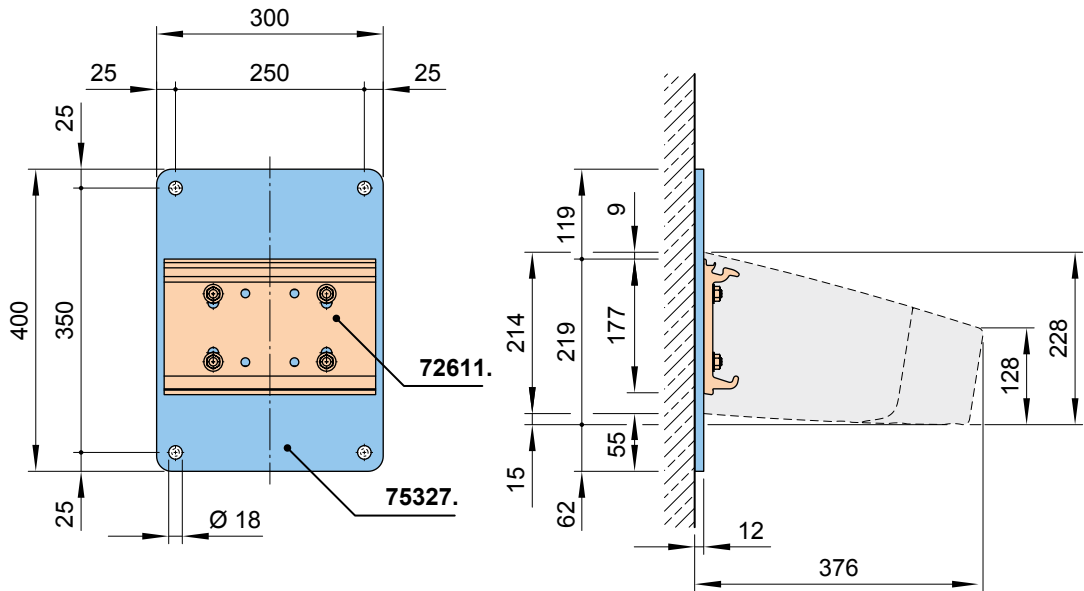
face fixture bracket
280 mm

72611.



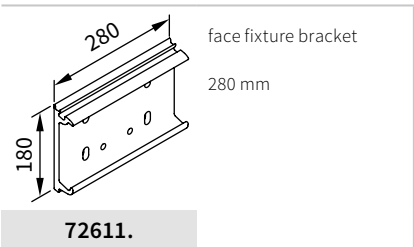
spreader plate B
300 × 400 × 12 mm
4-hole

75327.



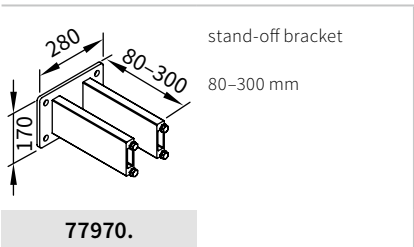
Face fixture with stand-off bracket

Fixtures, fittings and accessories



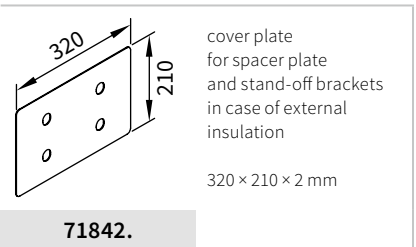
face fixture bracket
280 mm

72611.



stand-off bracket
80-300 mm

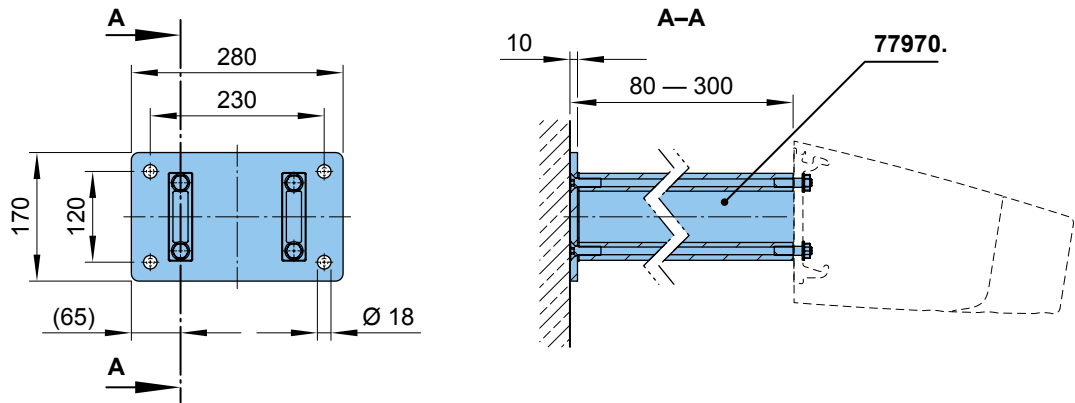
77970.



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

320 × 210 × 2 mm

71842.



dimensions in mm

- 01
- 02
- 03
- 04**
- 05
- 06
- 07
- 08
- 09
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17