



Semi-cassette awning

markilux 1650

The awning with excellent design features and well-thought-out-mechanics.
The integrated lighting creates a pleasant atmosphere.



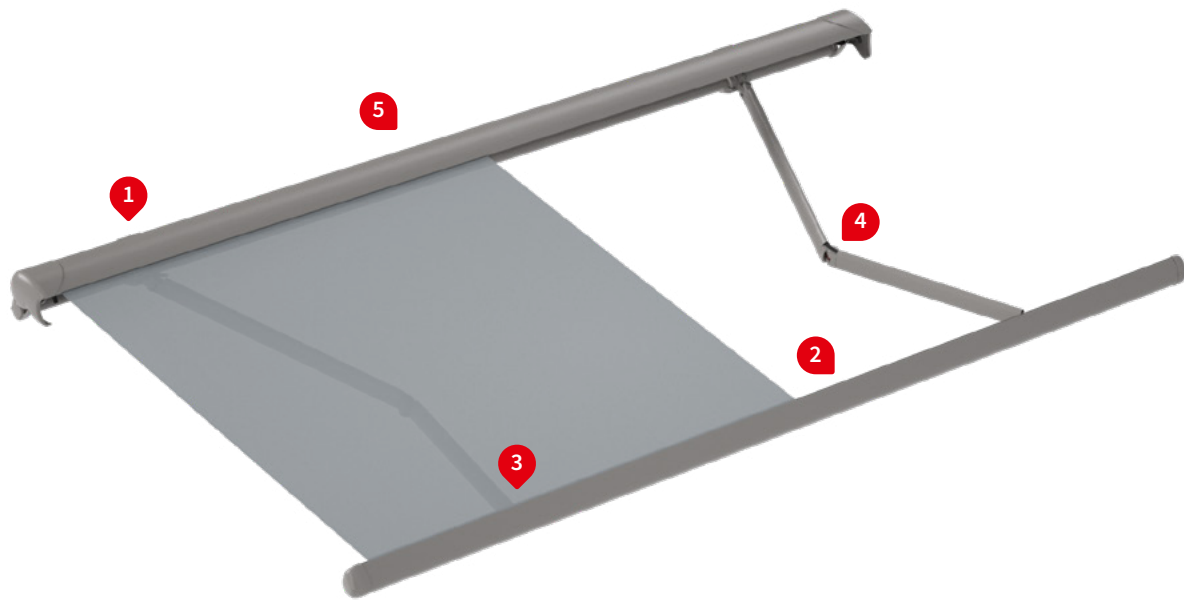
product
design award

markilux.com

Product characteristics

Wind resistance class 2

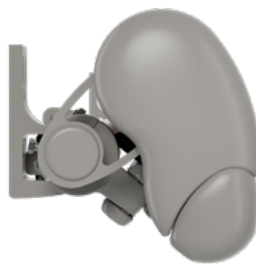
Beaufort 5 → 7.5–10.4 m/s → 28–37 km/h → 17–23 mph



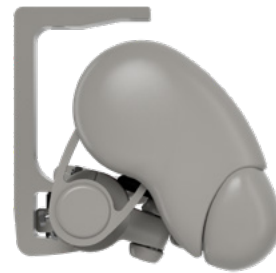
1 face fixture



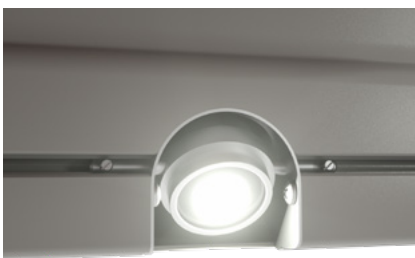
1 face fixture
maximum pitch of 25°



1 top fixture



2 integrate LED spotlights in the
front profile, can be tilted vertically
through 90°



3 cable transition to the front profile



4 twin steel-link chains, corrosion
protected



4 bionic tendon made of high-tech
fibres for optimum power
transference ¹⁾



5 wall sealing profile ¹⁾



1) optional configuration

Product characteristics

Description

- the folding-arm awning with exceptional, organic design characteristics and pivoting coverboard, ideally suited for shading large areas.
- front profile with integrated, adjustable LED spotlights to illuminate the area under the awning.

Special features

- front profile with integrated LED spotlights with a vertical adjustment range of 90°, can be dimmed by radio control – so that you can make the evening longer on the patio or in front of a bar
- during the closing procedure, the coverboard tilts automatically down the given pitch of the awning and together with the front profile encloses the roller tube completely (the awning is open underneath)
- coverboard with integrated brush so that debris does not get dragged into the awning as it closes
- awning with an extremely torsion-resistant, round torque bar which gives a certain degree of flexibility when choosing the fixture points

Dimensions

- cassette in the standard version: depth 284 mm, height 223 mm
- single unit: minimum width 204 cm at the smallest projection of 150 cm, maximum width 710 cm at the largest projection of 400 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 roller tube support bracket is made of extruded aluminium, powder coated, visually masked by the coverboard end cap

Awning profiles

- extruded aluminium, in façade quality, powder coated
- oval, single-piece coverboard, pre-fitted, enclosing the awning from behind and above
- semi-circular front profile incorporated into the coverboard during closing
- round torque bar Ø 50 mm, galvanised both inside and out, powder coated

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 via corrosion-protected twin steel-link chains at the elbow joint, optionally with innovative bionic tendon made of high tensile, hightech fibres – low in friction, noiseless, insensitive to corrosion and UV resistant

Side caps

- the coverboard end caps are made of high-quality plastic, powder coated
- the front profile and torque bar end caps are made of high-quality plastic, powder coated or in polished chrome

Fixture brackets

- face fixture, top fixture, eaves fixture
- extruded aluminium, powder coated
- pitch range 5°–50°, infinitely adjustable
- 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⁾



off-white textured finish, 5233 ¹⁾
front profile and torque bar end cap
in polished chrome

stone grey metallic, 5215 ¹⁾
front profile and torque bar end cap
in polished chrome

anthracite metallic, 5204 ¹⁾
front profile and torque bar end cap
in polished chrome



Combination options – possible in any frame colour.

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.

¹⁾ textured finish

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

Dimensions and configuration options

Single unit

		Overall awning width									Minimum width		
		260	310	360	410	460	510	560	610	660	710	Radio-controlled motor	
Order dimensions		204 260	261 310	311 360	361 410	411 460	461 510	511 560	561 610	611 660	661 710		
H	150	1)										204	—
	200	1)										248	—
	250	—	1)									298	—
	300	—	—	1)								348	—
	350	—	—	—	1)							398	661
	400	—	—	—	—	1)				—		437	687

1) = observe the minimum widths!

H = extension



= 2 folding arms,
2 brackets

= 2 folding arms, 3 brackets

= 2 folding arms, 3 brackets
1 rolltex bearing

= 3 folding arms, 4 brackets
2 rolltex bearings

dimensions in cm



= 2 standard arms



= 3 standard arms

Operation

standard optional

Coupled Awning

crank handle	—	—	not available
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

Awning cover

fabric range no.

standard optional

Shadeplus / drop valance

sunvas	301.. / 309..–315..	✓	—	not available
perla	370 ..	—	✓	
sunsilk	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		—	—	

Optional accessories

folding arm technology with bionic tendon
wall sealing profile (effective up to a maximum awning pitch of 25°); coverboard when fitted to the markilux panel, in one piece
infrared heater 2500 W
infrared heater 2500 W with integrated radio-controlled receiver 868 MHz io
torque bar brackets for the infrared heater
automatic controls (light, wind, rain)

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

Fixture brackets

wall bracket 100 mm	70867.
wall bracket 45 mm	71813.
spreader plate A 430 × 160 × 12 mm	75326.
spreader plate B 300 × 400 × 12 mm	75325.
markilux panel 250 × 230 × 49 mm	76308.
markilux panel continuous	76380.
stand-off bracket wide 80–300 mm	77968.
stand-off bracket narrow 80–300 mm	77967.
top fixture bracket 90 mm	70868.
top fixture bracket 45 mm	71818.
eaves fixture bracket 90 mm, 150 mm plate	71612.
eaves fixture bracket 90 mm, 270 mm plate	71659.
flat plate and angled bracket for eaves fixture, machine finish aluminium, 500 mm plate	716620
spreader plate 260 × 60 × 12 mm for eaves fixture bracket	75383.

12 Lighting options**LED spotlights in projection profile**

A radio receiver and a hand-held radio transmitter ensure convenient operation

**Technical specification**

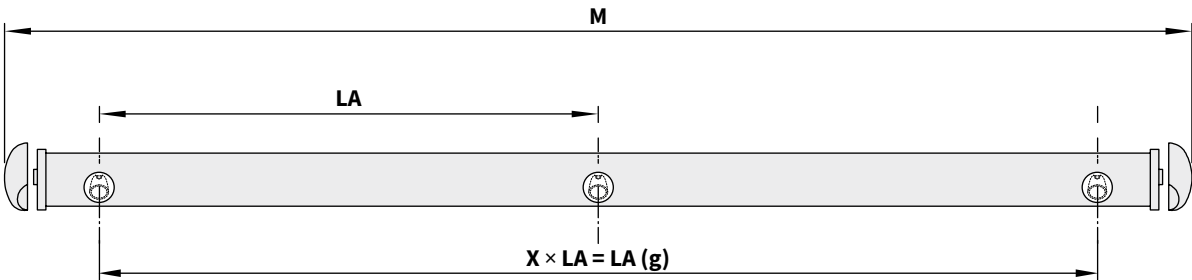
Operating voltage	230 V, 50 Hz
Power output of one LED spotlight	5 W
Light source	LED (12 V)
Number of transformers	1 unit
Light temperature	warm white
IP protection class	IP 44
Service life	approx. 20.000 h

Control**standard optional**

radio-controlled dimmer	✓	—
standard on / off switch	—	✓

Lighting options

LED spotlight distribution table



Overall awning width	No. of spotlights	LA	LA (g)
195–260	3	86	172
261–310	3	111	222
311–360	3	136	272
361–410	3	161	322
411–460	5	82	328
461–510	5	105	420
511–560	5	115	460
561–610	5	125	500
611–660	5	135	540
661–710	5	135	540

dimensions in cm

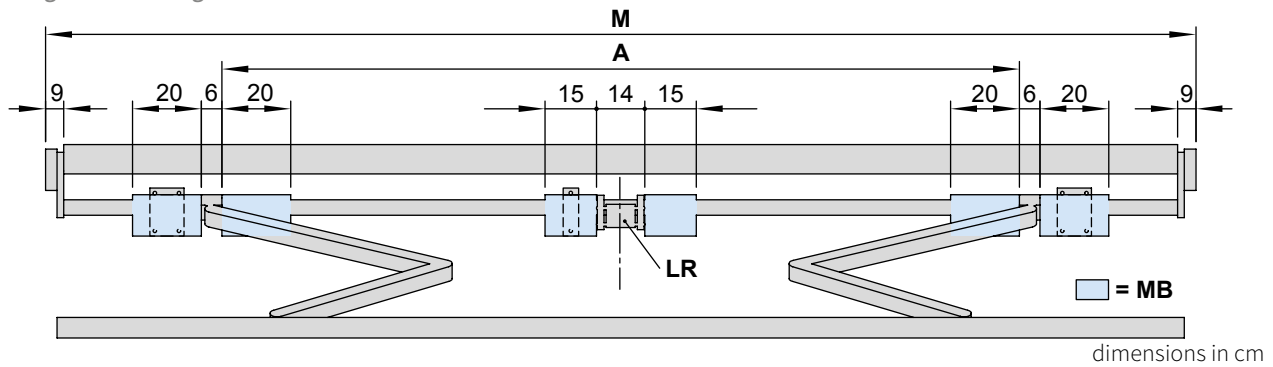
LA (g) = distance between the spotlights (total)

M = order dimension = awning width

dimensions in mm

Bracket fixture range

Awning with 2 folding arms



		Overall awning width								
		260	310	360	410	460	510	560	610	660
Order dimensions		174 260	261 310	311 360	360 410	411 460	461 510	511 560	561 610	611 660
		Arm position A								
H	150	154 ¹⁾	220	250	280	320	390	425	460	500
	200	215 ²⁾	204 ¹⁾	250	280	320	390	425	460	500
	250	—	265 ²⁾	254 ¹⁾	280	320	390	425	460	500
	300	—	—	315 ²⁾	304 ¹⁾	320	390	425	460	500
	350	—	—	—	365 ²⁾	370 ¹⁾	390	425	460	500
	400	—	—	—	—	404 ²⁾	425 ^{1) 2)}	425	460	—
BHT		No. of brackets No. of fixing points								
W	4,5	—					1 2			
	10	2 6					2 6			
BP		A 2 16 B 2 8					A 2 16 B 2 8			
DP		—					1			
PA		2 8					3 12			
DE	4,5	—					1 2			
	9	2 8					2 8			
DA	9	2 8					3 12			

dimensions in cm

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

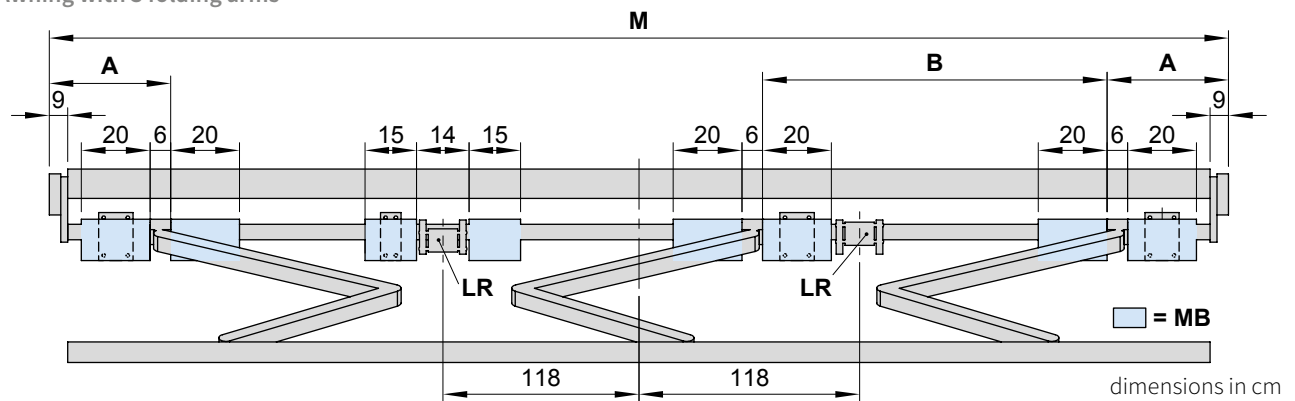
- 1) = coupled awning in intermediate widths available on request with junction roller
 2) = Please note the minimum widths! In the case of small awnings the brackets can only be fitted inside the arms, i.e. the position denoted by measurement **A**

The **pull-out forces** necessary for determining the correct fixing materials necessary to meet wind resistance class 2 (Beaufort 5) can be found in the password-protected dealer area of the markilux.com website under "Pull-out Forces".

A	= arm position	H	= <i>order dimension</i> = extension
BHT	= bracket width	LR	= rolltex bearing
BP	= spreader plate A or B, to be positioned behind the folding arm	M	= <i>order dimension</i> = awning width
DA	= eaves fixture bracket	MB	= bracket fixture range
DE	= top fixture bracket	PA	= markilux panel, fixture profile, width 250 mm
DP	= spacer plate 71826., to be positioned behind the left rolltex bearing, in the case of spreader plate A or B	W	= face fixture bracket

Bracket fixture range

Awning with 3 folding arms



Overall awning width

710

Order dimensions

661

710

		Arm position	
		A	B
H	150	35	220
	200	35	220
	250	35	220
	300	35	220
	350	25	230
	400	16.5 ¹⁾	228 ¹⁾
BHT		No. of brackets No. of fixing points	
W	45	1 2	
	100	3 9	
BP		A 3 24 B 3 12	
DP		1	
DE	45	1 2	
	90	3 12	
DA	90	4 16	

dimensions in mm

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

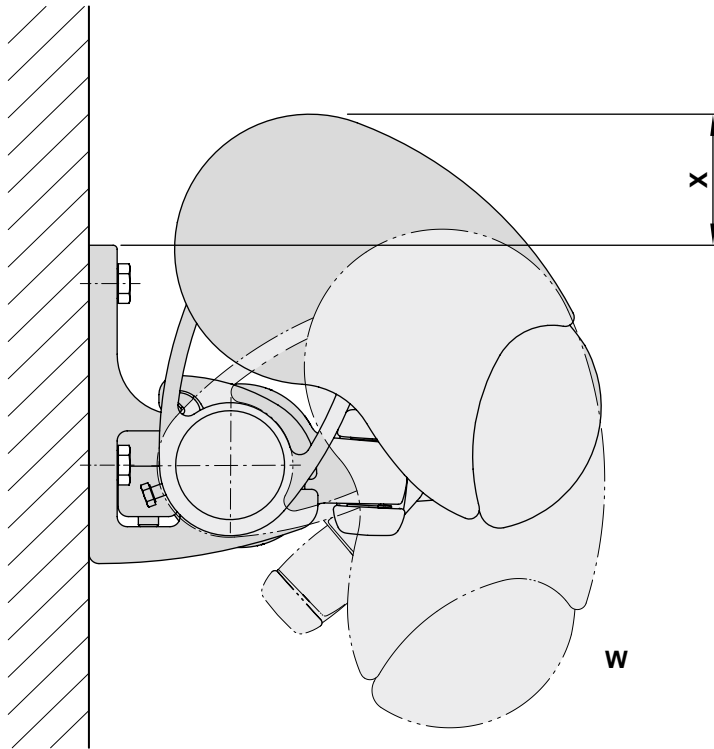
The **pull-out forces** necessary for determining the correct fixing materials necessary to meet wind resistance class 2 (Beaufort 5) can be found in the password-protected dealer area of the markilux.com website under "Pull-out Forces".

- 1) = coupled units are not available with junction roller
A, B = arm position
BHT = bracket width
BP = spreader plate A or B, to be positioned behind the folding arm
DA = eaves fixture bracket
DE = top fixture bracket

- DP** = spacer plate 71826., to be positioned behind the left rolltex bearing, in the case of spreader plate A or B
H = *order dimension* = extension
LR = rolltex bearing
M = *order dimension* = awning width
MB = bracket fixture range
PA = markilux panel, fixture profile, width 250 mm
W = face fixture bracket

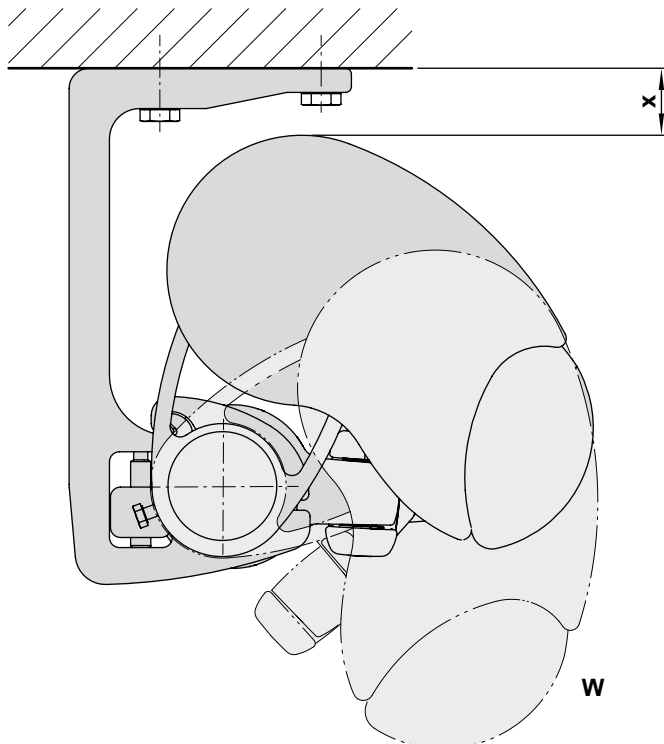
Overall unit height at different pitch settings

Face fixture



pitch (W)	approx. height in mm (X)
5°	65
10°	64
15°	60
20°	54
25°	48
30°	41
35°	34
40°	26
45°	17
50°	8

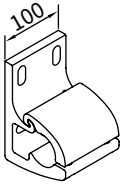
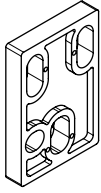
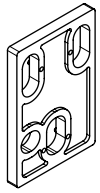
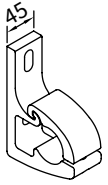
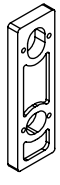
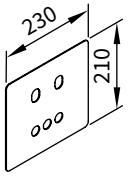
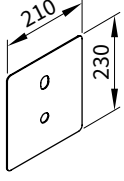
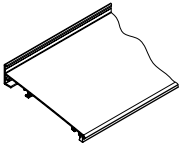
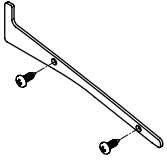
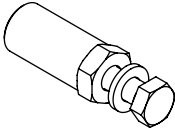
Top fixture

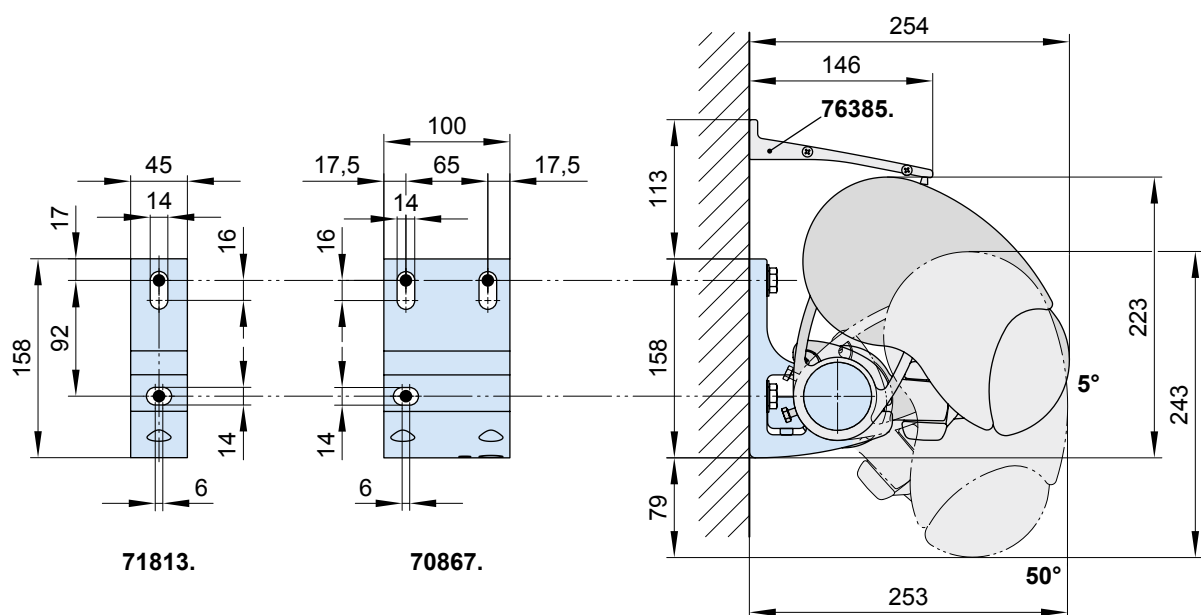


pitch (W)	approx. height in mm (X)
5°	33
10°	34
15°	38
20°	44
25°	50
30°	57
35°	65
40°	73
45°	81
50°	90

Face fixture

Fixtures, fittings and accessories

 face fixture bracket 100 mm 70867.	 spacer plate 100 × 150 × 20 mm N.B! Stack to a max. height of 200 mm 758831	 spacer plate 100 × 150 × 12 mm 758841
 face fixture bracket for central fixture, depending on size 45 mm 71813.	 spacer plate for face fixture 45 mm × 150 mm × 20 mm Attention! stack to a max. height of 200 mm 718251	 spacer plate for face fixture 45 × 150 × 12 mm 71826.
 cover plate for spacer plate and stand-off brackets in the case of external insulation 230 × 210 × 2 mm 71843.	 cover plate for spacer plate and stand-off brackets in the case of external insulation 210 × 230 × 2 mm 71844.	 Wall sealing profile incl. brush seal when installing with a coverboard available by the metre 76385. and 704241
 1 side plate including 2 pan-head self-tapping screws for wall sealing profile 76386. and 2 × 735611	 bolt reduction assembly pack 10 pcs M 16 → M 12 M 16 → M 10 M 12 → M 10 M 10 → M 10	

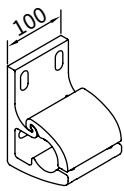


76385. = wall sealing profile (standard width = awning width (M); up to a maximum awning pitch of 25°)

dimensions in mm

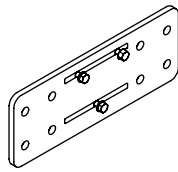
Face fixture with spreader plate A

Fixtures, fittings and accessories



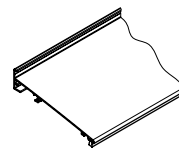
face fixture bracket
100 mm

70867.



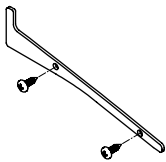
spreader plate A
face fixture
430 × 160 × 12 mm

75326.



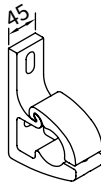
Wall sealing profile
incl. brush seal
when installing with a
coverboard
available by the metre

76385. and 704241



1 side plate including
2 pan-head self-tapping
screws for wall sealing
profile

76386. and 2 × 735611



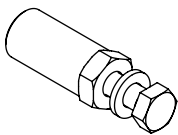
face fixture bracket
for central fixture,
depending on size
45 mm

71813.



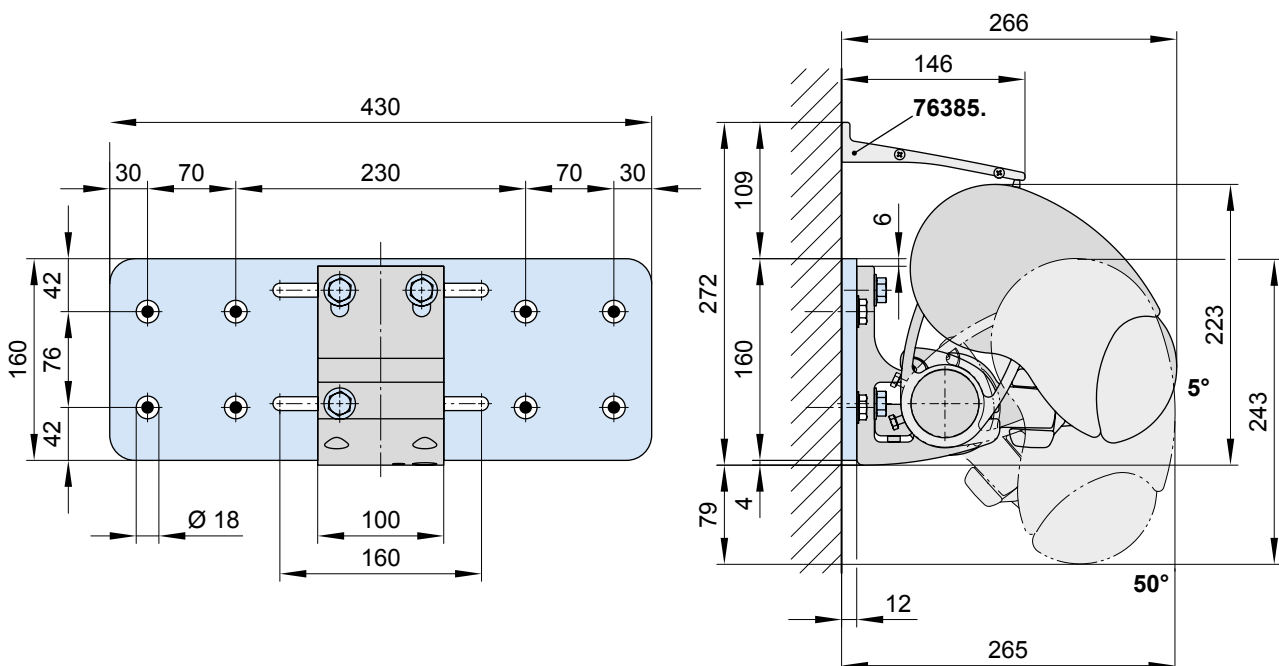
spacer plate for face
fixture
45 × 150 × 12 mm

71826.



bolt reduction assembly
pack 10 pcs

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

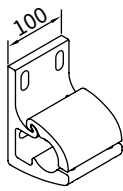
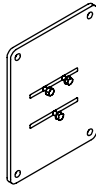
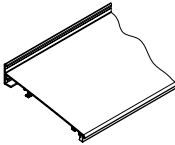
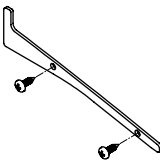
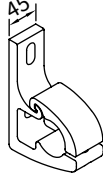
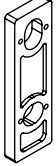
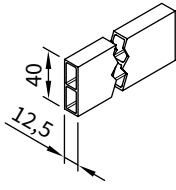
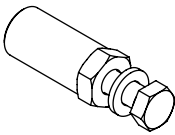


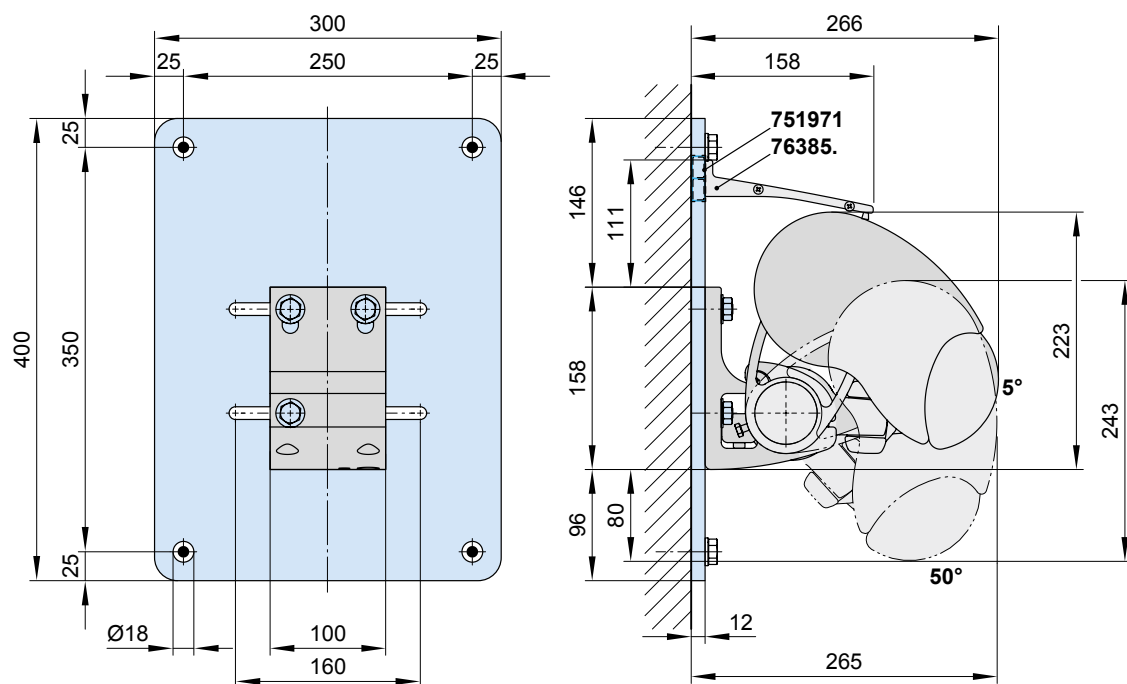
76385. = wall sealing profile (standard width = awning width (M); up to a maximum awning pitch of 25°)

dimensions in mm

Face fixture with spreader plate B

Fixtures, fittings and accessories

 face fixture bracket 100 mm 70867.	 spreader plate B face fixture 300 × 400 × 12 mm 75325.	 Wall sealing profile incl. brush seal when installing with a coverboard available by the metre 76385. and 704241
 1 side plate including 2 pan-head self-tapping screws for wall sealing profile 76386. and 2 × 735611	 face fixture bracket for central fixture, depending on size 45 mm 71813.	 spacer plate for face fixture 45 × 150 × 20 mm 71826.
 stand-off strip for wall sealing profile available by the metre 751971	 bolt reduction assembly pack 10 pcs M 16 → M 12 M 16 → M 10 M 12 → M 10 M 10 → M 10	



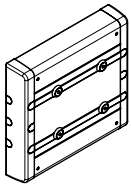
751971 = stand-off strip for wall sealing profile

76385. = wall sealing profile (standard width = awning width (M); up to a maximum awning pitch of 25°)

dimensions in mm

Face fixture with markilux panel 250 mm

Fixtures, fittings and accessories

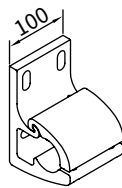


markilux panel 250 mm
fixture profile

with decorative profiles
and end caps

250 × 230 × 49 mm

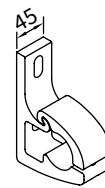
76308.



face fixture bracket

100 mm

70867.

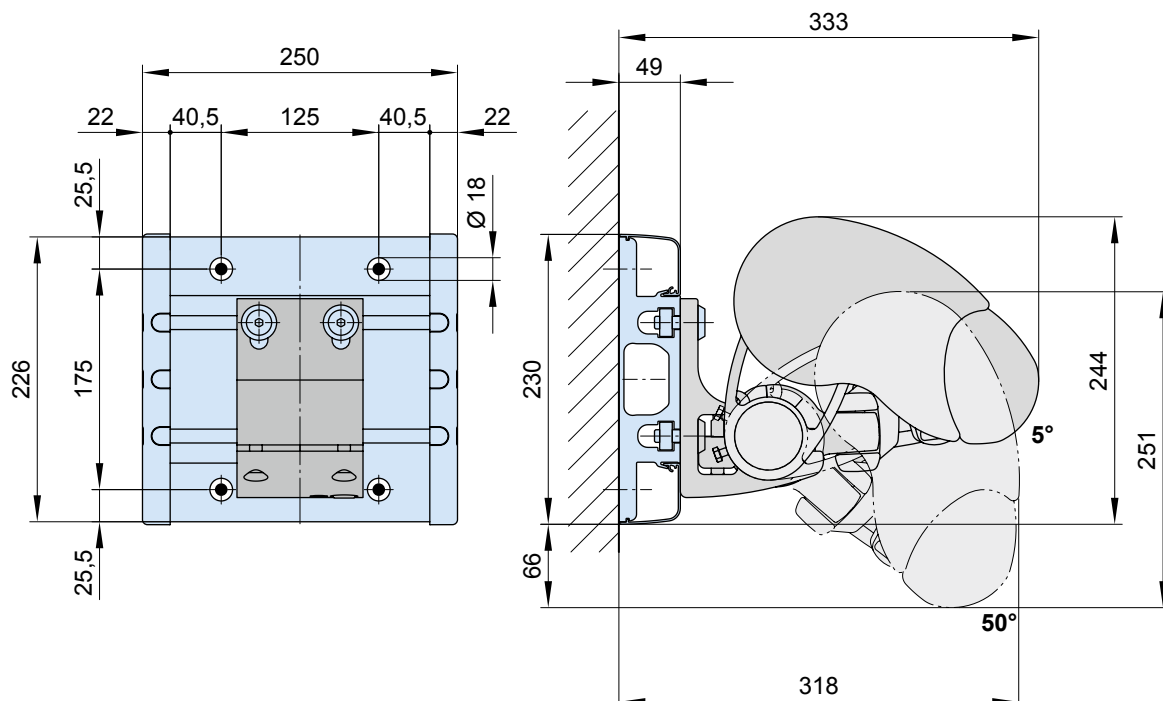


face fixture bracket

for central fixture,
depending on size

45 mm

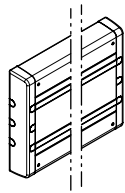
71813.



dimensions in mm

Face fixture with markilux panel continuous

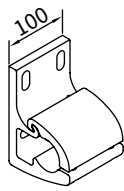
Fixtures, fittings and accessories



markilux panel 250 mm
fixture profile
with decorative profiles
and end caps

continuous

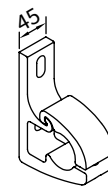
76380.



face fixture bracket

100 mm

70867.

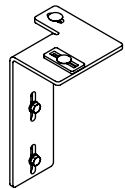


face fixture bracket

for central fixture,
depending on size

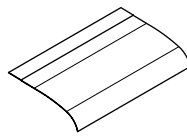
45 mm

71813.



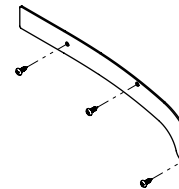
Coverboard brackets

76390.



Coverboard incl. addi-
tional profile and rubber
sealing strip

72015., 72019., 75970.



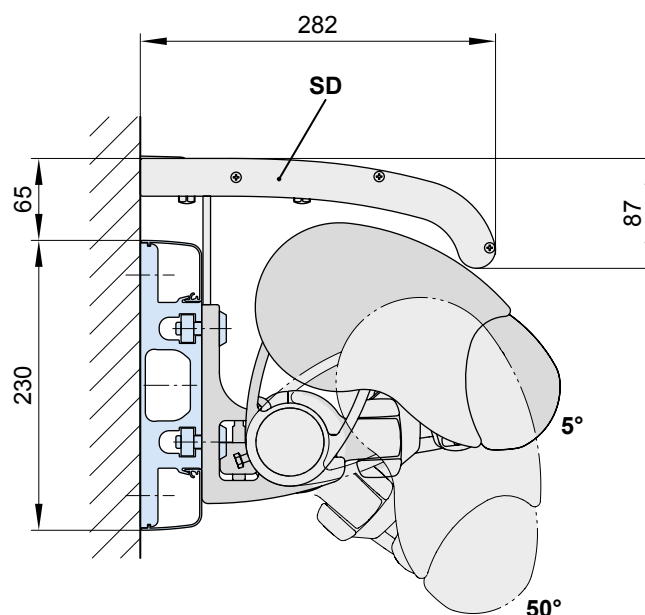
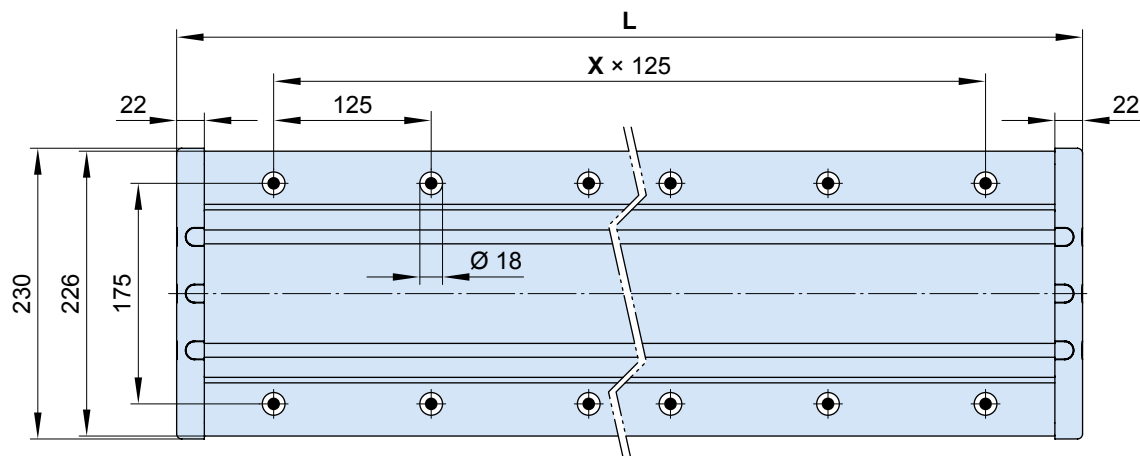
End cheeks for the cover-
board, 282 x 87 x 2 mm

and

3 fillister head self-tap-
ping screws

76469. und 3 x 735611

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 = individual width, max. 7000 mm

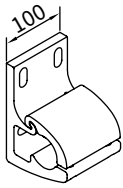
SD = coverboard

X = fixing point separation, **by way of example**

dimensions in mm

Face fixture with stand-off bracket

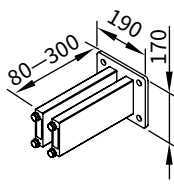
Fixtures, fittings and accessories



70867.

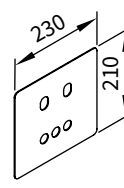
face fixture bracket

100 mm



77968.

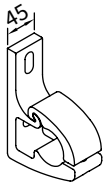
stand-off bracket
for face fixture bracket
70867.



71843.

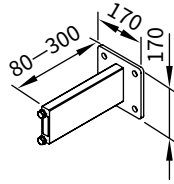
cover plate
for spacer plate
and stand-off brackets
in the case of external
insulation

230 × 210 × 2 mm



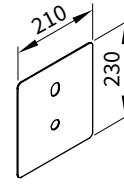
71813.

face fixture bracket
for central fixture,
depending on size
45 mm



77967.

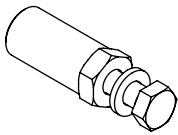
stand-off bracket
for face fixture bracket
71813.



71844.

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

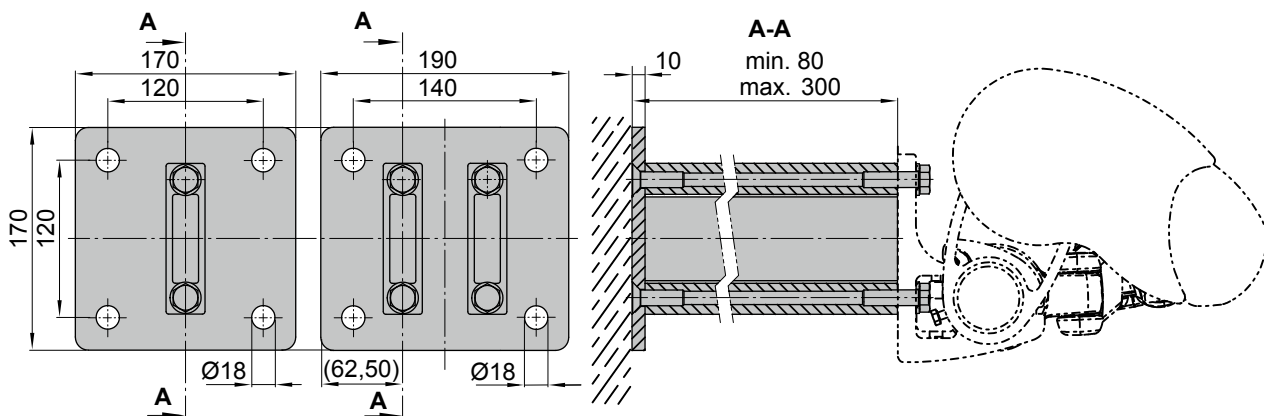
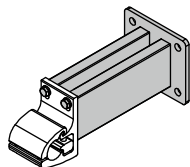
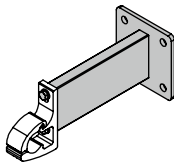
210 × 230 × 2 mm



bolt reduction assembly

pack 10 pcs

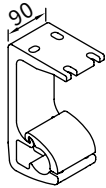
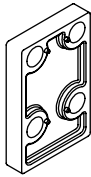
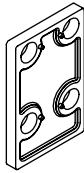
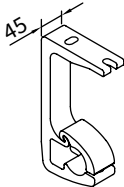
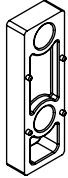
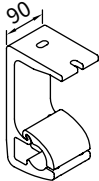
M 16 → M 12	M 16 → M 10	M 12 → M 10	M 10 → M 10
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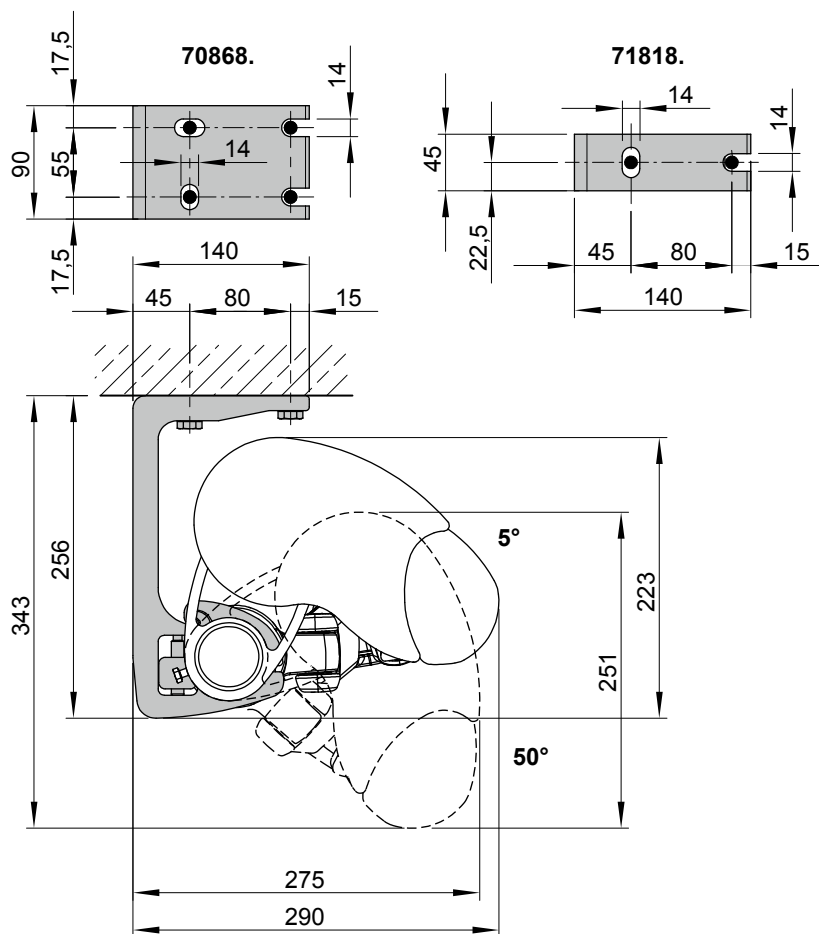


dimensions in mm

Top fixture

Fixtures, fittings and accessories

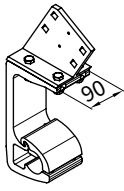
 top fixture bracket 90 mm 70868.	 spacer plate for top fixture 90 × 140 × 20 mm Attention! stack to a max. height of 200 mm 716311	 spacer plate for top fixture 90 × 140 × 12 mm 716411
 top fixture bracket additional bracket for 3 folding arms 71818.	 spacer plate for top fixture 45 × 140 × 20 mm Attention! stack to a max. height of 200 mm 716261	 spacer plate for top fixture 45 × 140 × 12 mm 716371
 top fixture bracket for central fixture The pull-out forces are double compared to those of top fixture bracket 70868. 70869.		



dimensions in mm

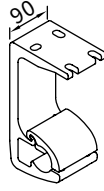
Eaves fixture

Fixtures, fittings and accessories



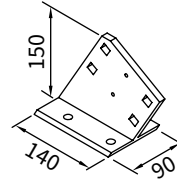
eaves fixture bracket
complete set
Height of flat
plate: 150 mm
90 mm

70871.



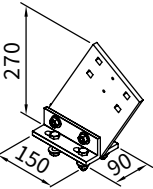
top fixture bracket
90 mm

70868.



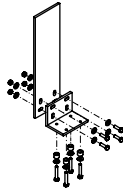
eaves fixture bracket
150 mm plate

71612.



eaves fixture bracket
270 mm plate
please refer to "Eaves
fixture with spreader /
backing plate"

71659.



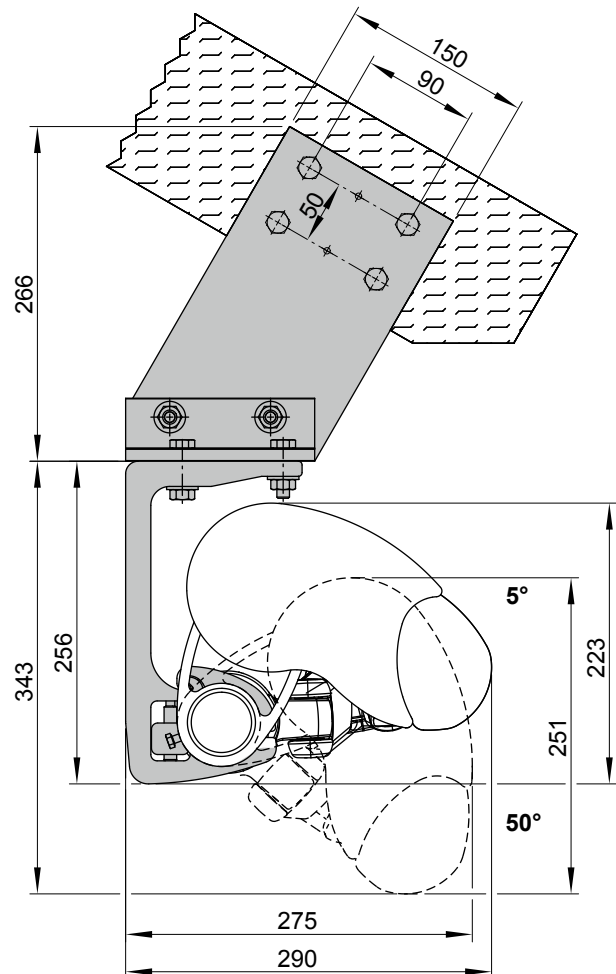
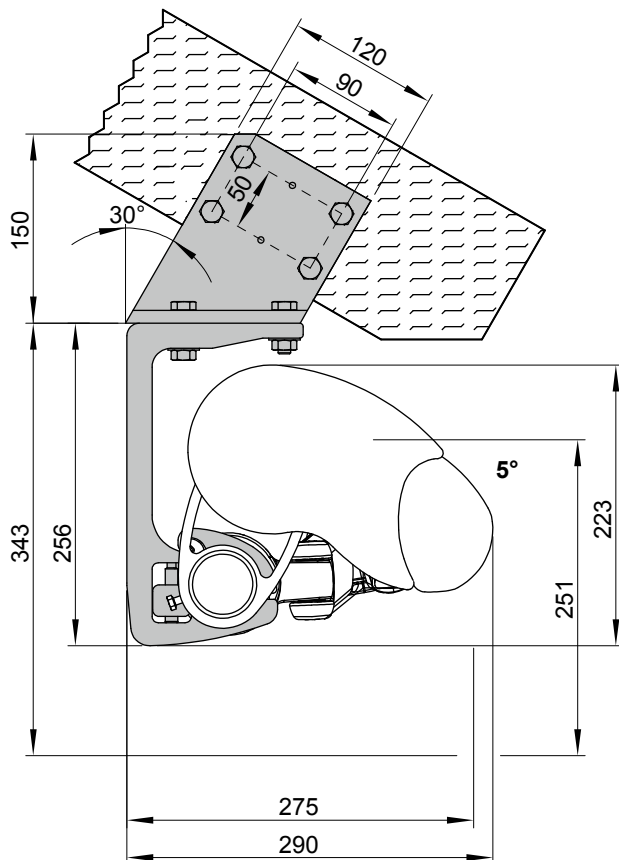
flat plate and angled
bracket for eaves fixture
machine finish

716620

12

With eaves fixture bracket 150 mm (71612.)

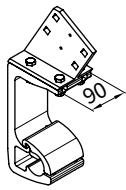
With eaves fixture bracket 270 mm (71659.)



dimensions in mm

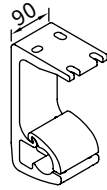
Eaves fixture with additional plate

Fixtures, fittings and accessories



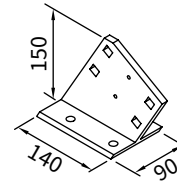
eaves fixture bracket
90 mm
complete set
Height of flat
plate: 150 mm

70871.



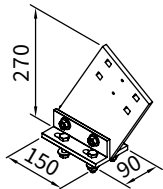
top fixture bracket
90 mm

70868.



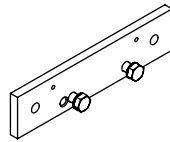
eaves fixture bracket
150 mm plate

71612.



eaves fixture bracket
270 mm plate
please refer to "Eaves
fixture with spreader /
backing plate"

71659.

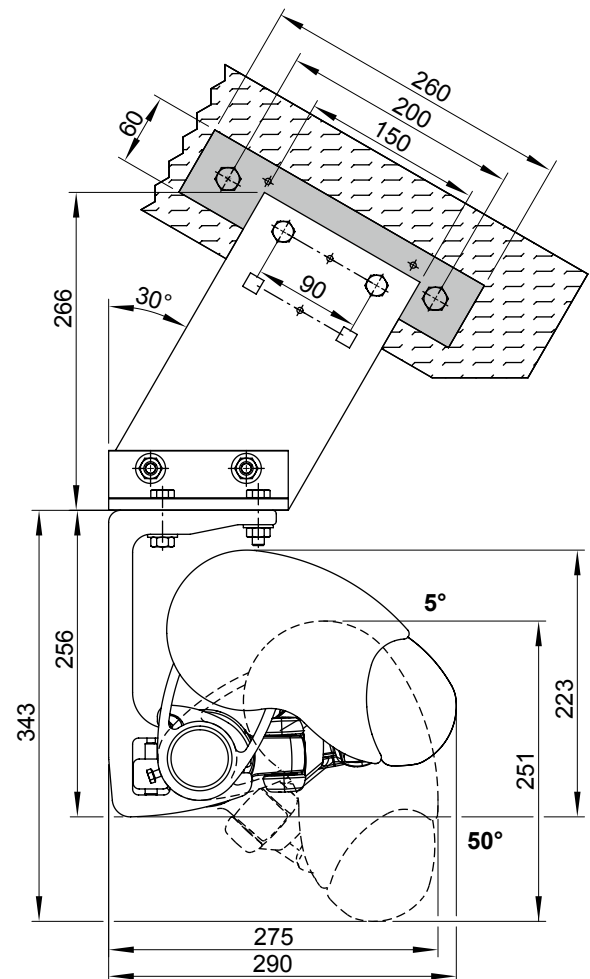
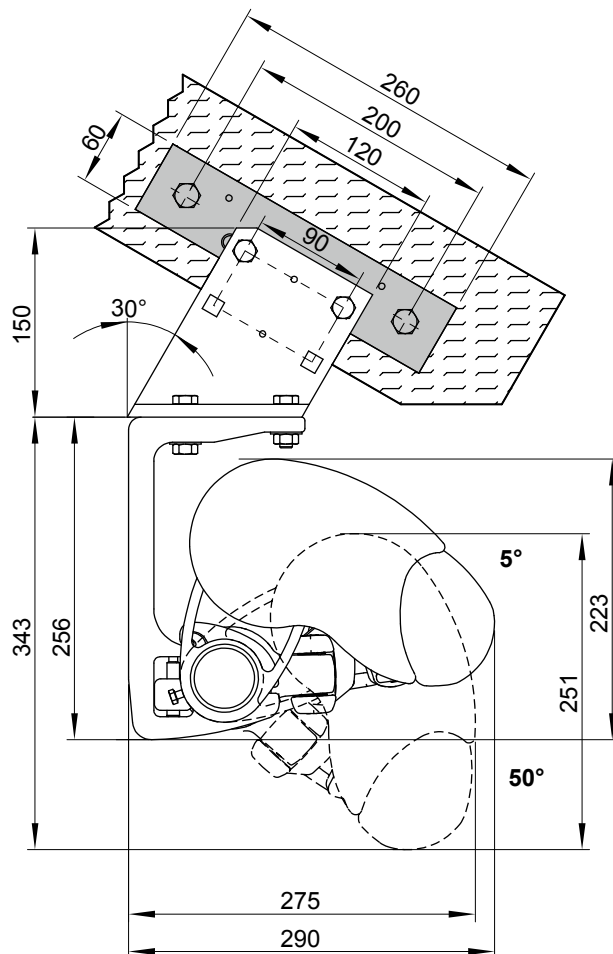


supplementary flat plate
eaves fixture
260 × 60 × 12 mm
please refer to "Eaves
fixture with spreader /
backing plate"

75383.

With eaves fixture bracket 150 mm (71612.)

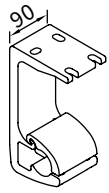
With eaves fixture bracket 270 mm (71659.)



dimensions in mm

Eaves fixture with adjustable bracket

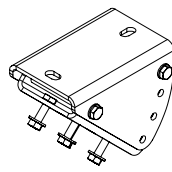
Fixtures, fittings and accessories



top fixture bracket

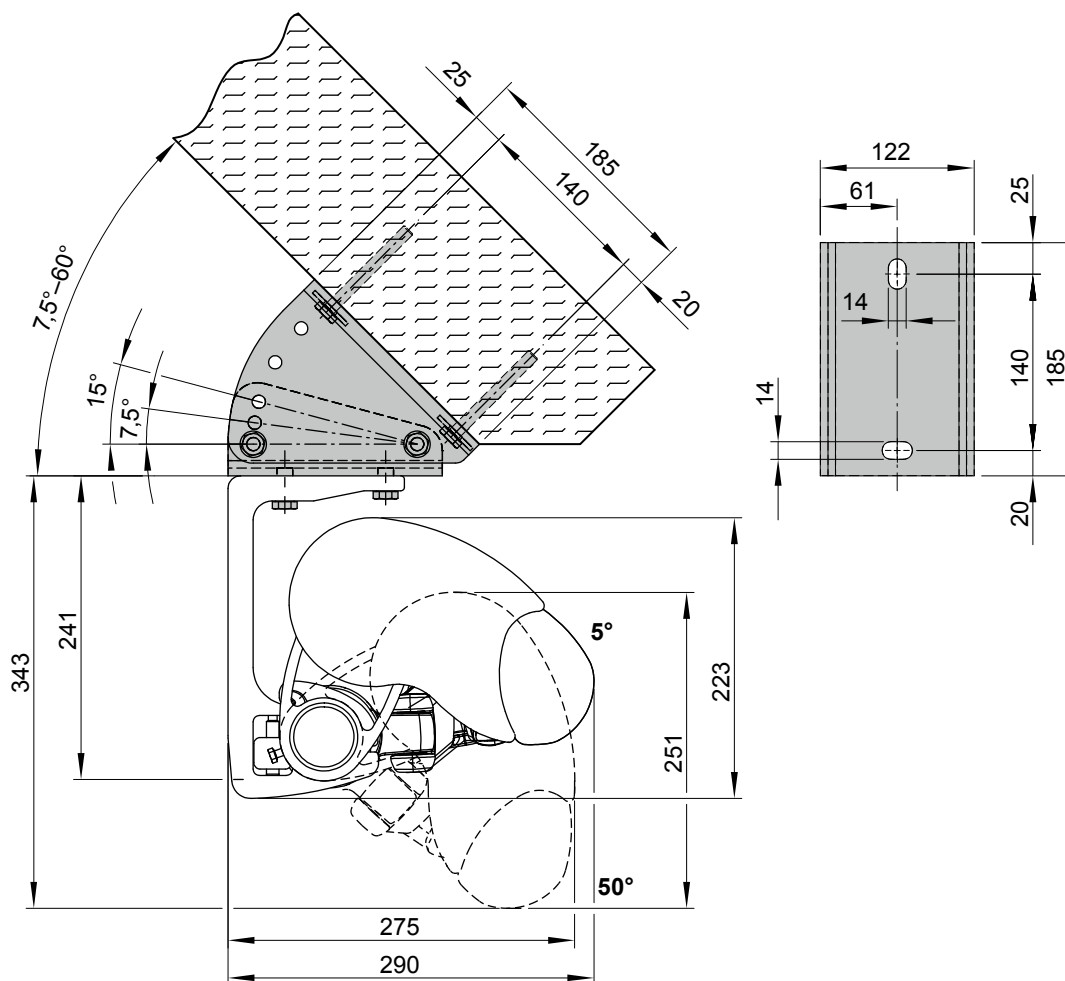
90 mm

70868.



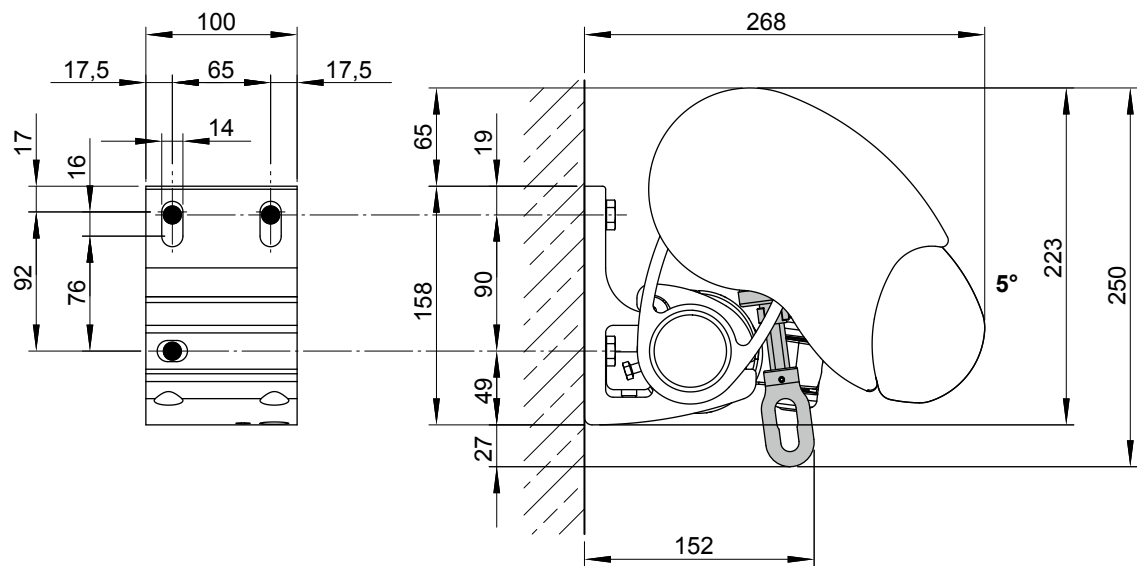
adjustable
eaves fixture bracket

71198.

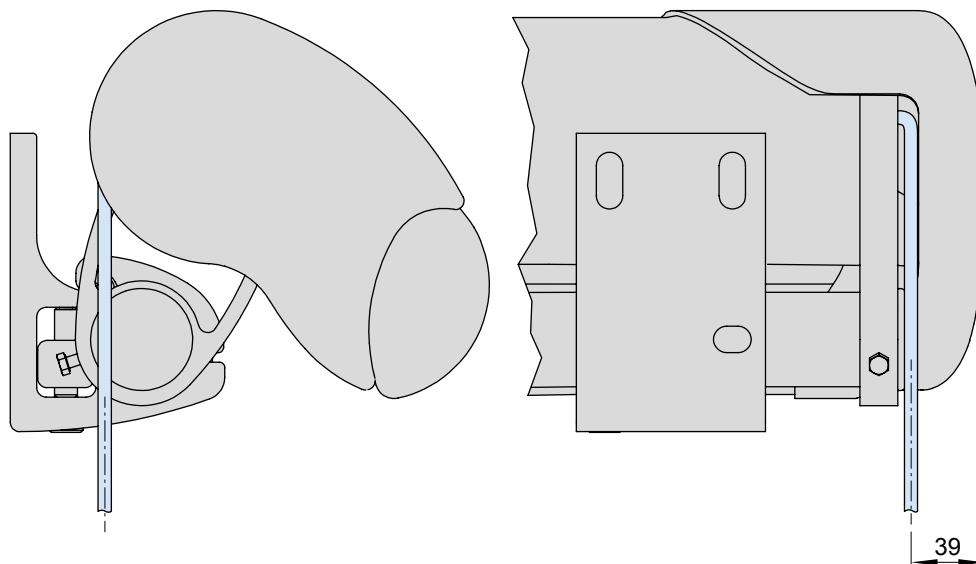


dimensions in mm

Face fixture, manual operation



Motor cable exit point



dimensions in mm