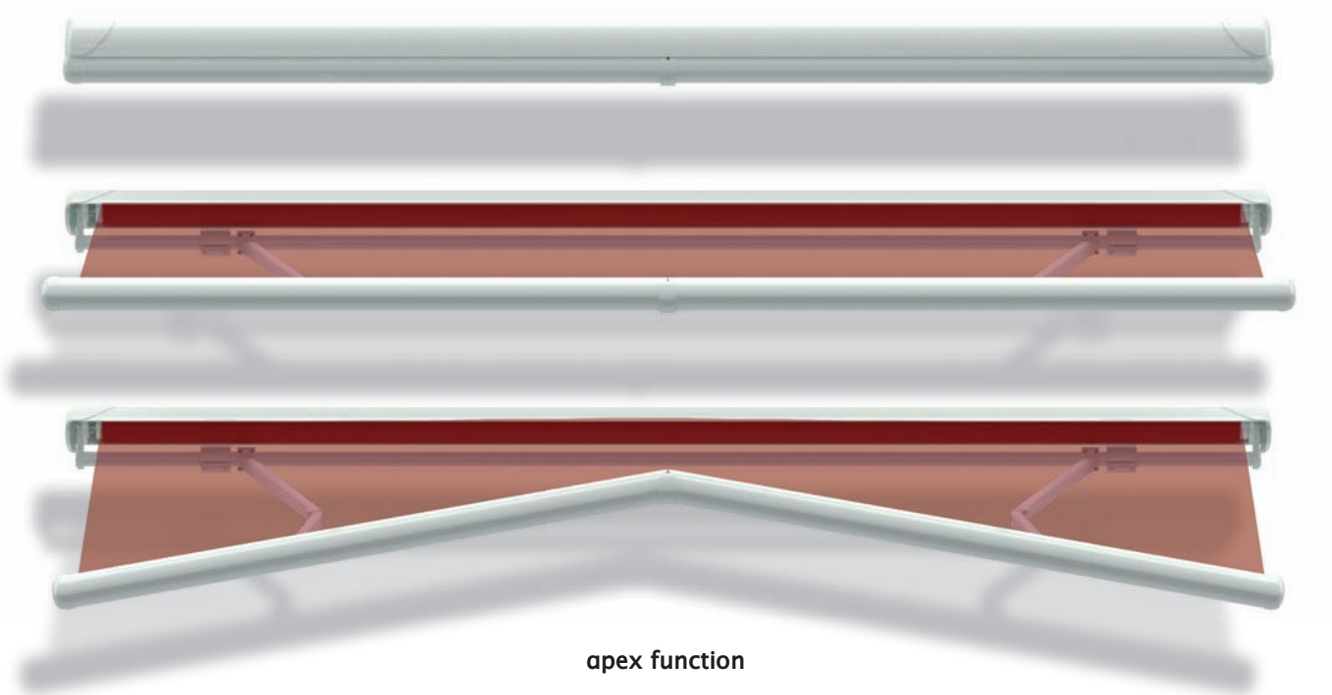
markilux 1600 pavilion 2

The first awning that allows the centre to be raised into an apex

CE MAXIMUM SAFETY markilux

iF PRODUCT DESIGN AWARD

markilux



apex function

markilux 1600 pavilion 2

The first awning that allows the centre to be raised into an apex

Design features

- folding-arm awning in a semi-cassette version. the dynamically rounded coverboard gives the awning the appearance of being a full cassette
- presented with the IF Design Award for excellent design
- elegant and robust front profile made of aluminium with valance slot

Technical highlights

- the front profile can be pushed up into a gable position with an operating rod so that rainwater can run off even when the awning is set at a low pitch. when the awning is retracted the awning returns automatically to its original position thanks to the use of specialised technology
- sturdy, round steel torque bar, 50 mm ∅, to prevent twist and deflection
- coverboard with integrated brush, so that larger pieces of dirt and debris cannot be drawn into the awning
- the 85 mm roller tube ensures the highest stiffness and the best possible cover winding characteristics even at the largest widths

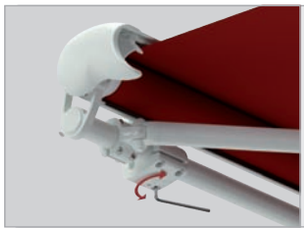
Additional features

- radio-controlled motor with radio remote control for ease of use
- hard-wired motor operation (optionally with automatic weather controls) for straightforward and easy operation
- wall sealing profile to cover the gap between awning and wall
- in the case of manual operation ease of use is ensured with the spring-assisted gearbox
- awning available in non-standard RAL colours

side view with awning closed, face fixture

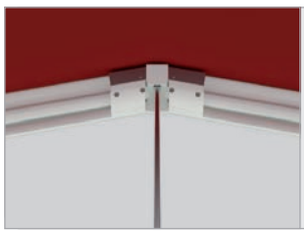
side view with awning retracted, top fixture

wall sealing profile (optional)



simple pitch adjustment

corrosion-resistant and technically proven; twin steel-link chains at the elbow joints



raising the front profile into an apex

Standard specification

- apex function
- manual operation with stainless steel winding handle
- bonded awning cover
- sunsilk snc fabric
- sunsilk snc signature fabric
- acrylic fabric 34

Standard frame colours

- traffic white - RAL 9016
- metallic aluminium - RAL 9006
- grey brown - similar to RAL 8019
- light ivory - RAL 1015
- off-white textured finish - 5233
- stone grey metallic - 5215
- anthracite metallic - 5204

Optional accessories

- hard-wired or radio-controlled motor with remote control
- wall sealing profile
- light and wind sensor
- infra-red heater
- Vibrabox / Sunis light sensor
- special powder-coated finish

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Lounge style line

off-white textured finish

stone grey metallic

anthracite metallic

Frame colours	
off-white textured finish - 5233	
stone grey metallic - 5215	
anthracite metallic - 5204	

End caps alternatively in	
polished chrome	

Dimensions and configuration options

projection	awning width 360 (350-360)	410 (361-410)	460 (411-460)	510 (461-510)	560 (511-560)	610 (561-610)	660 (611-660)	minimum widths standard arms: motor operation 1)	manual operation 1)
250	2)							350	350
300		2)						400	400
350			2)					450	450

dimensions in cm

= available, 2 folding arms

= available, 2 folding arms, 1 rolltex bearing

1) the dimensions are only valid for fixture without spreader plates (2 folding arms)
2) please note the minimum widths!

Operation	
manual operation with stainless steel winding handle	●
servo-assisted operation	○
hard-wired motor	○
radio-controlled motor	○*
Shadeplus / drop valance	
manual operation	–
hard-wired motor	–
radio-controlled motor	–
Lighting	
halogen spotlights	–
Covers	
sunsilk snc (fabric series 324xx/329xx)	●
sunsilk snc signature (fabric series 369xx)	●
acrylic 34 (fabric series 341xx-347xx)	●
widely woven acrylic (fabric series 349xx)	–
sunsilk perla FR (fabric series 374xx/379xx)	○
transolair (fabric series 339xx)	–
Soltis 92	–
PVC fabric	–
Miscellaneous	
coverboard	–
system coverboard	–
wall sealing profile	○1
pitch adjustment gear	–
insertable side blind	○
light and wind sensor	○
valance	–
infra-red heater	○
Vibrabox / Sunis light sensor	○
Coupled units	
coupled unit, 2 fields	–
coupled unit, 3 fields	–
junction roller	–
one-piece cover (on request)	–

● = standard specification
○ = optional accessories
– = not available
○* = radio-controlled motor using 433 MHz technology
○1 = wall sealing profile effective up to a maximum awning pitch of 10°

Housing tolerances / Awning cover dimensions	width: motor	width: manual operation	projection
housing tolerance	+0 / -10		
awning cover width = width less	260	280	
awning cover length = awning projection plus			180

dimensions in mm

The width of the awning cover is always **less** than the width of the awning.

Pitch adjustment range: from 0° to 10° (to the horizontal).

Definition of the projection: Please consult the section "Technical Information".

In the case of manual operation **approximately 16 winding handle revolutions can be assumed per metre of awning projection**.

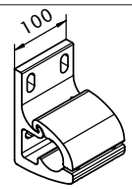
The extension time in the case of **motor operation** is approx. **12 seconds per metre**.

Coupled folding-arm awnings are not available in this model.

Frame colours		
traffic white - RAL 9016		●
metallic aluminium - RAL 9006		●
grey brown - similar to RAL 8019		●
light ivory - RAL 1015		●
off-white textured finish - 5233 (Lounge)		●
nano stone grey metallic - 5215 (Lounge)		●
anthracite metallic - 5204 (Lounge)		●
special powder-coated finish		○

* Colours similar to the RAL chart - these may differ slightly from those depicted in both hue and finish.

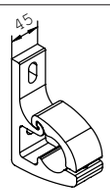
Fixtures, fittings and accessories



Face fixture bracket assembly

100 mm

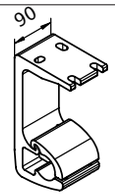
70867.



Face fixture bracket assembly

45 mm

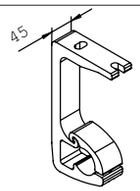
71813.



Top fixture bracket assembly

90 mm

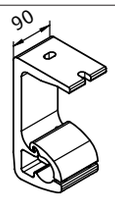
70868.



Top fixture bracket assembly

45 mm

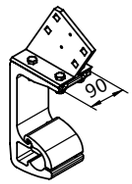
71818.



Top fixture bracket assembly

for central fixture

70869.

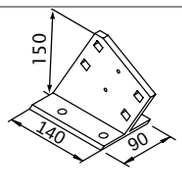


Eaves fixture bracket assembly

90 mm

complete set

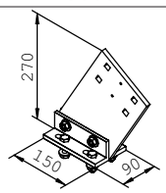
70871.



Eaves fixture bracket

150 mm

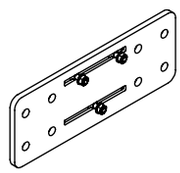
71612.



Eaves fixture bracket assembly

270 mm

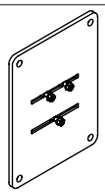
71659.



Spreader plate A (including bracket bolts)

160 x 430 x 12 mm

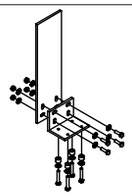
75326.



Spreader plate B

300 x 400 x 12 mm

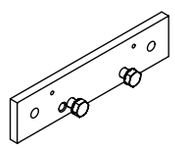
75325.



Flat plate and angled bracket for eaves fixture

machine finish

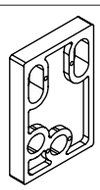
716620



Additional eaves fixture plate assembly

60 x 260 x 12 mm

75383.



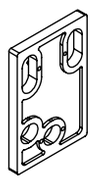
Spacer plate for face fixture

100 x 150 x 20 mm

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

(please refer to the section "Technical Information")

718231

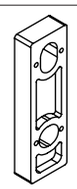


Spacer plate for face fixture

100 x 150 x 12 mm

(please refer to the section "Technical Information")

718241



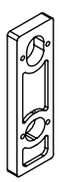
Spacer plate for face fixture

45 x 150 x 20 mm

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

(please refer to the section "Technical Information")

718251

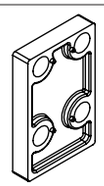


Spacer plate for face fixture

45 x 150 x 12 mm

(please refer to the section "Technical Information")

71826.



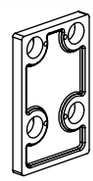
Spacer plate for top fixture

90 x 140 x 20 mm

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

(please refer to the section "Technical Information")

716311

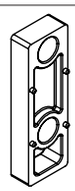


Spacer plate for top fixture

90 x 140 x 12 mm

(please refer to the section "Technical Information")

716411



Spacer plate for top fixture

45 x 140 x 20 mm

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

(please refer to the section "Technical Information")

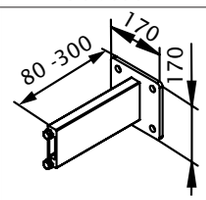
716261

Spacer plate for top fixture

45 x 140 x 12 mm

(please refer to the section "Technical Information")

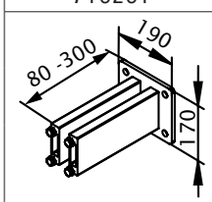
716371



Spacer bracket for face fixture bracket 71813.

(please refer to the section "Technical Information")

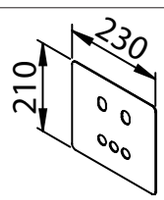
77967.



Spacer bracket for face fixture bracket 70867.

(please refer to the section "Technical Information")

77968.

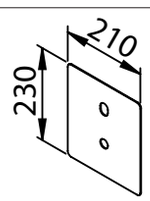


Cover plate for installation with spacer plates and spacer brackets in the case of external insulation

210 x 230 x 2 mm

(please refer to the section "Technical Information")

71843.



Cover plate for installation with spacer plates and spacer brackets in the case of external insulation

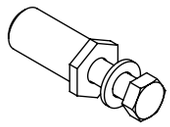
230 x 210 x 2 mm

(please refer to the section "Technical Information")

71844.

. = Please insert the RAL No. (please refer to the section on "Coatings")

Fixtures, fittings and accessories

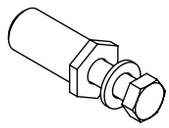


753891

Bolt reduction assembly
M 16 - M 12 / SW 27

50 mm length

(please refer to the section "Technical Information")

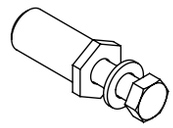


754921

Bolt reduction assembly
M 16 - M 10 / SW 27

50 mm length

(please refer to the section "Technical Information")

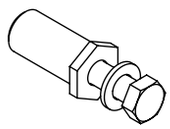


754911

Bolt reduction assembly
M 12 - M 10 / SW 27

50 mm length

(please refer to the section "Technical Information")

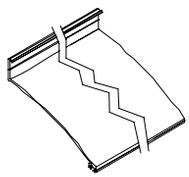


754901

Bolt reduction assembly
M 10 - M 10 / SW 27

50 mm length

(please refer to the section "Technical Information")

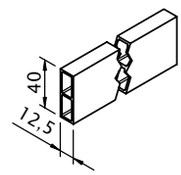


77780.

Wall sealing profile

available by the metre

fixture example: see face fixture with wall sealing profile

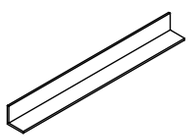


751971

Stand-off strip for wall sealing profile

available by the metre

fixture example: see face fixture with wall sealing profile



79380.

Angled profile for eaves fixture,

100 x 100 mm

available by the metre, undrilled

793800 machine finish

. = Please insert the RAL No. (please refer to the section on "Coatings")

markilux 1600 pavilion 2

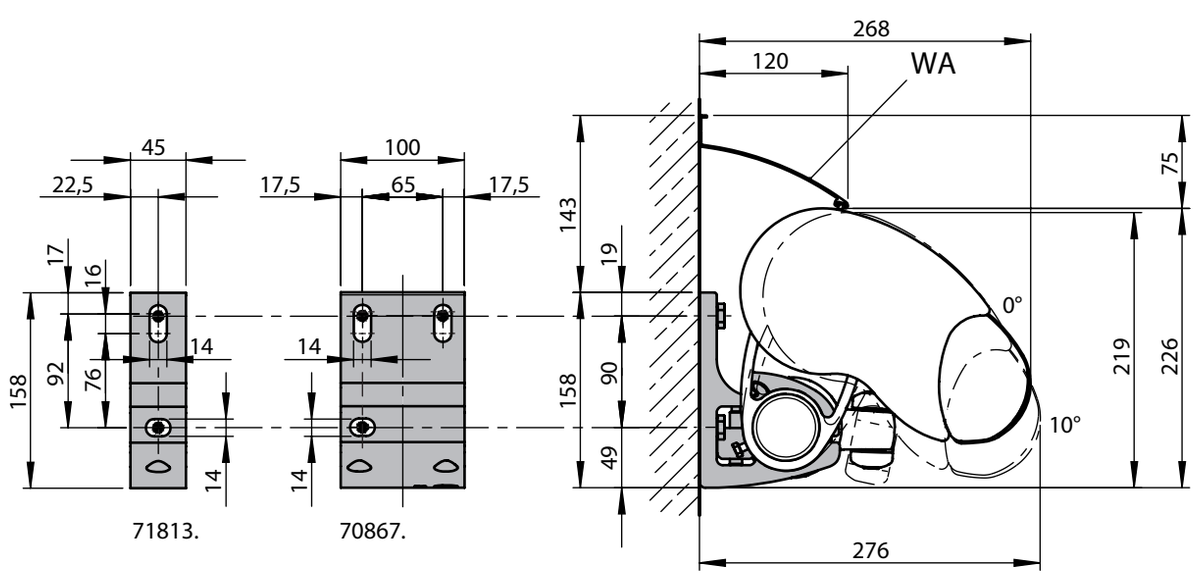
Face fixture

Pull-out force [N=Newton] per upper fixture point according to EN 13561, wind resistance class 2

	compression-proof substrate							non compression-proof substrate						
	M [cm]							M [cm]						
	360	410	460	510	560	610	660	360	410	460	510	560	610	660
H [cm]	FB [N]							FB [N]						
250	1433	1594	1754	1914	2075	2235	2677	1959	2178	2397	2616	2835	3055	3658
300	---	2128	2344	2560	3118	3366	3614	---	2909	3204	3499	4261	4600	4939
350	---	---	3392	3715	4039	4362	---	---	---	4636	5078	5519	5961	---
HT | BHT	2 | 100 mm		2 | 100 mm					2 | 100 mm		2 | 100 mm				
	---		1 | 45 mm					---		1 | 45 mm				
BM	6		8					6		8				

The pull-out force refers to the vertical centre to centre measurement between the fixture points of **90 mm.** If this measurement is reduced, the pull-out force increases by **11%** in the case of **compression-proof substrates** and by **19%** in the case of **non-compression-proof substrates**.

M = overall awning width
H = projection
FB = pull-out force per fixing point
HT | BHT = bracket quantity | width
BM = no. of fixing points
WA = wall sealing profile
71813. = face fixture bracket assembly 45 mm
70867. = face fixture bracket assembly 100 mm



dimensions in mm

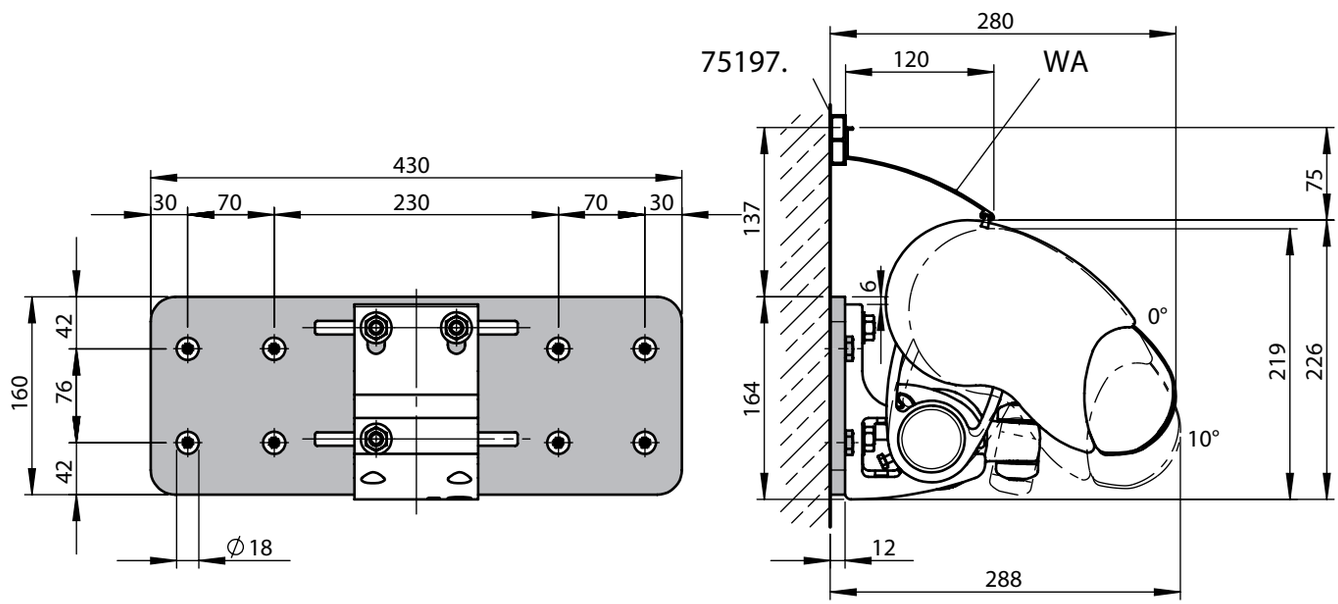
Face fixture with spreader plate A

Pull-out force [N=Newton] per upper fixture point according to EN 13561, wind resistance class 2

	compression-proof substrate							non compression-proof substrate						
	M [cm]							M [cm]						
	360	410	460	510	560	610	660	360	410	460	510	560	610	660
H [cm]	FB [N]							FB [N]						
250	823	915	1007	1099	1191	1282	1536	1169	1300	1430	1561	1692	1822	2183
300	---	1220	1344	1468	1787	1929	2071	---	1734	1910	2085	2540	2742	2944
350	---	---	1943	2128	2313	2498	---	---	---	2761	3024	3287	3550	---
HT | BHT	2 | 100mm		2 | 100 mm					2 | 100mm		2 | 100 mm				
	---		1 | 45 mm					---		1 | 45 mm				
BP	2		2					2		2				
DP	---		1					---		1				
BM	16		18					16		18				

The pull-out force refers to the vertical centre to centre measurement between the fixing points of **76 mm**. In the case of spreader plates a washer conforming to DIN 9021 must be used.

M = overall awning width
H = projection
FB = pull-out force per fixing point
HT | BHT = bracket quantity | width
BP = no. of spreader plates
DP = no. of spacer plates
BM = no. of fixing points
WA = wall sealing profile
75197. = stand-off strip for wall sealing profile



dimensions in mm

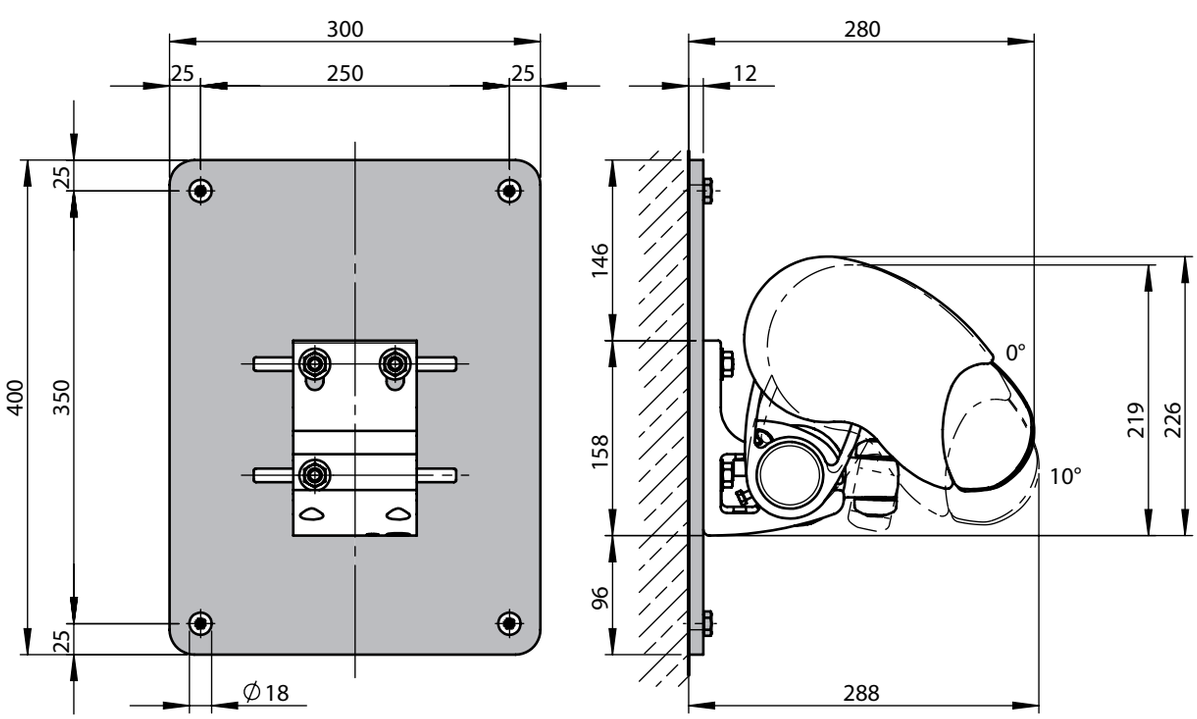
Face fixture with spreader plate B

Pull-out force [N=Newton] per upper fixture point according to EN 13561, wind resistance class 2

	compression-proof substrate							non compression-proof substrate						
	M [cm]							M [cm]						
	360	410	460	510	560	610	660	360	410	460	510	560	610	660
H [cm]	FB [N]							FB [N]						
250	487	541	596	650	705	759	909	508	564	621	678	735	791	948
300	---	722	795	868	1058	1142	1226	---	753	829	906	1103	1191	1278
350	---	---	1150	1259	1369	1478	---	---	---	1199	1313	1428	1542	---
HT | BHT	2 | 100mm		2 | 100 mm					2 | 100mm		2 | 100 mm				
	---		1 | 45 mm					---		1 | 45 mm				
BP	2		2					2		2				
DP	---		1					---		1				
BM	8		10					8		10				

The pull-out force refers to the vertical centre to centre measurement between the fixing points of **350 mm**. In the case of spreader plates a washer conforming to DIN 9021 must be used.

M = overall awning width
H = projection
FB = pull-out force per fixing point
HT | BHT = bracket quantity | width
BP = no. of spreader plates
DP = no. of spacer plates
BM = no. of fixing points



dimensions in mm

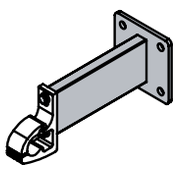
Face fixture with stand-off brackets

Pull-out force [N=Newton] per upper fixture point according to EN 13561, wind resistance class 2

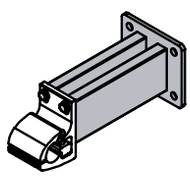
	compression-proof substrate							non compression-proof substrate						
	M [cm]							M [cm]						
	360	410	460	510	560	610	660	360	410	460	510	560	610	660
H [cm]	FB [N]							FB [N]						
250	1560	1733	1906	2080	2253	2426	2914	1755	1950	2145	2340	2535	2730	3278
300	---	2260	2488	2716	3315	3578	3841	---	2542	2799	3056	3730	4026	4321
350	---	---	3544	3880	4217	4554	---	---	---	3987	4366	4744	5123	---
HT | BHT	2 | 100mm		2 | 100 mm					2 | 100mm		2 | 100 mm				
	---		1 | 45 mm					---		1 | 45 mm				
DH 77968.	2		2					2		2				
DH 77967.	---		1					---		1				
BM	8		12					8		12				

The pull-out force refers to the vertical centre to centre measurement between the fixing points of **120 mm**. In the case of spacer plates a washer conforming to DIN 9021 must be used.

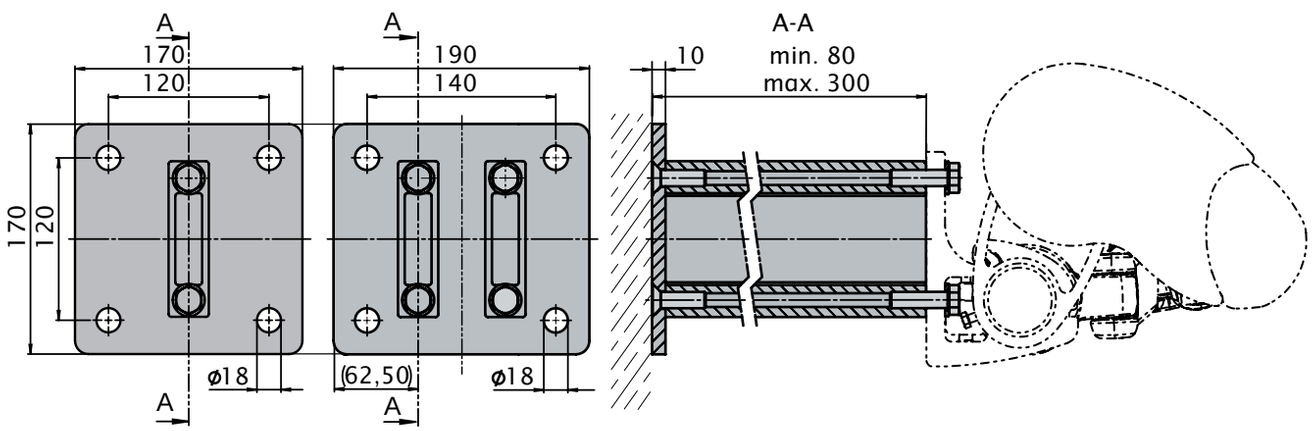
M = overall awning width
H = projection
FB = pull-out force per fixing point
HT | BHT = bracket quantity | width
BM = no. of fixing points
DH = no. of spacer brackets
77967. = spacer bracket for face fixture bracket 71813.
77968. = spacer bracket for face fixture bracket 70867.



77967.



77968.



dimensions in mm

markilux 1600 pavilion 2

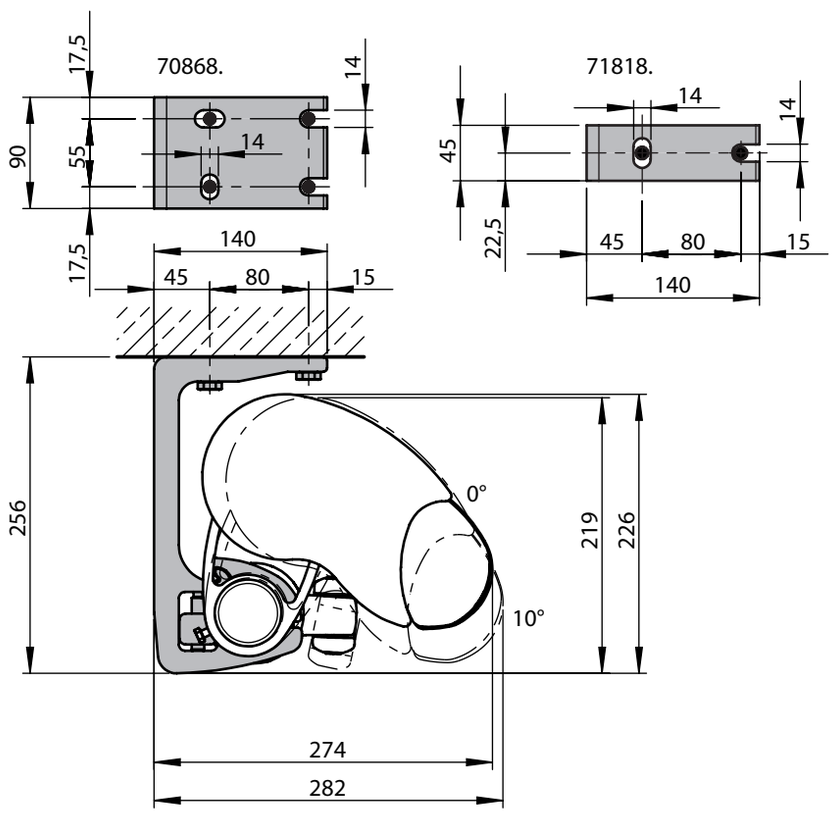
Top fixture

Pull-out force [N=Newton] per upper fixture point according to EN 13561, wind resistance class 2

	compression-proof substrate							non compression-proof substrate						
	M [cm]							M [cm]						
	360	410	460	510	560	610	660	360	410	460	510	560	610	660
H [cm]	FB [N]							FB [N]						
250	1769	1970	2170	2370	2570	2771	3300	2294	2553	2812	3071	3330	3589	4280
300	---	2596	2861	3127	3792	4095	4398	---	3375	3719	4064	4933	5327	5721
350	---	---	4089	4480	4871	5262	---	---	---	5331	5840	6349	6859	---
HT | BHT	2 | 90 mm		2 | 90 mm					2 | 90 mm		2 | 90 mm				
	---		1 | 45 mm					---		1 | 45 mm				
BM	8		10					8		10				

The pull-out force refers to the horizontal centre to centre measurement between the fixture points of **80 mm**. If the awning is fitted with two brackets per folding arm the pull-out force may be halved. Position the brackets to the left and right of the arm bearer.

M = overall awning width
H = projection
FB = pull-out force per fixing point
HT | BHT = bracket quantity | width
BM = no. of fixing points
70868. = top fixture bracket assembly 90 mm
71818. = top fixture bracket assembly 45 mm



dimensions in mm

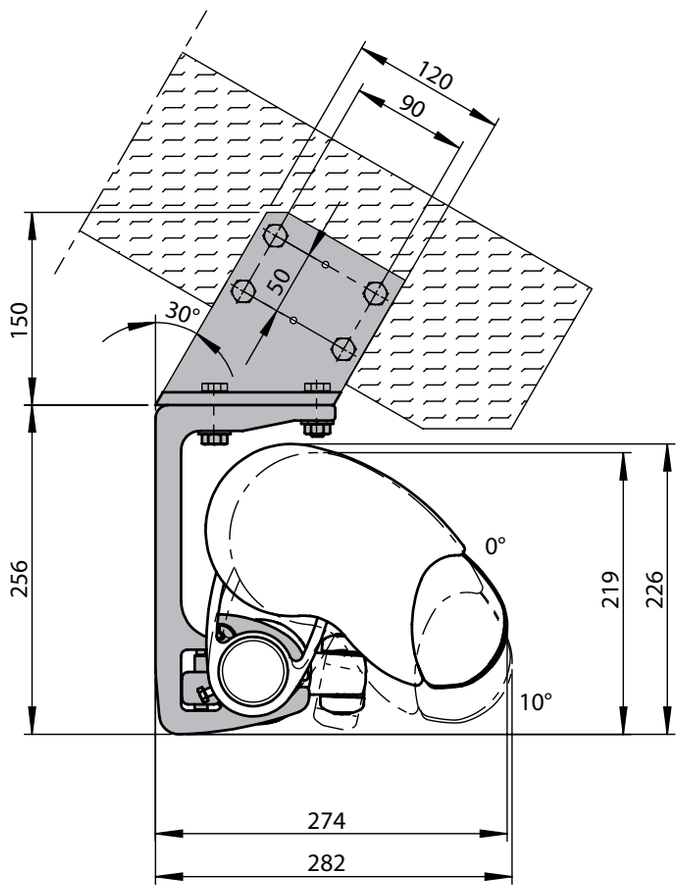
Eaves fixture

Torque [Nm = Newton metres] for the fixture bracket next to the arm, shear force [N = Newton] per fixing point according to EN 13561, wind resistance class 2

	Torque							Shear force						
	M [cm]							M [cm]						
	360	410	460	510	560	610	660	360	410	460	510	560	610	660
H [cm]	Md [Nm]							FS [N]						
250	124	142	160	177	195	213	231	4098	4561	5025	5488	5951	6414	7646
300	---	219	247	274	302	330	357	---	6022	6638	7253	8801	9504	10207
350	---	---	432	471	510	550	---	---	---	9503	10411	11319	12227	---
HT	2		3					2		3				
BM	8		12					8		12				

The shear force is calculated on the basis of 2 fixing points per bracket, because - depending on the roof pitch - it cannot be guaranteed that 4 fixing points per bracket can used.

M = overall awning width
H = projection
Md = torque value for the bracket in the immediate vicinity of the arm
HT = bracket
FS = shear force
BM = no. of fixing points



dimensions in mm

markilux 1600 pavilion 2

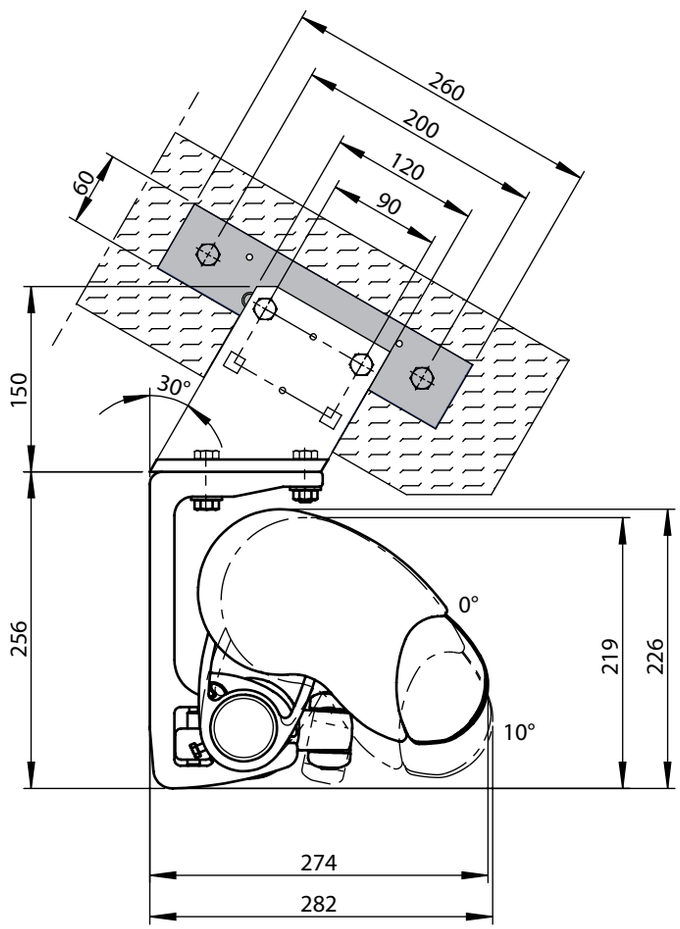
Eaves fixture with additional plate

Torque [Nm = Newton metres] for the fixture bracket next to the arm, shear force [N = Newton] per fixing point according to EN 13561, wind resistance class 2

	Torque							Shear force						
	M [cm]							M [cm]						
	360	410	460	510	560	610	660	360	410	460	510	560	610	660
H [cm]	Md [Nm]							FS [N]						
250	124	142	160	177	195	213	231	1943	2165	2388	2610	2832	3054	3622
300	---	219	247	274	302	330	357	---	2823	3113	3404	4115	4445	4775
350	---	---	432	471	510	550	---	---	---	4403	4825	5247	5670	---
HT	2		3					2		3				
BM	4		6					4		6				

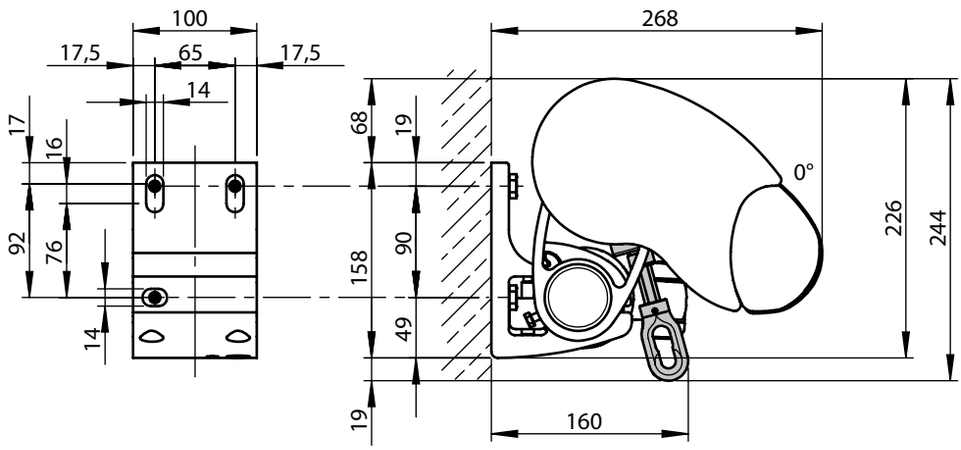
By using the additional flat fixture plate, the shear force is reduced in comparison with conventional eaves fixture.

M = overall awning width
H = projection
Md = torque value for the bracket in the immediate vicinity of the arm
HT = bracket
FS = shear force
BM = no. of fixing points



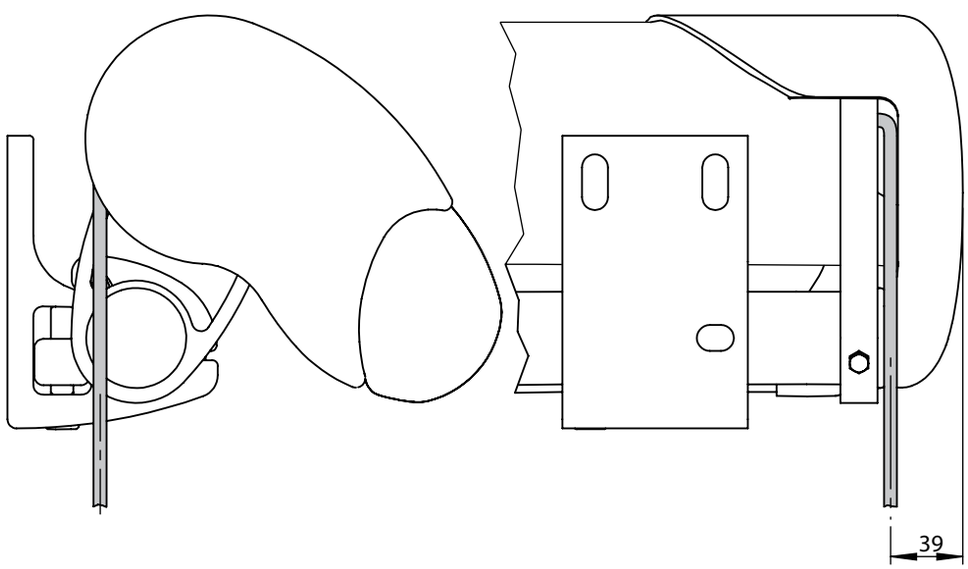
dimensions in mm

Face fixture with manual operation



dimensions in mm

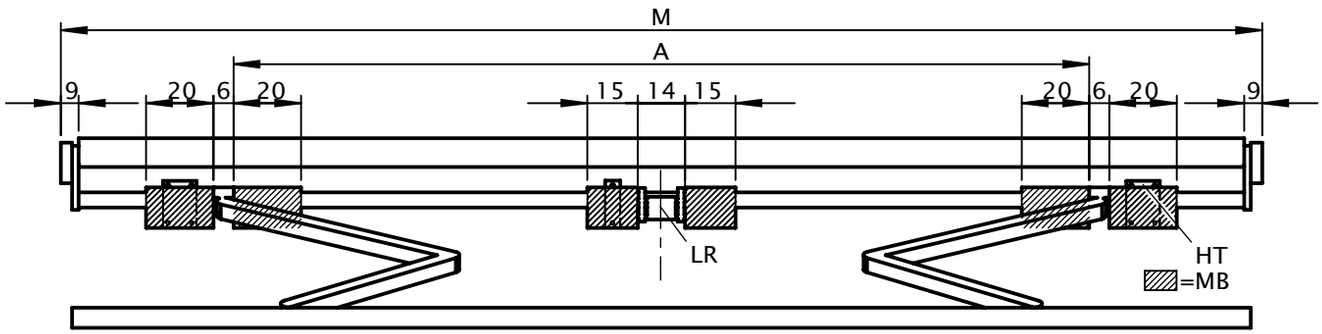
Cable exit position on motor-driven units



dimensions in mm

markilux 1600 pavilion 2

Bracket range for awnings with 2 folding arms



dimensions in cm

M [cm]	SB / ZB		360 (350-360)	410 (361-410)	460 (411-460)	510 (461-510)	560 (511-560)	610 (561-610)	660 (611-660)
H [cm]			A [cm]						
	250		277 ▲	285	320	355	390	425	460
	300		---	327 ▲	335	355	390	425	460
	350		---	---	377 ▲	385	390	425	---
W	HT | BHT	45 mm	---		1				
		100 mm	2		2				
DE		45 mm	---		1				
		90 mm	2		2				
DA		90 mm	2		3				

dimensions in cm

▲ = please note the minimum widths, dimension A is only valid for standard arms! (Dimension A is 13 cm smaller in the case of bespoke arms.)
In the case of small awnings the brackets can only be fitted inside the arms, i.e. the position denoted by measurement A.

M = overall awning width
H = projection
A = arm position
HT = bracket
HT | BHT = bracket quantity | width
MB = bracket fixture range
W = face fixture
DE/DA = top fixture and eaves fixture
SB = standard width
ZB = intermediate width
LR = rolltex bearing with bracket is always placed under a central seam

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