

safe · timeless · beautiful



## *markilux 1600*

Unique design, classic arm technology



# markilux 1600

## Unique design, classic arm technology

- design features**
- Shaped by well-known designers, given the IF Design Award for excellent design.
  - A semi-cassette folding-arm awning. The dynamically rounded coverboard gives the awning the appearance of being fully cassetted.
  - The possibility of mixing and matching the colour of the cassette with that of the end caps gives you the option of making your markilux awning your very own.
  - Elegant and robust front profile made of aluminium with valance slot.
  - for long-lasting attractiveness the awning has been powder coated.

- technical highlights**
- The extremely sturdy awning construction makes it possible to shade even very large areas safely.
  - Sturdy, round steel torque bar, 50 mm Ø, to prevent twist and deflection.
  - The 85 mm roller tube ensures the highest rigidity and the best possible cover winding characteristics even at the largest widths.
  - Coverboard with integrated brush so that larger pieces of debris cannot be drawn into the awning.
  - Folding arms with perfected power transference by means of double, rounded steel-link chains and direct coupling of the springs. The highest safety standards even at large extensions

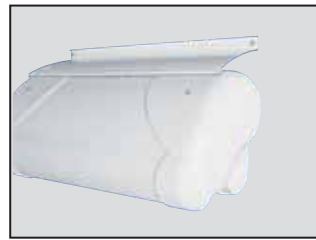
- optional accessories**
- In the case of manual operation ease of use is ensured with the spring-assisted gearbox.
  - Hard-wired motor drive (optionally with automatic controls) for simple, relaxed operation.
  - Radio-controlled motor with handheld transmitter for ease of operation - and ergonomically crafted for ease of use.
  - The shadeplus creates an additional room on the patio. Protection from sun, wind and inquisitive glances in one.
  - Awning available in non-standard RAL colours

· Beautifully crafted brackets; Design down to the last detail · Awning covers made from acrylic fabric or sunsilk snc with self-cleaning effect · The panel joints of the awning cover are ultrasonically bonded to give a better appearance without bothersome stitching · Manual operation includes a markilux stainless steel winding handle - quality to get to grips with · Folding arms with drop-forged, aluminium joints and Teflon-coated bronze bushes to ensure high stability and longevity · The greater upper to lower arm length ratio gives high lateral stability of the awning · Fixture brackets are made of extruded aluminium · Simply pitch adjustment via the bracket without necessitating readjustment of the front profile · At larger widths one or more rolltex bearings support the roller tube · Awnings more than 660 cm wide can be supplied as coupled units · An easily connected radio-controlled sun and wind sensor guarantees comfort and protection even during your absence · An optional wall sealing profile covers the gap between wall and awning · Available with a valance

# Folding-arm awning markilux 1600



simple pitch adjustment



wall sealing profile (optional)



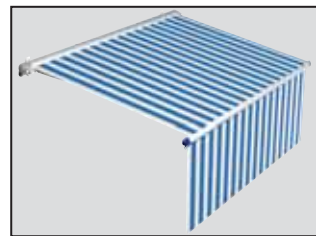
side view with awning closed, face fixture



Side view of top-fixed awning with shadeplus (optional) retracted



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



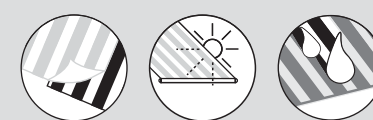
Shadeplus (optional)



Standard RAL colours:



standards:



optional accessories:



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**markilux 1600**



**Choice of colours**

frame colours	End caps
traffic white RAL 9016	traffic white RAL 9016
metallic aluminium RAL 9006	metallic aluminium RAL 9006
light ivory RAL 1015	light ivory RAL 1015
grey brown RAL 8019	grey brown RAL 8019
	yellow
	ruby red
	blue
	black



End caps  
Colour combination 1

End caps  
Colour combination 9

End caps  
Colour combination 3

End caps  
Colour combination 3



End caps  
Colour combination 10

**markilux 1600 Lounge**

frame colours	End caps
Nano off-white textured finish 5233	Nano off-white textured finish 5233
Nano stone grey metallic 5215	Nano stone grey metallic 5215
Nano anthracite metallic 5204	Nano anthracite metallic 5204
	Polished chrome



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## dimensions and configuration options

extension	Overall blind width									minimum width motor <sup>10)</sup>		minimum width manual operation <sup>10)</sup>	
	260 174-260	310 261-310	360 311-360	410 361-410	460 411-460	510 461-510	560 511-560	610 561-610	660 611-660	Standard	Bespoke arms	Standard	Bespoke arms
150	28)									187	174	190	177
200	28)									237	224	240	227
250		28)								287	274	290	277
300			28)							337	324	340	327
350				28)					17)	387	374	390	377
400 <sup>17) 19)</sup>					28)					437	424	440	427

10) the dimensions are only valid for fixture without spreader plates (2 folding arms).

17) a shadeplus is not available

19) awnings with 4 m extension are only available with motor (surcharge).

28) Please note the minimum widths!

dimensions in cm

operation type	
manual operation with st. steel winding handle	●
Servo-assisted operation	○
radio-controlled motor	○
motor	○
Shadeplus	
manual operation	○
radio-controlled motor	–
motor	–
Lighting	
Halogen Spotlights	–
Fluorescent lighting	–
covers	
acrylic 34 (fabric series 341xx-347xx)	●
sunsilk SNC (fabric series 324xx/329xx)	●
signature (fabric series 369xx)	●
transilk FR (fabric series 319xx)	–
transolair (fabric series 339xx)	–
widely woven acrylic (fabric series 349xx)	○ <sup>1)</sup>
perla FR (fabric series 374xx/379xx)	○
Soltis 92	○ <sup>2)</sup>
PVC fabric	○ <sup>2)</sup>
miscellaneous	
Coverboard	–
Sytem coverboard	–
wall sealing profile	○ <sup>3)</sup>
Pitch adjustment gear	–
Insertable side blind	○
sun and wind sensor	○
Valance	○
Infrared heater	○
Vibrabox / Sunis sun sensor	○
Coupled units (please refer to fixture)	
coupled unit 2 fields	○
coupled unit 3 fields	–
junction roller	○
one-piece cover (on request)	–

● = fitted as standard

○ = optional accessory

– = not available

○<sup>2)</sup> = PVC/Soltis 92 covers available up to a max. width of 610 cm and a max. arm length of 250 cm.

○<sup>1)</sup> = widely woven fabric up to a max. extension of 300 cm; not possible in those dimensions that require a rolltex bearing

○<sup>3)</sup> = wall sealing profile effective up to an awning pitch of 20°

 = available, 2 folding arms

 = available, 2 folding arms, 1 Rolltex bearing

**Definition of extension:** The extension is measured with the awning extended at a pitch of approx. 15° from the wall over the cover to the leading edge of the front profile. The extension tolerance is - 40mm / + 40mm

In the case of manual operation, assume approx. 16 winding handle revolutions per metre of awning extension.

Extension when using a motor takes approximately 12 seconds per metre.

**Definition of shadeplus drop:** The shadeplus drop is measured from the bottom edge of the shadeplus profile to the bottom edge of the valance profile. Because of tolerances in fabric thicknesses the drop may be shorter by up to 5 cm.

A manual shadeplus is available in the standard drops of 150 cm and 210 cm (210 cm only in transilk (319xx), transolair (339xx), widely woven fabrics (349xx) seamless or Soltis 92. Shadeplus covers with a drop greater than 170 cm in Soltis 92 will be made with a horizontal seam)









A shadeplus is not possible with PVC covers.

A shadeplus with motor is not possible.

**Coupled folding-arm awnings are available up to a max. of 2 single units positioned next to one another and only operated by motor.**

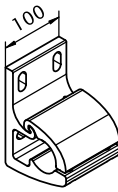
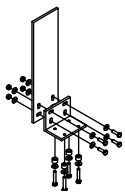
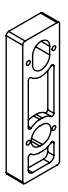
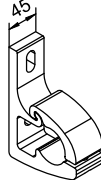
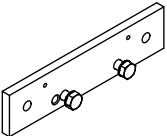
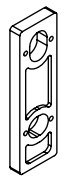
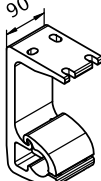
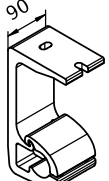
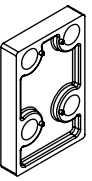
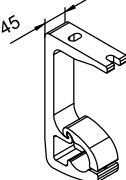
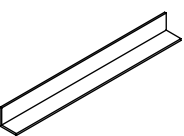
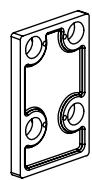
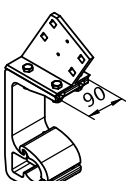
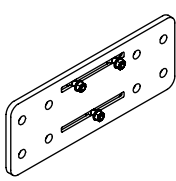
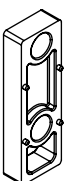
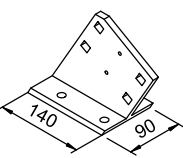
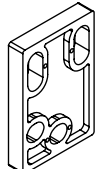

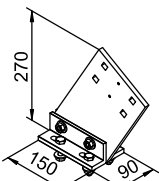
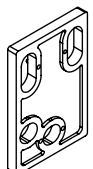
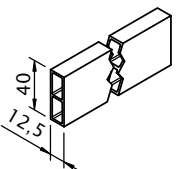
Optionally available with junction roller. Pattern repeat mismatches are possible in the case of junction roller covers, except when the extension is the maximum for the width of each awning. (see also arm separation table)

If coupled awnings are to be fitted into a recess or reveal the overall width of the coupled blind or awning must be at least 6 cm less than the width of the opening to allow the blind/awning to be coupled. Make a special note if the awning is to be fitted into a recess/reveal and note the reveal width separately.

frame colours		
	RAL 9016 traffic white	●
	RAL 8019 grey brown	●
	RAL 9006 metallic aluminium	●
	RAL 1015 light ivory	●
	5204 Nano anthracite metallic 5204 (Lounge)	○
	5215 Nano stone grey metallic 5215 (Lounge)	○
	5233 Nano off-white textured finish (Lounge)	○
	non-standard RAL colour	○

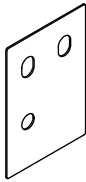
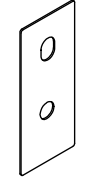
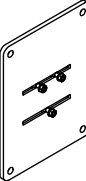
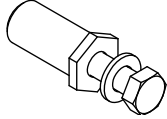
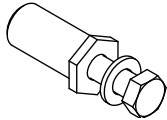
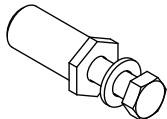
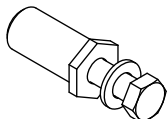
## markilux 1600

## fixings and accessories

 70867.	Face fixture bracket assembly 100mm	 716620	Angle and fixture plate for eaves fixture machine finish	 718251	Spacer plate for face fixture 45x150x20mm N.B! stack to a max. of 200 mm
 71813.	Face fixture bracket assembly 45mm	 75383.	Additional eaves fixture plate 60x260x12mm	 71826.	Spacer plate for face fixture 45x150x12mm
 70868.	Top fixture bracket assembly 90mm	 70869.	Top fixture bracket assembly assembly for central fixture	 716311	Spacer plate for top fixture 90x140x20mm N.B! stack to a max. of 200 mm
 71818.	Top fixture bracket assembly 45mm	 79380.	Angled profile for eaves fixtures 100x100mm available by the metre, undrilled	 716411	Spacer plate for top fixture 90x140x12mm
 70871.	Eaves fixture bracket assembly 90mm complete set	 75326.	Component assembly spreader plate A 160x430x12mm	 716261	Spacer plate for top fixture 45x140x20mm N.B! stack to a max. of 200 mm
 71612.	Eaves fixture bracket 140mm	 718231	Spacer plate for face fixture 100x150x20mm N.B! stack to a max. of 200 mm	 716371	Spacer plate for top fixture 45x140x12mm
 71659.	Eaves fixture bracket assembly 270mm	 718241	Spacer plate for face fixture 100x150x12mm	 751971	stand-off strip for wall sealing profile available by the metre Fixture example, see face fixture with wall sealing profile

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

## fixings and accessories

	Cover plate for external insulation
71833.	140x200x2mm
	Cover plate for external insulation
71834.	85x200x2mm
	Component assembly spreader plate B
75325.	300x400x12mm
	Reduction assembly M 16 - M 12 / SW 27
753891	50mm length (please refer to "Technical Information")
	Reduction assembly M 10 - M 10 / SW 27
754901	50mm length (please refer to "Technical Information")
	Reduction assembly M 12 - M 10 / SW 27
754911	50mm length (please refer to "Technical Information")
	reducing bolt assembly M 16 - M 10 / SW 27
754921	50mm length (please refer to "Technical Information")

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





# markilux 1600

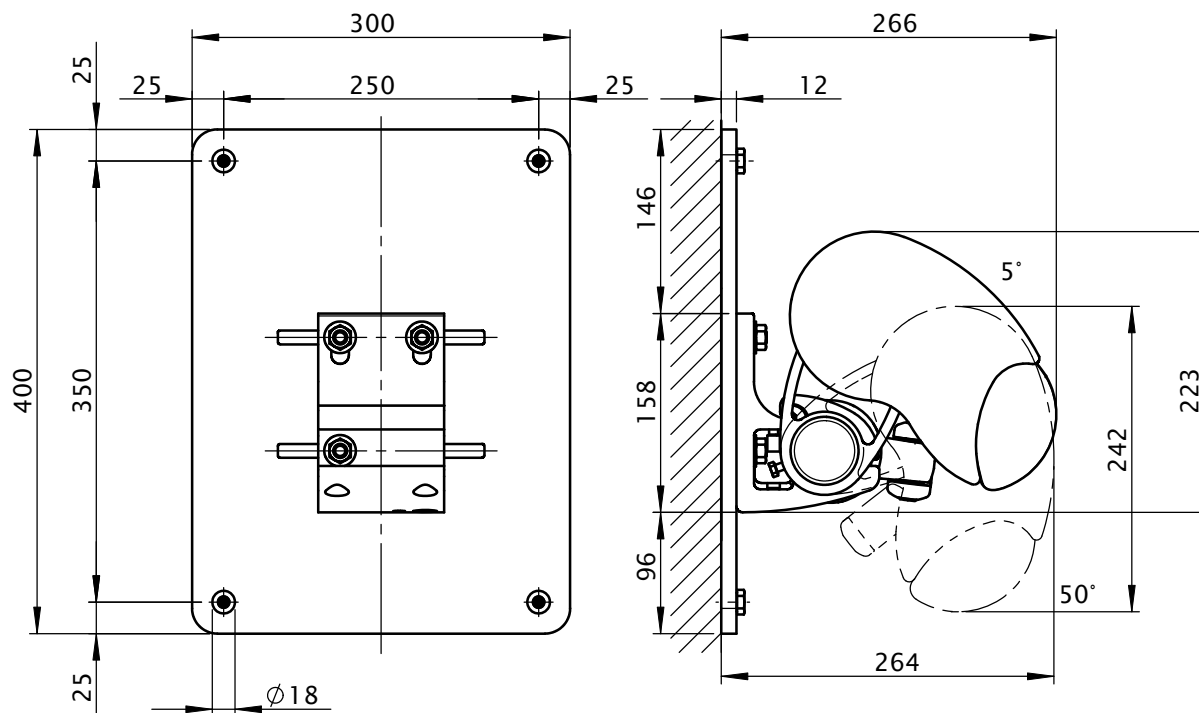
## Face fixture with spreader plate B

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

compression-proof substrate										non compression-proof substrate										
H [cm]	M [cm]										M [cm]									
	260	310	360	410	460	510	560	610	660		260	310	360	410	460	510	560	610	660	
FB [N]										FB [N]										
150	154	176	197	219	241	262	284	306	327		161	183	206	228	251	274	296	319	341	
200	238	272	306	340	374	408	443	477	511		248	283	319	355	390	426	462	497	533	
250	---	401	450	500	549	598	648	697	842		---	418	470	521	573	624	676	727	878	
300	---	---	605	672	739	807	990	1068	1146		---	---	631	701	771	841	1032	1113	1195	
350	---	---	---	869	1085	1187	1290	1392	1494		---	---	---	906	1131	1238	1345	1452	1559	
400	---	---	---	---	1368	1498	1628	1758	---		---	---	---	---	1427	1562	1698	1834	---	
HT   BHT	2   100mm					2   100mm					2   100mm					2   100mm				
	---					1   45mm					---					1   45mm				
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 fixture points of 350 mm. In the case of spreader plates a washer conforming to DIN 9021 must be used.

- M = overall awning width
- H = extension
- 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

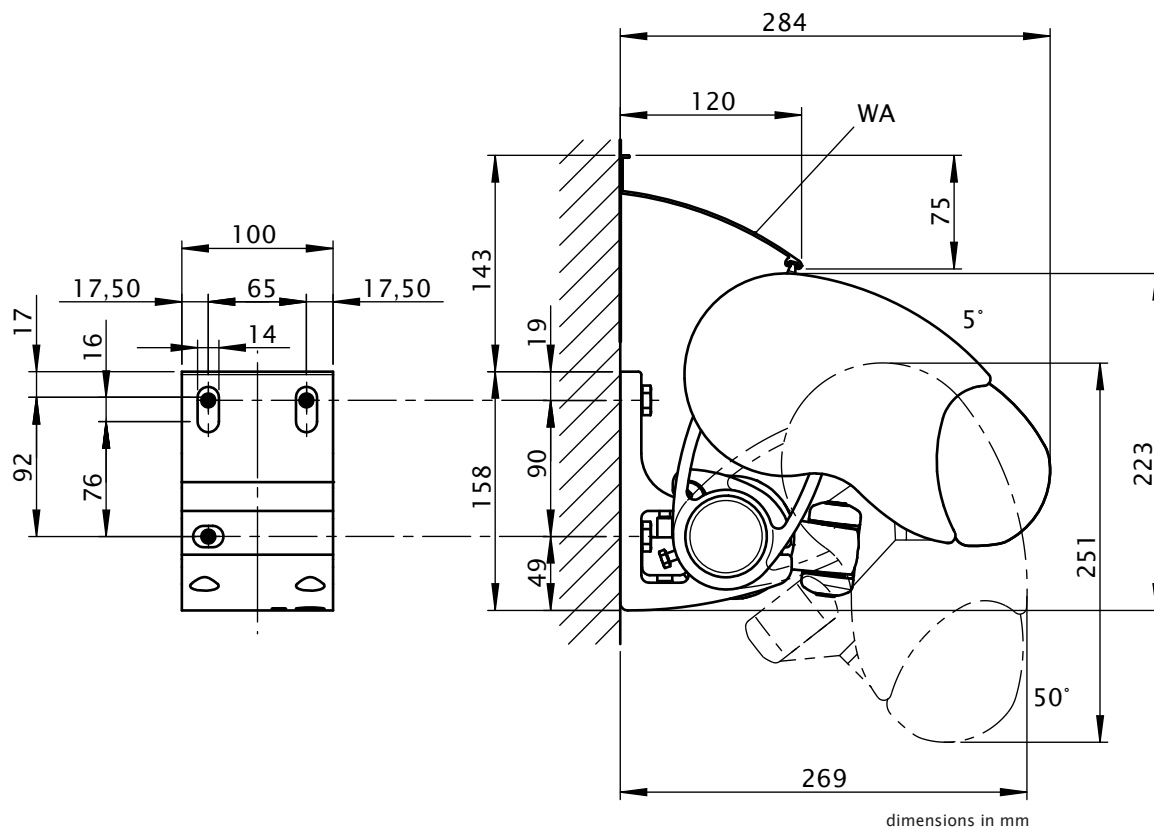
# Face fixture with shadeplus

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

H [cm]	compression-proof substrate									non compression-proof substrate								
	M [cm]									M [cm]								
	260	310	360	410	460	510	560	610	660	260	310	360	410	460	510	560	610	660
FB [N]																		
150	529	608	686	765	843	922	1000	1079	1157	724	831	938	1045	1153	1260	1367	1474	1582
200	802	922	1043	1163	1284	1404	1524	1645	1765	1096	1260	1425	1590	1754	1919	2083	2248	2413
250	---	1335	1505	1676	1846	2016	2186	2357	2808	---	1824	2057	2290	2523	2755	2988	3221	3838
300	---	---	1998	2226	2454	2682	3252	3512	3771	---	---	2731	3043	3354	3666	4444	4799	5154
350	---	---	---	2850	3521	3858	4195	4532	---	---	---	---	3894	4812	5272	5733	6194	---
HT   BHT	2   100 mm				2   100 mm					2   100 mm				2   100 mm				
	---				1   45mm					---				1   45mm				
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 14% in the case of **compression-proof** substrates and by 19% in the case of **non-compression-proof** substrates. 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 = extension  
 FB = pull-out force per fixing point  
 HT | BHT = bracket quantity | width  
 BM = no. of fixing points



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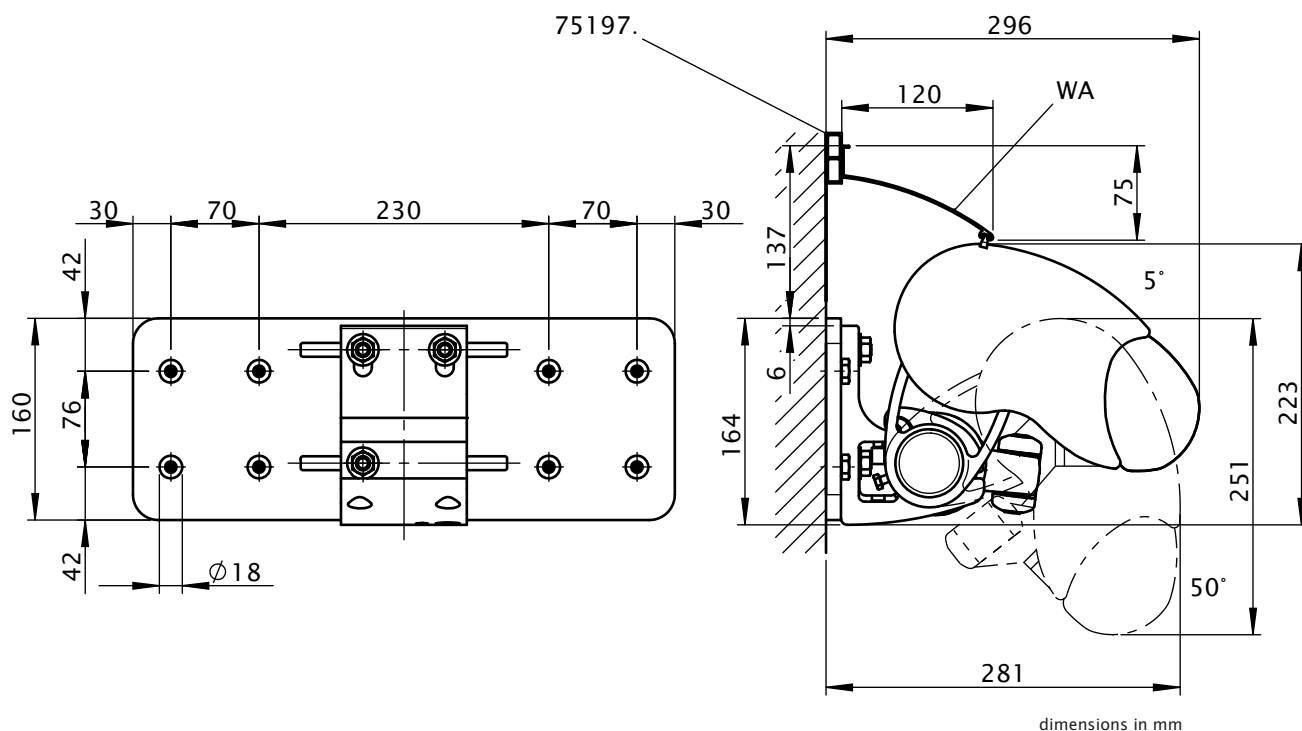
## Face fixture with shadeplus and spreader plate A

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

		compression-proof substrate									non compression-proof substrate								
		M [cm]									M [cm]								
		260	310	360	410	460	510	560	610	660	260	310	360	410	460	510	560	610	660
H [cm]		FB [N]									FB [N]								
150		305	350	395	441	486	531	576	621	667	434	498	562	626	690	755	819	883	947
200		461	530	599	668	738	807	876	945	1014	655	753	851	950	1048	1146	1245	1343	1441
250		---	766	864	961	1059	1157	1254	1352	1611	---	1089	1227	1366	1505	1644	1783	1921	2290
300		---	---	1145	1276	1407	1537	1864	2013	2162	---	---	1628	1813	1999	2185	2649	2860	3072
350		---	---	---	1632	2016	2209	2403	2596	---	---	---	---	2319	2866	3140	3414	3688	---
HT   BHT		2   100mm				2   100mm					2   100mm				2   100mm				
		---				1   45mm					---				1   45mm				
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 fixture points of 76 mm. In the case of spreader plates a washer conforming to DIN 9021 must be used.

M = overall awning width  
H = extension  
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



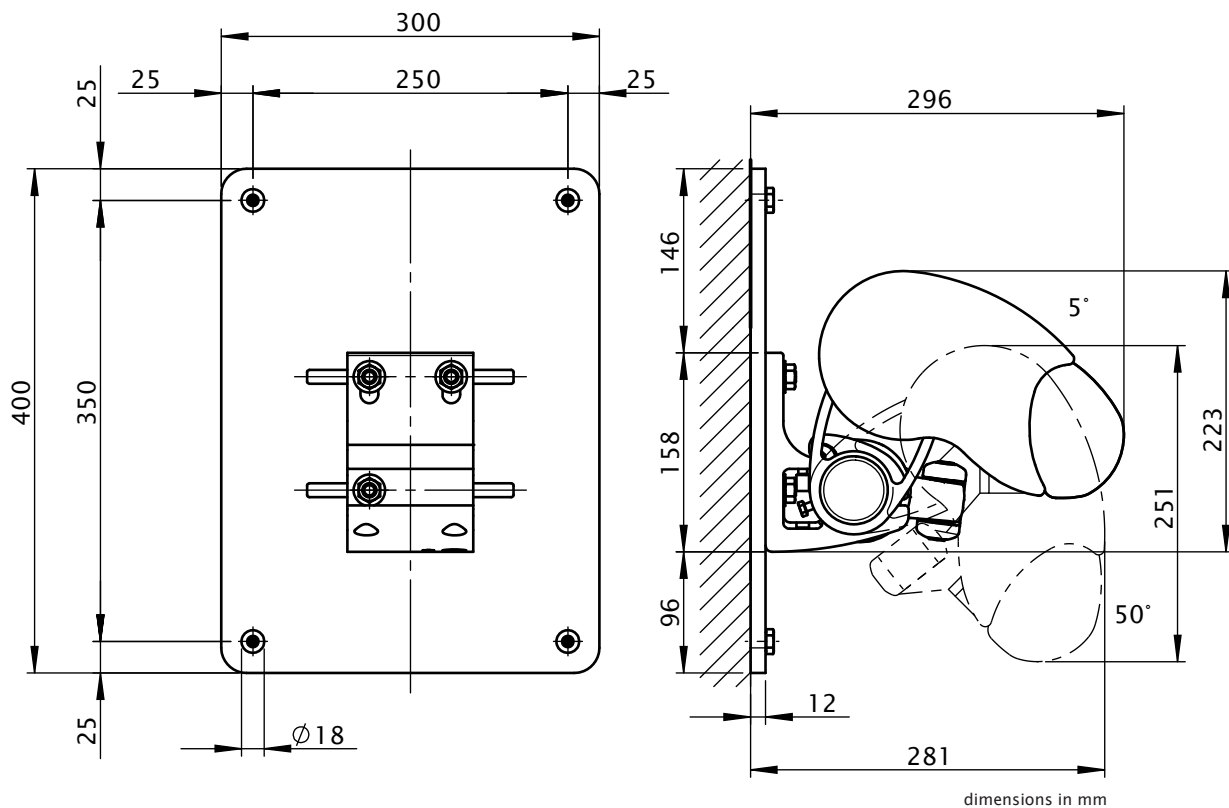
## Face fixture with shadeplus and spreader plate B

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

H [cm]	compression-proof substrate									non compression-proof substrate								
	M [cm]									M [cm]								
	260	310	360	410	460	510	560	610	660	260	310	360	410	460	510	560	610	660
	FB [N]									FB [N]								
150	181	207	234	261	287	314	341	368	394	188	216	244	272	300	328	356	383	411
200	273	314	355	396	436	477	518	559	600	284	327	370	412	455	498	541	583	626
250	---	453	511	569	627	685	742	800	954	---	473	533	593	654	714	774	834	994
300	---	---	678	755	832	910	1103	1191	1279	---	---	707	787	868	949	1150	1242	1334
350	---	---	---	966	1193	1308	1422	1536	---	---	---	---	1007	1244	1364	1483	1602	---
HT   BHT	2   100mm				2   100mm					2   100mm				2   100mm				
	---				1   45mm					---				1   45mm				
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 fixture points of 350 mm.  
In the case of spreader plates a washer conforming to DIN 9021 must be used.

M = overall awning width  
H = extension  
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



# markilux 1600

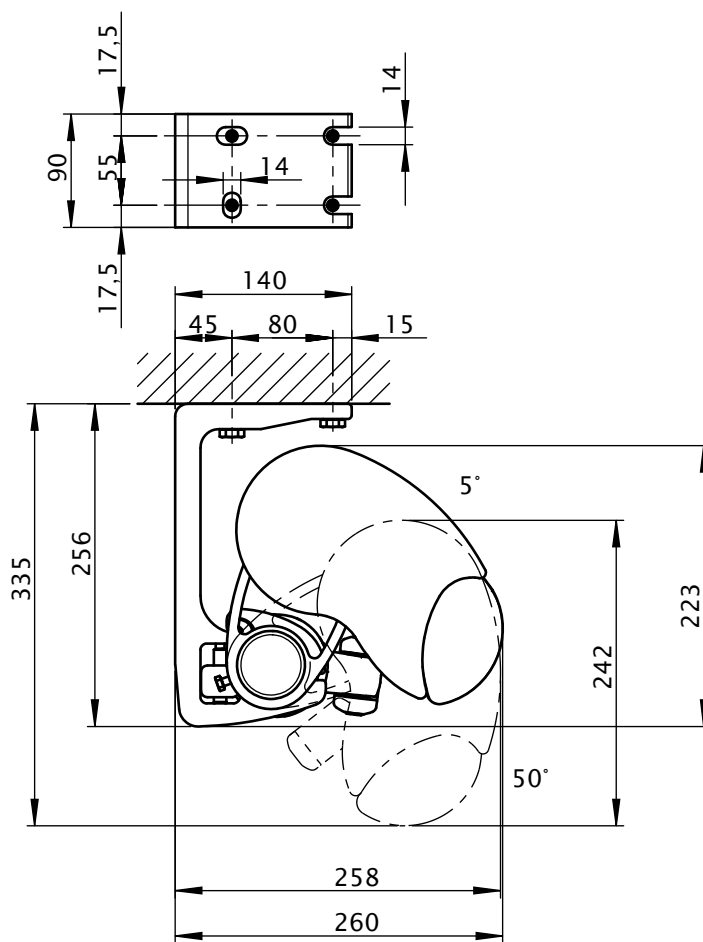
## Top fixture

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

		compression-proof substrate									non compression-proof substrate								
		M [cm]									M [cm]								
		260	310	360	410	460	510	560	610	660	260	310	360	410	460	510	560	610	660
H [cm]	HT   BHT	FB [N]									FB [N]								
150		594	681	768	855	942	1029	1116	1203	1290	759	870	980	1090	1200	1310	1421	1531	1641
200		883	1013	1143	1273	1404	1534	1664	1794	1925	1138	1305	1472	1639	1806	1973	2141	2308	2475
250		---	1460	1643	1826	2009	2191	2374	2557	3069	---	1892	2128	2364	2600	2836	3072	3308	3977
300		---	---	2179	2423	2668	2912	3557	3839	4121	---	---	2831	3148	3466	3783	4624	4990	5357
350		---	---	---	3105	3863	4230	4596	4963	5647	---	---	---	4044	5035	5512	5989	6466	7360
400		---	---	---	---	4846	5308	5770	6233	---	---	---	---	---	6324	6927	7530	8133	---
HT   BHT		2   90 mm				2   90 mm					2   90 mm				2   90 mm				
		---				1   45mm					---				1   45mm				
BM		8				10					8				10				

The pull-out force refers to the horizontal centre to centre separation of the fixture point of 80 mm. If the awning is fitted with two brackets per folding arm the pull-out force may be halved. Place the brackets directly left and right of the arm bearer.

M = overall awning width  
H = extension  
FB = pull-out force per fixing point  
HT | BHT = bracket quantity | width  
BM = no. of fixing points



dimensions in mm

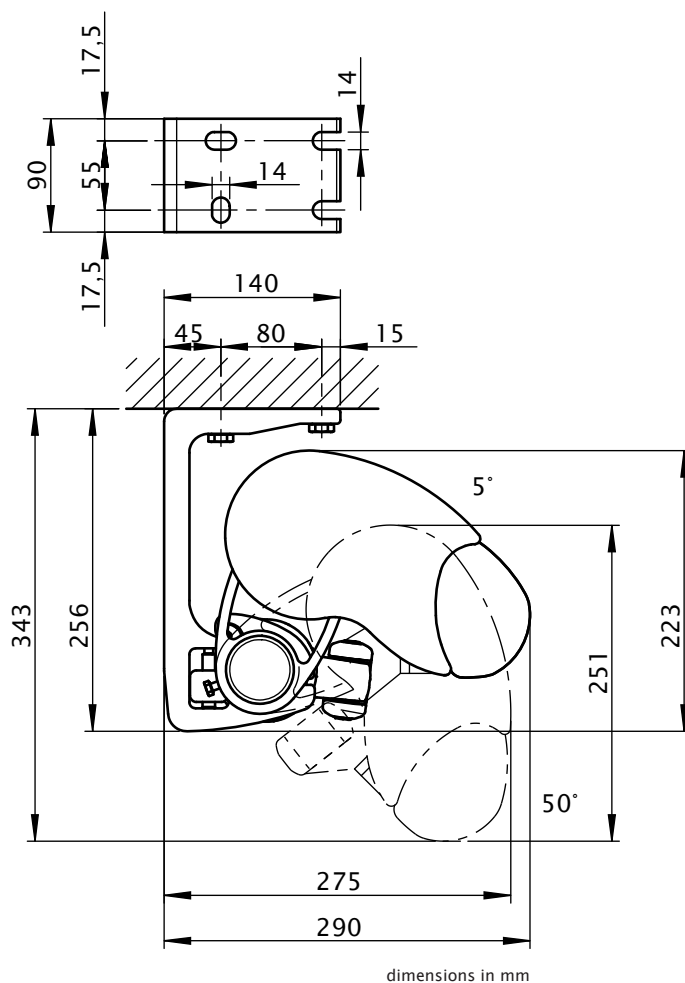
## Top fixture with shadeplus

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

H [cm]	compression-proof substrate									non compression-proof substrate								
	M [cm]									M [cm]								
	260	310	360	410	460	510	560	610	660	260	310	360	410	460	510	560	610	660
FB [N]																		
150	685	790	894	999	1103	1207	1312	1416	1521	879	1012	1145	1279	1412	1545	1678	1811	1944
200	1004	1158	1311	1465	1619	1772	1926	2079	2233	1298	1495	1693	1891	2088	2286	2484	2682	2879
250	---	1641	1853	2065	2277	2489	2701	2913	3455	---	2130	2404	2679	2953	3227	3502	3776	4483
300	---	---	2431	2711	2990	3270	3949	4266	4583	---	---	3163	3526	3889	4252	5139	5551	5964
350	---	---	---	3441	4239	4647	5054	5461	---	---	---	---	4484	5528	6059	6590	7120	---
HT   BHT	2   90 mm				2   90 mm					2   90 mm				2   90 mm				
	---				1   45mm					---				1   45mm				
BM	8				10					8				10				

The pull-out force refers to the horizontal centre to centre separation of the fixture point of 80 mm. If the awning is fitted with two brackets per folding arm the pull-out force may be halved. Place the brackets directly left and right of the arm bearer.

M = overall awning width  
H = extension  
FB = pull-out force per fixing point  
HT | BHT = bracket quantity | width  
BM = no. of fixing points



# markilux 1600

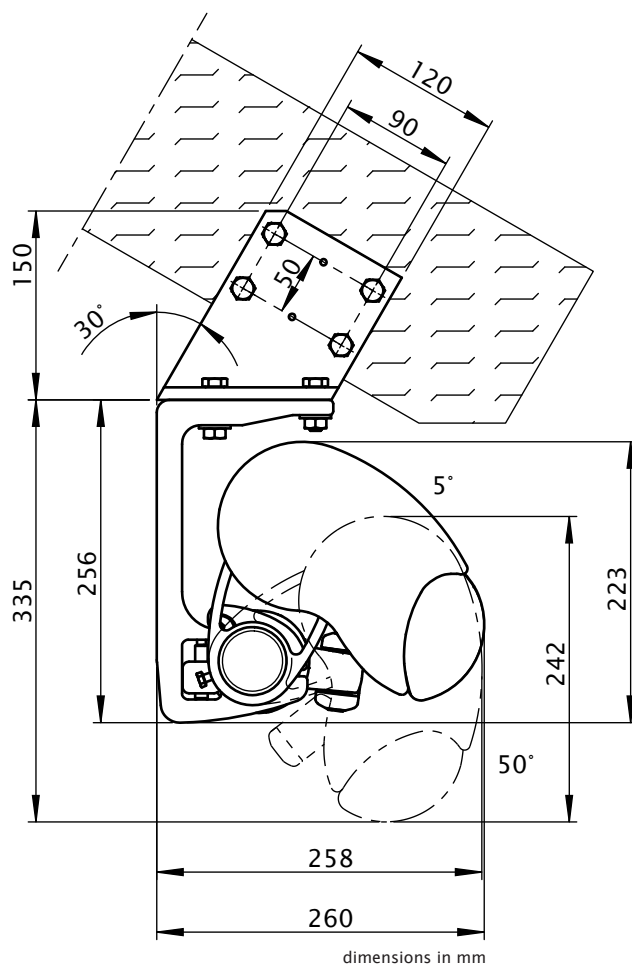
## Eaves/Roof timber fixture

Pull-out force [N=Newton] for the fixture bracket next to the arm according to EN 13561, wind resistance class 2

H [cm]	Torque									shear force								
	M [cm]									M [cm]								
	260	310	360	410	460	510	560	610	660	260	310	360	410	460	510	560	610	660
	Md [Nm]									FS [N]								
150	111	127	142	158	174	189	205	221	236	1365	1563	1762	1961	2159	2358	2557	2755	2954
200	172	196	221	246	271	295	320	345	370	2038	2338	2637	2937	3237	3537	3836	4136	4436
250	---	290	326	362	398	433	469	505	610	---	3381	3804	4226	4649	5071	5493	5916	7106
300	---	---	439	487	536	585	717	774	831	---	---	5054	5620	6186	6753	8252	8906	9560
350	---	---	---	631	787	861	936	1010	1151	---	---	---	7212	8976	9827	10678	11529	13121
400	---	---	---	---	994	1088	1182	1277	---	---	---	---	---	11269	12343	13418	14492	---
HT	2				3					2				3				
BM	8				12					8				12				

The shear force are calculated from 2 fixture points per bracket, because depending on the roof pitch it cannot be guaranteed that 4 fixture points per bracket can be used.

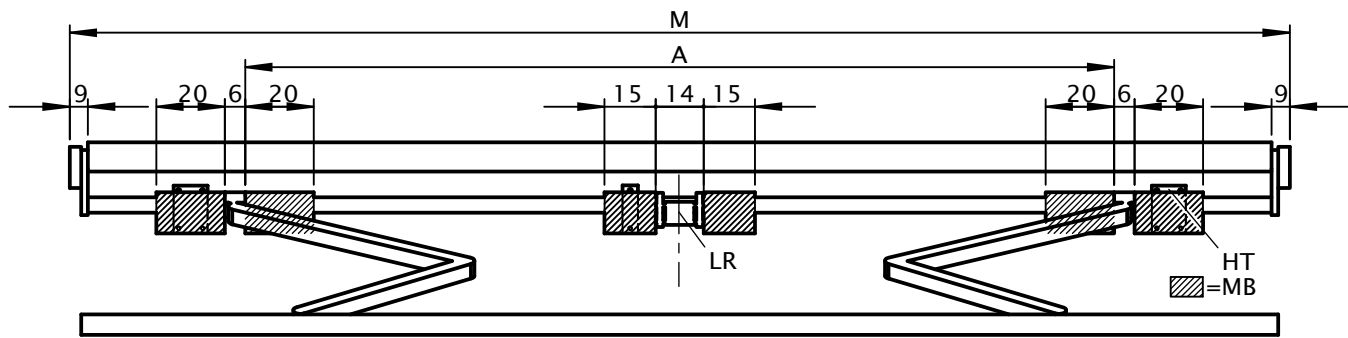
M = overall awning width  
 H = extension  
 Md = torque value for the bracket next to the arm  
 FS = shear force  
 HT = bracket  
 BM = no. of fixing points





## markilux 1600

## Bracket range for awnings with 2 folding arms



dimensions in cm

M [cm]	SB ZB	260 174-260	310 261-310	360 311-360	410 361-410	460 411-460	510 461-510	560 511-560	610 561-610	660 611-660
		A [cm]								
H [cm]		154 ■	220	250	280	320	390	425	460	500
		204 ▲	204 ■	250	280	320	390	425	460	500
		---	254 ▲	254 ■	280	320	390	425	460	500
		---	---	304 ▲	304 ■	320	390	425	460	500
		---	---	---	354 ▲	370 ■	390	425	460	500
W	HT   BHT	45 mm	---				425 ■	425	460	---
		100 mm	2				---	---	---	---
DE	HT   BHT	45 mm	---				---	---	---	---
		90 mm	2				---	---	---	---
DA		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 narrow awning widths the brackets can only be fitted inside the arms, i.e. within dimension A.

■ = coupled units are only available with junction roller in the standard widths, in other widths on request

M = overall awning width  
 A = arm position  
 HT = bracket  
 MB = range for bracket fixture  
 LR = Rolltex bearing with bracket is always situated under the central seam (depends on the width)  
 SB = standard width  
 ZB = intermediate width  
 H = extension  
 W = face fixture  
 DE/DA = top fixture and eaves fixture  
 HT | BHT = bracket quantity | width

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