



markilux 1600 stretch

The perfect solution for narrow patios, niches and balconies

**rated to wind resistance class 2
(corresponds to Beaufort 5)**

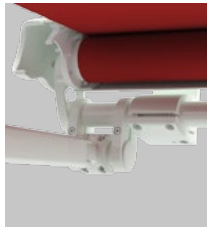


www.markilux.com

markilux



side view with awning retracted, face fixture



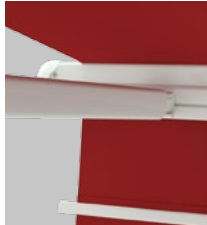
tiered folding arm fitted to the sturdy short section of torque bar



arm fixture to the torque bar



corrosion-resistant and technically proven; twin steel-link chains



arm fixture to the front profile left



wall sealing profile (optional), effective up to a maximum awning pitch of 15°



folding arms with bionic tendon (optional)



arm fixture to the front profile right



shadeplus / drop valance (optional) during extension

Design Features

presented with the IF Design Award for excellent design

folding-arm awning in a semi-cassette version; the dynamically rounded coverboard gives the awning the appearance of being fully cassetted; The dynamically rounded coverboard gives the awning the appearance of being fully cassetted

elegant and robust front profile made of aluminium with valance slot

Technical Specification

thanks to this innovative technical solution – tiered arms – large projections can still be achieved in narrow awnings

sturdy, round steel torque bar, 50 mm Ø, 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

folding arms with perfected power transference by means of twin, steel-link chains and direct coupling of the springs; maximum safety even in the case of large projections

Optional Accessories

the shadeplus creates an additional room on the patio; protection from the sun, the wind and inquisitive glances all in one

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

in the case of manual operation ease of use is ensured with the spring-assisted gearbox

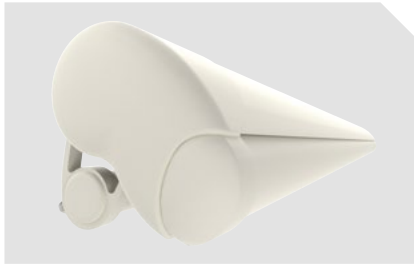
wall sealing profile to cover the gap between awning and wall

awning available in non-standard RAL colours

Lounge colours

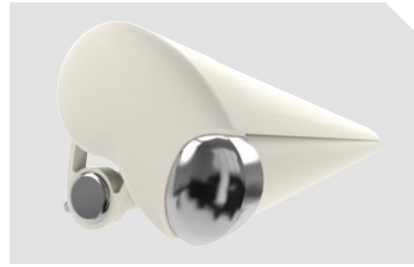
markilux 1600 stretch

off-white textured finish 5233



Designer end caps in polished chrome

off-white textured finish 5233



stone grey metallic 5215



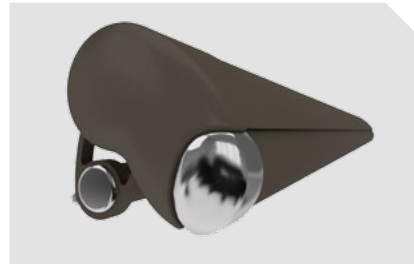
stone grey metallic 5215



Havana brown textured finish 5229



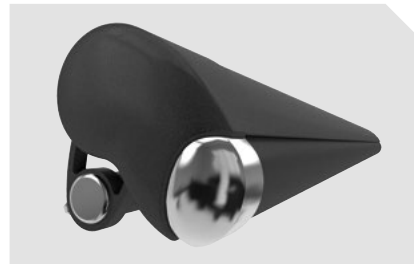
Havana brown textured finish 5229



anthracite metallic 5204



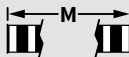
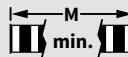






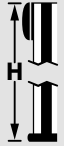
anthracite metallic 5204



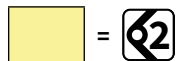
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Colours may differ slightly from those depicted in both hue and finish.

Dimensions and configuration options

												
	160	185	210	235	260	310	360	410				
	122 160	161 185	186 210	211 235	236 260	261 310	311 360	361 410				
	150	3)		1)					135	122	139	126
	200	3)		1)	1)				160	147	164	151
	250	-	3)			1)			185	172	189	176
	300	-	-	3)			1)		210	197	214	201
	350	-	-	-	3)			1)	235	222	239	226
	400 ²⁾	-	-	-	-	3)			260	247	264	251

dimensions in cm



- 1) intermediate widths on request
- 2) a shadeplus / drop valance is not possible
- 3) please note the minimum widths!

Operation / Drive

	standard	optional
manual operation	<input checked="" type="checkbox"/>	-
servo-assisted operation	-	<input checked="" type="checkbox"/>
hard-wired motor	-	<input checked="" type="checkbox"/>
io radio controls	-	<input checked="" type="checkbox"/>
radio-controlled motor (433 MHz)	-	<input checked="" type="checkbox"/>

Shadeplus / drop valance

	standard	optional
manual operation	-	<input checked="" type="checkbox"/>

Covers

	fabric range no.	standard	optional
sunsilk snc	324 .. / 328 .. / 369 ..	<input checked="" type="checkbox"/>	-
sunsilk perla FR	374 ..	-	<input checked="" type="checkbox"/>
sunvas snc	310 .. / 311 .. 313 .. — 315 ..	<input checked="" type="checkbox"/>	-
sunvas perla	370 ..	-	<input checked="" type="checkbox"/>





Miscellaneous

	standard	optional
bionic tendon	-	<input checked="" type="checkbox"/>
wall sealing profile	-	<input checked="" type="checkbox"/> ⁴⁾
light and wind sensor	-	<input checked="" type="checkbox"/>
insertable side blind	-	<input checked="" type="checkbox"/>
valance	<input checked="" type="checkbox"/> ⁵⁾	-
infra-red heater	-	<input checked="" type="checkbox"/>
vibrabox / radio control light sensor Sunis WireFree	-	<input checked="" type="checkbox"/>










4) up to a maximum awning pitch of 15°

5) valance shape 6


(please refer to the section “markilux Collection”)

 = motor	 = manual operation	M = awning width
 = no. of folding arms	 = no. of bespoke arms	M min. = minimum widths
		H = projection

Frame colours

		standard	optional
traffic white	RAL 9016		
metallic aluminium	RAL 9006		
grey brown, similar to	RAL 8019		
light ivory	RAL 1015		
anthracite metallic	5204		
stone grey metallic	5215		
off-white textured finish	5233		
Havanna brown textured finish	5229		
non-standard powder-coated finish			

Other end cap colour options

	standard	optional
polished chrome		

Dimensions and tolerances

	width	projection
housing tolerances	+ 5 / - 15 mm	± 40 mm
awning cover width = awning width	- 260 mm	
awning cover length = awning projection		+ 180 mm

Additional information

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

Pitch adjustment range:

from 5° to 25° (to the horizontal).

Definition of 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.**

It takes approximately **12 seconds per metre** to extend the awning in the case of **motor-driven units.**

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. Due to fabric thickness tolerances the actual drop may be shorter than the nominal drop by up to 5 cm. For the maximum shadeplus drops please consult the section “Technical Information”.

A shadeplus is not available with sunsilk perla FR, sunvas perla or PVC covers.

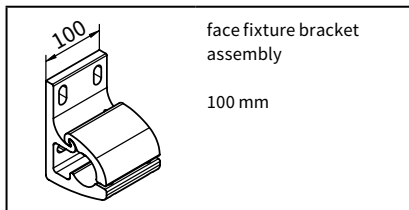
This model is only available as a single unit.

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

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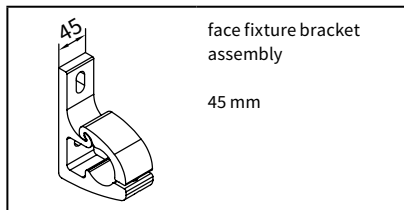
Fixtures, fittings and accessories

Fixture brackets



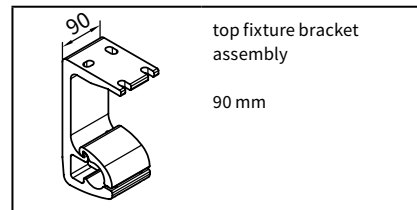
face fixture bracket assembly
100 mm

70867.



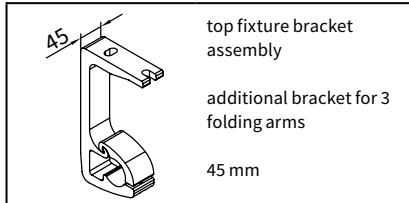
face fixture bracket assembly
45 mm

71813.



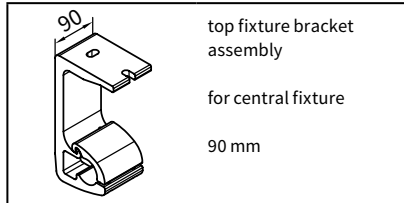
top fixture bracket assembly
90 mm

70868.



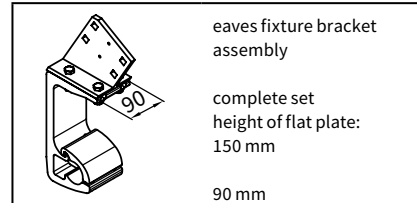
top fixture bracket assembly
additional bracket for 3 folding arms
45 mm

71818.



top fixture bracket assembly
for central fixture
90 mm

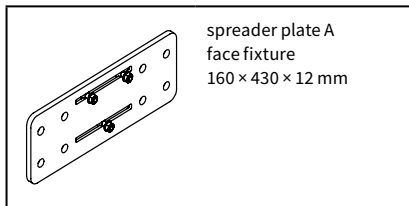
70869.



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

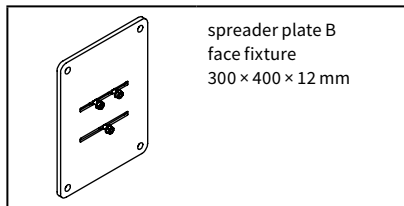
70871.

Spreader and spacer plates



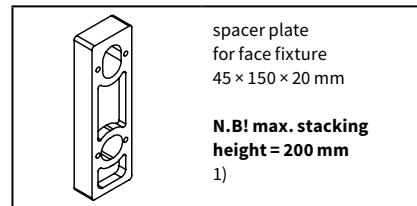
spreader plate A
face fixture
160 × 430 × 12 mm

75326.



spreader plate B
face fixture
300 × 400 × 12 mm

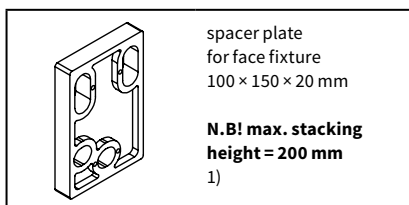
75325.



spacer plate
for face fixture
45 × 150 × 20 mm

N.B! max. stacking height = 200 mm
1)

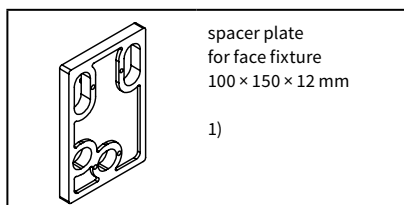
718251



spacer plate
for face fixture
100 × 150 × 20 mm

N.B! max. stacking height = 200 mm
1)

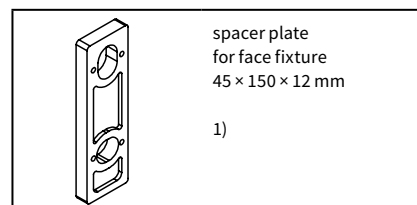
718231



spacer plate
for face fixture
100 × 150 × 12 mm

1)

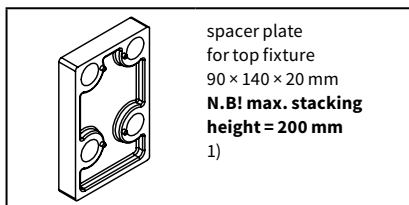
718241



spacer plate
for face fixture
45 × 150 × 12 mm

1)

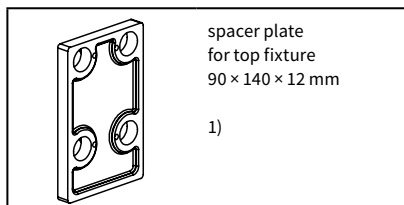
71826.



spacer plate
for top fixture
90 × 140 × 20 mm

N.B! max. stacking height = 200 mm
1)

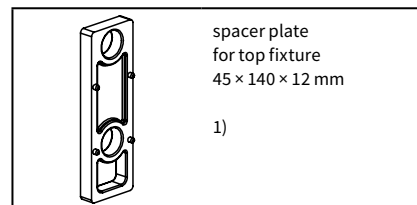
716311



spacer plate
for top fixture
90 × 140 × 12 mm

1)

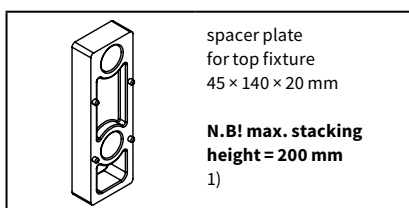
716411



spacer plate
for top fixture
45 × 140 × 12 mm

1)

716371



spacer plate
for top fixture
45 × 140 × 20 mm

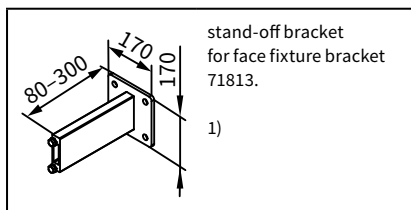
N.B! max. stacking height = 200 mm
1)

716261

1) please refer to the section "Technical Information"

. = insert RAL colour code no

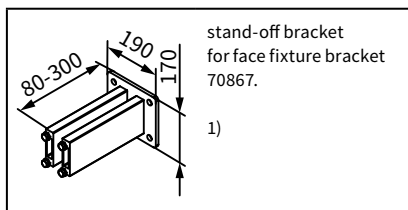
Stand-off brackets



stand-off bracket for face fixture bracket 71813.

1)

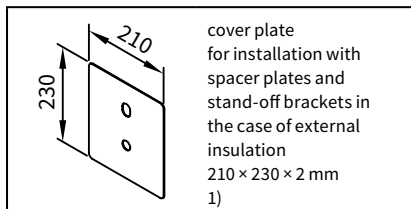
77967.



stand-off bracket for face fixture bracket 70867.

1)

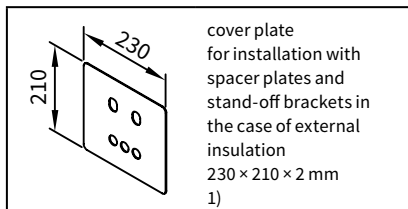
77968.



cover plate for installation with spacer plates and stand-off brackets in the case of external insulation 210 x 230 x 2 mm

1)

71844.

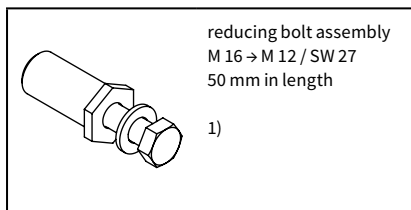


cover plate for installation with spacer plates and stand-off brackets in the case of external insulation 230 x 210 x 2 mm

1)

71843.

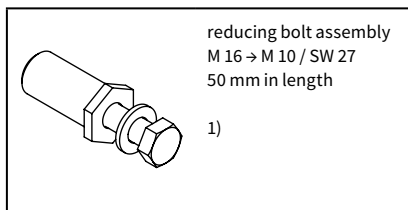
Accessories



reducing bolt assembly M 16 → M 12 / SW 27 50 mm in length

1)

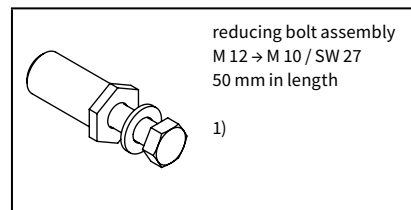
753891



reducing bolt assembly M 16 → M 10 / SW 27 50 mm in length

1)

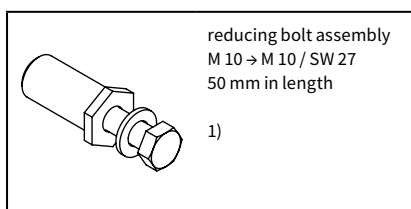
754921



reducing bolt assembly M 12 → M 10 / SW 27 50 mm in length

1)

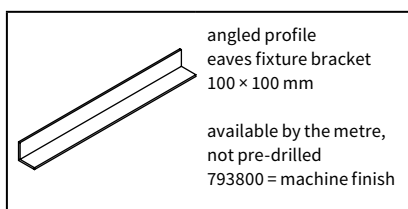
754911



reducing bolt assembly M 10 → M 10 / SW 27 50 mm in length

1)

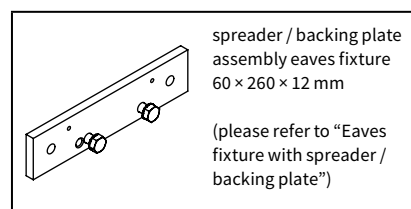
754901



angled profile eaves fixture bracket 100 x 100 mm

available by the metre, not pre-drilled 793800 = machine finish

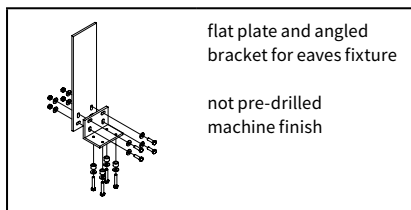
79380.



spreader / backing plate assembly eaves fixture 60 x 260 x 12 mm

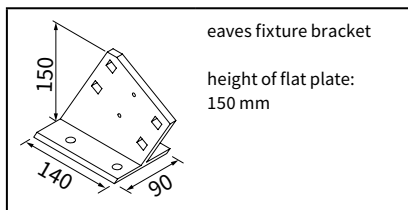
(please refer to "Eaves fixture with spreader / backing plate")

75383.



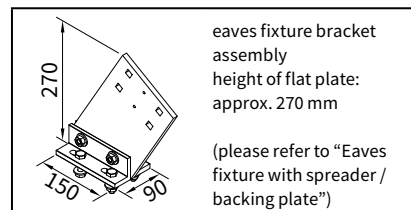
flat plate and angled bracket for eaves fixture not pre-drilled machine finish

716620



eaves fixture bracket height of flat plate: 150 mm

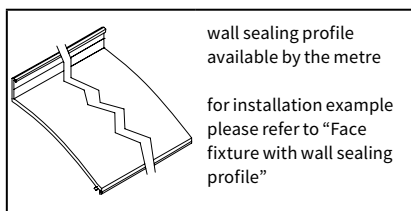
71612.



eaves fixture bracket assembly height of flat plate: approx. 270 mm

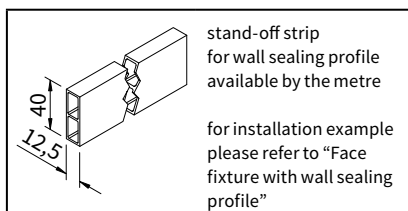
(please refer to "Eaves fixture with spreader / backing plate")

71659.



wall sealing profile available by the metre for installation example please refer to "Face fixture with wall sealing profile"

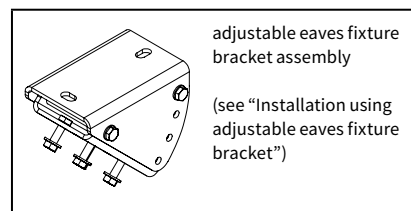
77780.



stand-off strip for wall sealing profile available by the metre

for installation example please refer to "Face fixture with wall sealing profile"

751971



adjustable eaves fixture bracket assembly

(see "Installation using adjustable eaves fixture bracket")

71198.

1) please refer to the section "Technical Information"

. = insert RAL colour code no

Face fixture

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

Compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
-----	-----	-----	-----	-----	-----	-----	-----

Non compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
-----	-----	-----	-----	-----	-----	-----	-----

H [cm]	FB [N]							
150	344	379	—	—	—	—	—	—
200	523	577	631	—	—	—	—	—
250	—	854	932	1009	1087	—	—	—
300	—	—	1239	1344	1449	1659	—	—
350	—	—	—	1724	1860	2133	2405	—
400	—	—	—	—	2586	2986	3386	3785

H [cm]	FB [N]							
150	470	517	—	—	—	—	—	—
200	714	788	862	—	—	—	—	—
250	—	1167	1273	1379	1485	—	—	—
300	—	—	1693	1837	1980	2267	—	—
350	—	—	—	2356	2542	2915	3287	—
400	—	—	—	—	3534	4080	4627	5174

HT BHT	2 100 mm
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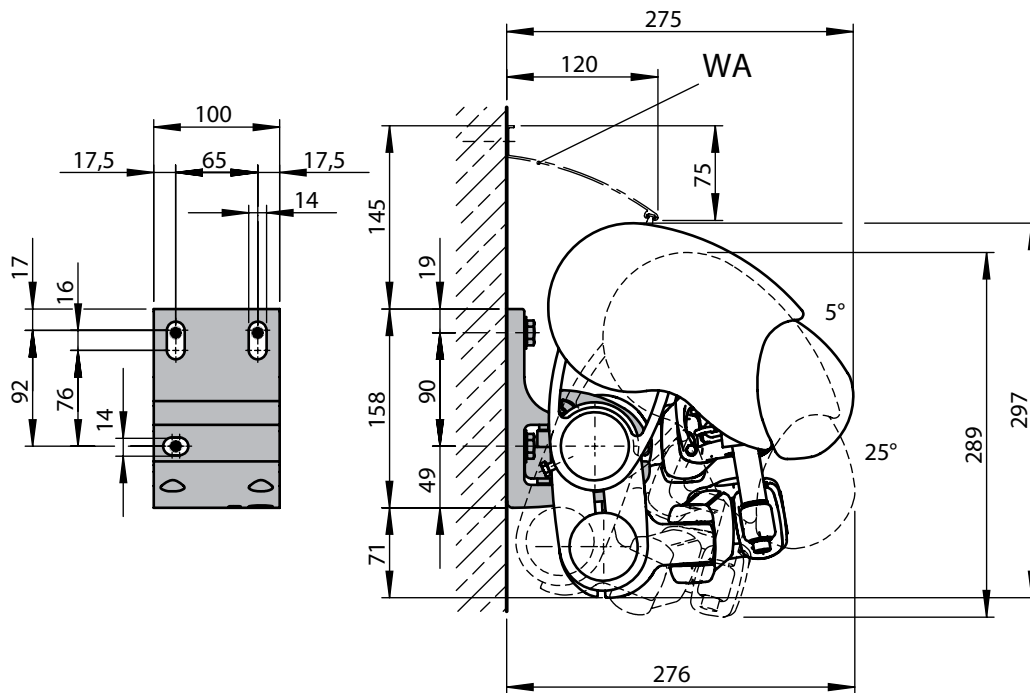
HT BHT	2 100 mm
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BM	6
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BM	6
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The pull-out force refers to the vertical centre to centre measurement between the fixture points of **90 mm**. If this measurement is reduced to the minimum, 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**.

- M = 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



dimensions in mm

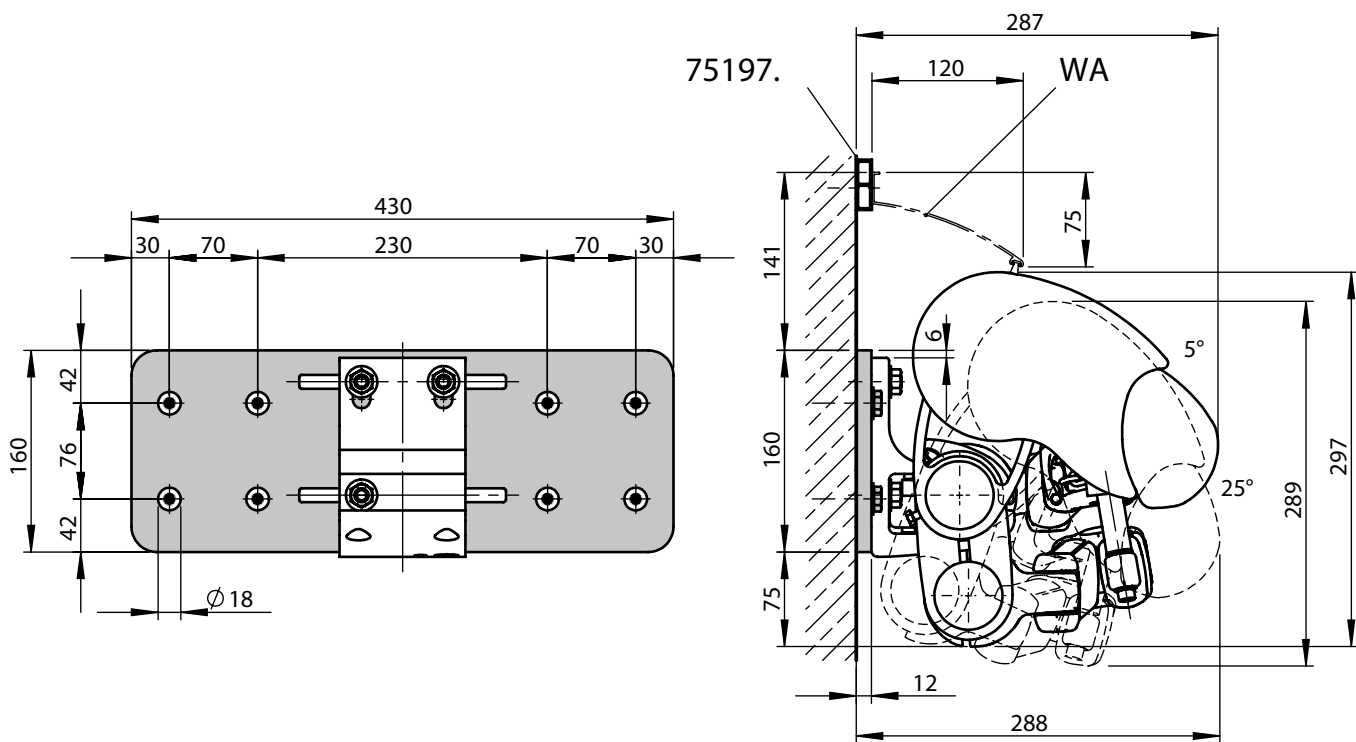
Face fixture with spreader plate A

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

Compression-proof substrate									Non compression-proof substrate								
M [cm]									M [cm]								
H [cm]									H [cm]								
FB [N]									FB [N]								
160	185	210	235	260	310	360	410		160	185	210	235	260	310	360	410	
150	198	218	—	—	—	—	—		282	310	—	—	—	—	—	—	
200	300	332	363	—	—	—	—		427	471	516	—	—	—	—	—	
250	—	490	535	579	624	—	—		—	697	760	823	887	—	—	—	
300	—	—	710	771	831	951	—		—	—	1009	1095	1181	1352	—	—	
350	—	—	—	987	1065	1222	1378		—	—	—	1403	1514	1736	1958	—	
400	—	—	—	—	1480	1709	1938	2167	—	—	—	—	2104	2429	2754	3079	
HT BHT	2 100 mm								2 100 mm								
BM	16								16								

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 = awning width
- H = projection
- FB = pull-out force per fixing point
- HT | BHT = bracket quantity | width
- BP = no. of spreader 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 fixing point according to EN 13561, wind resistance class 2

Compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
-----	-----	-----	-----	-----	-----	-----	-----

Non compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
-----	-----	-----	-----	-----	-----	-----	-----

H [cm]	FB [N]							
150	117	129	—	—	—	—	—	—
200	178	196	215	—	—	—	—	—
250	—	290	316	343	369	—	—	—
300	—	—	420	456	492	563	634	—
350	—	—	—	584	631	723	815	—
400	—	—	—	—	876	1011	1147	1282

H [cm]	FB [N]							
150	122	135	—	—	—	—	—	—
200	185	205	224	—	—	—	—	—
250	—	303	330	358	385	—	—	—
300	—	—	438	476	513	587	—	—
350	—	—	—	609	658	754	850	—
400	—	—	—	—	914	1055	1196	1337

HT BHT	2 100 mm
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HT BHT	2 100 mm
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BP	2
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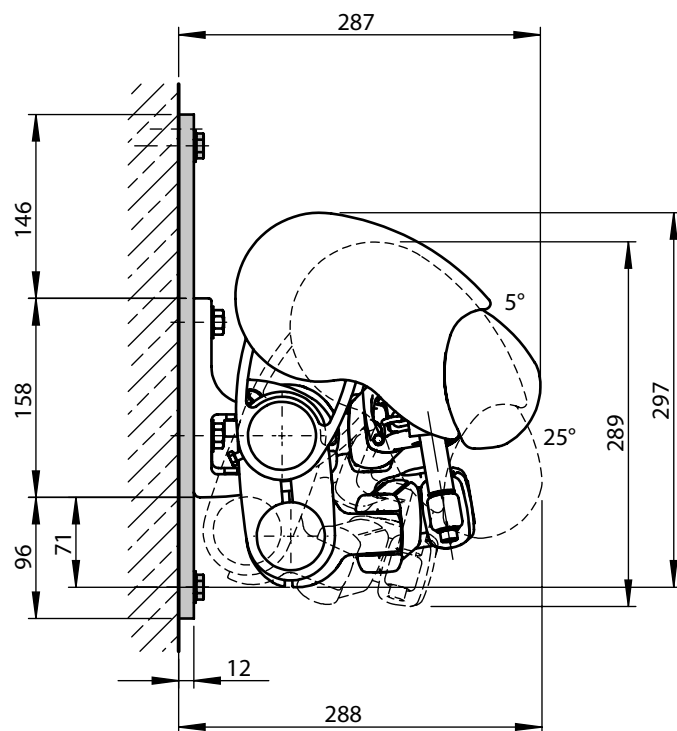
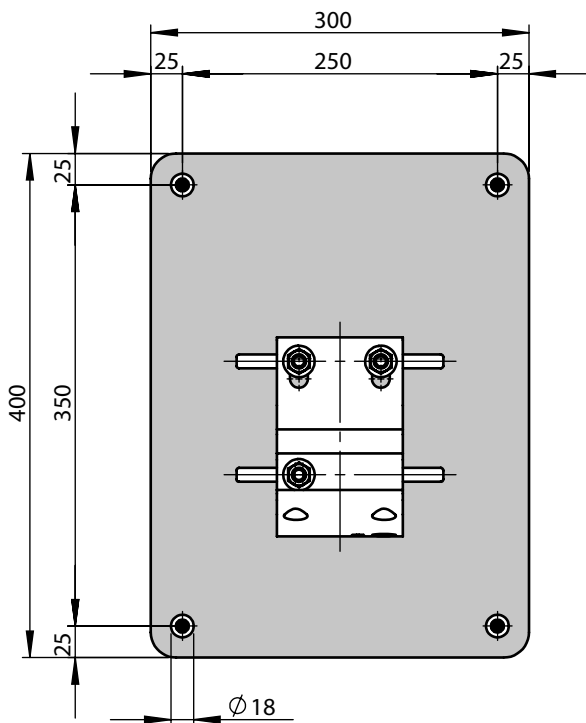
BP	2
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BM	8
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BM	8
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The pull-out force refers to the vertical centre to centre measurement between the fixture points of **350 mm**.
In the case of spreader plates a washer conforming to DIN 9021 must be used.

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



dimensions in mm

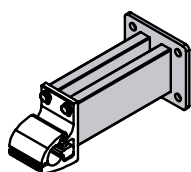
Face fixture with stand-off brackets

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

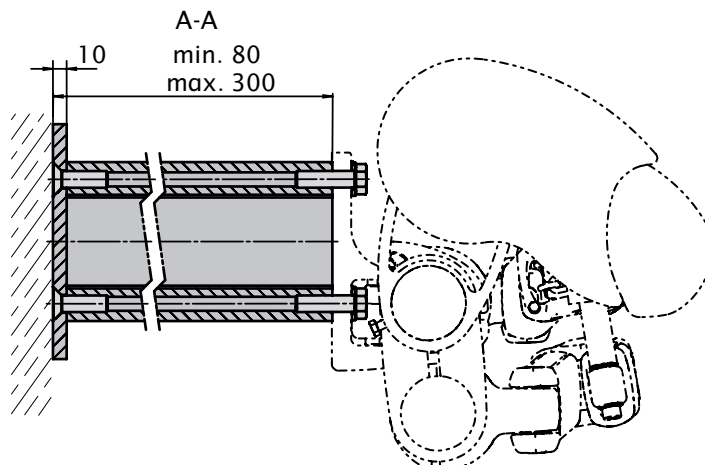
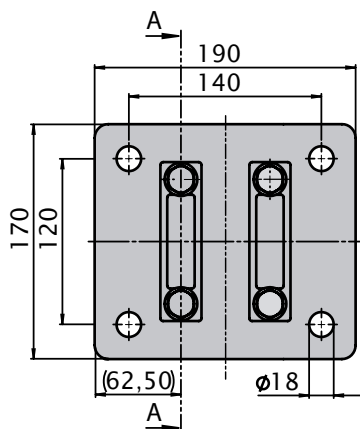
Compression-proof substrate									Non compression-proof substrate								
M [cm]									M [cm]								
H [cm]									H [cm]								
FB [N]									FB [N]								
160	185	210	235	260	310	360	410		160	185	210	235	260	310	360	410	
150	412	452	—	—	—	—	—	—	463	509	—	—	—	—	—	—	—
200	593	653	714	—	—	—	—	—	667	735	803	—	—	—	—	—	—
250	—	935	1019	1103	1187	—	—	—	—	1052	1146	1241	1335	—	—	—	—
300	—	—	1321	1432	1544	1766	—	—	—	—	1486	1612	1737	1987	—	—	—
350	—	—	—	1803	1945	2228	2512	—	—	—	—	2028	2188	2507	2826	—	—
400	—	—	—	—	2668	3079	3491	3902	—	—	—	—	3001	3464	3927	4390	—
HT BHT	2 100 mm								2 100 mm								
DH 77968.	2								2								
BM	8								8								

The pull-out force refers to the vertical centre to centre measurement between the fixture points of **120 mm**. In the case of stand-off brackets washers conforming to DIN 9021 must be used.

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



77968.



dimensions in mm

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Face fixture with shadeplus

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

Compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
-----	-----	-----	-----	-----	-----	-----	-----

Non compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
-----	-----	-----	-----	-----	-----	-----	-----

H [cm]	FB [N]							
150	372	412	—	—	—	—	—	—
200	561	621	681	—	—	—	—	—
250	—	909	994	1080	1165	—	—	—
300	—	—	1314	1428	1542	1770	—	—
350	—	—	—	1822	1969	2262	2556	—
400	—	—	—	—	2710	3134	3558	3982

H [cm]	FB [N]							
150	509	563	—	—	—	—	—	—
200	766	849	931	—	—	—	—	—
250	—	1243	1359	1475	1592	—	—	—
300	—	—	1796	1952	2108	2420	—	—
350	—	—	—	2490	2691	3092	3493	—
400	—	—	—	—	3704	4283	4862	5442

HT BHT	2 100 mm
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HT BHT	2 100 mm
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BM	6
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BM	6
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The pull-out force refers to the vertical centre to centre measurement between the fixture points of **90 mm**. If this measurement is reduced to the minimum, 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**.

M = awning width

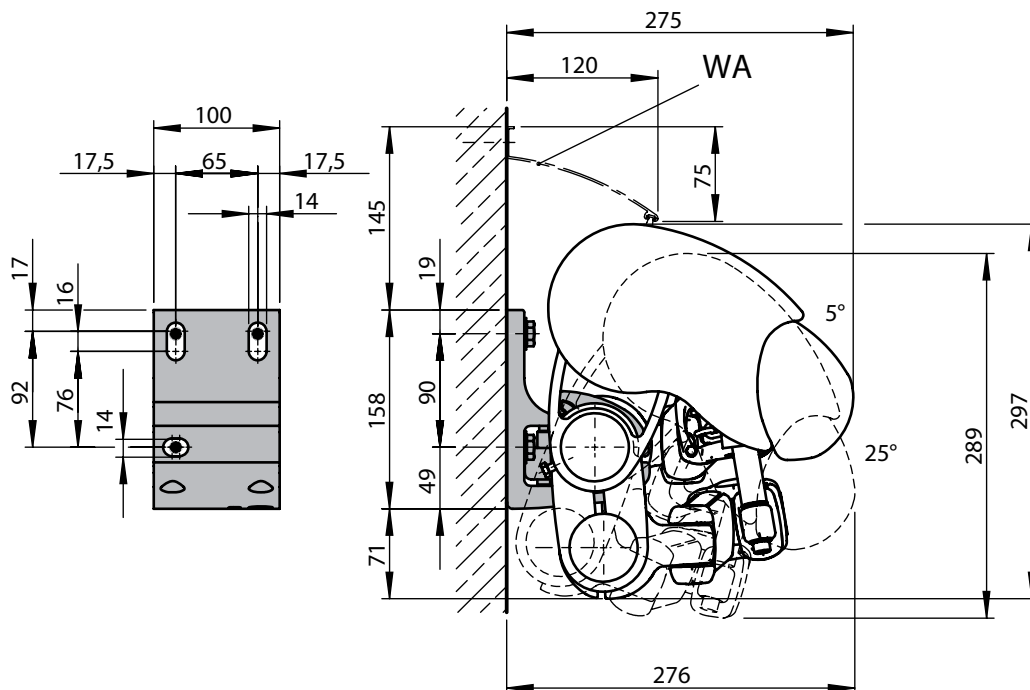
BM = no. of fixing points

H = projection

WA = wall sealing profile

FB = pull-out force per fixing point

HT | BHT = bracket quantity | width



dimensions in mm

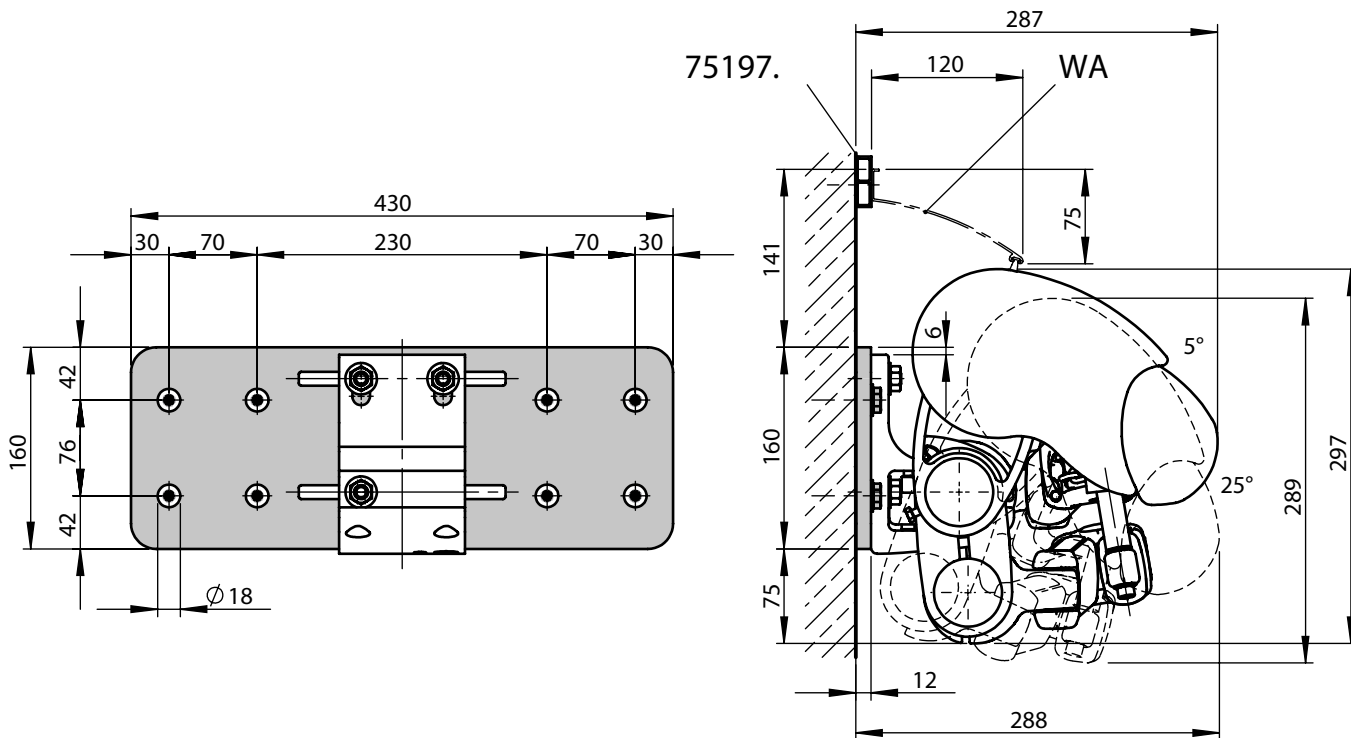
Face fixture with shadeplus and spreader plate A

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

Compression-proof substrate									Non compression-proof substrate								
M [cm]									M [cm]								
H [cm]									H [cm]								
FB [N]									FB [N]								
160	185	210	235	260	310	360	410		160	185	210	235	260	310	360	410	
150	215	237	—	—	—	—	—	—	305	337	—	—	—	—	—	—	—
200	322	357	392	—	—	—	—	—	458	507	556	—	—	—	—	—	—
250	—	522	571	620	668	—	—	—	—	742	811	880	950	—	—	—	—
300	—	—	753	819	884	1015	—	—	—	—	1071	1164	1256	1442	—	—	—
350	—	—	—	1044	1128	1296	1464	—	—	—	—	1483	1602	1841	2080	—	—
400	—	—	—	—	1551	1794	2036	2279	—	—	—	—	2205	2549	2894	3239	—
HT BHT	2 100 mm								2 100 mm								
BP	2								2								
BM	16								16								

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



dimensions in mm

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Face fixture with shadeplus and spreader plate B

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

Compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
-----	-----	-----	-----	-----	-----	-----	-----

Non compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
-----	-----	-----	-----	-----	-----	-----	-----

H [cm]	FB [N]							
150	127	140	—	—	—	—	—	—
200	191	211	232	—	—	—	—	—
250	—	309	338	367	396	—	—	—
300	—	—	446	485	523	601	—	—
350	—	—	—	618	667	767	866	—
400	—	—	—	—	918	1062	1205	1349

H [cm]	FB [N]							
150	132	146	—	—	—	—	—	—
200	199	220	242	—	—	—	—	—
250	—	322	352	382	412	—	—	—
300	—	—	465	505	546	626	—	—
350	—	—	—	644	696	800	903	—
400	—	—	—	—	957	1107	1257	1406

HT BHT	2 100 mm
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HT BHT	2 100 mm
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BP	2
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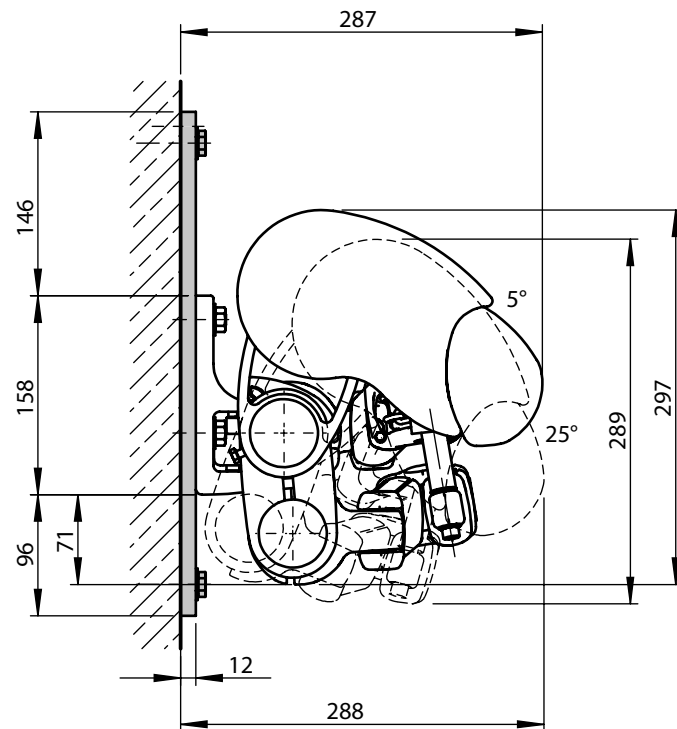
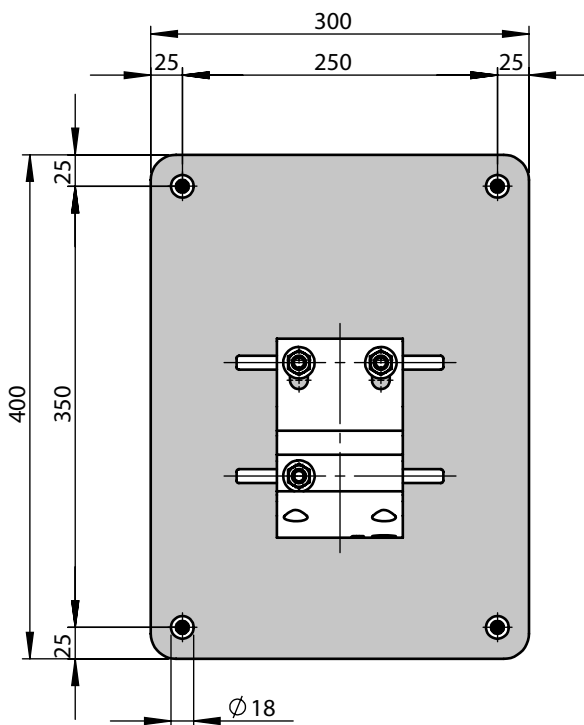
BP	2
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BM	8
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BM	8
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The pull-out force refers to the vertical centre to centre measurement between the fixture points of **350 mm**.
In the case of spreader plates a washer conforming to DIN 9021 must be used.

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



dimensions in mm

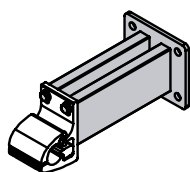
Face fixture for shadeplus / drop valance with stand-off brackets

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

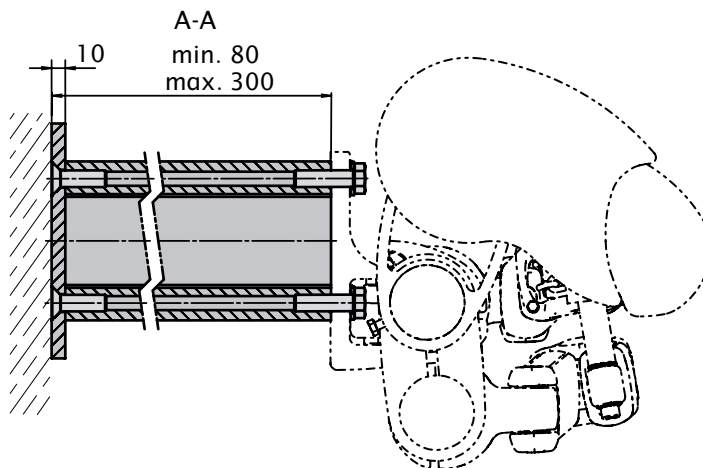
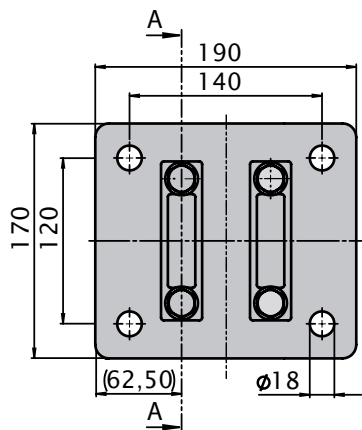
Compression-proof substrate									Non compression-proof substrate								
M [cm]									M [cm]								
160 185 210 235 260 310 360 410									160 185 210 235 260 310 360 410								
H [cm]									H [cm]								
150 200 250 300 350 400									150 200 250 300 350 400								
FB [N]									FB [N]								
150	412	452	—	—	—	—	—	—	463	509	—	—	—	—	—	—	—
200	593	653	714	—	—	—	—	—	667	735	803	—	—	—	—	—	—
250	—	935	1019	1103	1187	—	—	—	—	1052	1146	1241	1335	—	—	—	—
300	—	—	1321	1432	1544	1766	—	—	—	—	1486	1612	1737	1987	—	—	—
350	—	—	—	1803	1945	2228	2512	—	—	—	—	2028	2188	2507	2826	—	—
400	—	—	—	—	2668	3079	3491	3902	—	—	—	—	3001	3464	3927	4390	—
HT BHT	2 100 mm								2 100 mm								
DH 77968.	2								2								
BM	8								8								

The pull-out force refers to the vertical centre to centre measurement between the fixture points of **120 mm**. In the case of stand-off brackets washers conforming to DIN 9021 must be used.

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



77968.



dimensions in mm

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Top fixture

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

Compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
-----	-----	-----	-----	-----	-----	-----	-----

Non compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
-----	-----	-----	-----	-----	-----	-----	-----

H [cm]	FB [N]							
150	443	490	—	—	—	—	—	—
200	652	722	792	—	—	—	—	—
250	—	1047	1144	1241	1338	—	—	—
300	—	—	1504	1633	1763	2021	—	—
350	—	—	—	2078	2244	2576	2908	—
400	—	—	—	—	3094	3575	4056	4537

H [cm]	FB [N]							
150	569	628	—	—	—	—	—	—
200	843	933	1023	—	—	—	—	—
250	—	1359	1485	1610	1736	—	—	—
300	—	—	1958	2125	2293	2628	—	—
350	—	—	—	2709	2925	3356	3788	—
400	—	—	—	—	4041	4668	5295	5923

HT BHT	2 90 mm
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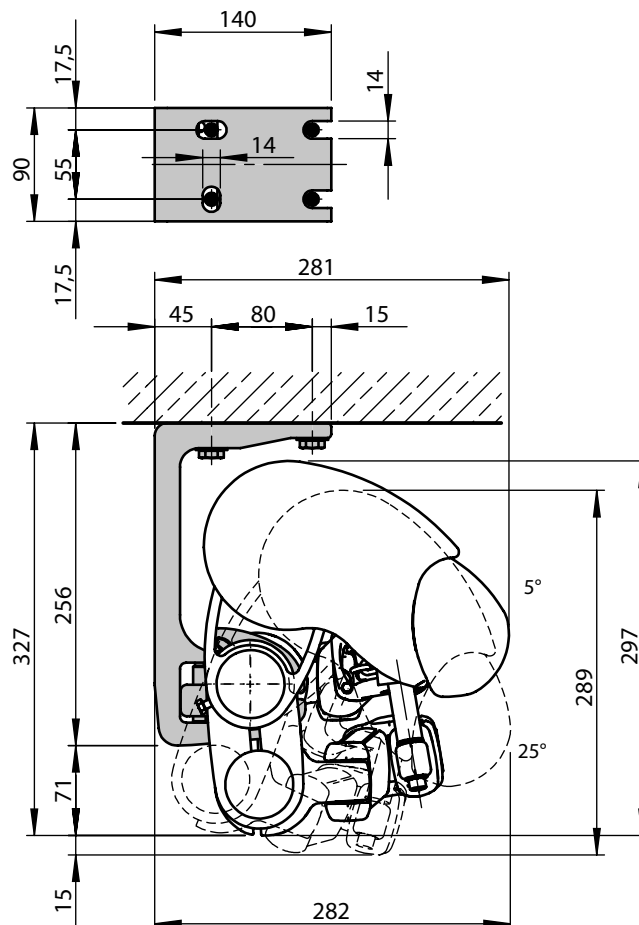
HT BHT	2 90 mm
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BM	8
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BM	8
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The pull-out force refers to the horizontal centre to centre measurement between the fixture points of **80 mm**.

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



dimensions in mm

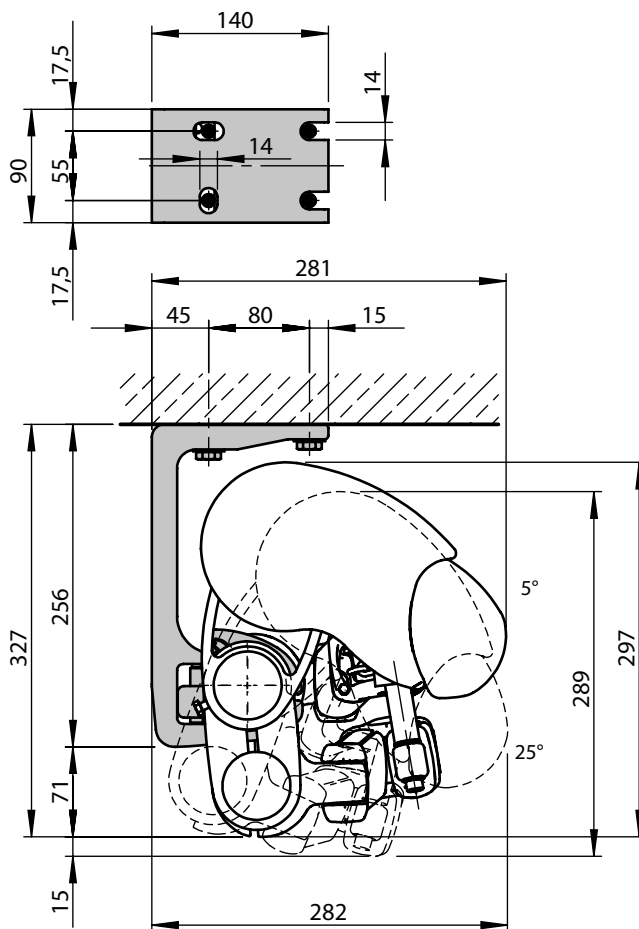
Top fixture with shadeplus / drop valance

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

		Compression-proof substrate							Non compression-proof substrate								
		M [cm]							M [cm]								
		160	185	210	235	260	310	360	410	160	185	210	235	260	310	360	410
H [cm]	FB [N]																
150	476	529	—	—	—	—	—	—	613	679	—	—	—	—	—	—	
200	697	774	851	—	—	—	—	—	902	1001	1100	—	—	—	—	—	
250	—	1111	1217	1323	1429	—	—	—	—	1444	1581	1719	1856	—	—	—	
300	—	—	1592	1732	1872	2151	—	—	—	—	2073	2255	2436	2799	—	—	
350	—	—	—	2193	2371	2728	3084	—	—	—	—	2860	3092	3556	4020	—	
400	—	—	—	—	3240	3749	4258	4754	—	—	—	—	4232	4896	5560	6212	
HT BHT	2 90 mm							2 90 mm									
BM	8							8									

The pull-out force refers to the horizontal centre to centre measurement between the fixture points of 80 mm.

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



dimensions in mm

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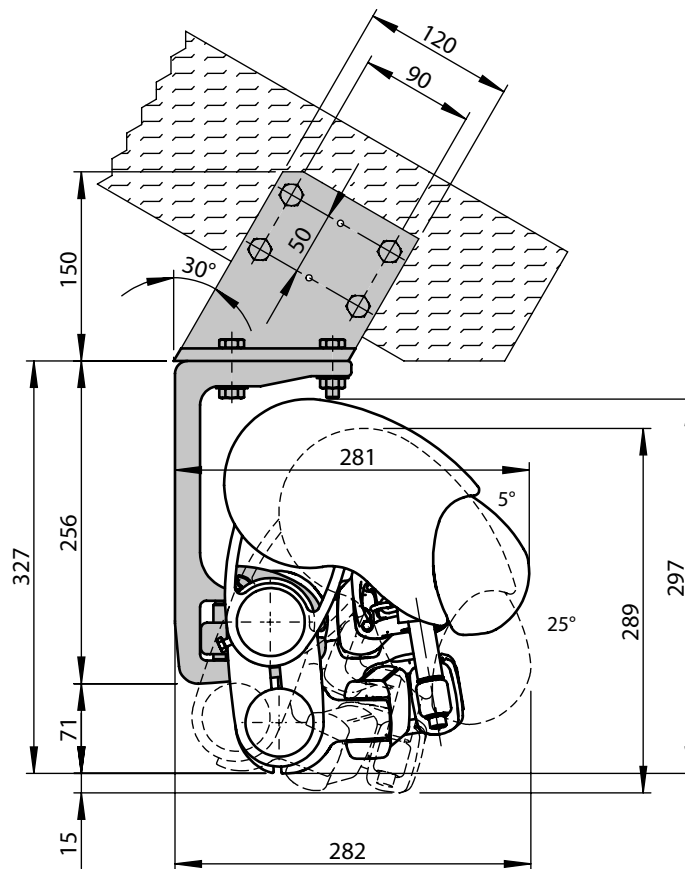
Eaves fixture

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

H [cm]	Torque M [cm]								Shear force M [cm]							
	160	185	210	235	260	310	360	410	160	185	210	235	260	310	360	410
	Md [Nm]								FS [N]							
150	85	93	—	—	—	—	—	—	1020	1127	—	—	—	—	—	—
200	129	142	155	—	—	—	—	—	1508	1669	1830	—	—	—	—	—
250	—	210	229	248	267	—	—	—	—	2426	2651	2876	3101	—	—	—
300	—	—	305	331	356	408	—	—	—	—	3492	3791	4091	4690	—	—
350	—	—	—	424	458	525	592	—	—	—	—	4829	5214	5984	6754	—
400	—	—	—	—	636	734	833	931	—	—	—	—	7198	8316	9434	10552
HT	2								2							
BM	8								8							

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 be used.

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



dimensions in mm

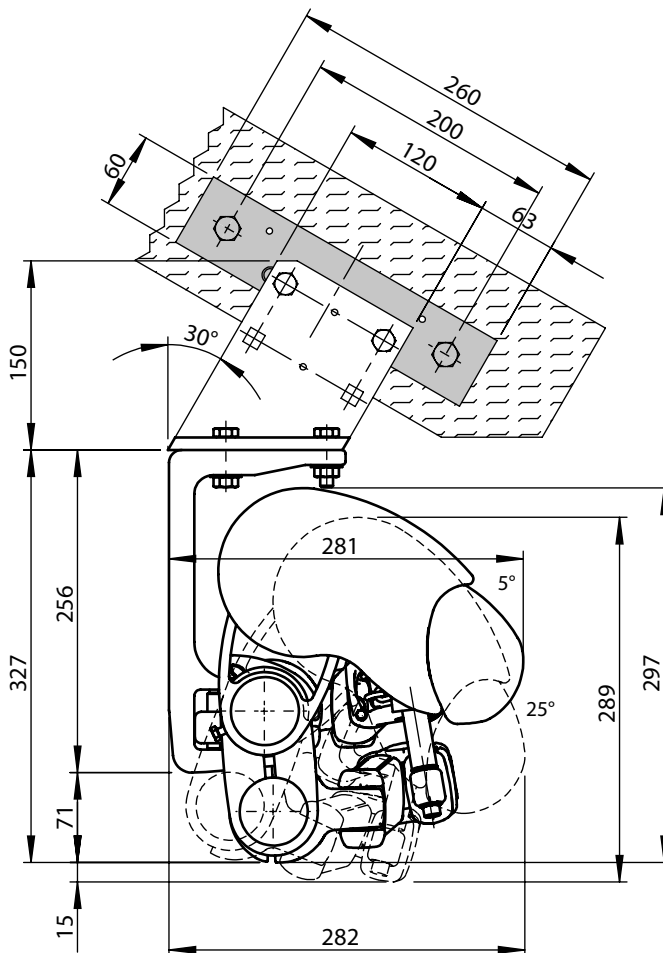
Eaves fixture with additional spreader / backing plate

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

H [cm]	Torque M [cm]								Shear force M [cm]							
	160	185	210	235	260	310	360	410	160	185	210	235	260	310	360	410
	Md [Nm]								FS [N]							
150	85	93	—	—	—	—	—	—	503	558	—	—	—	—	—	—
200	129	142	155	—	—	—	—	—	723	802	881	—	—	—	—	—
250	—	210	229	248	267	—	—	—	—	1143	1251	1359	1467	—	—	—
300	—	—	305	331	356	408	—	—	—	—	1629	1771	1912	2196	—	—
350	—	—	—	424	458	525	592	—	—	—	—	2238	2418	2778	3138	—
400	—	—	—	—	636	734	833	931	—	—	—	—	3311	3827	4344	4861
HT	2								2							
BM	4								4							

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

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



dimensions in mm

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Installation using the adjustable eaves fixture bracket

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

Compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
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Non compression-proof substrate
M [cm]

160	185	210	235	260	310	360	410
-----	-----	-----	-----	-----	-----	-----	-----

H [cm]	FB [N]							
150	663	735	—	—	—	—	—	—
200	966	1071	1176	—	—	—	—	—
250	—	1541	1685	1830	1974	—	—	—
300	—	—	2207	2398	2588	2970	—	—
350	—	—	—	3042	3286	3773	4261	—
400	—	—	—	—	4517	5220	5924	6627

H [cm]	FB [N]							
150	684	758	—	—	—	—	—	—
200	998	1106	1214	—	—	—	—	—
250	—	1593	1742	1891	2040	—	—	—
300	—	—	2282	2479	2676	3070	—	—
350	—	—	—	3146	3398	39002	4406	—
400	—	—	—	—	4674	5401	6129	6857

HT BHT	2 90 mm
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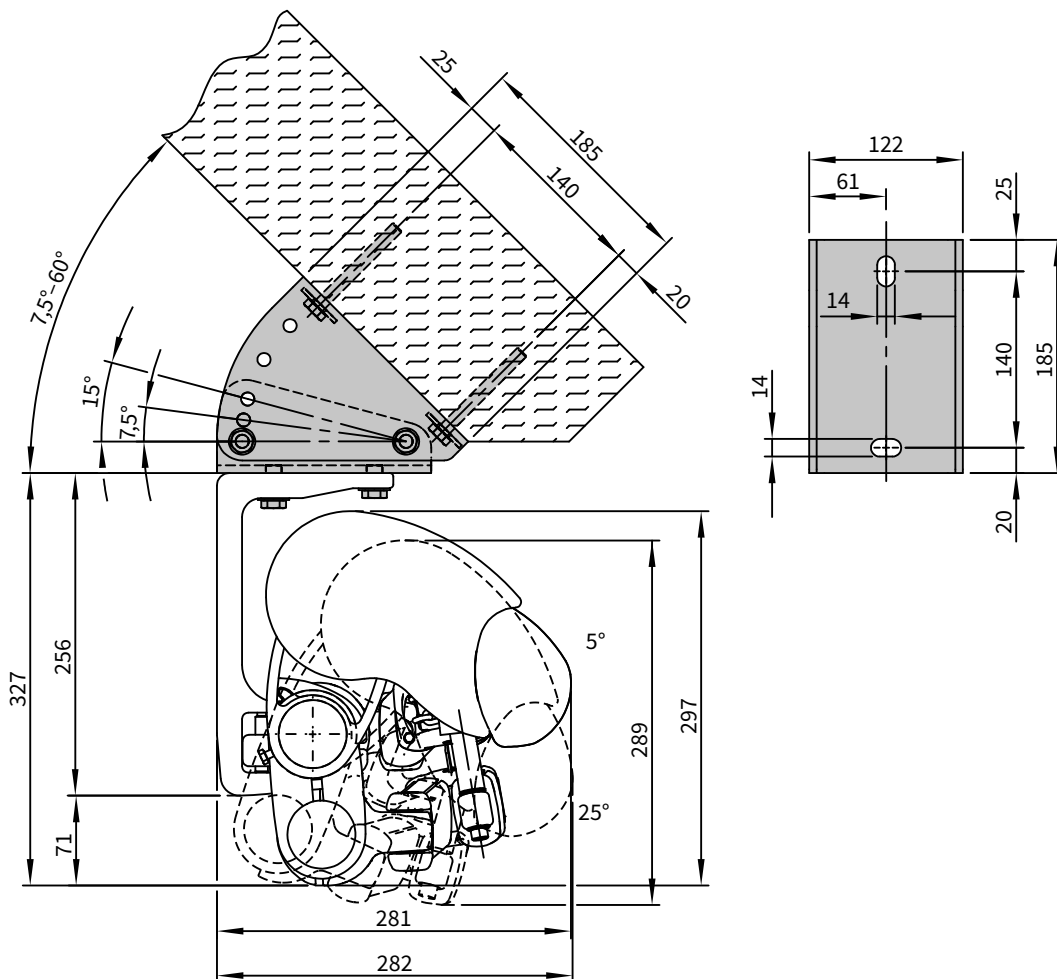
HT BHT	2 90 mm
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BM	8
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BM	8
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The pull-out force refers to the measurement from the front to the rear fixture points of **140 mm**. Washers conforming to DIN 9021 must be used.

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



dimensions in mm

Installation with shadeplus using the adjustable eaves fixture bracket

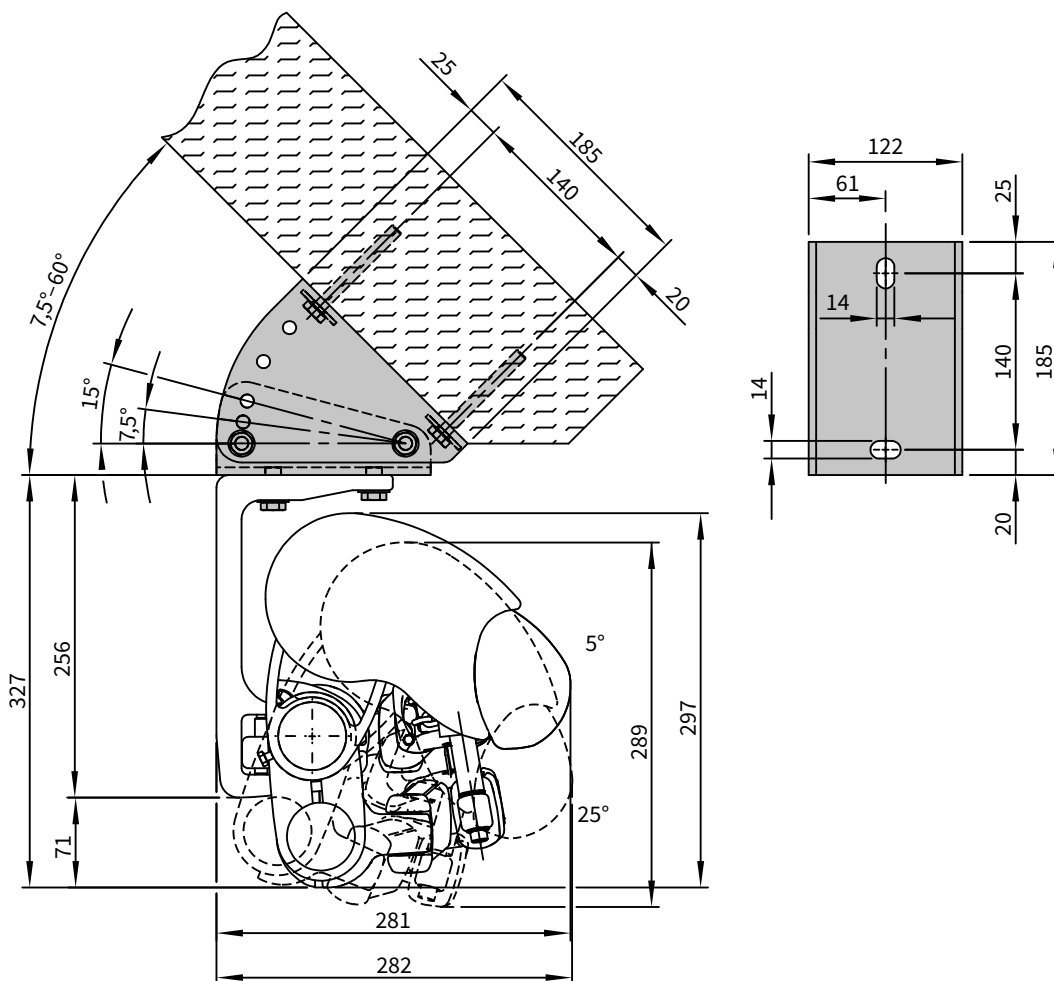
Pull-out force [N=Newton] per upper fixing point according to EN 13561, wind resistance class 2

Compression-proof substrate									Non compression-proof substrate								
M [cm]									M [cm]								
H [cm]									H [cm]								
FB [N]									FB [N]								
160	185	210	235	260	310	360	410		160	185	210	235	260	310	360	410	
150	712	791	—	—	—	—	—		734	816	—	—	—	—	—	—	
200	1031	1146	1261	—	—	—	—		1065	1184	1302	—	—	—	—	—	
250	—	1635	1792	1949	2106	—	—		—	1690	1852	2014	2176	—	—	—	
300	—	—	2335	2541	2747	3159	—		—	—	2415	2627	2840	3266	—	—	
350	—	—	—	3209	3470	3993	4516		—	—	—	3319	3590	4130	4671	—	
400	—	—	—	—	4728	5472	6216	6935	—	—	—	—	4892	5662	6432	7176	
HT BHT	2 90 mm								2 90 mm								
BM	8								8								

The pull-out force refers to the measurement from the front to the rear fixture points of 140 mm.

Washers conforming to DIN 9021 must be used.

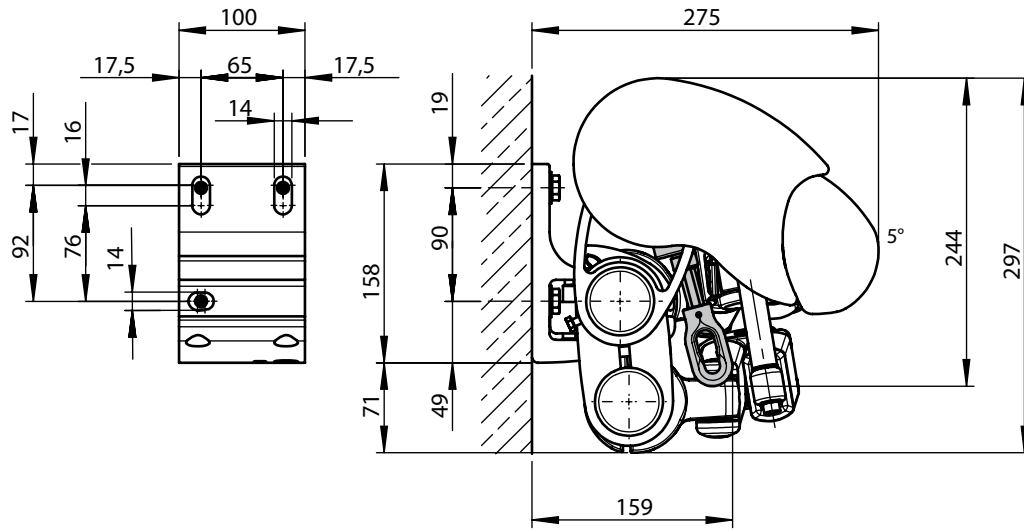
- M = awning width
- H = projection
- FB = pull-out force per fixing point
- HT | BHT = bracket quantity | width
- BM = no. of fixing points



dimensions in mm

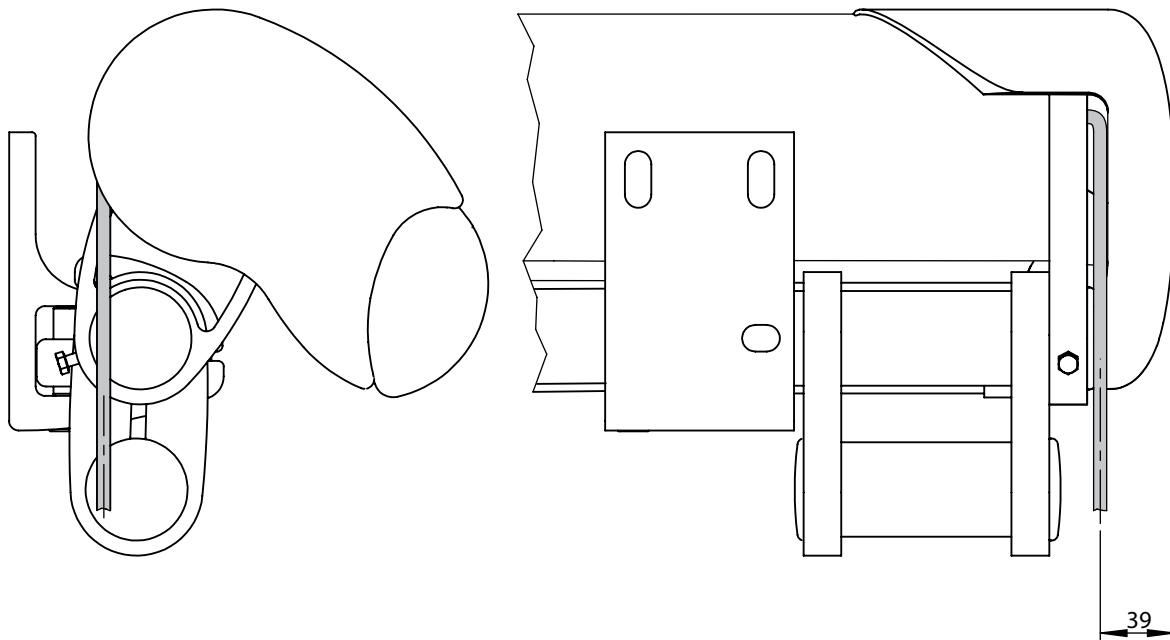
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Face fixture with manual operation



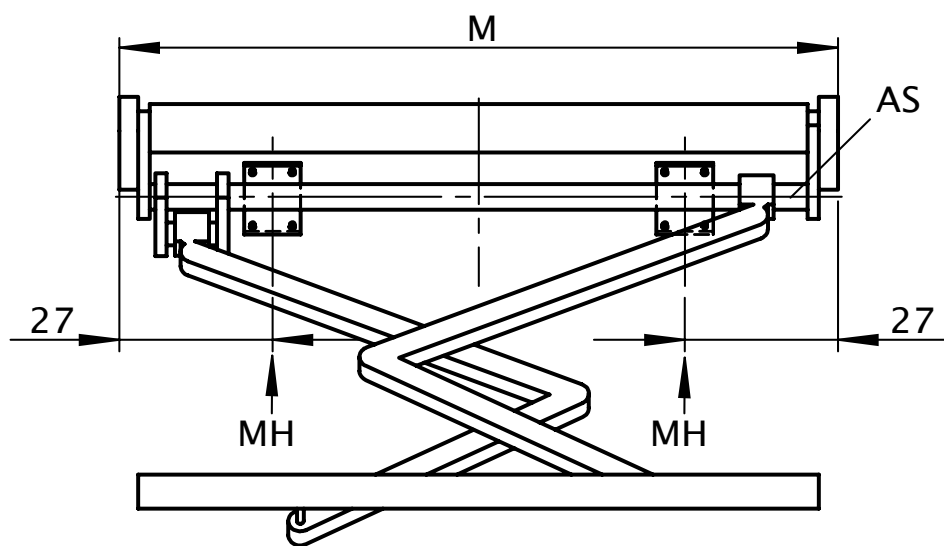
dimensions in mm

Cable exit position in motor-driven units



dimensions in mm

Bracket fixture range for awnings with 2 folding arms



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!

- M = awning width
- MH = bracket centre
- AS = operation side (opposite the tiered folding arm)

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