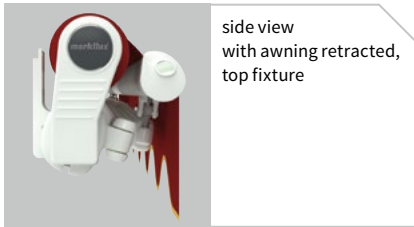




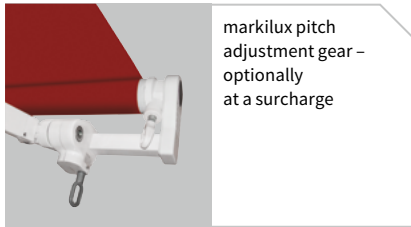
markilux 1300 Basic

The awning which sets exacting standards

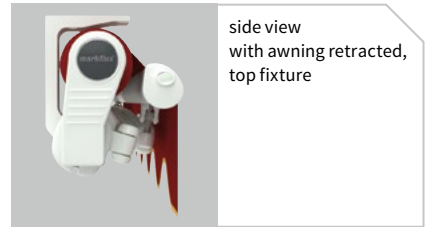
rated to wind resistance class 2
(corresponds to Beaufort 5)



side view with awning retracted, top fixture



markilux pitch adjustment gear – optionally at a surcharge



side view with awning retracted, top fixture



folding arm with round steel-link chain



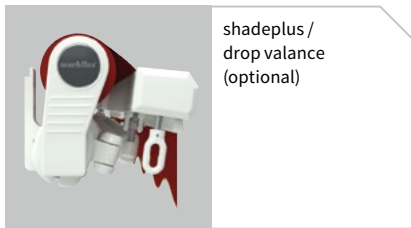
markilux shadeplus / drop valance – optionally at a surcharge



markilux aluminium coverboard – optionally at a surcharge



side view at a pitch of 55°



shadeplus / drop valance (optional)

Design Features, Technical Specification and Optional Accessories

the robust folding arms with single steel-link chain ensure a taut cover

the pivot bolts are made from corrosion-proof stainless steel and run in Teflon-coated bushes

the strong 40 mm × 40 mm torque bar is extremely resistant to twist and deflection, the roller tube is made of steel and has a diameter of 85 mm for the same reason

the attractive front profile made with integrated gutter ensures water drains away to the sides

the pitch adjustment gear mechanism (available optionally at a surcharge) that affords added protection: the sun marches across the sky – your awning marches with it; with the pitch adjustment gear mechanism you can change the (normally fixed) pitch from 4° to 54° or 35° to 85° by simply using a winding handle

Frame colours

		standard	optional
traffic white	RAL 9016	<input type="checkbox"/>	
metallic aluminium	RAL 9006	<input type="checkbox"/>	
non-standard powder-coated finish			

Miscellaneous

	standard	optional
pitch adjustment gear	–	<input checked="" type="checkbox"/>
shadeplus / drop valance	–	<input checked="" type="checkbox"/>
coverboard	–	<input checked="" type="checkbox"/>
light and wind sensor	–	<input checked="" type="checkbox"/>
insertable side blind	–	<input checked="" type="checkbox"/>
valance	<input checked="" type="checkbox"/> 1)	–
infrared heater	–	<input checked="" type="checkbox"/>
vibrabox / radio control light sensor Sunis WireFree	–	<input checked="" type="checkbox"/>

1) valance shape 1, 2 or 6 (please refer to the section “world of colours in the markilux collection”)

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

Dimensions and configuration options

		250	300	350	400	450	500	550	600	650	700 ³⁾					
		167 250	251 300	301 350	351 400	401 450	451 500	501 550	551 600	601 650	651 700					
	150											181	167	266	184	170
	200	3)										231	218	341	234	221
	250	-	3)									281	268	416	284	271
	300	-	-	3)								331	318	491	334	321
	350	-	-	-	3)						3)	381	368	566	384	371
	400 ¹⁾²⁾	-	-	-	-	3)					3)	431	418	640	434	421

= =

dimensions in cm

- 1) a shadeplus / drop valance is not possible
- 2) awnings with 3 arms or a projection of 400 cm are only available with motor
- 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"/>

Dimensions and tolerances

	width	projection
housing tolerances	+ 20 / - 15 mm	± 40 mm
awning cover width = awning width	- 140 mm - 170 mm	
awning cover length = awning projection		+ 130 mm

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"/>

Coupled units

	standard	optional
2 fields	-	<input checked="" type="checkbox"/> ⁴⁾
junction roller	-	<input checked="" type="checkbox"/> ⁵⁾
one-piece cover	-	<input checked="" type="checkbox"/>

- 4) for minimum widths please consult the section "Technical Information"
- 5) see overview "Bracket fixture range"

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

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Additional information

The width of the awning cover is always **less** than that of the awning. Please refer cover sizes in the case of coupled units and those with more than 2 arms to us.

Pitch adjustment range: from 5° to 55° (to the horizontal).

Pitch adjustment range in the case of pitch adjustment

gear: either from 4° to 54° or from 35° to 85° (in both cases 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 a **motor-driven awning**.

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”.

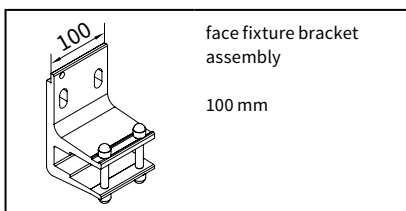
A shadeplus is not available with sunsilk perla FR, sunvas perla or PVC covers.

Coupled folding-arm awnings are available up to a **max. of 2 single units** side by side, however only with a motor drive. 3 units coupled together on request.

A coupled unit is available with **junction roller**. Pattern repeat mismatches are possible in the case of junction roller covers. A junction roller may not fit when the projection is the maximum for the width of each awning. (see also the section on “Installation”, the arm separation table).

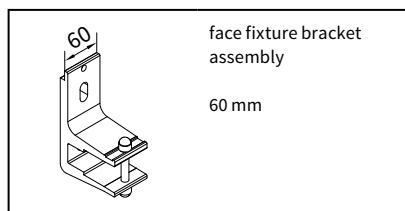
If coupled blinds are fitted into a **recess or reveal** the overall width of the coupled awning must be at least 6 cm less than the width of the opening to allow the awning to be coupled.

Fixtures, fittings and accessories



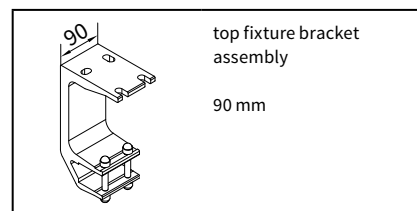
71664.

face fixture bracket assembly
100 mm



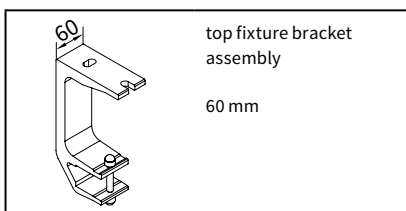
71665.

face fixture bracket assembly
60 mm



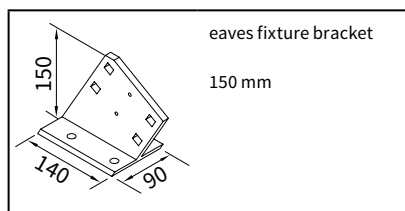
71666.

top fixture bracket assembly
90 mm



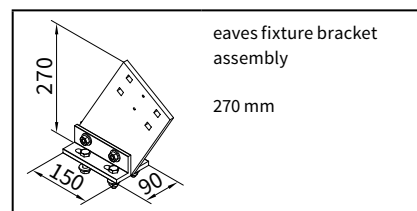
71667.

top fixture bracket assembly
60 mm



71612.

eaves fixture bracket
150 mm

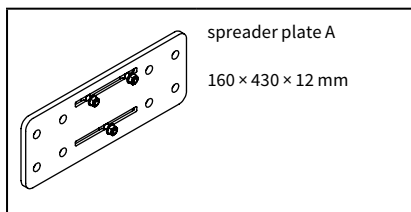


71659.

eaves fixture bracket assembly
270 mm

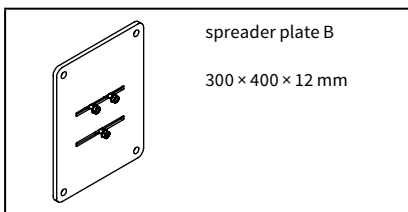
. = insert RAL colour code no

Fixtures, fittings and accessories



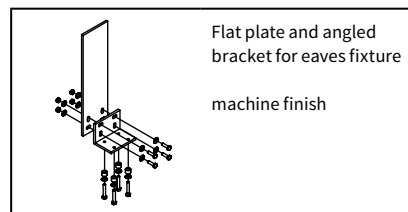
spreader plate A
160 × 430 × 12 mm

75326.



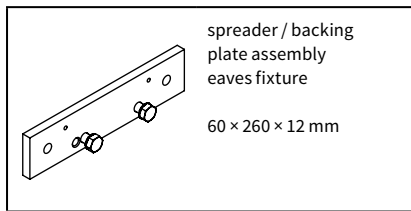
spreader plate B
300 × 400 × 12 mm

75325.



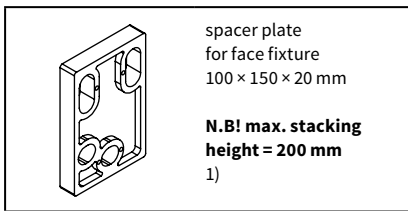
Flat plate and angled
bracket for eaves fixture
machine finish

716620



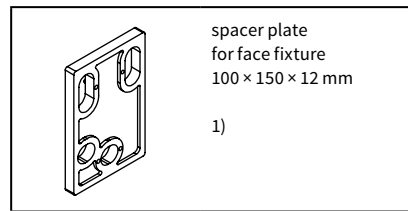
spreader / backing
plate assembly
eaves fixture
60 × 260 × 12 mm

75383.



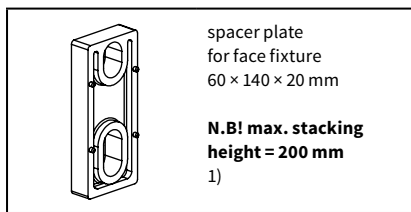
spacer plate
for face fixture
100 × 150 × 20 mm
**N.B! max. stacking
height = 200 mm**
1)

718231



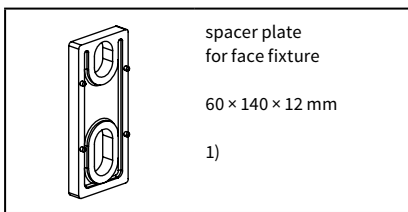
spacer plate
for face fixture
100 × 150 × 12 mm
1)

718241



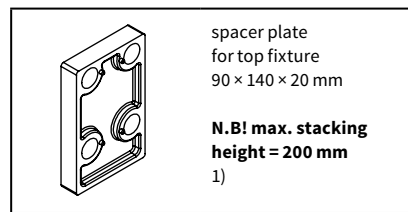
spacer plate
for face fixture
60 × 140 × 20 mm
**N.B! max. stacking
height = 200 mm**
1)

716321



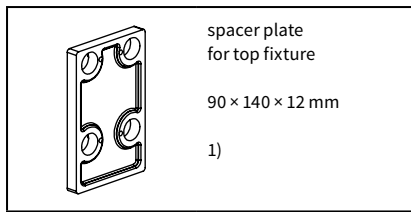
spacer plate
for face fixture
60 × 140 × 12 mm
1)

71642.



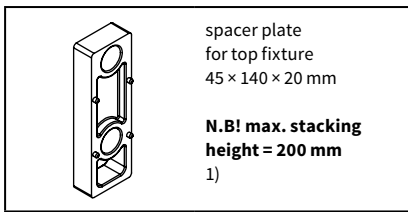
spacer plate
for top fixture
90 × 140 × 20 mm
**N.B! max. stacking
height = 200 mm**
1)

716311



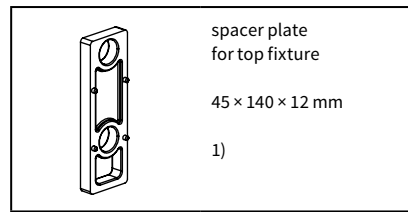
spacer plate
for top fixture
90 × 140 × 12 mm
1)

716411



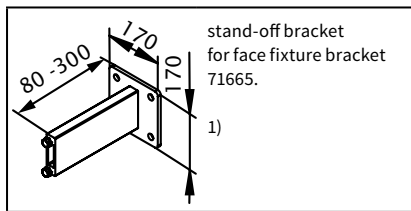
spacer plate
for top fixture
45 × 140 × 20 mm
**N.B! max. stacking
height = 200 mm**
1)

716261



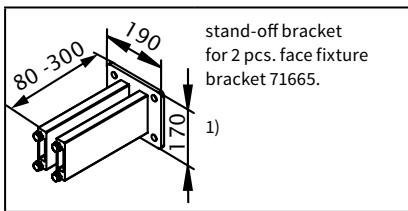
spacer plate
for top fixture
45 × 140 × 12 mm
1)

716371



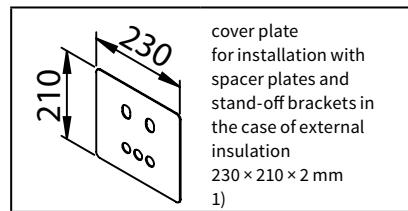
stand-off bracket
for face fixture bracket
71665.
1)

77967.



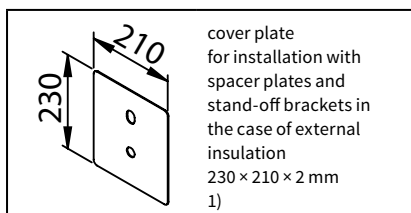
stand-off bracket
for 2 pcs. face fixture
bracket 71665.
1)

77968.



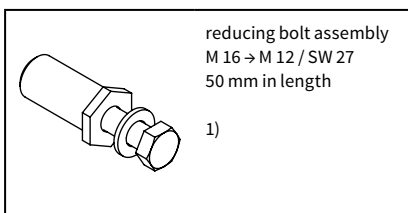
cover plate
for installation with
spacer plates and
stand-off brackets in
the case of external
insulation
230 × 210 × 2 mm
1)

71843.



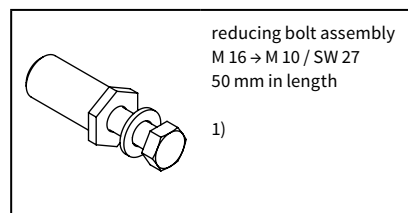
cover plate
for installation with
spacer plates and
stand-off brackets in
the case of external
insulation
230 × 210 × 2 mm
1)

71844.



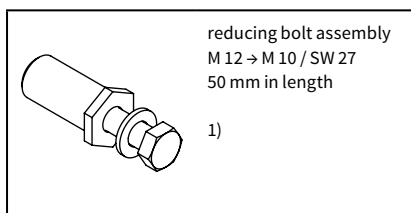
reducing bolt assembly
M 16 → M 12 / SW 27
50 mm in length
1)

753891



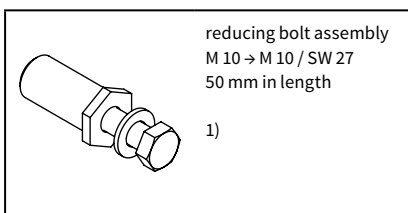
reducing bolt assembly
M 16 → M 10 / SW 27
50 mm in length
1)

754921



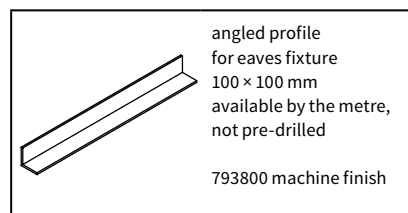
reducing bolt assembly
M 12 → M 10 / SW 27
50 mm in length
1)

754911



reducing bolt assembly
M 10 → M 10 / SW 27
50 mm in length
1)

754901



angled profile
for eaves fixture
100 × 100 mm
available by the metre,
not pre-drilled
793800 machine finish

79380.

1) please refer to the section "Technical Information"

. = insert RAL colour code no

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Face fixture

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

Compression-proof substrate
M [cm]

H [cm]	FB [N]									
	250	300	350	400	450	500	550	600	650	700
150	439	506	572	639	705	772	838	905	971	845
200	701	808	915	1023	1130	1237	1344	1452	1559	1397
250	—	1202	1359	1517	1674	1831	1989	2146	2637	2421
300	—	—	1860	2077	2293	2510	3132	3386	3641	3388
350	—	—	—	2748	3033	3818	4155	4492	4260	4574
400	—	—	—	—	4431	4862	5293	5724	5410	5769

Non compression-proof substrate
M [cm]

H [cm]	FB [N]									
	250	300	350	400	450	500	550	600	650	700
150	508	585	661	738	815	892	969	1045	1122	976
200	810	934	1058	1182	1306	1430	1554	1677	1801	1614
250	—	1389	1571	1752	1934	2116	2298	2480	3047	2797
300	—	—	2149	2400	2650	2901	3619	3913	4207	3915
350	—	—	—	3175	3505	4412	4801	5191	4922	5285
400	—	—	—	—	5121	5619	6116	6614	6251	6666

HT BHT	2 100 mm	2 100 mm 2 60 mm	3 100 mm 2 60 mm
BM	6	10	13

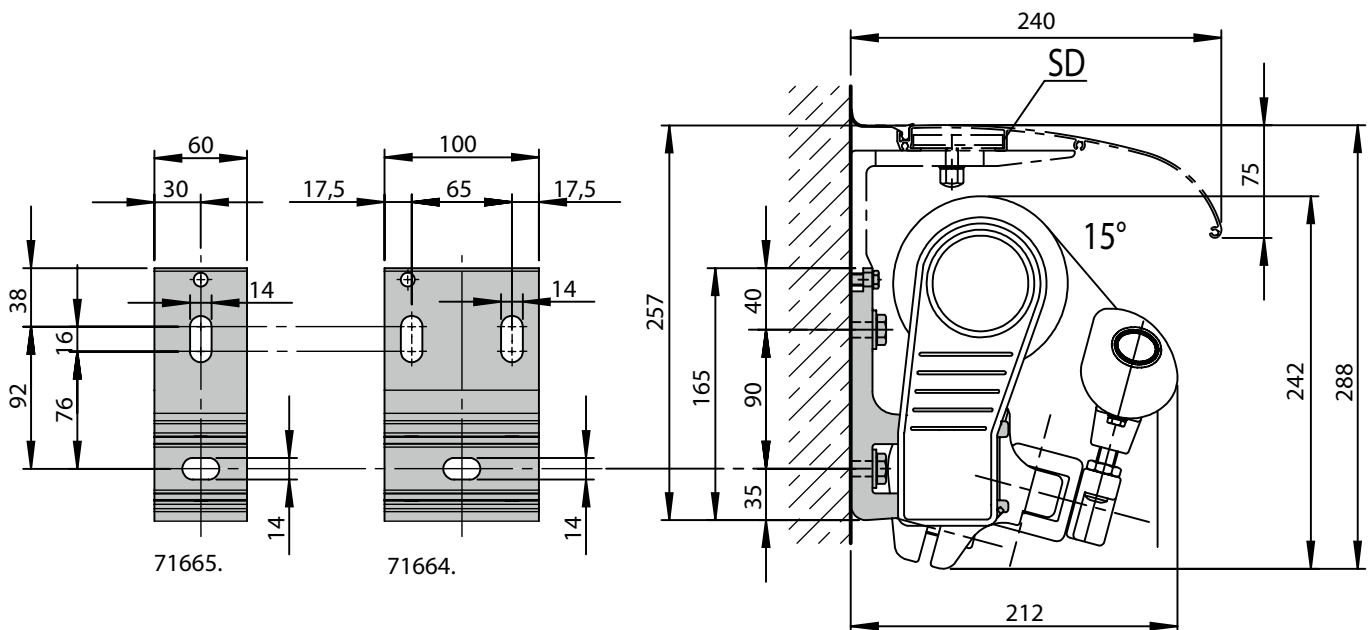
HT BHT	2 100 mm	2 100 mm 2 60 mm	3 100 mm 2 60 mm
BM	6	10	13

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**.

If the awning is fixed with 2 brackets per folding arm, the pull-out force can be halved.

Place the brackets immediately to the left and right of the arm bearer.

- M = awning width
- H = projection
- FB = pull-out force per fixing point
- HT | BHT = bracket quantity | width
- BM = no. of fixing points
- SD = coverboard
- 71665. = face fixture bracket assembly 60 mm
- 71664. = face fixture bracket assembly 100 mm



dimensions in mm

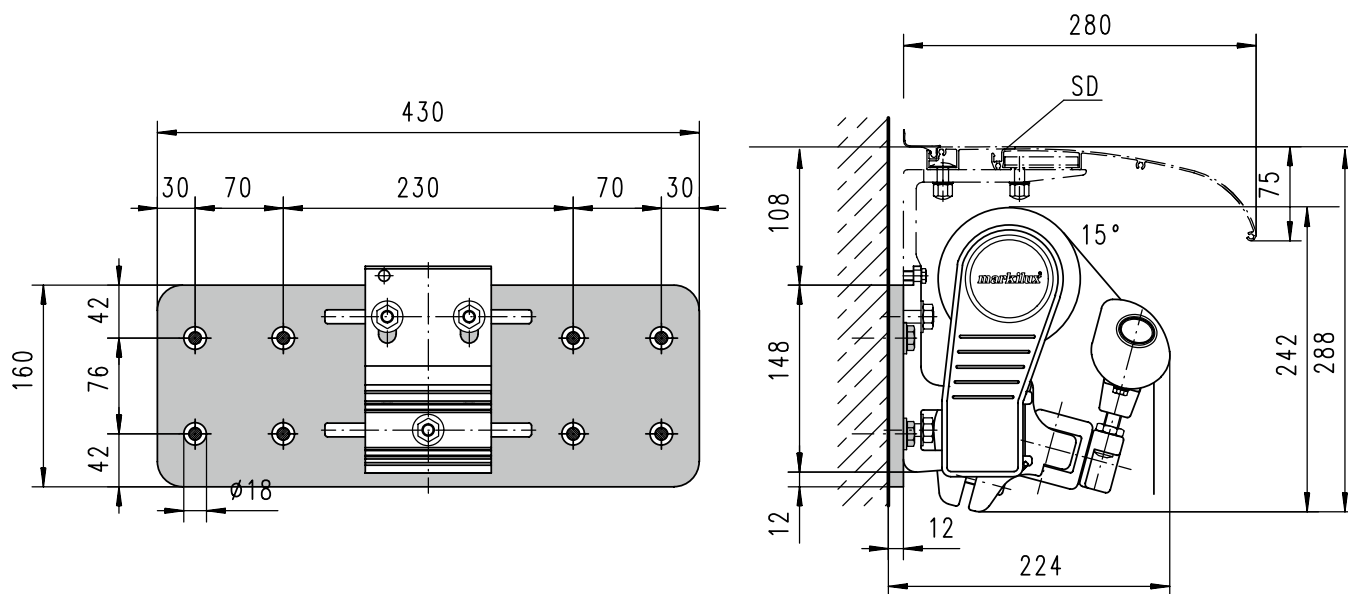
Face fixture with spreader plate A

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]											
250	300	350	400	450	500	550	600	650	700		250	300	350	400	450	500	550	600	650	700		
150	214	247	279	312	344	376	409	441	474	390	305	351	397	443	489	535	581	627	673	554		
200	341	393	445	497	549	602	654	706	758	643	484	559	633	707	781	855	929	1003	1077	914		
250	—	583	660	736	813	889	965	1042	1280	1117	—	829	938	1046	1155	1263	1372	1480	1819	1588		
300	—	—	902	1007	1112	1217	1519	1642	1765	1564	—	—	1282	1431	1580	1729	2158	2333	2509	2223		
350	—	—	—	1331	1469	1850	2013	2176	1956	2107	—	—	—	1892	2088	2629	2861	3093	2779	2995		
400	—	—	—	—	2145	2354	2562	2771	2485	2659	—	—	—	—	3049	3345	3641	3938	3531	3778		
HT BHT	2 100 mm				2 100 mm 2 60 mm			3 100 mm 2 60 mm				2 100 mm				2 100 mm 2 60 mm			3 100 mm 2 60 mm			
BP	2				2			3				2				2			3			
DP	—				2			2				—				2			2			
BM	16				20			28				16				20			28			

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 spacer plates
- BM = no. of fixing points
- SD = coverboard



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]

H [cm]	FB [N]									
150	127	146	165	184	204	223	242	261	280	231
200	202	233	263	294	325	356	387	418	449	381
250	—	345	390	436	481	526	571	617	758	661
300	—	—	534	596	658	720	899	972	1045	926
350	—	—	—	788	870	1095	1191	1288	1157	1247
400	—	—	—	—	1270	1393	1516	1640	1470	1573

Non compression-proof substrate
M [cm]

H [cm]	FB [N]									
150	132	152	172	192	212	232	252	272	292	240
200	210	243	275	307	339	371	403	436	468	397
250	—	360	407	454	502	549	596	643	790	690
300	—	—	557	621	686	751	937	1013	1090	965
350	—	—	—	821	907	1142	1242	1343	1207	1300
400	—	—	—	—	1324	1453	1581	1710	1533	1641

HT BHT	2 100 mm	2 100 mm 2 60 mm	3 100 mm 2 60 mm
BP	2	2	3
DP	—	2	2
BM	8	12	16

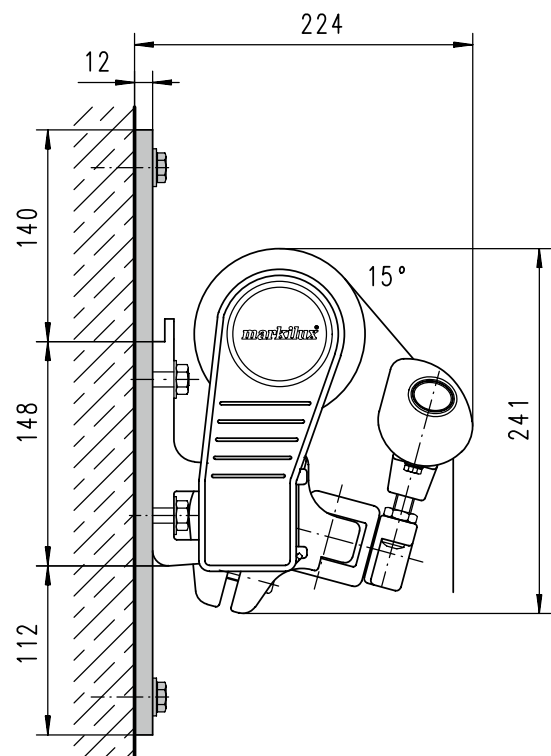
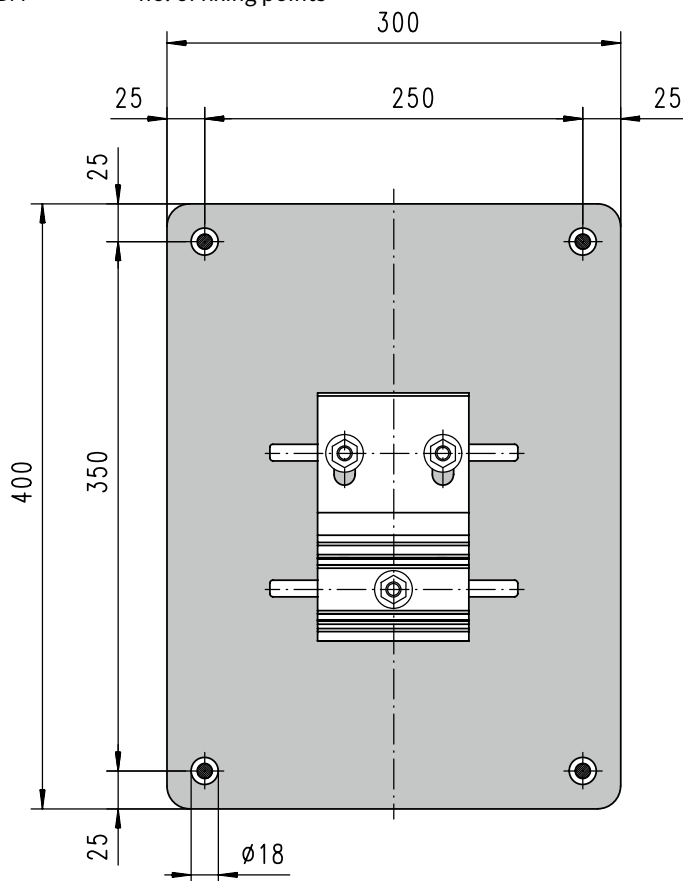
HT BHT	2 100 mm	2 100 mm 2 60 mm	3 100 mm 2 60 mm
BP	2	2	3
DP	—	2	2
BM	8	12	16

BP	2	2	3
DP	—	2	2
BM	8	12	16

BP	2	2	3
DP	—	2	2
BM	8	12	16

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
- DP = no. of spacer plates
- BM = no. of fixing points



dimensions in mm

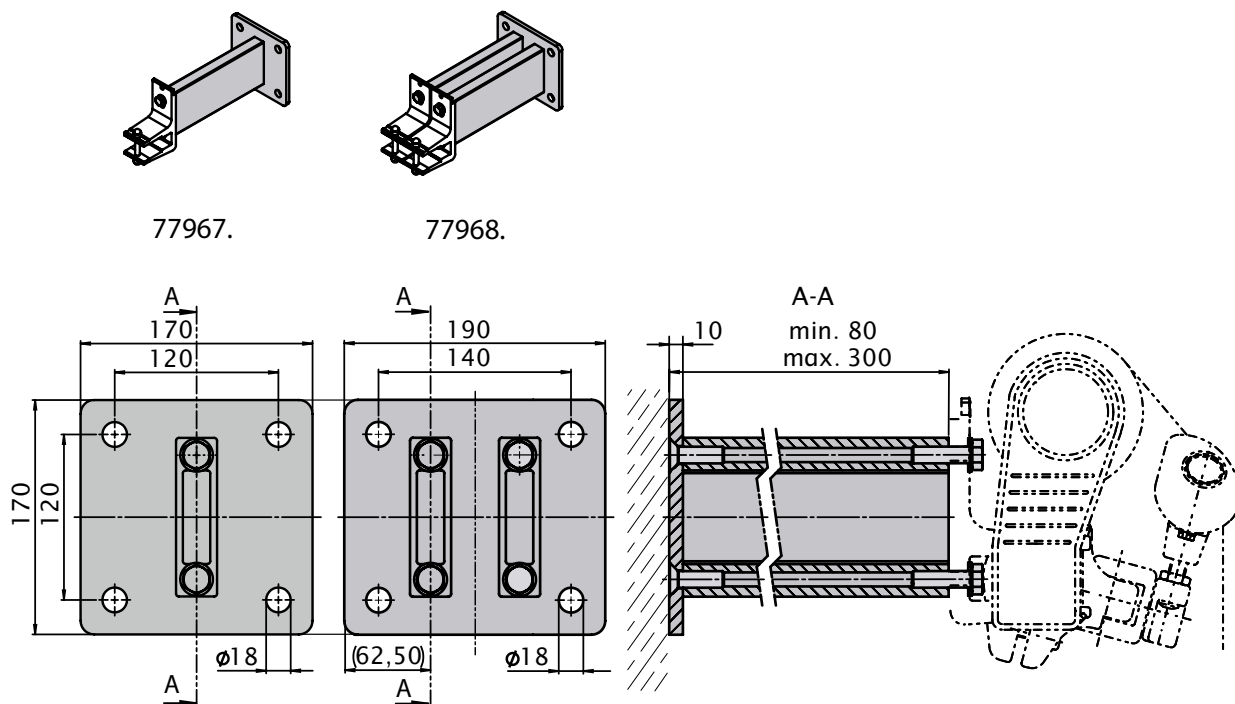
Face fixture with stand-off brackets

Pull-out force [N=Newton] per upper 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]											
250	300	350	400	450	500	550	600	650	700		250	300	350	400	450	500	550	600	650	700		
150	398	461	524	586	649	712	775	838	901	742	448	518	589	660	730	801	872	942	1013	835		
200	618	717	815	913	1011	1109	1207	1305	1403	1192	696	806	916	1027	1137	1247	1358	1468	1578	1341		
250	—	1043	1184	1324	1464	1605	1745	1886	2286	1996	—	1173	1332	1490	1648	1806	1964	2122	2571	2246		
300	—	—	1596	1786	1976	2166	2670	2890	3109	2756	—	—	1796	2009	2223	2437	3004	3251	3498	3101		
350	—	—	—	2334	2581	3215	3502	3788	3407	3672	—	—	—	2626	2903	3617	3939	4262	3832	4131		
HT BHT	2 100 mm				2 100 mm 2 60 mm			3 100 mm 2 60 mm				2 100 mm				2 100 mm 2 60 mm			3 100 mm 2 60 mm			
DH 77968.	2				2			3				2				2			3			
DH 77967.	—				2			2				—				2			2			
BM	8				16			20				8				16			20			

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
- 77967. = stand-off bracket for face fixture bracket 71665.
- 77968. = stand-off bracket for 2 pcs. face fixture bracket 71665.



dimensions in mm

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]

Non compression-proof substrate
M [cm]

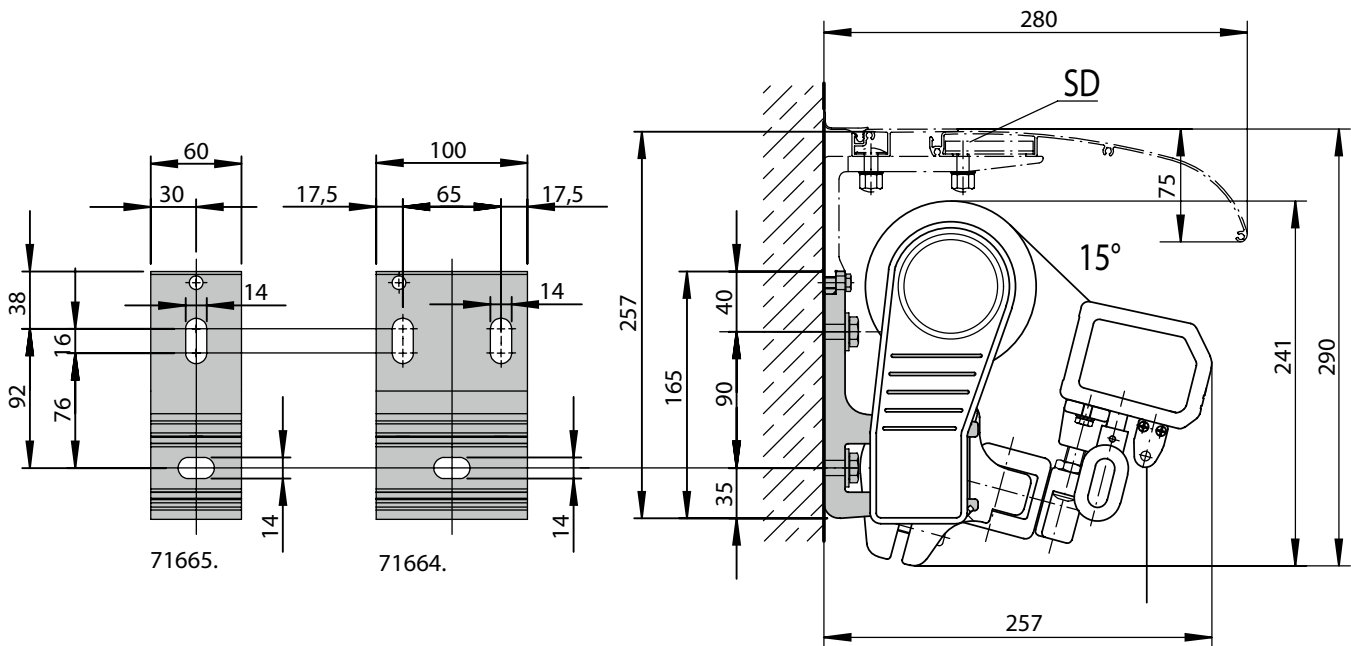
H [cm]	FB [N]										FB [N]									
	250	300	350	400	450	500	550	600	650	700	250	300	350	400	450	500	550	600	650	700
150	510	591	671	752	833	913	994	1074	1155	997	589	683	776	869	962	1055	1148	1242	1335	1153
200	795	921	1047	1174	1300	1426	1552	1678	1804	1607	919	1065	1210	1356	1502	1648	1793	1939	2085	1857
250	—	1343	1524	1705	1886	2067	2248	2429	2943	2690	—	1552	1761	1970	2180	2389	2598	2807	3401	3109
300	—	—	2058	2303	2548	2793	3443	3726	4009	3716	—	—	2378	2661	2944	3228	3978	4305	4632	4294
350	—	—	—	3012	3330	4148	4518	4888	4618	4963	—	—	—	3480	3848	4794	5221	5649	5337	5735

HT BHT	Compression-proof substrate			Non compression-proof substrate		
	2 100 mm	2 100 mm 2 60 mm	3 100 mm 2 60 mm	2 100 mm	2 100 mm 2 60 mm	3 100 mm 2 60 mm

BM	Compression-proof substrate			Non compression-proof substrate		
	6	10	13	6	10	13

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**. If the awning is fixed with 2 brackets per folding arm, the pull-out force can be halved. Place the brackets immediately to the left and right of the arm bearer.

- M = awning width
- H = projection
- FB = pull-out force per fixing point
- HT | BHT = bracket quantity | width
- BM = no. of fixing points
- SD = coverboard
- 71665. = face fixture bracket assembly 60 mm
- 71664. = wall bracket 100 mm



dimensions in mm

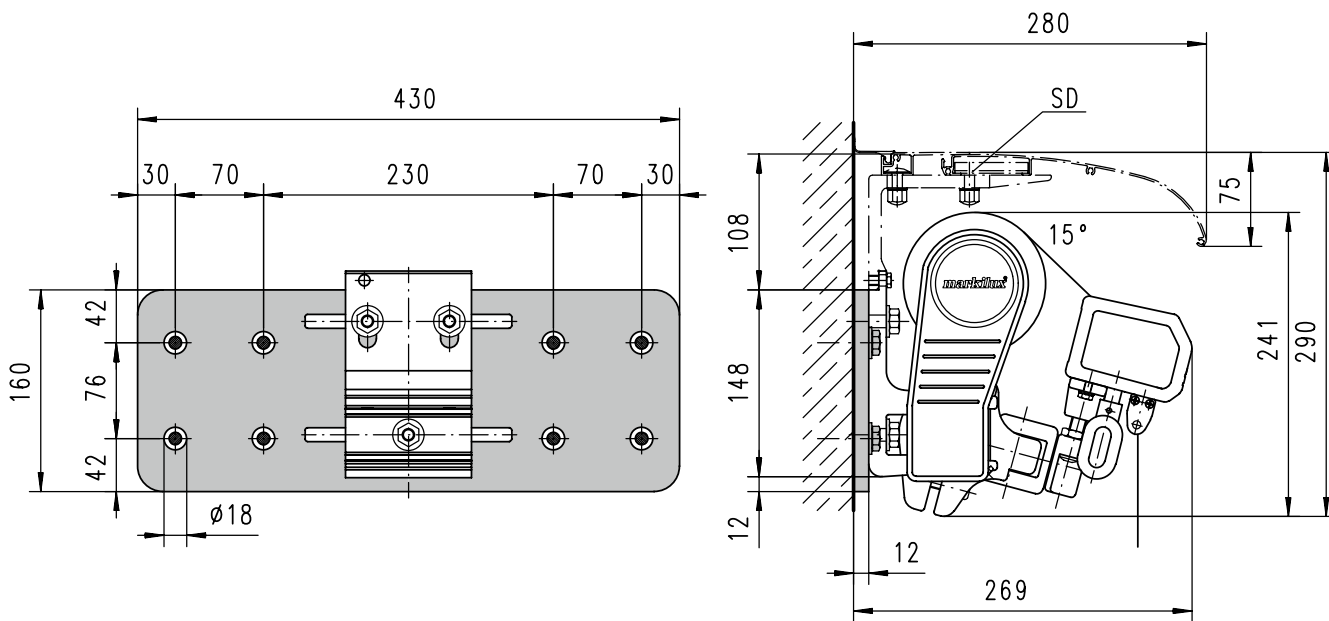
Face fixture with shadeplus and spreader plate A

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]										
250	300	350	400	450	500	550	600	650	700	250	300	350	400	450	500	550	600	650	700	
150	249	288	327	366	406	445	484	524	563	464	353	409	465	521	577	632	688	744	800	659
200	387	448	509	570	632	693	754	816	877	745	549	636	724	811	898	985	1072	1159	1246	1059
250	—	652	740	828	915	1003	1091	1179	1249	1248	—	926	1051	1176	1301	1425	1550	1675	2030	1773
300	—	—	998	1116	1235	1354	1669	1806	1943	1723	—	—	1418	1586	1755	1924	2372	2567	2761	2448
350	—	—	—	1459	1613	2009	2188	2368	2129	2295	—	—	—	2073	2292	2855	3110	3365	3026	3262
HT BHT	2 100 mm			2 100 mm			3 100 mm			2 100 mm			2 100 mm			3 100 mm				
				2 60 mm			2 60 mm						2 60 mm			2 60 mm				
BP	2			2			3			2			2			3				
DP	—			2			2			—			2			2				
BM	16			20			28			16			20			28				

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
- DP = no. of spacer plates
- BM = no. of fixing points
- SD = coverboard



dimensions in mm

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]

H [cm]	FB [N]									
150	147	170	194	217	240	263	287	310	333	274
200	229	265	301	338	374	410	446	483	519	441
250	—	386	438	490	542	594	646	698	845	738
300	—	—	590	661	731	801	988	1069	1150	1019
350	—	—	—	863	954	1189	1295	1401	1260	1358

Non compression-proof substrate
M [cm]

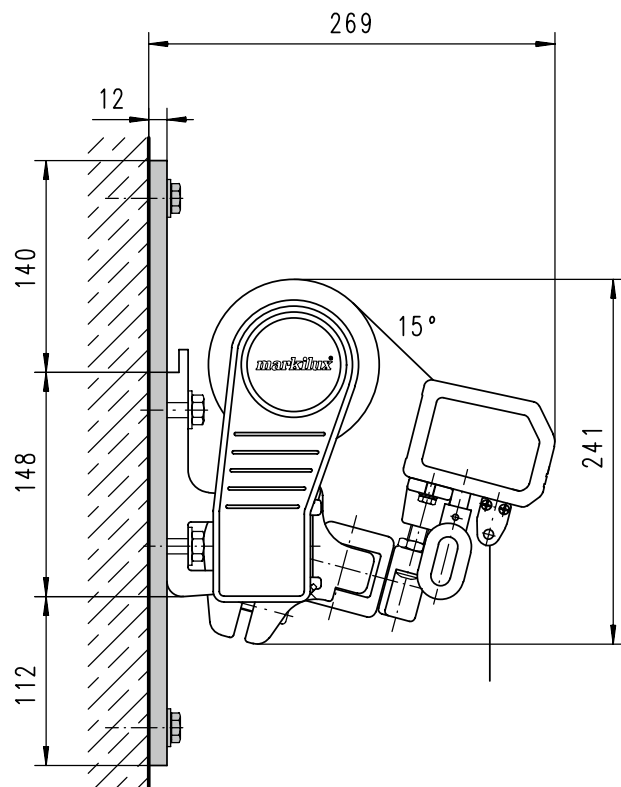
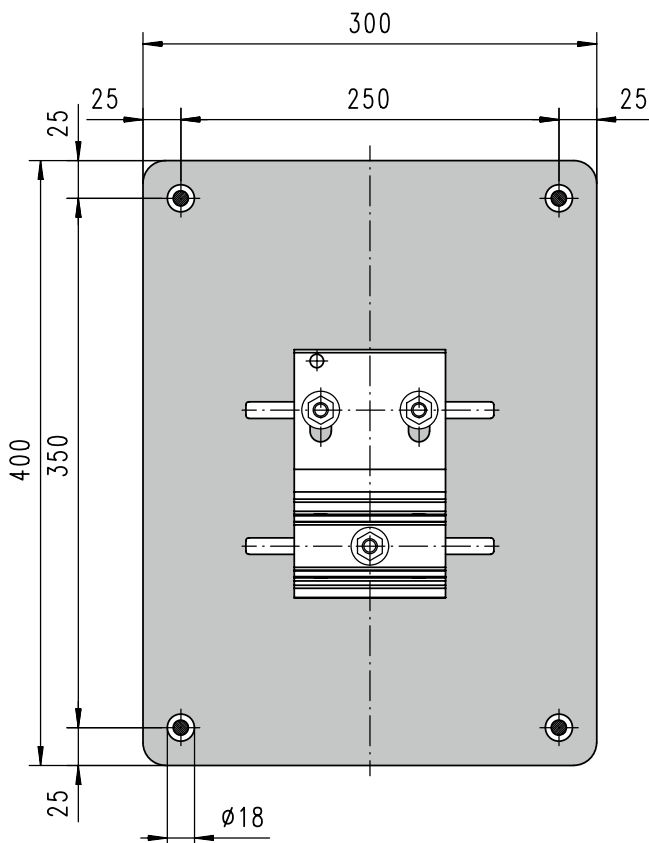
H [cm]	FB [N]									
150	153	178	202	226	250	275	299	323	347	286
200	239	276	314	352	390	428	466	503	541	460
250	—	402	457	511	565	619	673	727	882	770
300	—	—	616	689	762	836	1030	1115	1199	1063
350	—	—	—	990	995	1240	1351	1461	1314	1417

HT BHT	2 100 mm		2 100 mm 2 60 mm		3 100 mm 2 60 mm	
BP	2		2		3	
DP	—		2		2	
BM	16		20		28	

HT BHT	2 100 mm		2 100 mm 2 60 mm		3 100 mm 2 60 mm	
BP	2		2		3	
DP	—		2		2	
BM	16		20		28	

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
- DP = no. of spacer 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

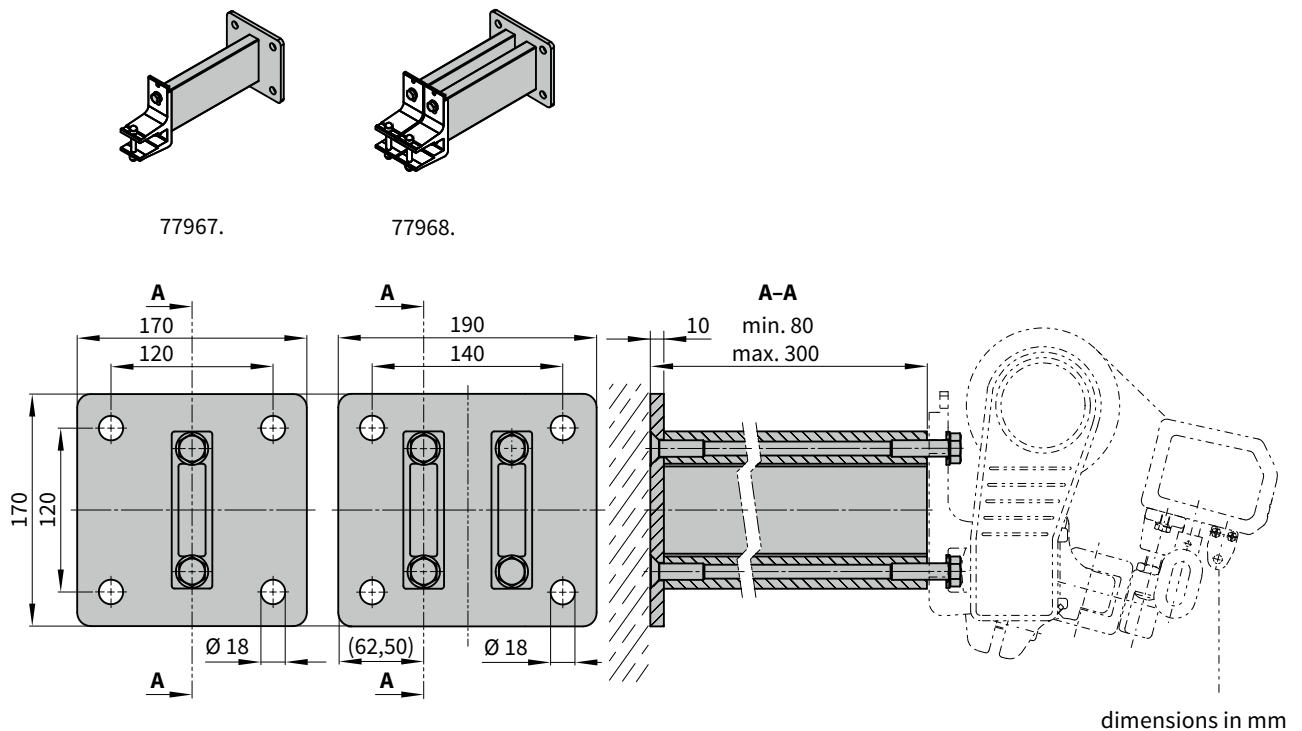
Compression-proof substrate										Non compression-proof substrate										
M [cm]										M [cm]										
H [cm]										H [cm]										
FB [N]										FB [N]										
250	300	350	400	450	500	550	600	650	700	250	300	350	400	450	500	550	600	650	700	
150	450	517	584	651	718	786	853	920	987	812	506	581	657	733	808	884	959	1035	1111	913
200	678	781	884	987	1089	1192	1295	1398	1501	1274	762	878	994	1110	1226	1341	1457	1573	1689	1433
250	—	1119	1265	1411	1557	1703	1848	1994	2457	2144	—	1259	1423	1587	1751	1915	2080	2244	2764	2412
300	—	—	1686	1882	2078	2274	2842	3073	3304	2926	—	—	1897	2117	2338	2558	3197	3457	3716	3292
350	—	—	—	2442	2695	3397	3697	3996	3591	3869	—	—	—	2747	3032	3822	4159	4496	4040	4353
400	—	—	—	—	3882	4259	4636	5013	4495	4810	—	—	—	—	4368	4792	5216	5640	5057	5411

HT BHT	2 100 mm	2 100 mm 2 60 mm	3 100 mm 2 60 mm
DH 77968.	2	2	3
DH 77967.	—	2	2
BM	8	16	20

HT BHT	2 100 mm	2 100 mm 2 60 mm	3 100 mm 2 60 mm
DH 77968.	2	2	3
DH 77967.	—	2	2
BM	8	16	20

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
- DP = no. of stand-off brackets
- 77967. = stand-off bracket for face fixture bracket 71665.
- 77968. = stand-off bracket for 2 pcs. face fixture bracket 71665.



Top fixture

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

Compression-proof substrate
M [cm]

	250	300	350	400	450	500	550	600	650	700
H [cm]	FB [N]									
150	467	541	614	688	762	835	909	983	1056	953
200	707	819	930	1041	1152	1264	1375	1486	1597	1461
250	—	1181	1338	1496	1653	1810	1968	2125	2589	2403
300	—	—	1799	2011	2223	2435	3020	3266	3513	3293
350	—	—	—	2629	2904	3639	3962	4284	4083	4385
400	—	—	—	—	4191	4600	5009	5418	5141	5485

Non compression-proof substrate
M [cm]

	250	300	350	400	450	500	550	600	650	700
H [cm]	FB [N]									
150	634	733	831	930	1029	1128	1227	1326	1425	1273
200	974	1125	1277	1429	1581	1733	1885	2037	2189	1991
250	—	1637	1854	2071	2289	2506	2723	2940	3590	3322
300	—	—	2505	2800	3094	3388	4209	4552	4895	4579
350	—	—	—	3672	4056	5089	5539	5990	5700	6121
400	—	—	—	—	5873	6446	7018	7591	7195	7675

HT BHT	2 90 mm	2 90 mm 2 60 mm	3 90 mm 2 60 mm
BM	8	12	16

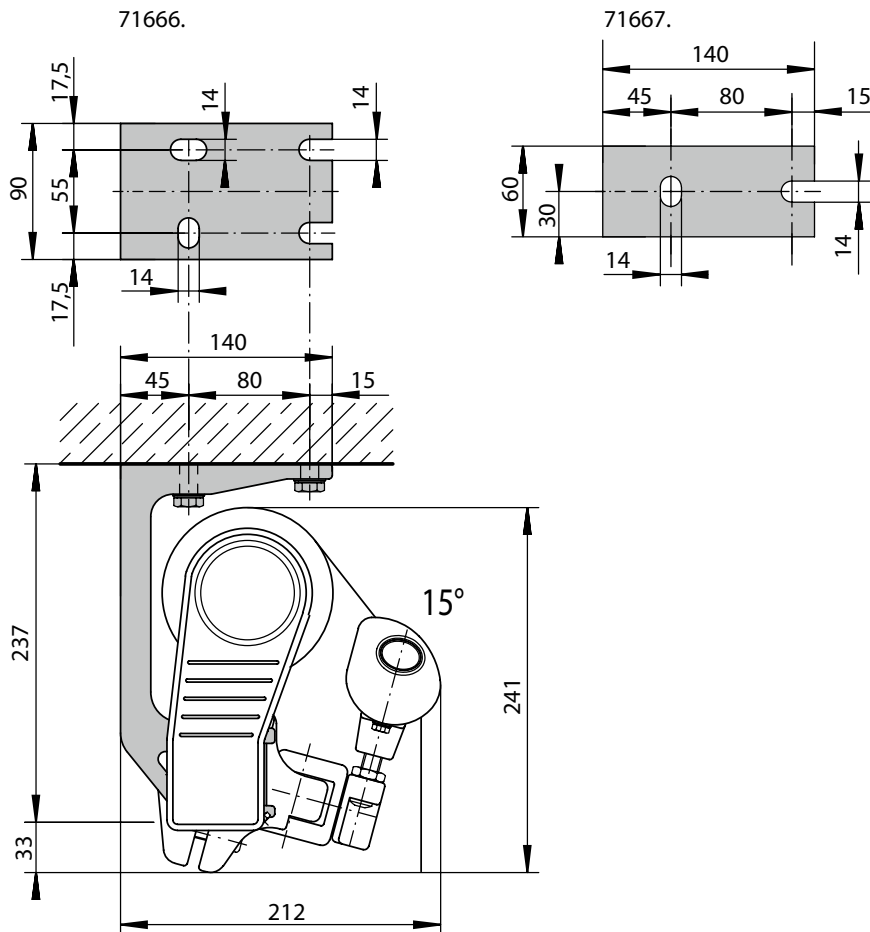
HT BHT	2 90 mm	2 90 mm 2 60 mm	3 90 mm 2 60 mm
BM	8	12	16

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

If the awning is fixed with 2 brackets FB per folding arm, the pull-out force can be halved.

Place the brackets immediately to the left and right of the arm bearer.

- M = awning width
- H = projection
- FB = pull-out force per fixing point
- HT | BHT = bracket quantity | width
- BM = no. of fixing points
- 71666 = top fixture bracket assembly 90 mm
- 71667 = top fixture bracket assembly 60 mm



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]									
H [cm]											FB [N]									
150	532	619	705	792	879	965	1052	1139	1226	1093	726	843	960	1078	1195	1312	1429	1547	1664	1472
200	794	923	1051	1180	1309	1437	1566	1694	1823	1654	196	1273	1449	1626	1802	1979	2155	2331	2508	2264
250	—	1311	1490	1669	1848	2027	2206	2385	2871	2651	—	1821	2069	2317	2564	2812	3060	3308	3989	3672
300	—	—	1981	2220	2458	2696	3306	3579	3852	3595	—	—	2763	3094	3425	3756	4613	4993	5374	5006
350	—	—	—	2872	3178	3943	4296	4649	4413	4743	—	—	—	4015	4442	5518	6011	6505	6166	6627

HT BHT	2 90 mm			2 90 mm 2 60 mm		3 90 mm 2 60 mm	
BM	8			12		16	

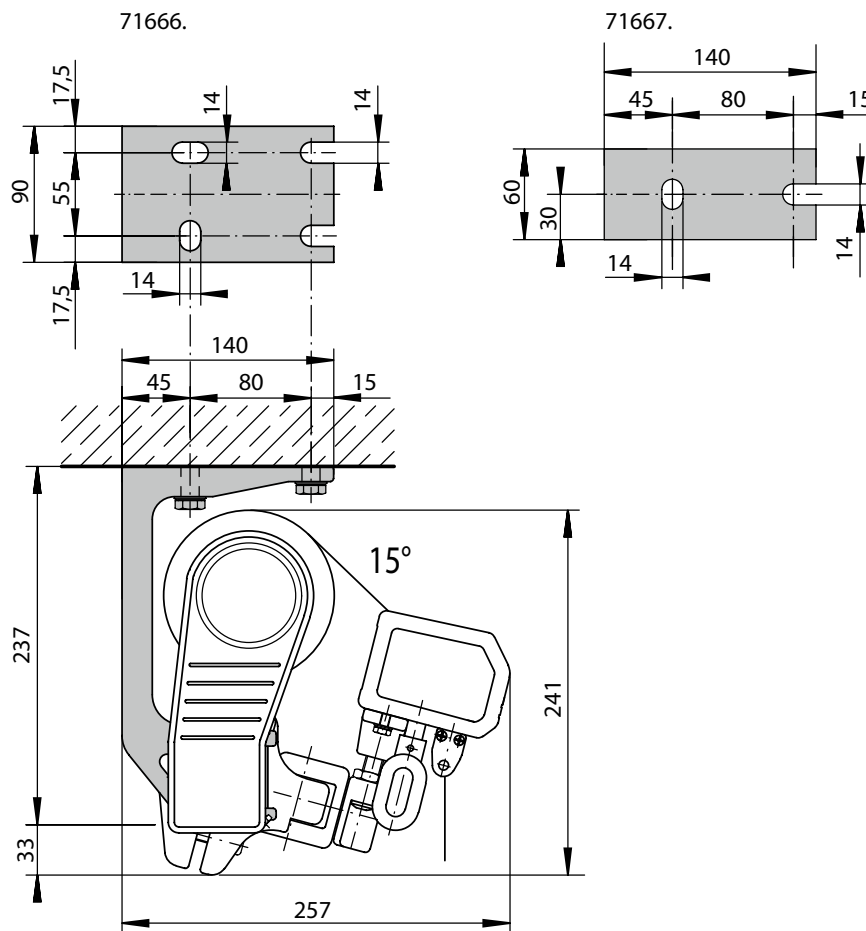
Non compression-proof substrate			
M [cm]			
FB [N]			
2 90 mm	2 90 mm 2 60 mm	3 90 mm 2 60 mm	8 12 16

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

If the awning is fixed with 2 brackets per folding arm, the pull-out force can be halved.

Place the brackets immediately to the left and right of the arm bearer.

- M = awning width
- H = projection
- FB = pull-out force per fixing point
- HT | BHT = bracket quantity | width
- BM = no. of fixing points
- 71666. = top fixture bracket assembly 90 mm
- 71667. = top fixture bracket assembly 60 mm



dimensions in mm

Eaves fixture

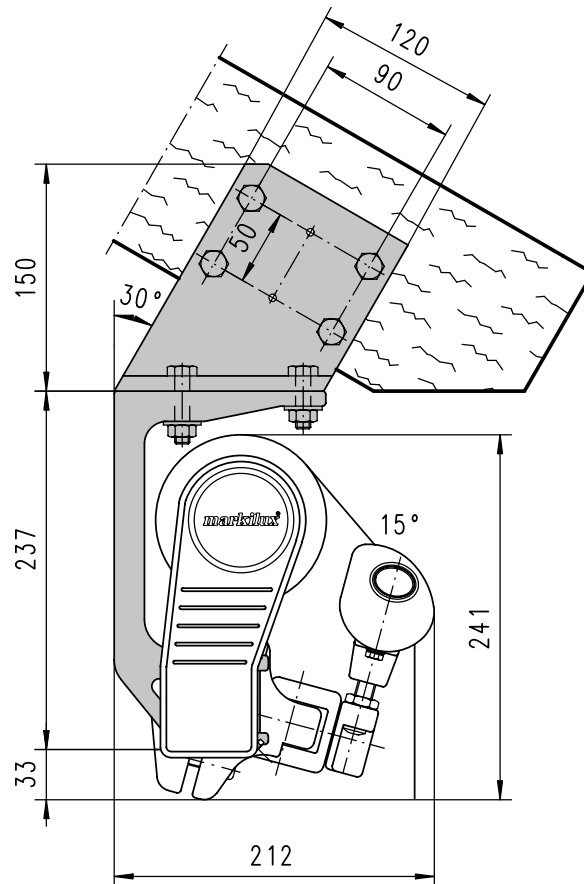
torque value for the bracket in the immediate vicinity of the arm

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

H [cm]	Torque M [cm]										Shear force M [cm]																			
	250	300	350	400	450	500	550	600	650	700	250	300	350	400	450	500	550	600	650	700										
	Md [Nm]										FS [N]																			
150	91	105	119	133	147	161	174	188	202	176	1140	1319	1498	1676	1855	2034	2212	2391	2569	2303										
200	146	168	190	213	235	257	280	302	324	291	1745	2018	2290	2563	2836	3109	3382	3655	3928	3579										
250	—	250	283	315	348	381	414	446	548	504	—	2928	3316	3705	4094	4482	4871	5260	6419	5945										
300	—	—	387	432	477	522	651	704	757	705	—	—	4473	4999	5525	6051	7512	8126	8739	8180										
350	—	—	—	572	631	794	864	934	886	951	—	—	—	6550	7235	9074	9878	10682	10169	10921										
400	—	—	—	—	922	1011	1101	1191	1125	1200	—	—	—	—	10467	11487	12507	13528	12828	13683										
HT	2					4					5					2					4					5				
BM	8				16				20		8				16				20											

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

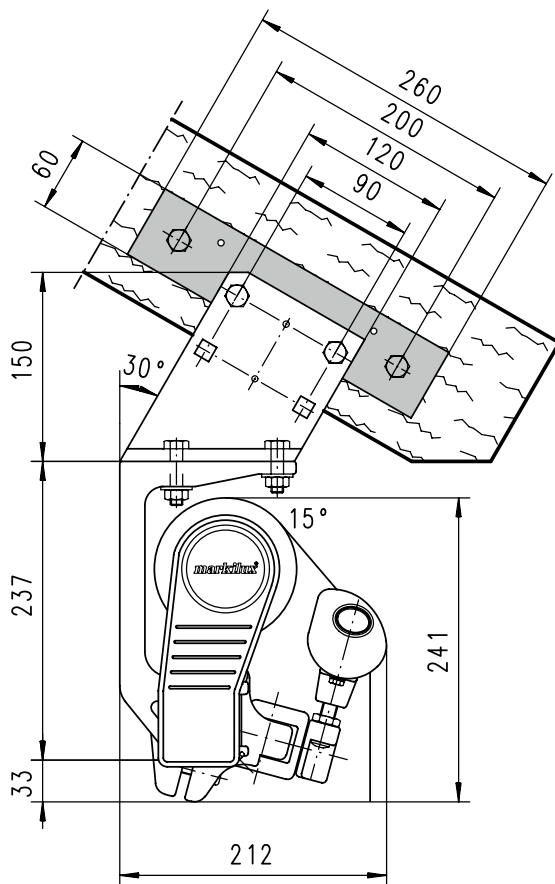
torque value for the bracket in the immediate vicinity of the arm

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

H [cm]	Torque M [cm]										Shear force M [cm]																			
	250	300	350	400	450	500	550	600	650	700	250	300	350	400	450	500	550	600	650	700										
	Md [Nm]										FS [N]																			
150	91	105	119	133	147	161	174	188	202	176	582	676	770	864	958	1053	1147	1241	1335	1229										
200	146	168	190	213	235	257	280	302	324	291	854	990	1127	1264	1400	1537	1673	1810	1946	1803										
250	—	250	283	315	348	381	414	446	548	504	—	1400	1589	1777	1966	2155	2343	2532	3067	2868										
300	—	—	387	432	477	522	651	704	757	705	—	—	2109	2360	2610	2860	3532	3822	4111	3873										
350	—	—	—	572	631	794	864	934	886	951	—	—	—	3058	3379	4221	4596	4972	4755	5107										
400	—	—	—	—	922	1011	1101	1191	1125	1200	—	—	—	—	4834	5307	5780	6253	5951	6350										
HT	2					4					5					2					4					5				
BM	4				8				10		4				8				10											

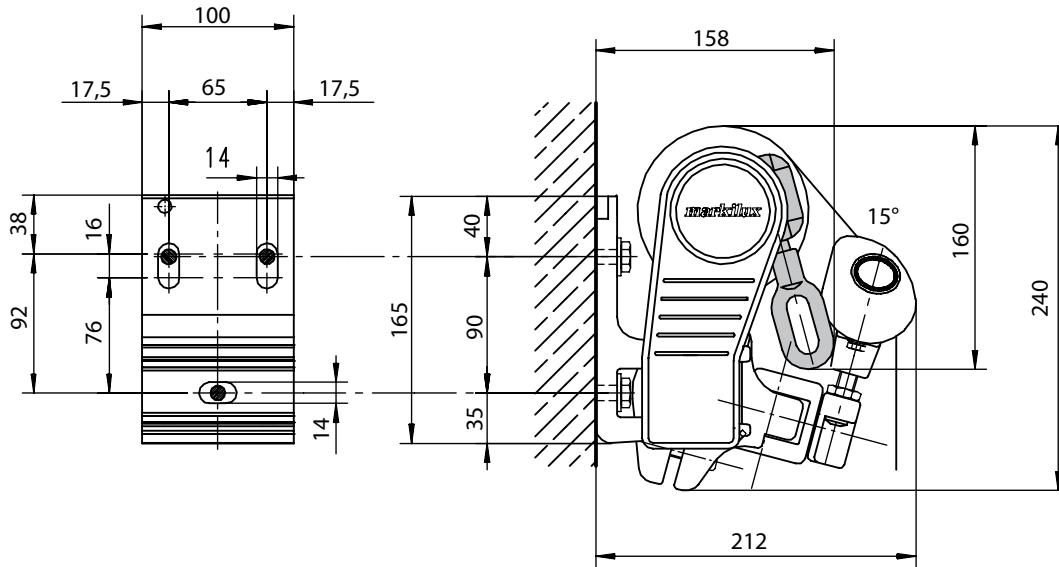
By using the additional flat fixture plate, the shear force is reduced in comparison with conventional eaves fixture.

- 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

Face fixture with manual operation



dimensions in mm

Pitch adjustment gear

Ideal for additional solar protection on the balcony

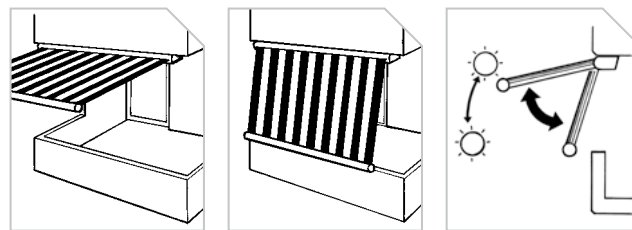
Up to a projection of 300 cm and with the awning extended, 2 folding arms can be raised or lowered easily and noiselessly between the angles of 4° and 54° or 35° and 85° by means of a winding handle (only gearbox operated).

The eye used to alter the pitch of the awning is attached directly to the gearbox, which can be positioned optionally on the left or the right. All the components needed to adjust the pitch of the awning are hidden away inside the torque bar and so protected from the elements.

A fine tuning mechanism enables the arms to be levelled with ease.

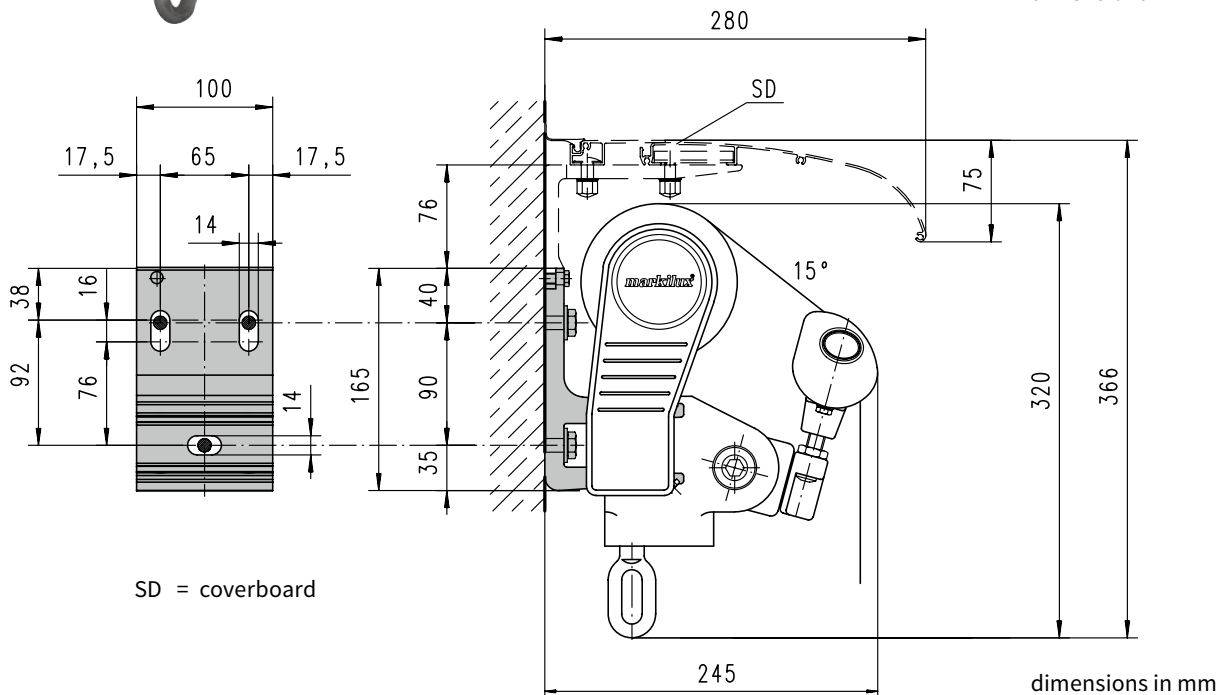
The pitch adjustment gear is supplied in white with white awnings and in black with any other colour.

Attention! The pitch adjustment gear may only be operated when the awning is extended. Attempting to adjust the pitch with the awning closed, may cause the system to malfunction!



		M min.	
		⊖	+
H	150	200	200
	200	250	238
	250	300	288
	300	350	338

dimensions in mm



SD = coverboard

dimensions in mm

= standard folding arms

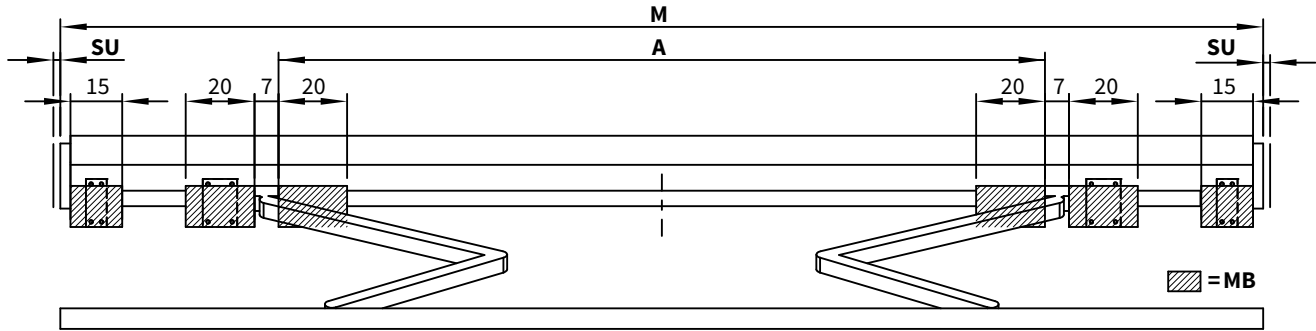
= standard

M min. = minimum widths

H = projection

01
02
03
04
05
06
07
08
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11
12
13
14
15
16
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18
19
20
21
22
23

Bracket fixture range for awnings with 2 folding arms



dimensions in cm

M [cm]	SB →	250	300	350	400	450	500	550	600	650
	ZB →	167–250	251–300	301–350	351–400	401–450	451–500	501–550	551–600	601–650

H [cm] ↓	A [cm]								
150	156	206	240	275	310	345	375	415	450
200	206*	206	240	275	310	345	375	415	450
250	—	256*	256	275	310	345	375	415	450
300	—	—	306*	306	310	345	375	415	450
350	—	—	—	356*	356	375	375	415	—
400	—	—	—	—	406*	406	406	415	—

dimensions in cm

W	BHT ↓	HT ↓	
	60 mm	—	2
100 mm	—	2	

DE	60 mm	2	
	90 mm	2	2

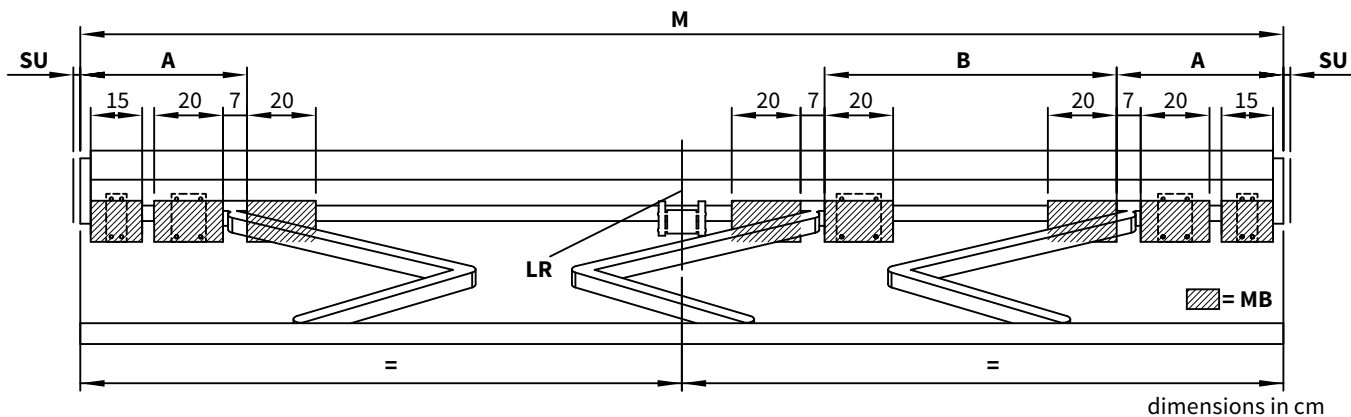
DA	90 mm	4	
----	-------	---	--

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

* = Please note the minimum widths! Dimension **A** is only valid for standard arms! Dimension **A** is 13 cm less 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 = awning width
- H = projection
- A = arm position
- HT = no. of brackets
- BHT = bracket width
- MB = bracket fixture range
- W = face fixture
- DE = top fixture
- DA = eaves fixture
- SB = standard width
- ZB = intermediate width
- SU = coverboard overhang 2 cm

Bracket fixture range for awnings with 3 folding arms



M [cm]	SB →	650			700	
	ZB →	601–613	614–650	640–650	651–674	675–700

H [cm] ↓	A [cm] ↓	B [cm] ↓	A [cm] ↓	B [cm] ↓	A [cm] ↓	B [cm] ↓	A [cm] ↓	B [cm] ↓	A [cm] ↓	B [cm] ↓	KM [cm]
200	—	—	—	—	—	—	55	225	55	225	341
250	—	—	—	—	—	—	55	210	55	210	416
300	—	—	—	—	—	—	55	200	55	200	491
350	29	180	30	190	—	—	50	190	55	190	566
400	—	—	—	—	12*	204*	17	204	30	204	640

dimensions in cm

W	BHT ↓	HT ↓
	60 mm	2
	100 mm	3
DE	60 mm	2
	90 mm	3
DA	90 mm	5

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

- * = The 2 × 60 mm brackets cannot be fitted in this instance and are not supplied
- M = awning width
- H = projection
- A = arm position
- B = arm position
- HT = no. of brackets
- BHT = bracket width
- MB = bracket fixture range
- W = face fixture
- DE = top fixture
- DA = eaves fixture
- SB = standard width
- ZB = intermediate width
- LR = a rolltex bearing with accompanying bracket is always placed under a central seam (depends on the awning size)
- SU = coverboard overhang 2 cm
- KM = minimum awning width

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