markilux 970

The compact cassette awning with the straight design –
with extended size matrix:
available up to 600 cm width and 350 cm projection

Now even with shadeplus

PLUS X AWARD®
2016 ausgezeichnet für:
Innovation
High Quality
Design
Bedienkomfort
Funktionalität

GERMAN DESIGN AWARD WINNER 2017

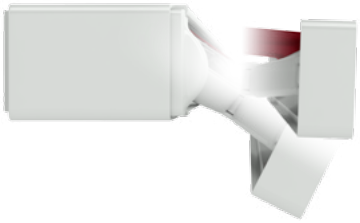
DESIGN AWARD 2017

PLUS X AWARD®
ausgezeichnet als:
BESTES PRODUKT 2017

markilux.com

markilux
safe timeless beautiful

side view
top fixture



the awning pitch
can be adjusted
from 5° to 30°

side view
eaves fixture

the wind safety
mechanism in the
tilt device ensures
safe operation

integrated shadeplus
in the front profile
(option)

LED spots underneath
the cassette (option)

Design Features

compact, rectangular cassette

modern, purist design suited to current architectural styles with straight lines and a clear concept

attractive appearance thanks to the torque bar-free construction

compact housing only 140 mm in height

the special cassette shape surrounds the roller tube even when the awning is extended so lending the awing a closed and overall harmonious appearance

the panel joints of the awning cover are ultrasonically bonded – giving an improved appearance without bothersome stitching

when retracted, the cover is protect-ed from the weather by the cassette, which encloses it completely

Technical Specification

when the awning is closed, the folding arms are protected inside the front profile

folding arms with perfected power transference by means of the innovative bionic tendon

the 85 mm roller tube ensures the highest rigidity and the best possible cover winding characteristics even at the largest widths

folding arms with drop-forged, aluminium joint components and Teflon-coated bronze bushes, which provide superior robustness and durability

the new and unique fixture technology makes installation simple and easy

simple pitch adjustment of 5° to 30° via the tilt device

Accessories

shadeplus creates additional living space on the terrace: vertical protection against the sun, wind and inquisitive glances.

hard-wired for switch operation

radio-controlled motor with radio remote control for ease of use

automatic sun and wind controls

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

the optional lighting in energy-efficient technology (LED spotlights) provides a striking atmosphere under the awning

awning available in non-standard RAL colours

various front panel colours which contrast the frame colour (without surcharge)

Frame colours / Front panel colours (upper description / lower description)

traffic white	RAL 9016	**metallic aluminium**	RAL 9006	**stone grey metallic**	5215
traffic white	RAL 9016	**stone grey metallic**	5215	**anthracite metallic**	5204

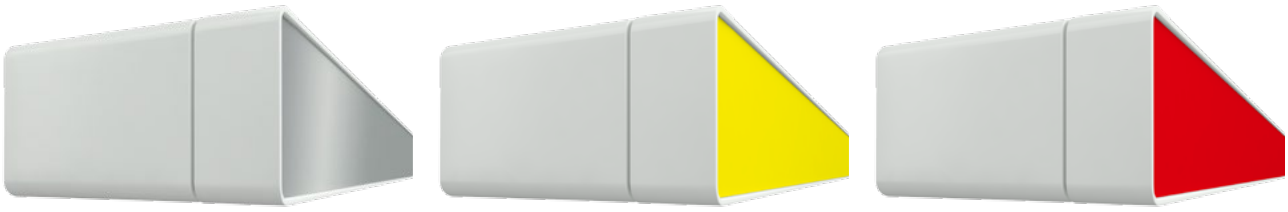
off-white textured finish	5233	**anthracite metallic**	5204	**anthracite metallic**	5204
anthracite metallic	5204	**anthracite metallic**	5204	**stone grey metallic**	5215

Examples: The colour of the front panel (lower description) can be combined to match or contrast with the awning colour (upper description).

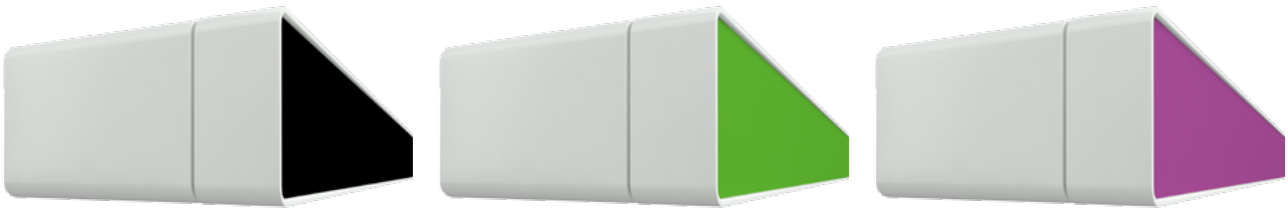
Additional front panel colours

By way of example, all possible front panel colours are shown below with the frame colour traffic white RAL 9016.
The front panel colours can be combined at will with all standard, non-standard Lounge and RAL colours.

anodised aluminium	E6 / EV1	**sulphur yellow**	RAL 1016	**traffic red**	RAL 3020



pitch black	RAL 9005	**yellow green**	RAL 6018	**traffic purple**	RAL 4006



Dimensions and configuration options

		M							M min.	
		250	300	350	400	450	500	550	600		
		195 — 250	251 — 300	301 — 350	351 — 400	401 — 450	451 — 500	501 — 550	551 — 600	M	
H	150	1)								195*	195
	200	1)								245*	245
	250	—	1)							295*	295
	300	—	—	1)				2)	2)	345*	345
	350	—	—	—	1) 2)	2)	2)	—	—	395*	395

1) please note the minimum widths! 2) shadeplus not available dimensions in cm

*The vibrabox can only be positioned **in the centre**, between the arms.
If a vibrabox is required the **minimum width increases by 15 cm**.

Operation / drive unit

	Standard	Optional
manual operation	☑	—
servo-assisted operation	—	☑
motor	—	☑
io Radio controls	—	☑
radio-controlled motor (433 MHz)	—	☑

Shadeplus

	Standard	Optional
manual operation	☑	—
motor	—	☑
io Radio controls	—	☑
radio-controlled motor (433 MHz)	—	☑

Covers

	Fabric range no.	Standard	Optional
sunsilk snc	324 .. / 328 .. / 369 ..	☑	—
sunsilk perla FR	374 ..	—	☑
sunvas snc	310 .. / 311 .. 313 .. — 315 ..	☑	—
sunvas perla	370 ..	—	☑

Miscellaneous

	Standard	Optional
shadeplus	—	☑
LED spotlights	—	☑
light and wind sensor	—	☑
vibrabox* / radio control light sensor Sunis WireFree	—	☑

= motor = manual operation

M = overall awning width
M min. = minimum width
H = extension

Lighting options

LED spotlights underneath the cassette

Radio control options LED lighting

	Radio RTS (433 MHz)	**Radio io** (868 MHz)
LED spotlights	on / off / dimmable	on / off / dimmable

Frame and front panel colours

		Standard	**Optional**
traffic white	RAL 9016	■	
metallic aluminium	RAL 9006	■	
grey brown, similar to	RAL 8019	■	
off-white textured finish*	5233	■	
stone grey metallic*	5215	■	
anthracite metallic*	5204	■	
Havana brown textured finish*	5229	■	
non-standard powder-coated finish			■

* = textured finish

Additional front panel colours

		Optional
anodised aluminium	E6 / EV1	■
sulphur yellow	RAL 1016	■
traffic red	RAL 3020	■
pitch black	RAL 9005	■
yellow green	RAL 6018	■
traffic purple	RAL 4006	■

Dimensions and tolerances

	Width	**Nominal extension**
housing tolerances	+5 / −5 mm	±40 mm
awning cover width	**M** − 320 mm	
awning cover length	**H** + 130 mm	

Additional Information

The width of the awning cover is always less than that of the awning. Pitch adjustment range: 5° to 30°.

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**.

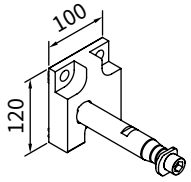
This model is only available as a **single unit.**

If two single units are fitted side by side, a minimum gap of 5 cm between the units is required.

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

Fixtures, fittings and accessories

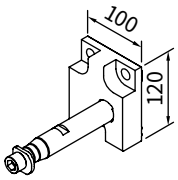
Face fixture brackets



face fixture bracket

left

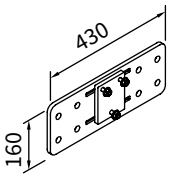
72826.



face fixture bracket

right

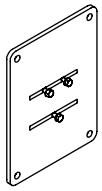
72827.



spreader plate A

430 × 160 × 12 mm

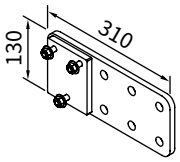
72870.



spreader plate B

300 × 400 × 12 mm

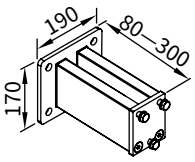
75325.



spreader plate C

310 × 130 × 12 mm

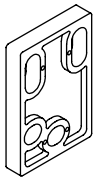
72526.



stand-off bracket
for face fixture bracket

please refer to “Face fixture with stand-off brackets”

72872.



spacer plate for
face fixture
100 mm × 150
mm × 20 mm

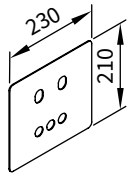
N.B! stack to a
max. height of 200 mm

718231

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

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

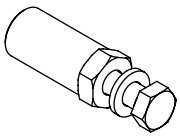
718241



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

210 mm × 230 mm × 2 mm

71843.

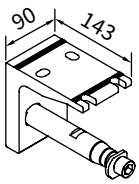


reducing bolt assembly
M 16 → M 12 / SW 27

50 mm

753891

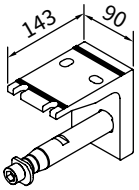
Top fixture



top fixture bracket

left

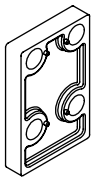
72860.



top fixture bracket

right

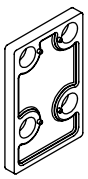
72861.



spacer plate for
top fixture
90 mm × 140
mm × 20 mm

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

716311

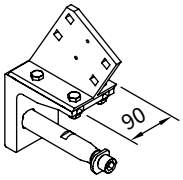


spacer plate for
top fixture
90 mm × 140
mm × 12 mm

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

716411

Eaves fixture brackets

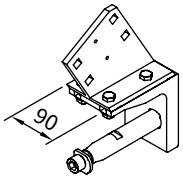


eaves fixture bracket

height of the top plate 150 mm

left

72874.

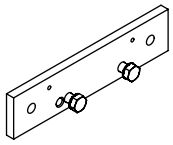


eaves fixture bracket

height of the top plate 150 mm

right

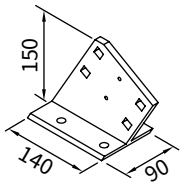
72875.



additional spreader / backing plate for eaves fixture

60 mm × 260 mm × 12 mm

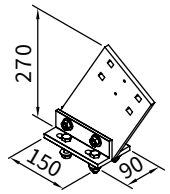
75383.



eaves fixture bracket

height of the top plate 150 mm

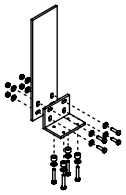
71612.



eaves fixture bracket

height of the top plate 270 mm

71659.

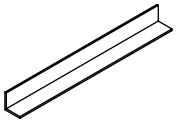


flat plate and angled bracket for eaves fixture

machine finish

490 mm

716620

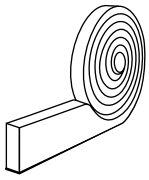


angled aluminium profile 100 mm × 100 mm × 10 mm

available by the metre not pre-drilled

79380.

Accessories



compression tape, to eliminate gaps, in rolls of 8 m, gap size from 3 mm to 7 mm, resistance to water ingression ≥ 600 Pa, anthracite

795721

. = 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

H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	691	805	919	1033	1148	1262	1376	1490
200	1084	1256	1429	1601	1774	1947	2119	2292
250	–	1745	1986	2227	2469	2710	2951	3193
300	–	–	2632	2952	3272	3592	4343	4704
350	–	–	–	3863	4272	5211	–	–
HT | BHT	2 | 100 mm							
BM	6							

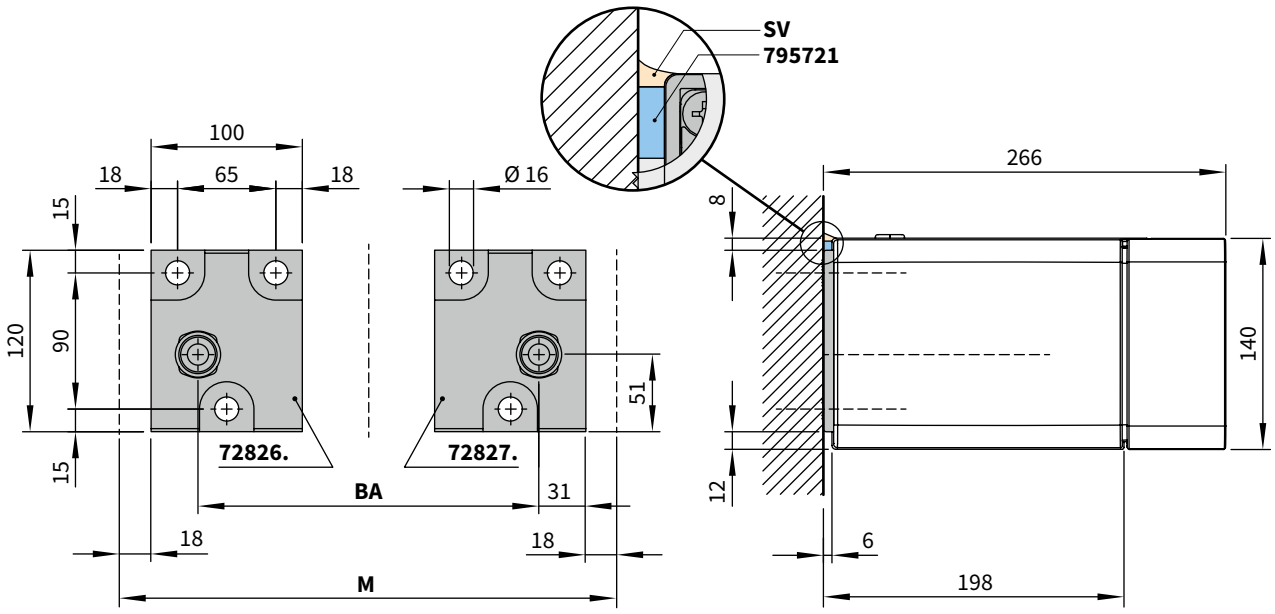
non compression-proof substrate

H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	729	850	970	1091	1211	1332	1452	1573
200	1144	1326	1508	1690	1873	2055	2237	2419
250	–	1842	2097	2351	2606	2861	3115	3370
300	–	–	2778	3116	3454	3792	4584	4966
350	–	–	–	4077	4509	5500	–	–
HT | BHT	2 | 100 mm							
BM	6							

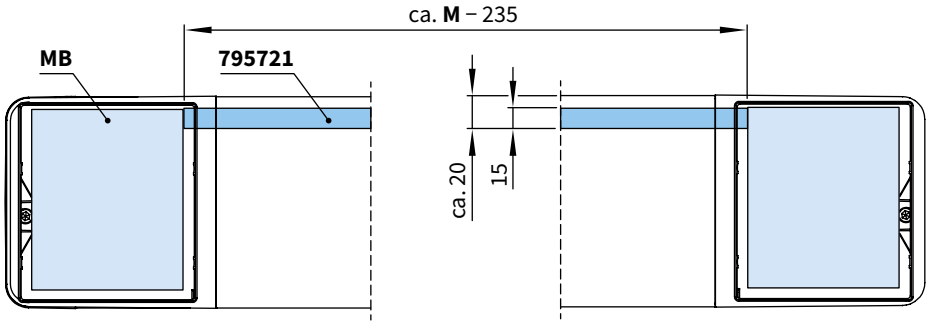
The pull-out forces shown apply when the vertical centre to centre measurement between the fixture points is **90 mm**.
If this measurement is reduced to the minimum, the pull-out force increases by up to **3 %** in the case of **compression-proof** substrates and by up to **7 %** in the case of **non-compression-proof** substrates.

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

72826. = face fixture bracket, left
72827. = face fixture bracket, right
795721 = compression tape
BA = width between fixture points
MB = bracket fixture range
SV = silicon seal



Face fixture and the use of compression tape



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

H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	311	362	414	465	516	567	619	670
200	485	563	640	717	794	871	949	1026
250	–	779	887	994	1102	1210	1317	1425
300	–	–	1172	1315	1457	1600	1935	2096
350	–	–	–	1718	1900	2318	–	–
HT | BHT	2 | 100 mm							
BP	2							
BM	16							

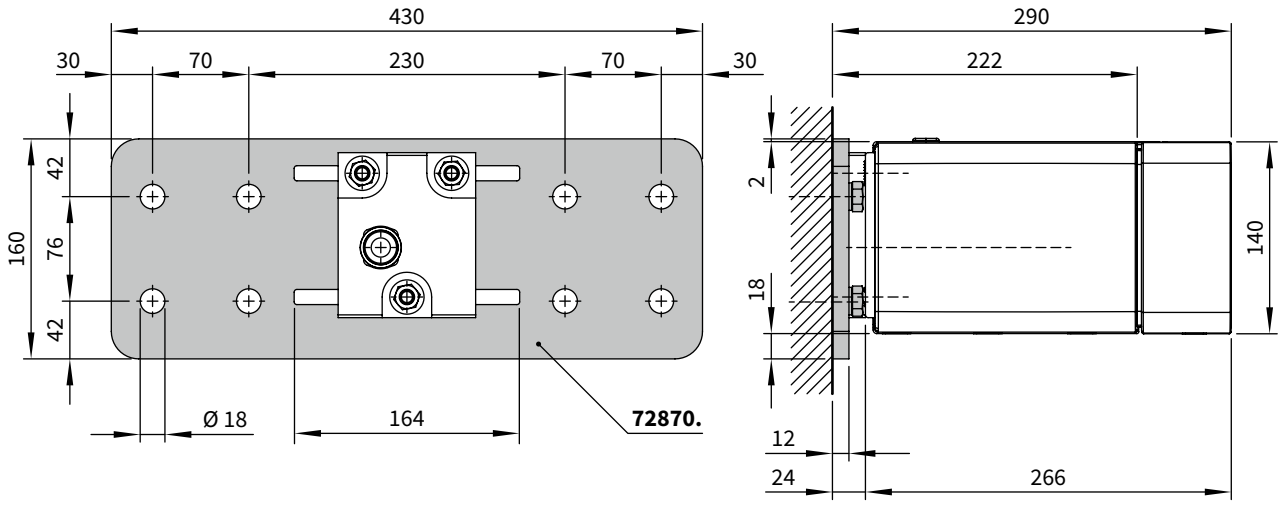
non compression-proof substrate

H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	442	515	588	661	733	806	879	952
200	690	799	909	1019	1129	1238	1348	1458
250	–	1107	1260	1413	1566	1719	1872	2025
300	–	–	1666	1869	2071	2274	2749	2978
350	–	–	–	2441	2700	3294	–	–
HT | BHT	2 | 100 mm							
BP	2							
BM	16							

The pull-out forces shown apply when the vertical centre to centre measurement between the fixture points is **76 mm**.
In the case of spreader plates a washer conforming to DIN 9021 must be used.

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

72870. = spreader plate **A**



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

H [cm]	M [cm] 250	300	350	400	450	500	550	600
	FB [N]							
150	182	212	242	272	302	332	362	392
200	285	330	375	421	466	511	557	602
250	–	458	521	584	647	711	774	837
300	–	–	689	773	857	941	1138	1232
350	–	–	–	1011	1118	1364		

HT | BHT	2 | 100 mm
BP	2
BM	8

non compression-proof substrate

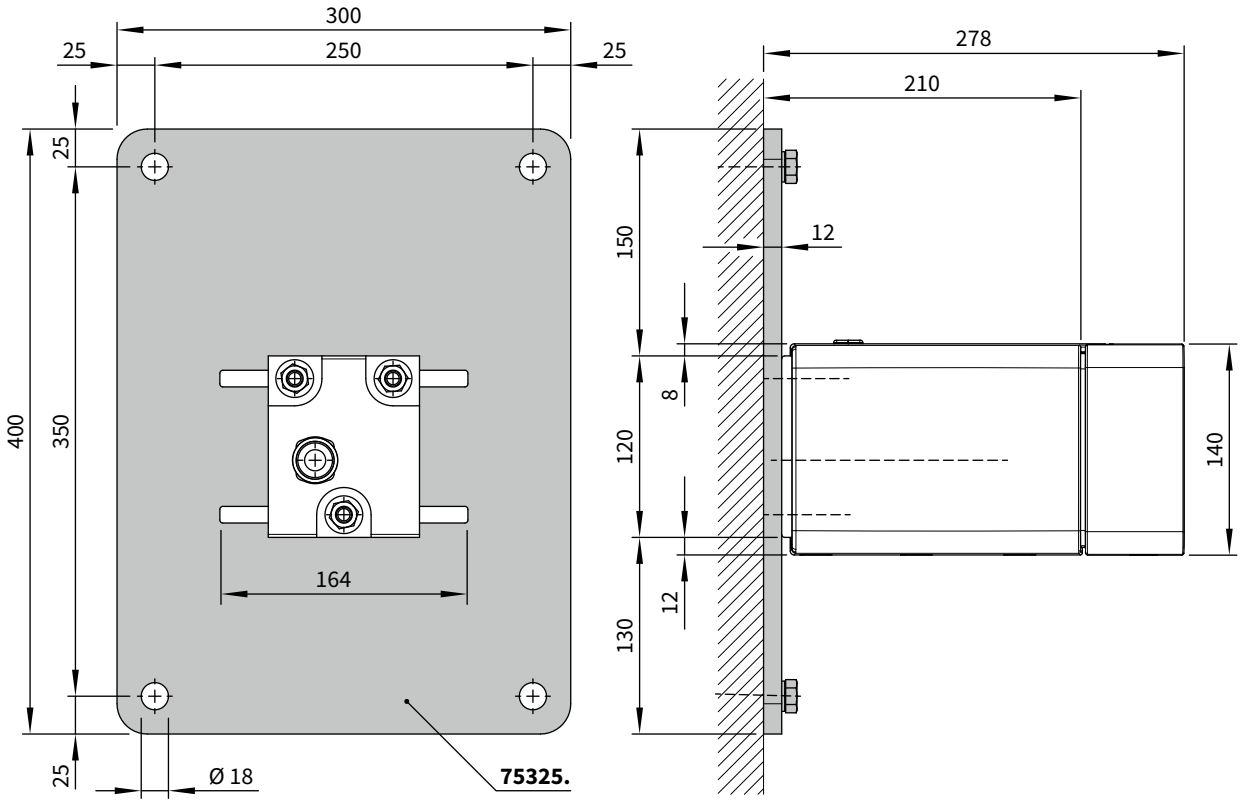
M [cm] 250	300	350	400	450	500	550	600
FB [N]							
190	221	252	284	315	346	378	409
297	344	391	439	486	533	580	628
–	477	543	609	675	741	807	873
–	–	719	806	894	981	1186	1285
–	–	–	1054	1166	1422	–	–

HT | BHT	2 | 100 mm
BP	2
BM	8

The pull-out forces shown apply when the vertical centre to centre measurement between the fixture points is **350 mm**.
In the case of spreader plates a washer conforming to DIN 9021 must be used.

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

75325. = spreader plate **B**



dimensions in mm

Face fixture with spreader plate C

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**
H [cm]	**FB [N]**							
150	481	561	640	720	799	879	958	1037
200	751	871	991	1110	1230	1349	1469	1589
250	–	1206	1373	1539	1706	1873	2040	2206
300	–	–	1815	2036	2257	2477	2996	3245
350	–	–	–	2660	2942	3589	–	–

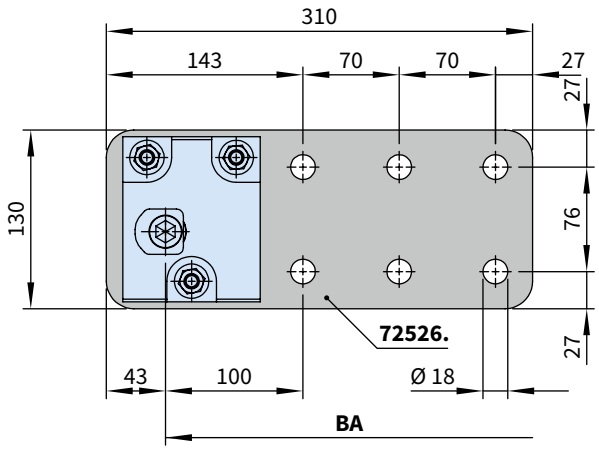
	non compression-proof substrate M [cm]							
	250	**300**	**350**	**400**	**450**	**500**	**550**	**600**
	FB [N]							
	589	686	783	881	978	1075	1172	1270
	920	1066	1212	1359	1505	1651	1798	1944
	–	1476	1680	1884	2088	2292	2496	2700
	–	–	2221	2492	2762	3032	3666	3971
	–	–	–	3255	3600	4392	–	–

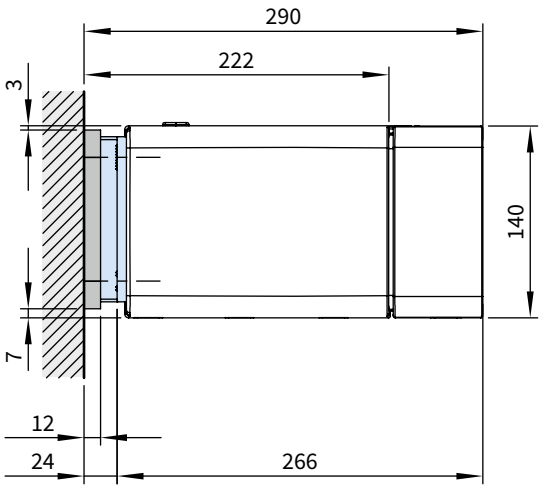
HT | BHT	2 | 100 mm	2 | 100 mm
BP	2	2
BM	12	12

The pull-out forces shown apply when the vertical centre to centre measurement between the fixture points is **76 mm**.
In the case of spreader plates a washer conforming to DIN 9021 must be used.

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

72526. = spreader plate **C**





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

H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	1038	1200	1362	1523	1685	1847	2009	2171
200	1503	1739	1975	2211	2447	2684	2920	3156
250	–	2402	2722	3043	3364	3685	4006	4326
300	–	–	3507	3923	4338	4754	–	–

HT | BHT	2 | 100 mm
BM	6

non compression-proof substrate

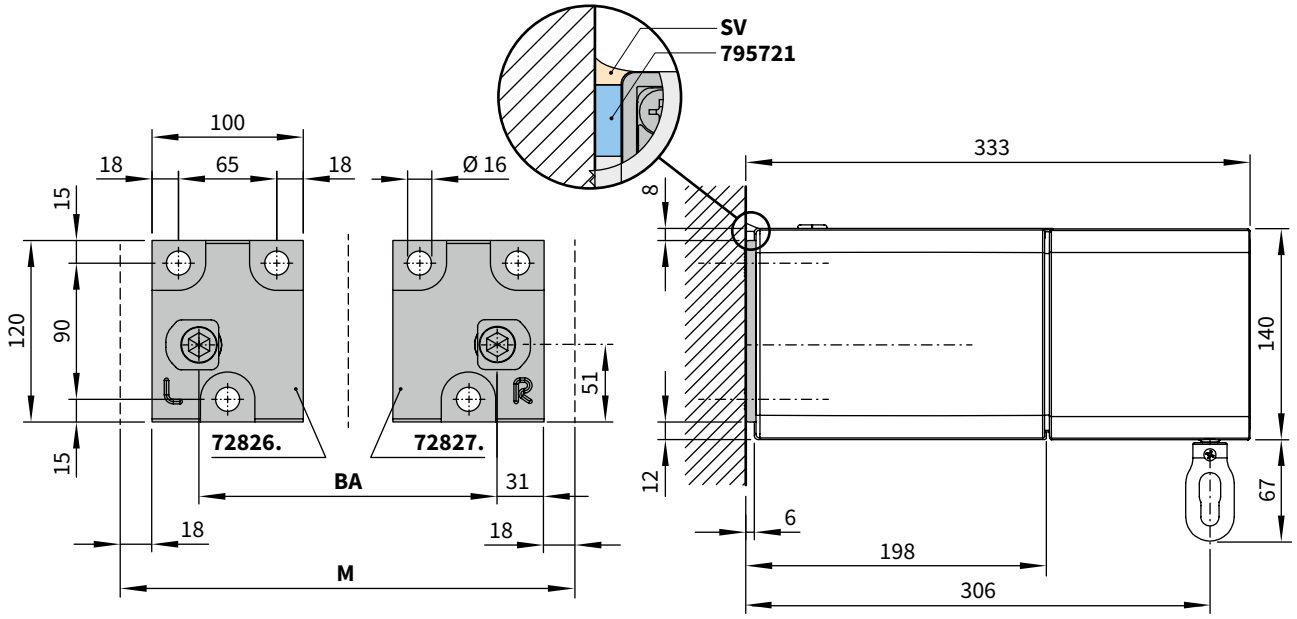
H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	1096	1266	1437	1608	1779	1950	2121	2292
200	1586	1835	2085	2334	2583	2833	3082	3332
250	–	2535	2874	3212	3551	3889	4228	4567
300	–	–	3702	4141	4579	5018	–	–

HT | BHT	2 | 100 mm
BM	6

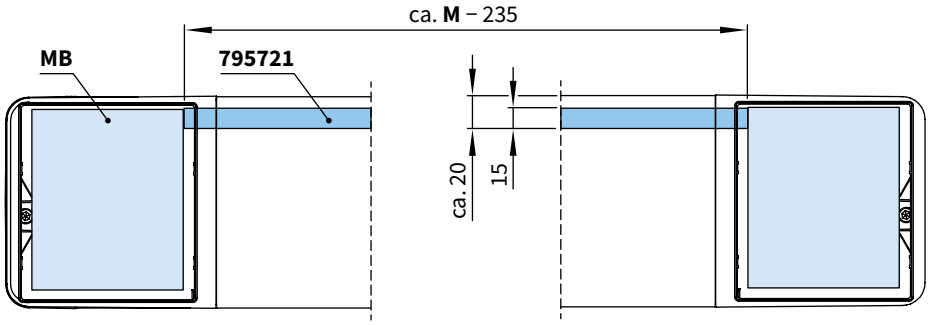
The pull-out forces shown apply when the vertical centre to centre measurement between the fixture points is **90 mm**.
If this measurement is reduced to the minimum, the pull-out force increases by up to **3 %** in the case of **compression-proof** substrates and by up to **7 %** in the case of **non-compression-proof** substrates.

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

72826. = face fixture bracket, left
72827. = face fixture bracket, right
795721 = compression tape
BA = width between fixture points
MB = bracket fixture range
SV = silicon seal



Face fixture and the use of compression tape



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

H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	466	539	611	684	757	829	902	974
200	672	777	883	988	1094	1199	1305	1411
250	–	1071	1214	1357	1500	1643	1785	1928
300	–	–	1561	1745	1930	2115	–	–

HT | BHT	2 | 100 mm
BP	2
BM	16

non compression-proof substrate

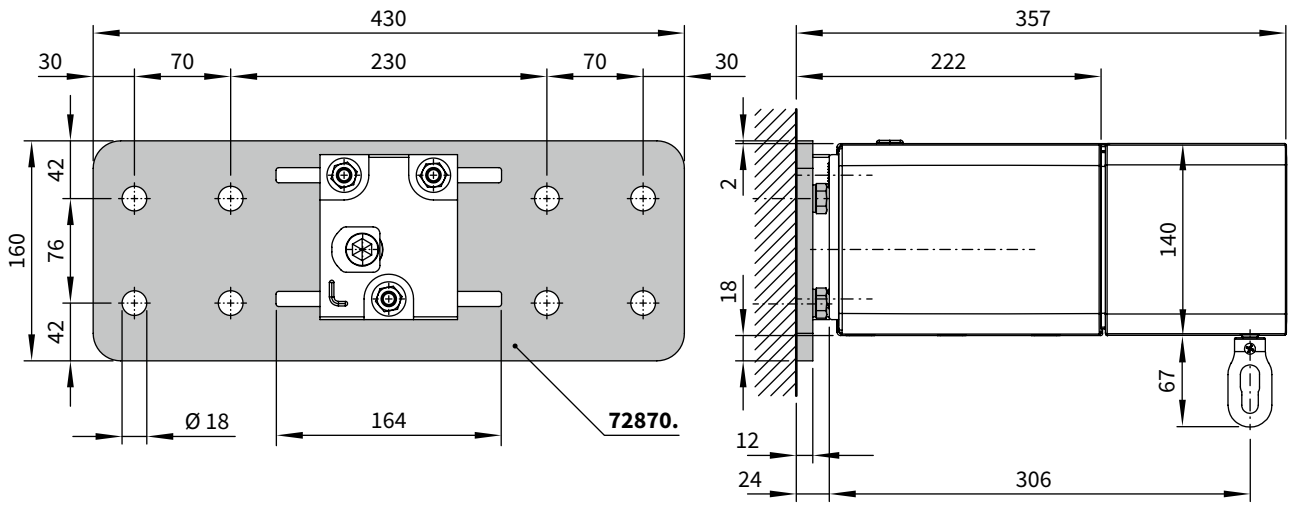
H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	662	766	869	972	1075	1178	1282	1385
200	955	1105	1255	1405	1555	1705	1854	2004
250	–	1522	1725	1928	2131	2334	2537	2740
300	–	–	2218	2480	2743	3006	–	–

HT | BHT	2 | 100 mm
BP	2
BM	16

The pull-out forces shown apply when the vertical centre to centre measurement between the fixture points is **76 mm**.
In the case of spreader plates a washer conforming to DIN 9021 must be used.

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

72870. = spreader plate **A**



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

H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	273	316	358	401	443	486	528	571
200	394	456	518	580	642	704	766	828
250	–	629	713	797	881	966	1050	1134
300	–	–	918	1027	1136	1244	–	–

HT | BHT	2 | 100 mm
BP	2
BM	8

non compression-proof substrate

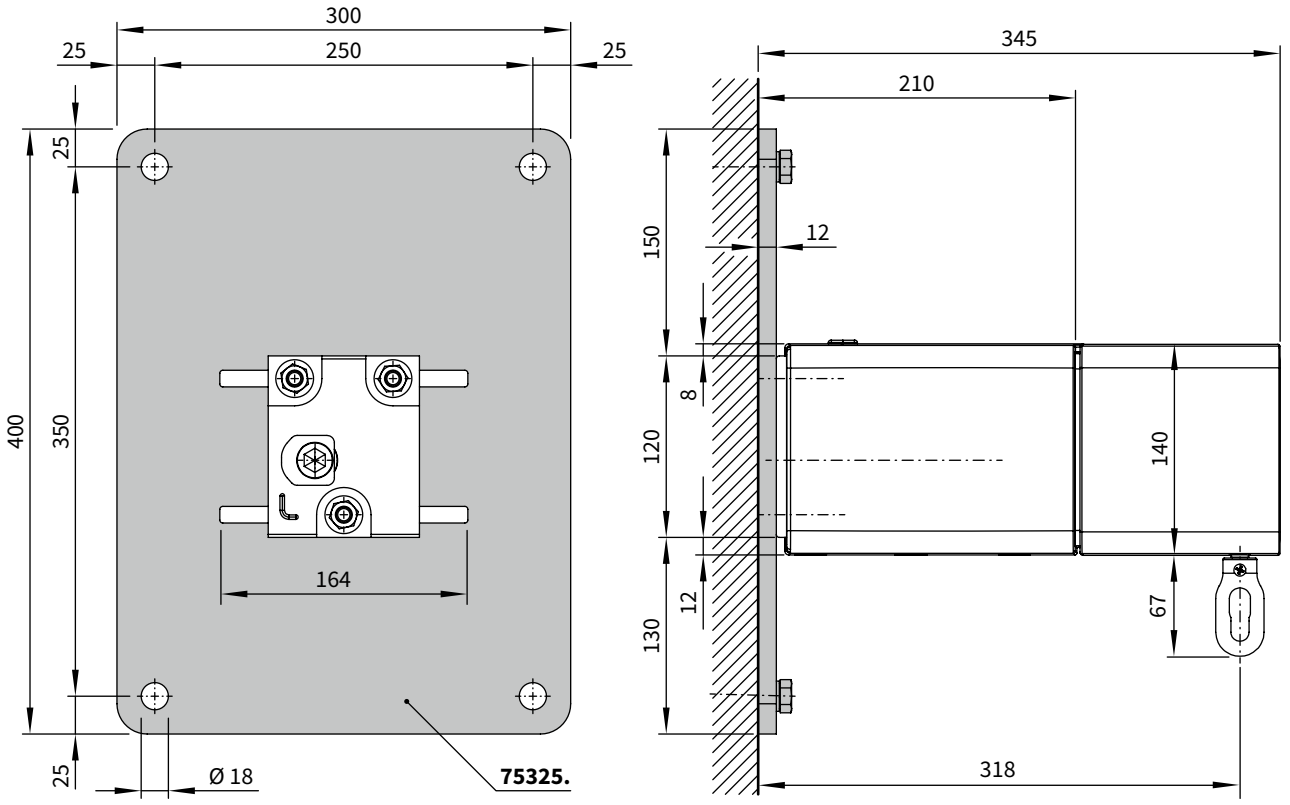
H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	285	329	373	418	462	507	551	595
200	411	476	540	605	670	734	799	864
250	–	656	744	832	919	1007	1095	1182
300	–	–	958	1071	1184	1298	–	–

HT | BHT	2 | 100 mm
BP	2
BM	8

The pull-out forces shown apply when the vertical centre to centre measurement between the fixture points is **350 mm**.
In the case of spreader plates a washer conforming to DIN 9021 must be used.

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

75325. = spreader plate **B**



dimensions in mm

Face fixture with shadeplus and spreader plate C

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**
H [cm]	**FB [N]**							
150	722	834	947	1059	1172	1284	1396	1509
200	1040	1204	1367	1530	1694	1857	2021	2184
250	–	1658	1879	2101	2322	2543	2765	2986
300	–	–	2416	2703	2989	3275	–	–

	non compression-proof substrate M [cm]							
	250	**300**	**350**	**400**	**450**	**500**	**550**	**600**
H [cm]	**FB [N]**							
150	883	1021	1158	1296	1434	1571	1709	1846
200	1273	1473	1673	1873	2073	2273	2473	2673
250	–	2029	2300	2570	2841	3112	3383	3654
300	–	–	2957	3307	3657	4007	–	–

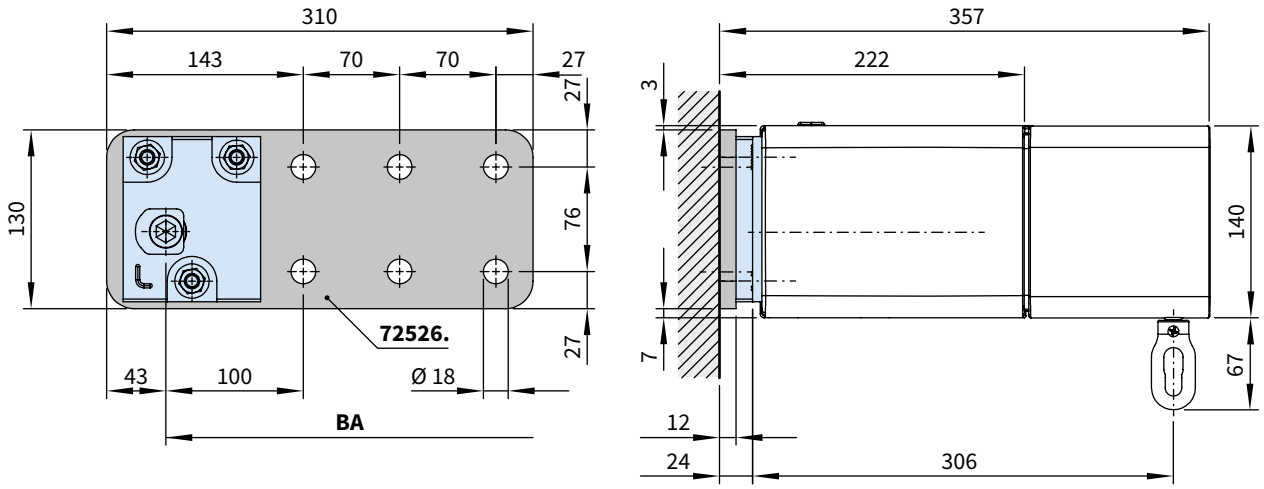
HT | BHT	2 | 100 mm
BP	2
BM	12

2 | 100 mm	
2	
12	

The pull-out forces shown apply when the vertical centre to centre measurement between the fixture points is **76 mm**.
In the case of spreader plates a washer conforming to DIN 9021 must be used.

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

72526. = spreader plate **C**



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

H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	633	736	839	942	1044	1147	1250	1353
200	944	1093	1242	1390	1539	1687	1836	1985
250	–	1468	1669	1871	2072	2273	2475	2676
300	–	–	2160	2421	2683	2944	3569	3866
350	–	–	–	3115	3443	4209	–	–

HT | BHT	2 | 100 mm
DH 72872.	2
BM	8

non compression-proof substrate

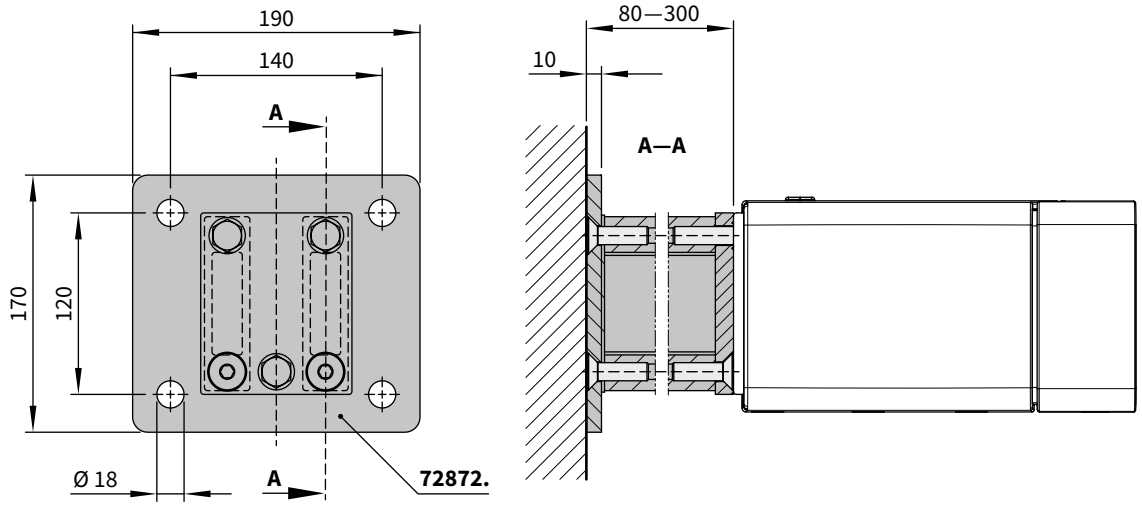
H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	712	827	943	1059	1175	1291	1407	1523
200	1062	1230	1397	1564	1731	1898	2066	2233
250	–	1651	1878	2104	2331	2557	2784	3011
300	–	–	2430	2724	3018	3312	4016	4349
350	–	–	–	3504	3873	4735	–	–

HT | BHT	2 | 100 mm
DH 72872.	2
BM	8

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

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

72872. = stand-off brackets for face fixture brackets 72826. and 72827.



dimensions in mm

Face fixture with shadeplus and stand-off brackets

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

compression-proof substrate

H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	931	1075	1218	1362	1505	1649	1792	1936
200	1285	1485	1685	1886	2086	2286	2487	2687
250	–	1991	2256	2520	2784	3049	3313	3577
300	–	–	2843	3179	3514	3850	–	–

HT | BHT	2 | 100 mm
DH 72872.	2
BM	8

non compression-proof substrate

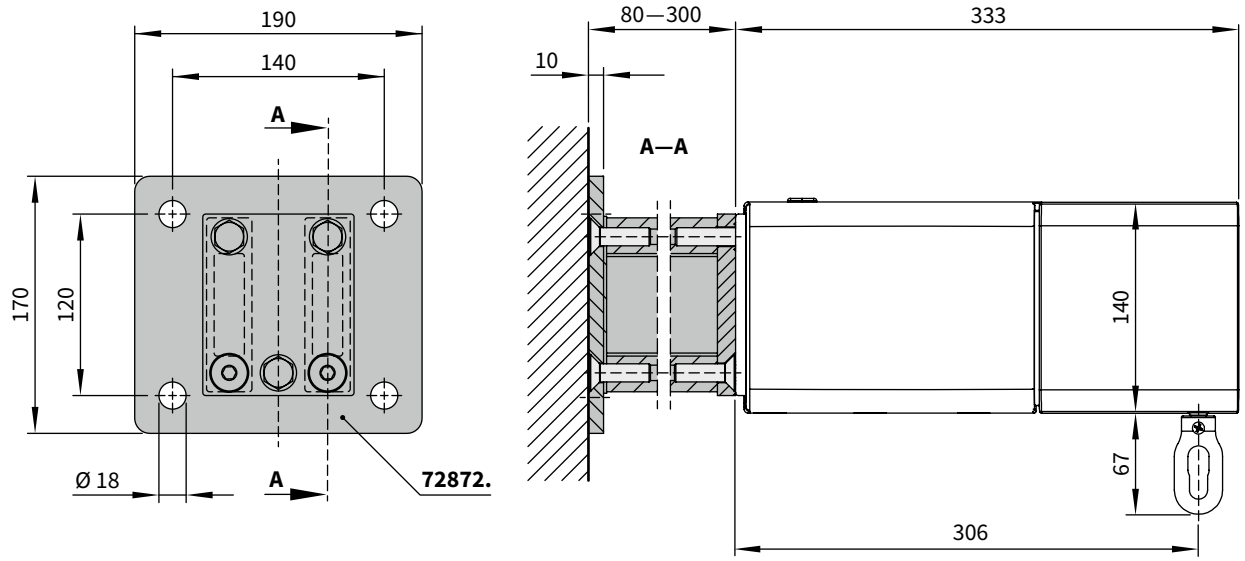
H [cm] \ M [cm]	250	300	350	400	450	500	550	600
	FB [N]							
150	1048	1209	1371	1532	1694	1855	2016	2178
200	1445	1671	1896	2121	2347	2572	2797	3023
250	–	2240	2538	2835	3132	3430	3727	4024
300	–	–	3199	3576	3954	4331	–	–

HT | BHT	2 | 100 mm
DH 72872.	2
BM	8

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

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

72872. = stand-off brackets for face fixture brackets 72826. and 72827.



dimensions in mm

Top fixture

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

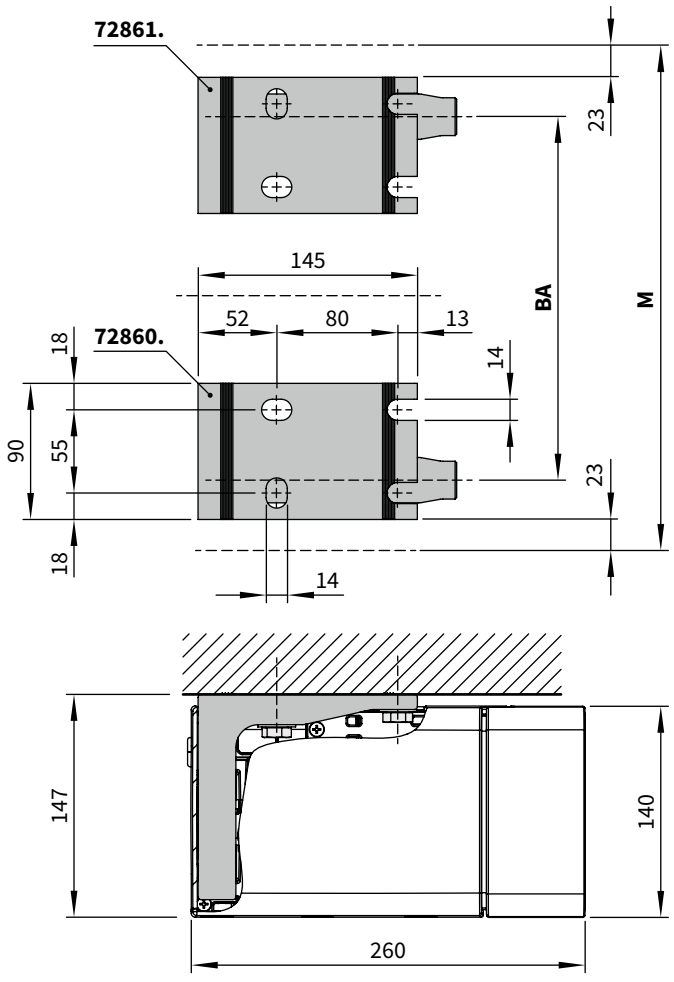
	compression-proof substrate							
	M [cm]							
	250	300	350	400	450	500	550	600
H [cm]	FB [N]							
150	609	712	815	918	1021	1124	1227	1330
200	920	1069	1219	1368	1517	1666	1815	1965
250	–	1456	1660	1863	2067	2271	2474	2678
300	–	–	2171	2437	2703	2969	3576	3874
350	–	–	–	3158	3495	4250	–	–
HT | BHT	2 | 90 mm							
BM	8							

	non compression-proof substrate							
	M [cm]							
	250	300	350	400	450	500	550	600
	FB [N]							
150	883	1031	1179	1327	1475	1623	1771	1920
200	1349	1567	1784	2002	2219	2437	2654	2872
250	–	2147	2446	2745	3044	3343	3642	3941
300	–	–	3213	3606	3998	4391	5295	5737
350	–	–	–	4687	5186	6313	–	–
HT | BHT	2 | 90 mm							
BM	8							

The pull-out forces shown apply when the horizontal centre to centre measurement between the fixture points is **80 mm.**

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

72860. = top fixture bracket, left
72861. = top fixture bracket, right



dimensions in mm

Top fixture with shadeplus

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

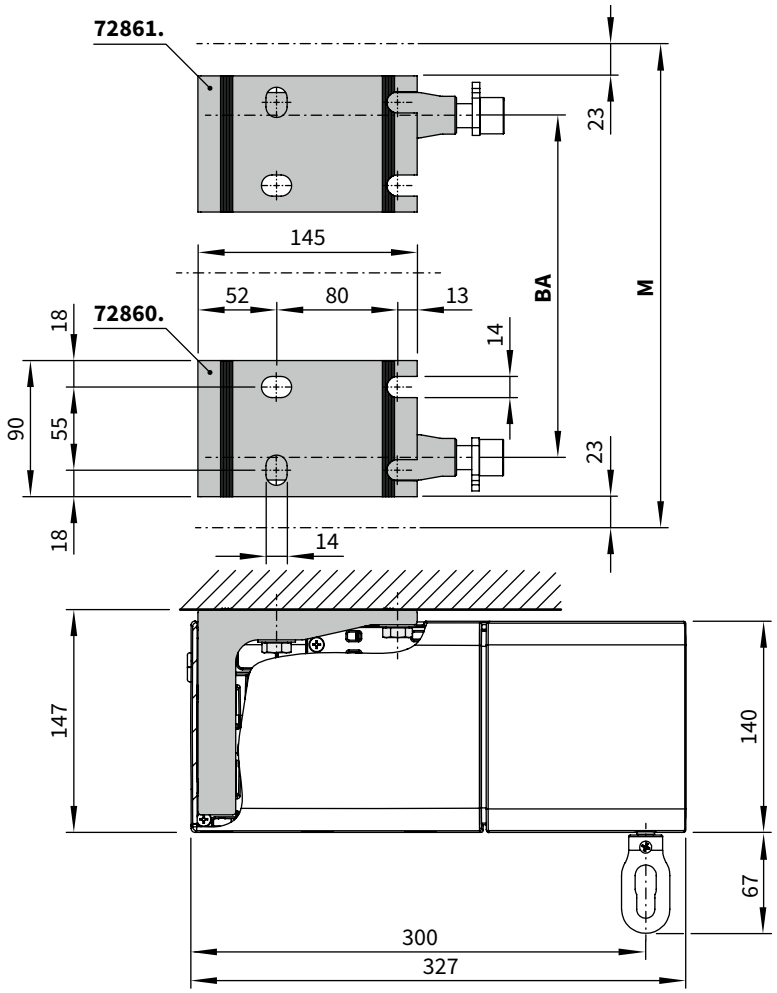
	compression-proof substrate M [cm]								***non compression-proof*** substrate M [cm]							
	250	**300**	**350**	**400**	**450**	**500**	**550**	**600**	**250**	**300**	**350**	**400**	**450**	**500**	**550**	**600**
H [cm]	**FB [N]**								**FB [N]**							
150	884	1025	1165	1306	1447	1587	1728	1869	1295	1500	1704	1909	2114	2319	2523	2728
200	1252	1452	1651	1851	2050	2250	2449	2649	1847	2140	2433	2726	3019	3312	3605	3898
250	–	1976	2243	2509	2776	3042	3309	3575	–	2927	3320	3714	4107	4501	4894	5288
300	–	–	2864	3206	3547	3888	–	–	–	–	4252	4758	5264	5770	–	–

HT | BHT	2 | 90 mm	2 | 90 mm
BM	8	8

The pull-out forces shown apply when the horizontal centre to centre measurement between the fixture points is **80 mm.**

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

72860. = top fixture bracket, left
72861. = top fixture bracket, right



dimensions in mm

Eaves fixture

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

	Torque M [cm]								Shear force M [cm]							
	250	300	350	400	450	500	550	600	250	300	350	400	450	500	550	600
H [cm]	Md [Nm]								FS [N]							
150	131	153	175	196	218	240	261	283	1583	1850	2116	2382	2648	2914	3180	3446
200	206	239	271	304	337	370	403	436	2412	2802	3191	3581	3970	4360	4749	5139
250	–	332	377	423	469	515	561	607	–	3834	4368	4902	5437	5971	6506	7040
300	–	–	500	561	622	683	825	894	–	–	5732	6432	7133	7834	9443	10232
350	–	–	–	734	812	990	–	–	–	–	–	8355	9244	11250	–	–
HT	2								2							
BM	8								8							

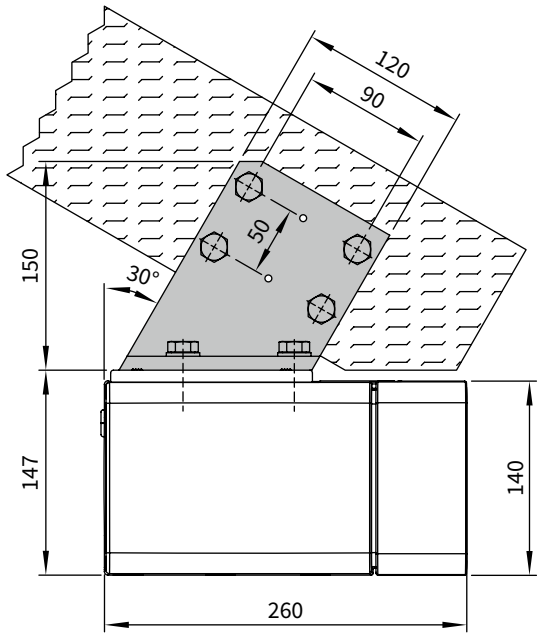
The shear force is calculated on the basis of 2 fixture points per bracket, because – depending on the roof pitch – it cannot be guaranteed that 4 fixture points per bracket can used.

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

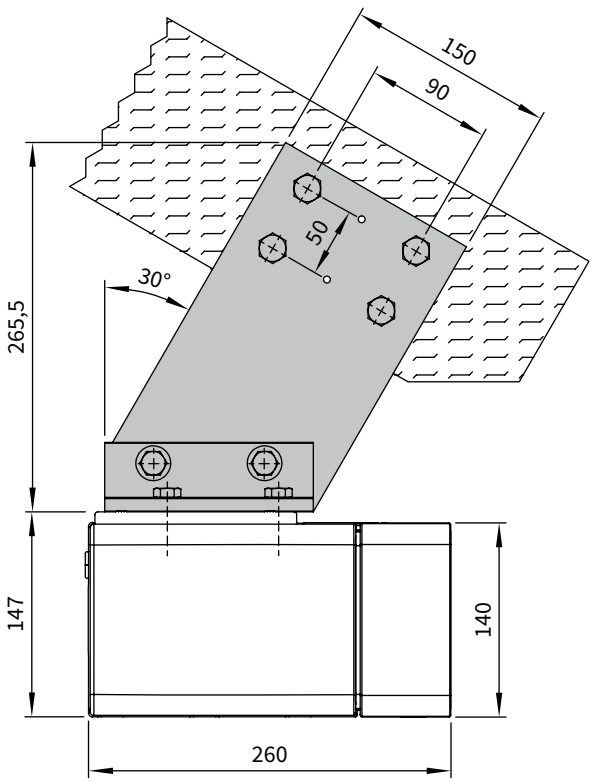
72874. = eaves fixture bracket, *complete*, 150 mm, left
72875. = eaves fixture bracket, *complete*, 150 mm, right

71612. = eaves fixture bracket, height of the top plate 150 mm
71659. = eaves fixture bracket, height of the top plate 270 mm

with eaves fixture bracket 150 mm



with eaves fixture bracket 270 mm



dimensions in mm

Eaves fixture with shadeplus

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

	Torque M [cm]								Shear force M [cm]							
	250	300	350	400	450	500	550	600	250	300	350	400	450	500	550	600
H [cm]	Md [Nm]								FS [N]							
150	197	228	259	289	320	351	382	412	2316	2683	3049	3416	3783	4150	4516	4883
200	285	330	375	420	465	510	555	600	3297	3821	4344	4868	5392	5916	6439	6963
250	–	456	517	578	639	700	761	822	–	5220	5922	6625	7327	8029	8731	9433
300	–	–	666	745	824	903	–	–	–	–	7579	8481	9384	10286	–	–
350	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
HT	2								2							
BM	8								8							

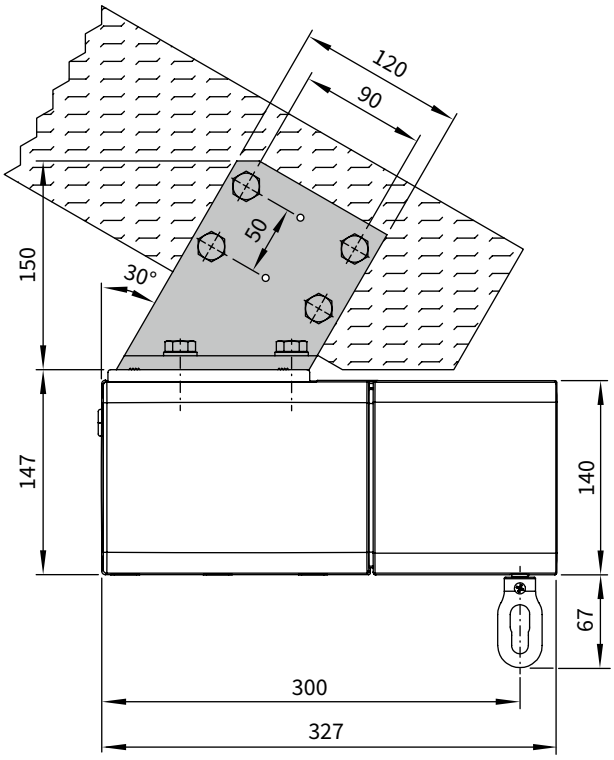
The shear force is calculated on the basis of 2 fixture points per bracket, because – depending on the roof pitch – it cannot be guaranteed that 4 fixture points per bracket can used.

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

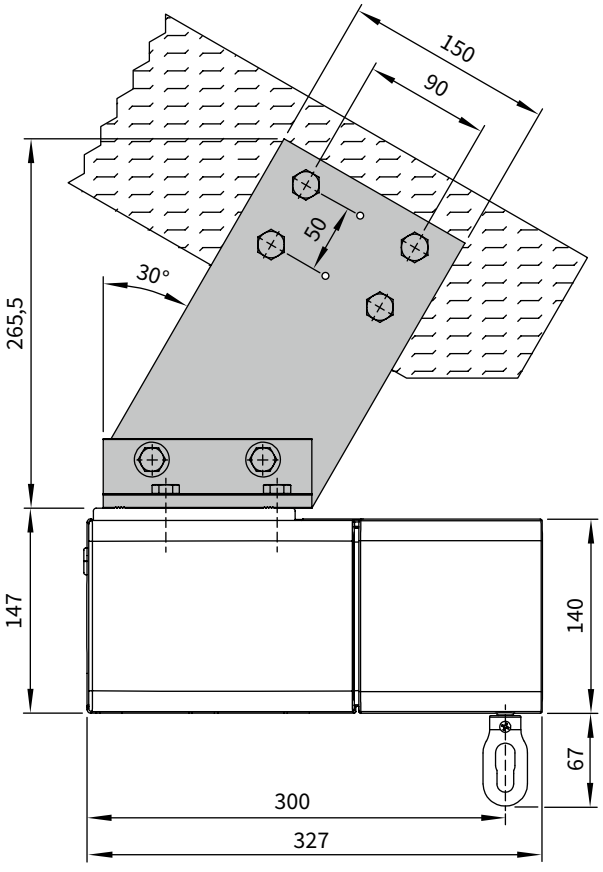
72874. = eaves fixture bracket, *complete*, 150 mm, left
72875. = eaves fixture bracket, *complete*, 150 mm, right

71612. = eaves fixture bracket, height of the top plate 150 mm
71659. = eaves fixture bracket, height of the top plate 270 mm

with eaves fixture bracket 150 mm



with eaves fixture bracket 270 mm



dimensions in mm

Eaves fixture with additional spreader / backing plate

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

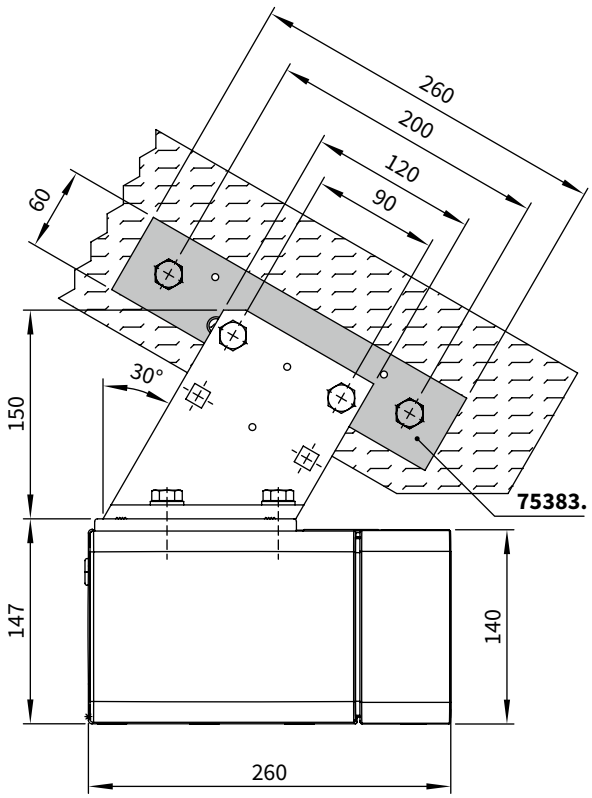
	Torque M [cm]								Shear force M [cm]							
	250	300	350	400	450	500	550	600	250	300	350	400	450	500	550	600
H [cm]	FB [N]								FB [N]							
150	131	153	175	196	218	240	261	283	781	915	1048	1182	1315	1449	1582	1716
200	206	239	271	304	337	370	403	436	1154	1343	1532	1721	1910	2099	2288	2478
250	–	332	377	423	469	515	561	607	–	1808	2062	2316	2570	2825	3079	3333
300	–	–	500	561	622	683	–	–	–	–	2675	3005	3334	3663	–	–
350	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
HT	2								2							
BM	4								4							

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

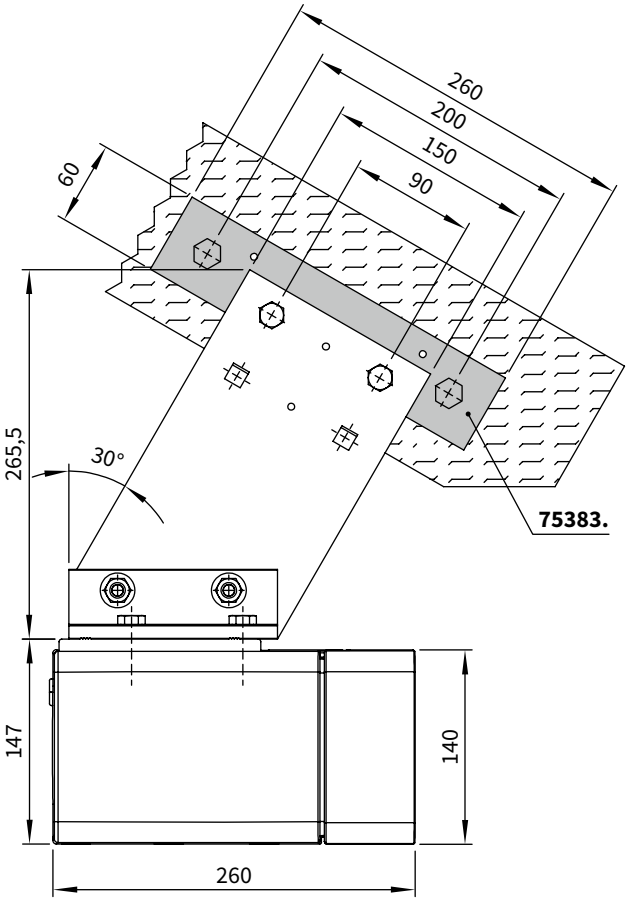
M = overall awning width
H = nominal projection
Md = torque value for the bracket in the immediate vicinity of the arm
HT = no. of brackets per track
FS = shear force
BM = no. of fixing points

75383. = additional spreader / backing plate for eaves fixture 60 mm × 260 mm × 12 mm

with eaves fixture bracket 150 mm



with eaves fixture bracket 270 mm



dimensions in mm

Eaves fixture for shadeplus with additional spreader / backing plate

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

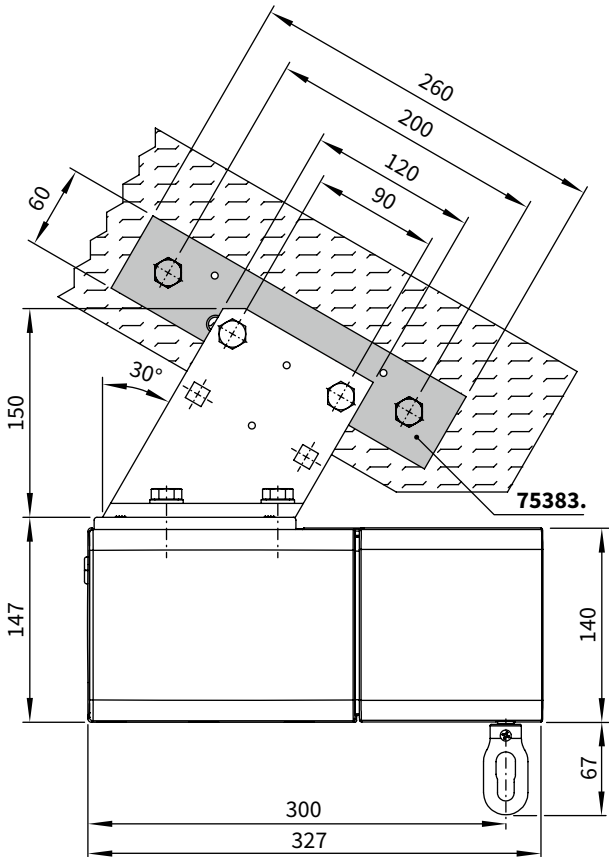
	Torque M [cm]								Shear force M [cm]							
	250	300	350	400	450	500	550	600	250	300	350	400	450	500	550	600
H [cm]	FB [N]								FB [N]							
150	131	153	175	196	218	240	261	283	781	915	1048	1182	1315	1449	1582	1716
200	206	239	271	304	337	370	403	436	1154	1343	1532	1721	1910	2099	2288	2478
250	–	332	377	423	469	515	561	607	–	1808	2062	2316	2570	2825	3079	3333
300	–	–	500	561	622	683	–	–	–	–	2675	3005	3334	3663	–	–
350	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
HT	2								2							
BM	4								4							

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

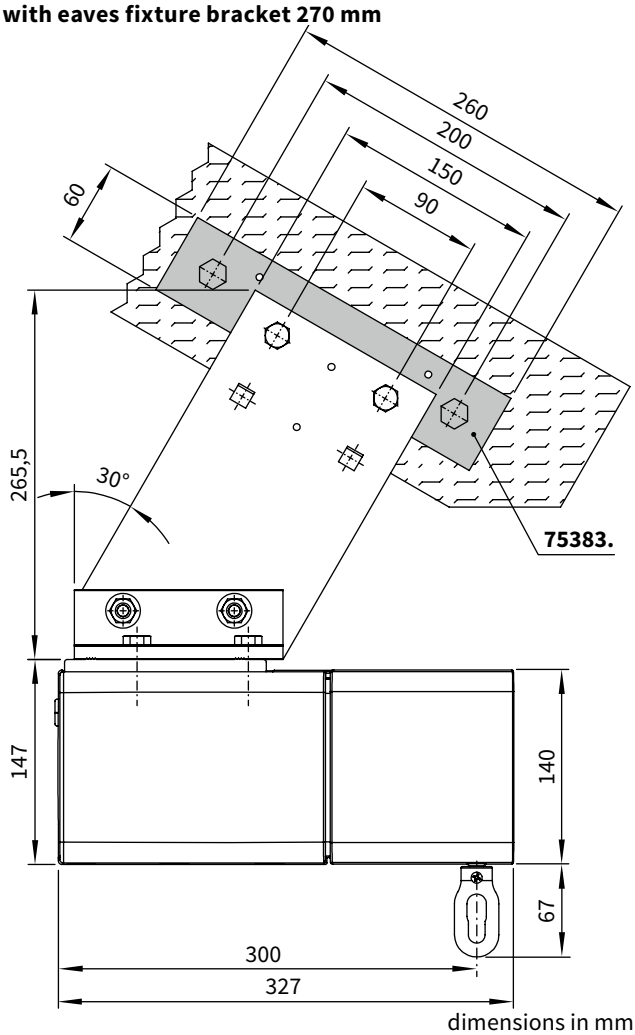
M = overall awning width
H = nominal projection
Md = torque value for the bracket in the immediate vicinity of the arm
HT = no. of brackets per track
FS = shear force
BM = no. of fixing points

75383. = additional spreader / backing plate for eaves fixture 60 mm × 260 mm × 12 mm

with eaves fixture bracket 150 mm

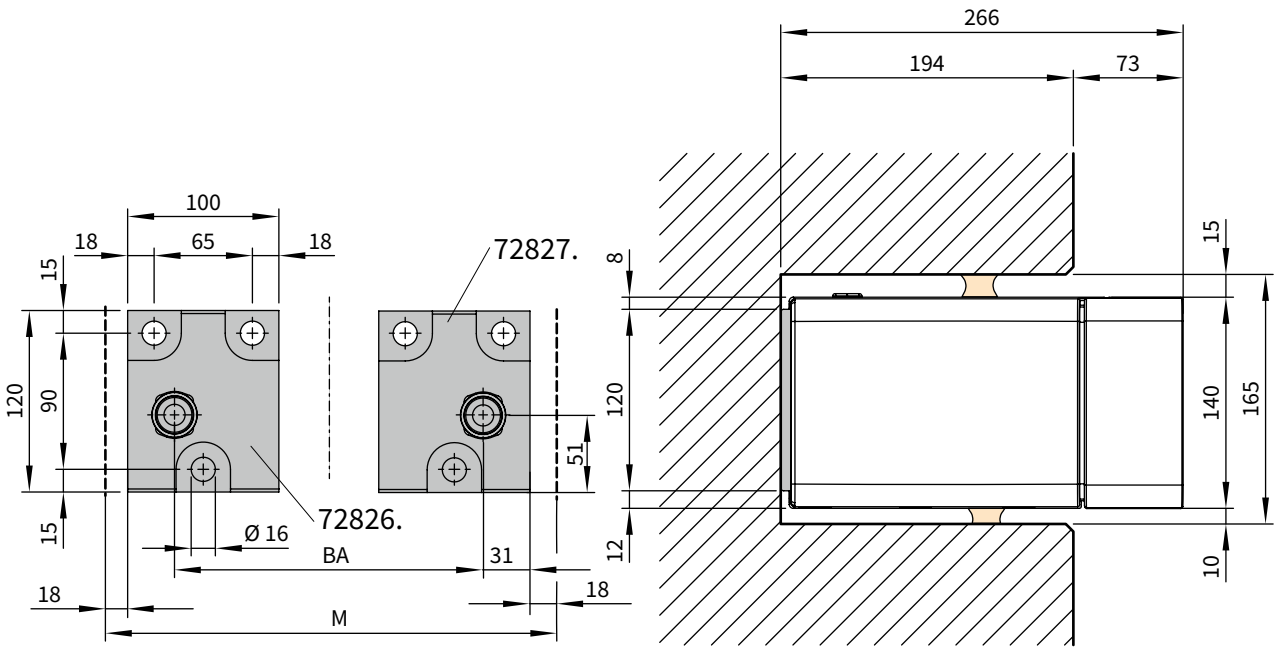


with eaves fixture bracket 270 mm



dimensions in mm

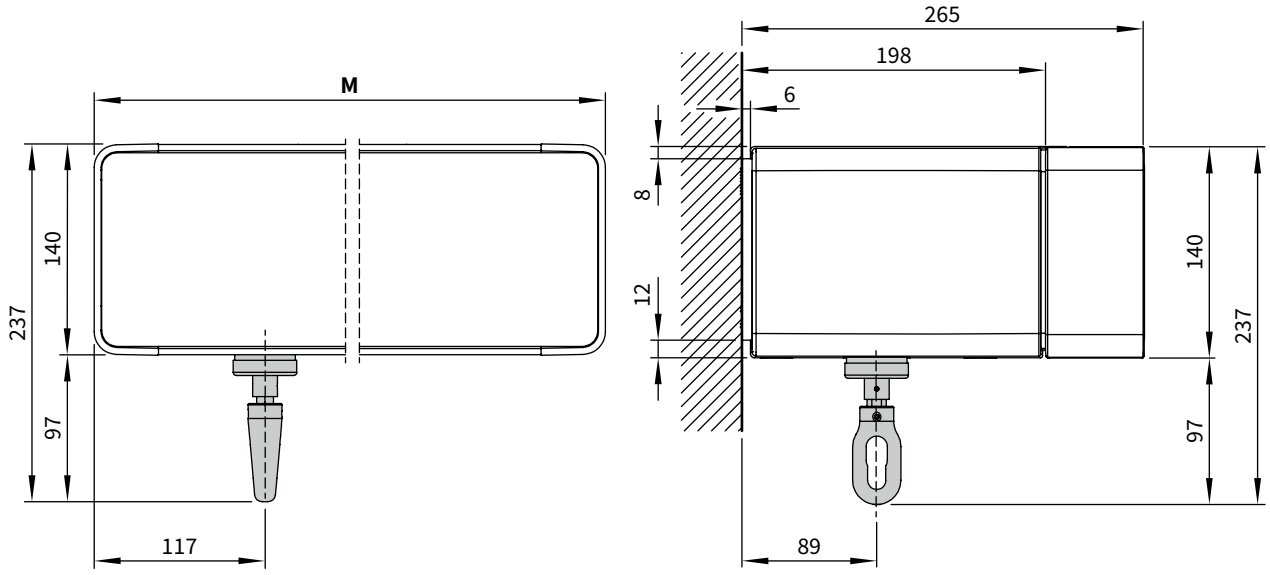
Recess fixture



72826. = face fixture bracket, left
72827. = face fixture bracket, right

dimensions in mm

Manual operation when using face fixture

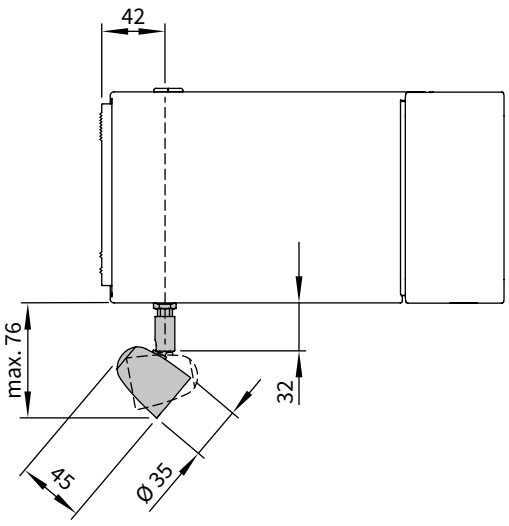


dimensions in mm

M = overall awning width = **order width of the folding-arm awning**
BA = width between fixture points

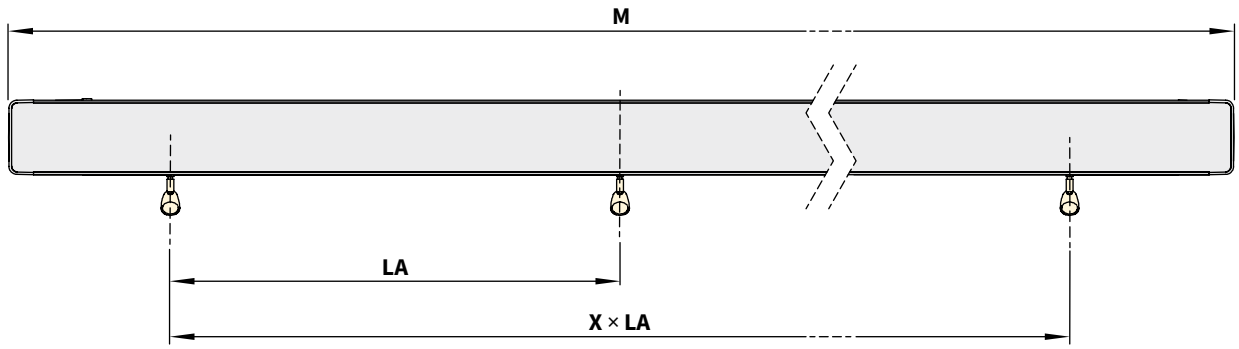
Lighting options

LED spotlights



dimensions in mm

Dimensions / No. of LED spotlights

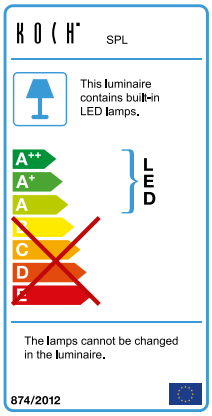


M (mm)	Number of spotlights	LA (mm)
1950—2500	3	750
2501—3000	3	980
3001—3500	3	980
3501—4000	4	980
4001—4500	4	980
4501—5000	5	980
5001—5500	5	980
5501—6000	6	980

M = overall awning width
LA = spotlight separation

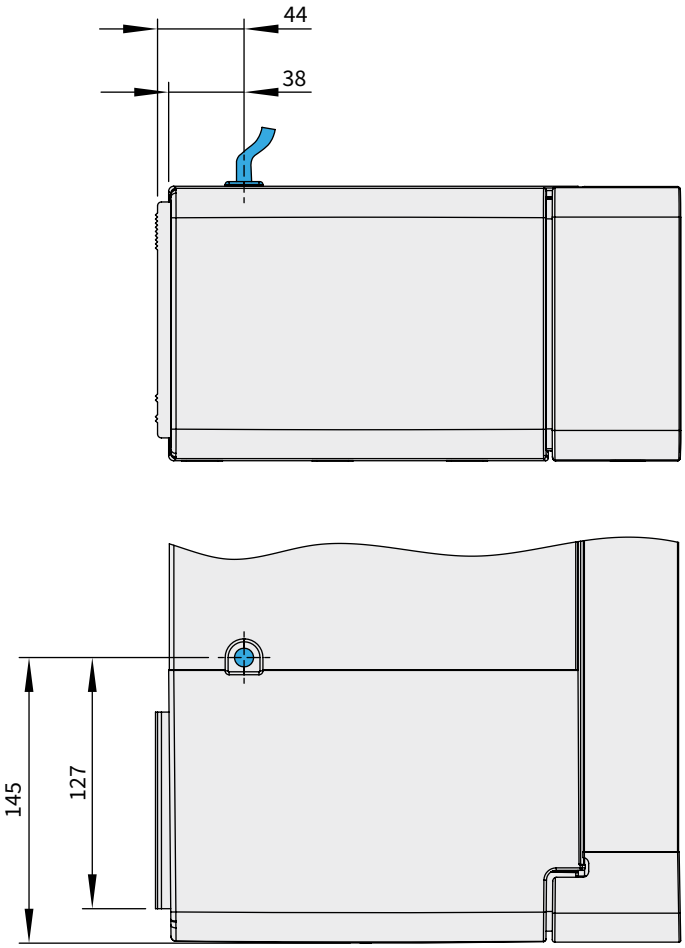
Technical data markilux LED spotlights

operating voltage	230 V, 50 Hz
power output per spotlight	5 W
light source	LED (12 V)
number of transformers	1 piece
light temperature	2700 K, warm white
IP protection class	IP 44
energy efficiency class	A bis A++
service life	approx. 20,000 h



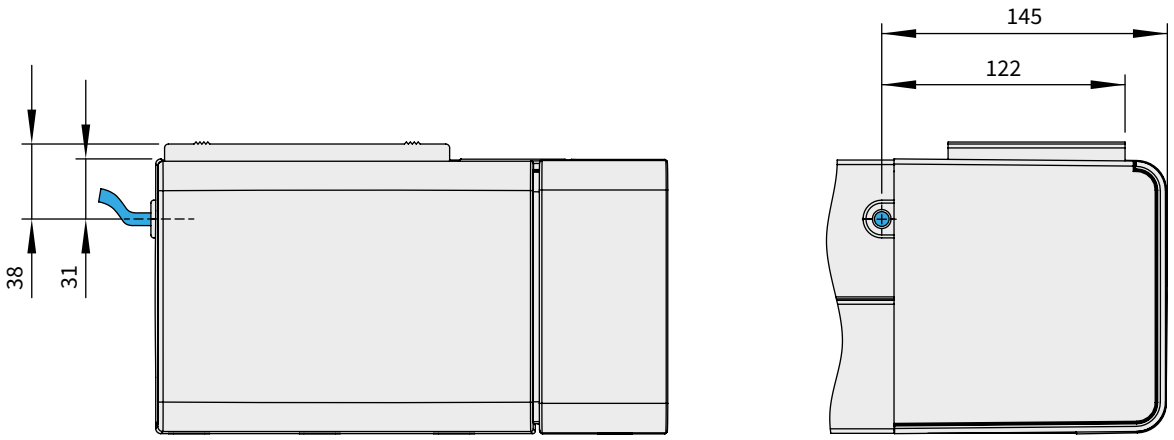
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

Cable exit point in the case of face fixture



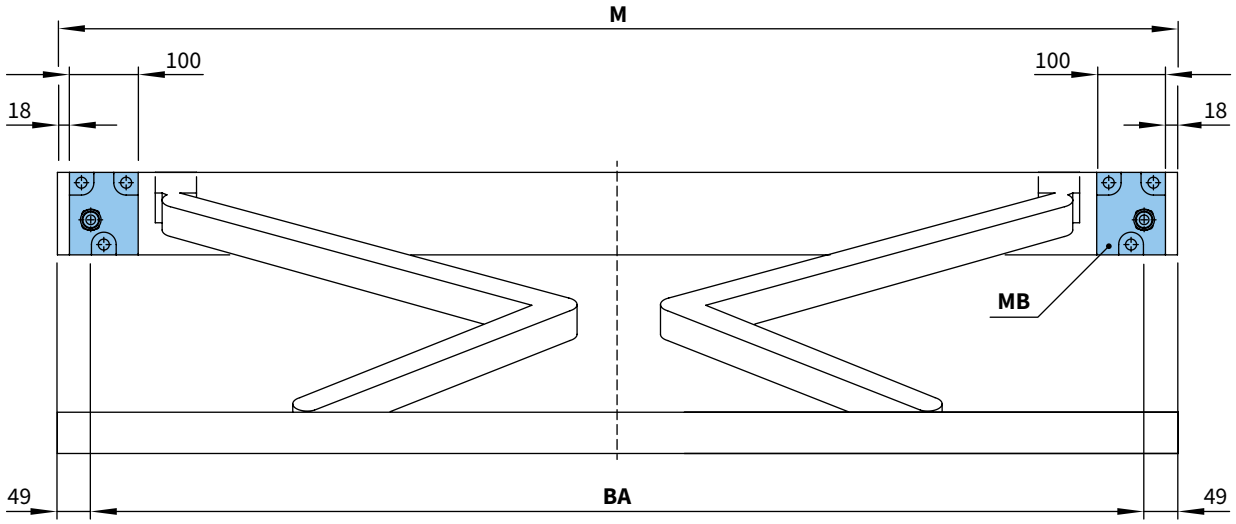
dimensions in mm

Cable exit point in the case of top fixture



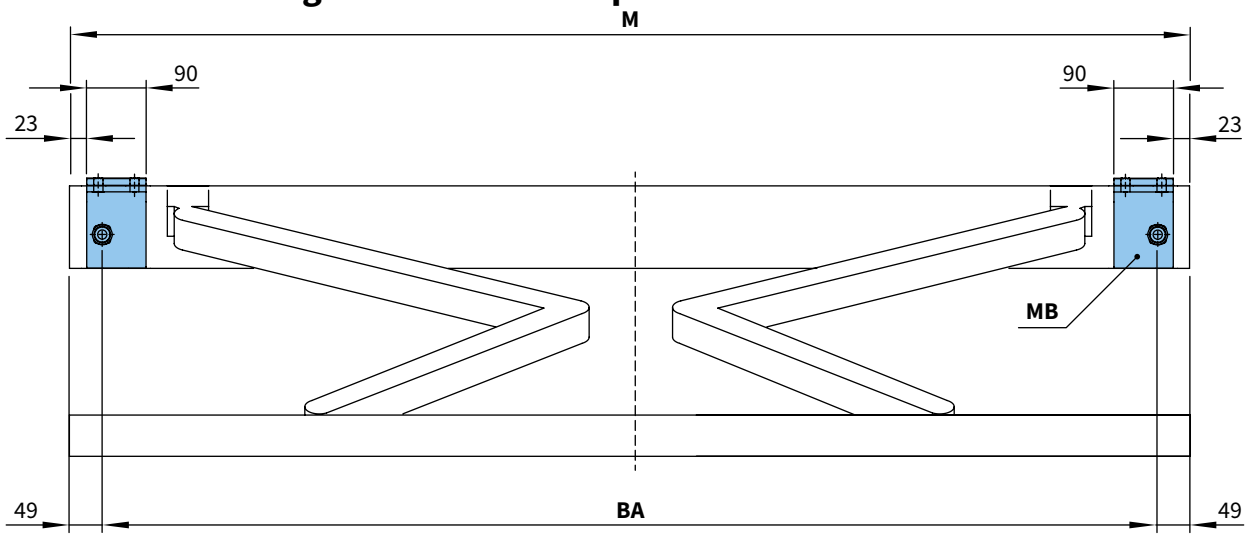
dimensions in mm

Bracket fixture range in the case of face fixture



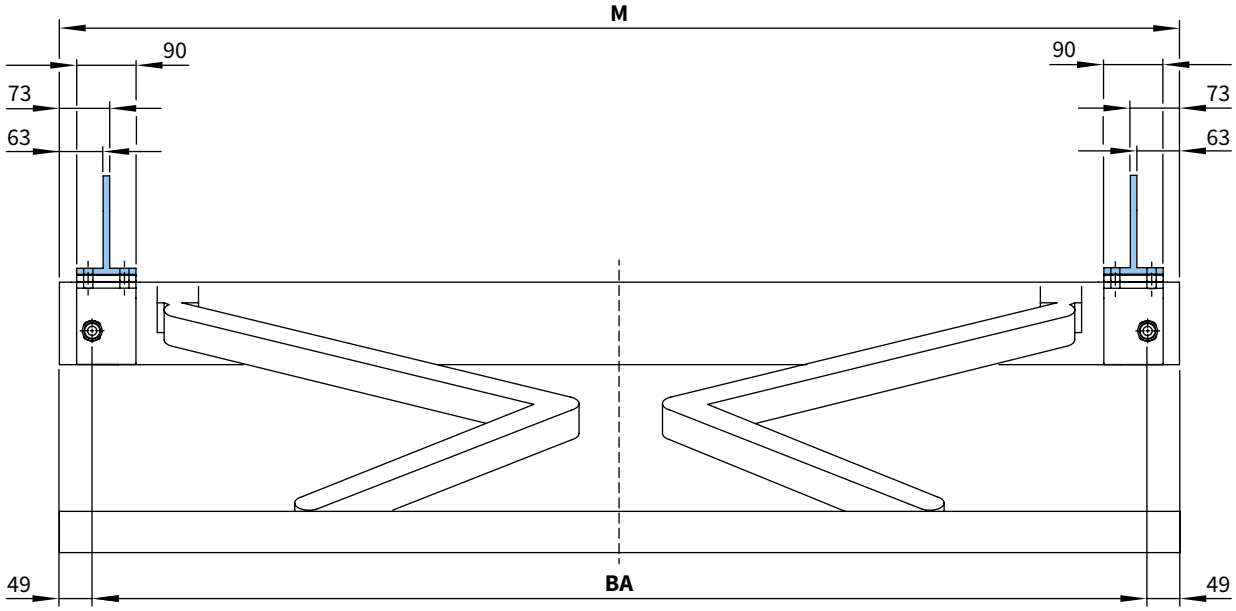
dimensions in mm

Bracket fixture range in the case of top fixture



dimensions in mm

Bracket fixture range in the case of eaves fixture



dimensions in mm

M = awning width = **order width of the folding-arm awning**

MB = bracket fixture range

BA = width between fixture points

01
02
03
04
05
06
07
08
09
10
11
12
13
14
15