

# LAMILUX Glass Skylight F100

Assembly instruction

## General comments

The content of this assembly instruction manual has been established to the best of our knowledge. All notes, technical and visual information reflect the current state of technology and are based on our experiences.

Legal claims cannot be derived from the content of this installation manual. LAMILUX reserves the right to change technical specifications.

Every work has to be done in accordance with the current state of technology, the regulations and guidelines of authorities, trade associations, accident prevention regulations and professional associations of the Federal Republic of Germany, the European Union and the country of destination. As far as standards, technical regulations or guidelines (e.g. EN or equal standards) exist, the work has to be done in compliance with those directives.

Revision index:

This version replaces previous editions completely.



The assembly instruction manual must be read before installation  
Particularly the safety and operating instructions



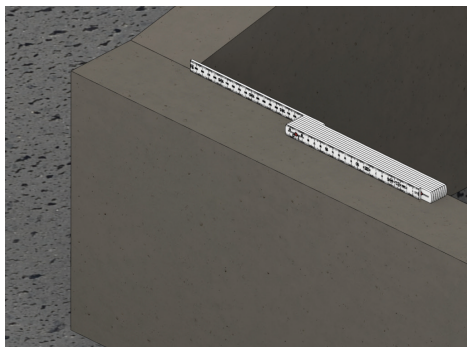
Do not step on glass - RISK OF BREAKING THROUGH



Always use fall arrest equipment and follow national regulations for fall-through protection



Check all materials are complete on delivery



### Check and prepare for installation

In general, the building tolerances apply which can be given on request

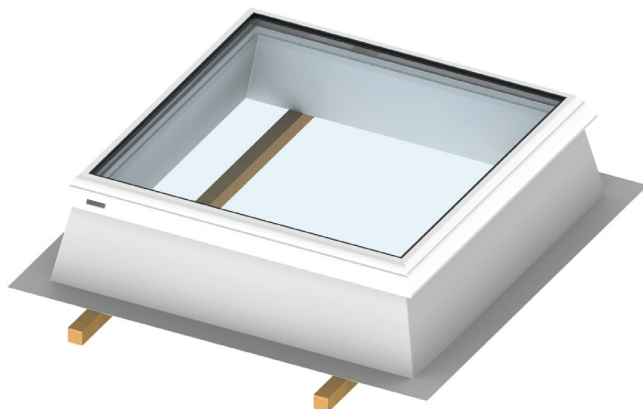
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## Transport | Assembly

Glass skylights are usually delivered completely pre-assembled on its upstand. The overall element is mounted on a wooden pallet.



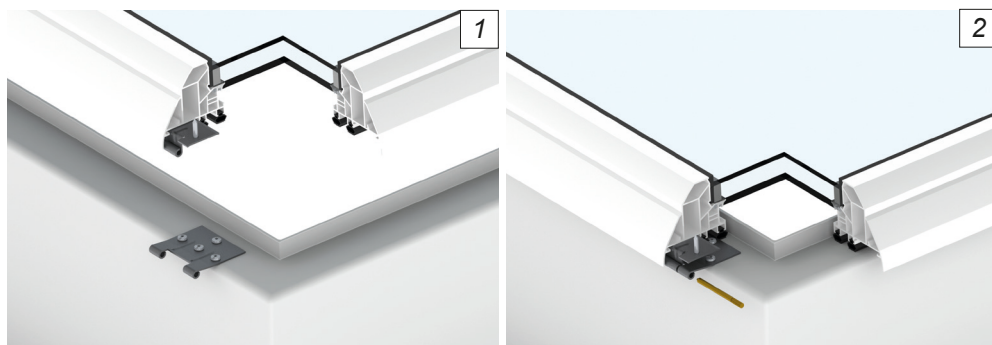
If upper part and upstand are transported separately, the upper part of the element needs to be mounted after installation of the upstand.

bolt hinge:

>> upper part  
#312618

>> lower part  
#312619

>> brass bolt  
#312620

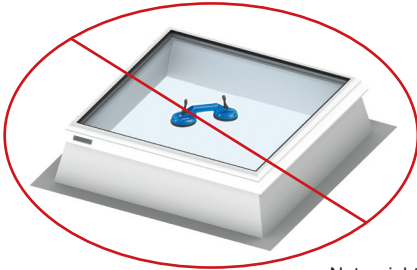


During transport, either lift the element using a pallet or without a pallet, e.g. using square timbers to lift the element on the marked corner points of the frame.



**ATTENTION**

Always store aerated  
**NEVER** lift the upper part of the glass as well as the entire element with a glass sucker.  
**Risk of glass breakage**

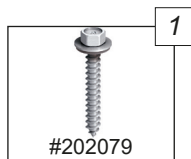


Avoid overheating!

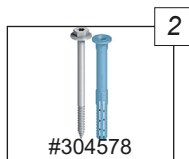
Net weight upper part and upstand separately in kg

structural roof opening size (mm)	upper part		upstand height (mm)				
	double glazing	triple glazing	150	300	400	500	400 5°
600/600	13	15	6	10	12	15	16
600/900	21	23	8	12	15	18	21
600/1200	27	30	9	14	18	22	25
700/1350	32	40	10	18	22	25	29
800/800	23	28	8	13	16	20	22
800/1500	41	51	12	18	23	28	32
900/900	28	35	9	14	18	22	24
900/1200	37	46	11	17	21	25	29
900/1450	45	56	12	19	24	29	33
1000/1000	35	43	10	17	21	25	27
1000/1500	52	64	13	21	26	31	35
1200/1200	50	63	12	20	25	30	33
1200/1500	62	78	14	22	28	33	38
1250/1250	55	68	13	21	26	31	35
1400/1400	68	86	14	23	38	35	39
1500/1500	79	99	15	24	30	37	37

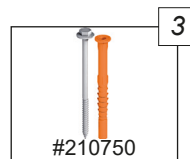
## Structural attachment



Wood screw  
JA3-6,5x50-E16/2



Screw-in wall plug  
SDF-KB-10Vx50-V



Screw-in wall plug  
SDP-KB-10Gx80-V



Sealing screw  
JA3-6,5x32-E16/2



Drilling screw  
JT3-6-5,5x30 E16/2

Substructure	Item number	Drill hole in upstand
Wood	1	Ø 7mm
Reinforced concrete	2	Ø 10,5mm
Aerated concrete	3	Ø 10,5mm
Steel 0,63 - 1,5mm	4	Ø 7mm
Steel 1,5 - 3mm	5	Ø 6mm



Fixings are not included in scope of delivery. Please contact our sales office if you wish to add these to your order.  
Equivalent screws and plugs with technical approval can be procured from most DIY stores or your local builders merchants and can also be used.

Starting at one point, evenly space your fixings at 300mm centres along the edge, and 100mm at corner points. Please refer to fixing details table (page 7) depending on substructure.



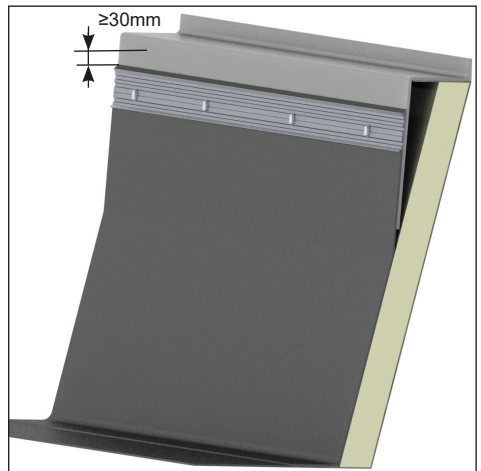
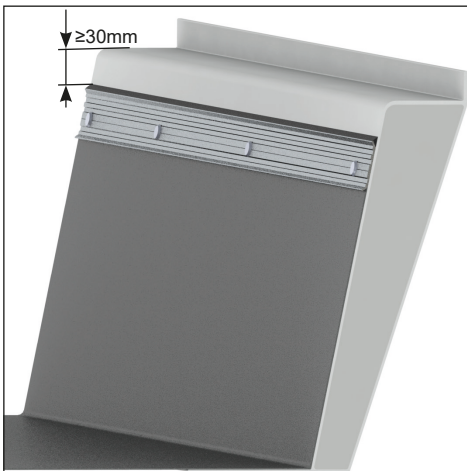
**Note:**

We recommend a roof pitch of  $>5^\circ$  or a corresponding wedge to prevent water ponding on the Glass Skylight F100. This is not necessary if using an upstand with a pitch of  $5^\circ$ .

Do not use screws to fasten the clamping profiles to the upstand, instead use splash-proof special rivets.

For plastic sheeting: Press plate blind rivet with neoprene disk 5.2x19.1 Al/Al (#216043)

For bituminous welding sheeting: press plate blind rivet with neoprene disc 5.2x28.6 Al/Al (#216044)



The drawn connection only serves as a schematic for orientation!

Please note! Waterproofing is to be carried out by an approved roofer after installation. The LAMILUX Glass Skylight F100 is supplied with a FIT 10 - PVC cap flashing as standard. Detailed drawings can be downloaded from [www.lamiluxskylights.co.uk](http://www.lamiluxskylights.co.uk)



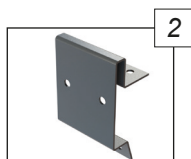
## Ventilated locked (laminated spring lock)

Components:

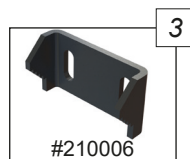
for a later installation of the drive



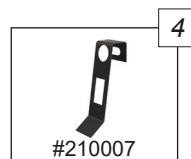
insert-sleeve F100



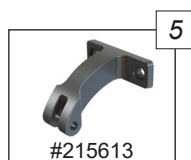
metal fitting blank



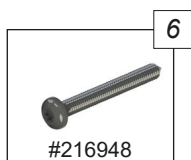
closing part leaf  
spring



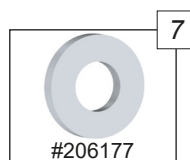
laminated spring



wing bent RAL  
9016



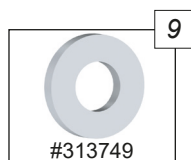
raised-head screw  
AW25 5,5x45



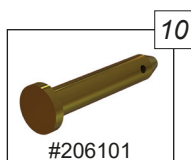
washer



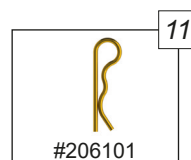
socket screw  
M6x12



lock washer Ø=6,4

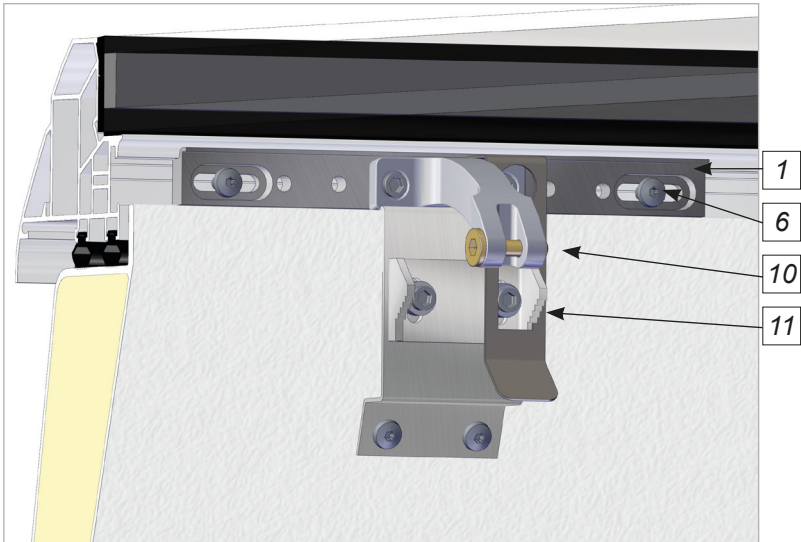
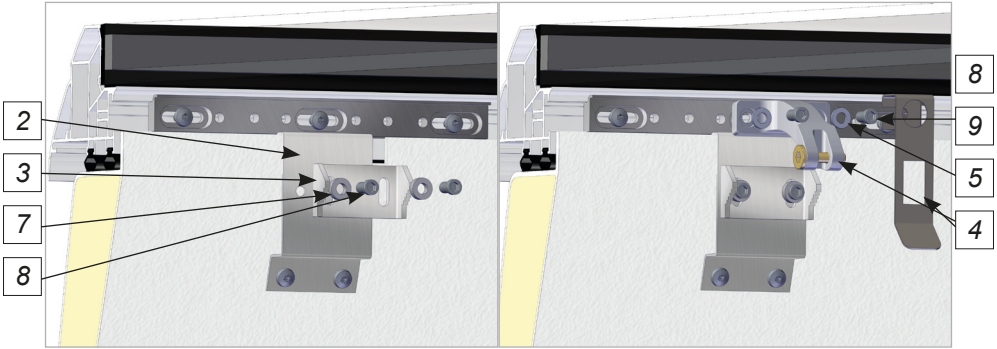


locating bolt



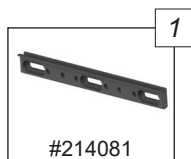
lock splint

Assembly:

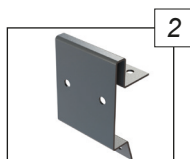


## Rigidly bolted (Z sheet without drive)

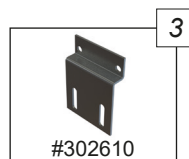
Components:



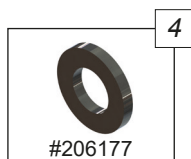
insert-sleeve F100



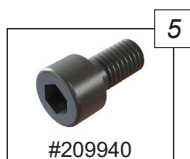
metal fitting blank



locking plate  
Z-sheet



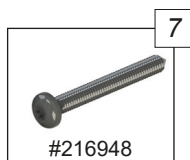
washer thick  $\varnothing=6,4$



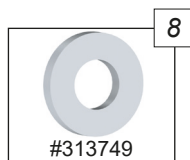
socket screw  
M6x12



socket screw  
M6x10

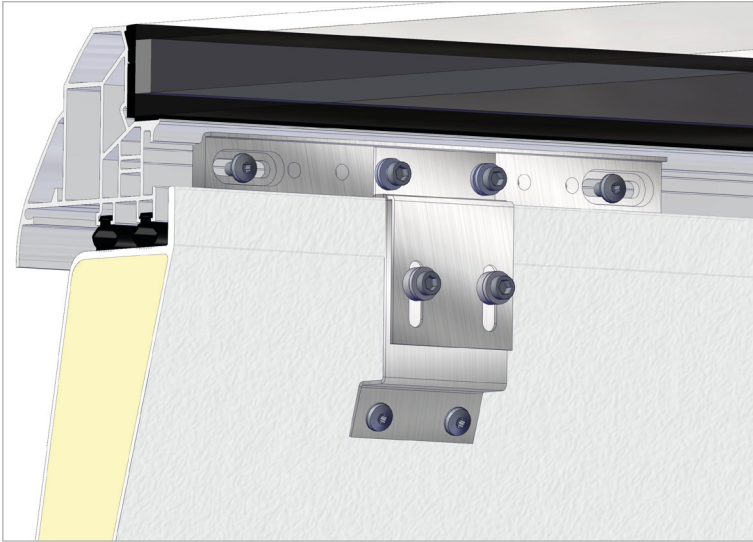
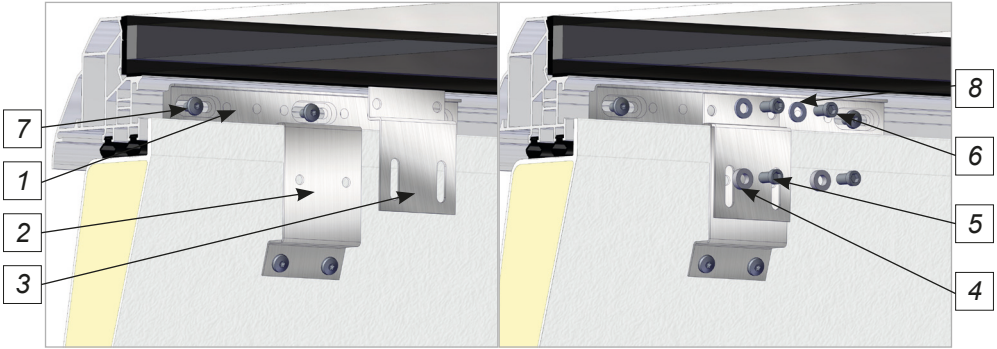


raised-head screw  
AW25 5,5x45



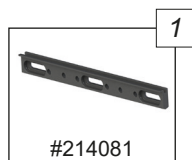
lock washer  $\varnothing=6,4$

Assembly:

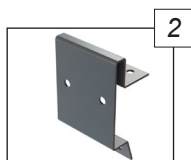


## Rack and pinion drive type "ZA"

Components:



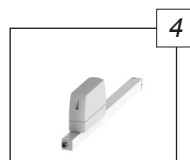
insert-sleeve F100



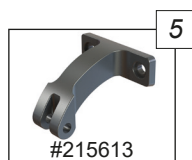
metal fitting blank



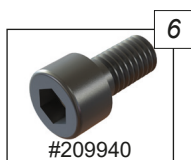
angle bracket WK6



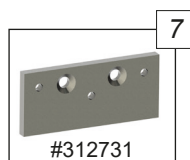
motor ZA



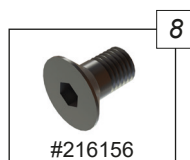
wing bent RAL  
9016



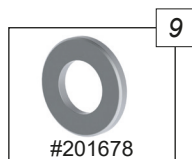
socket screw  
M6x12



adapter plate WK6



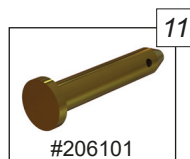
countersunk M6x10



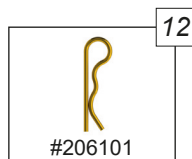
washer DIN 125 6,4



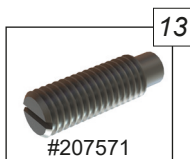
raised-head screw  
AW25 5,5x45



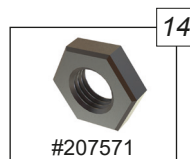
locating bolt



lock splint

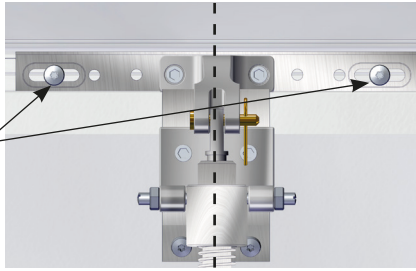


threaded pin M8

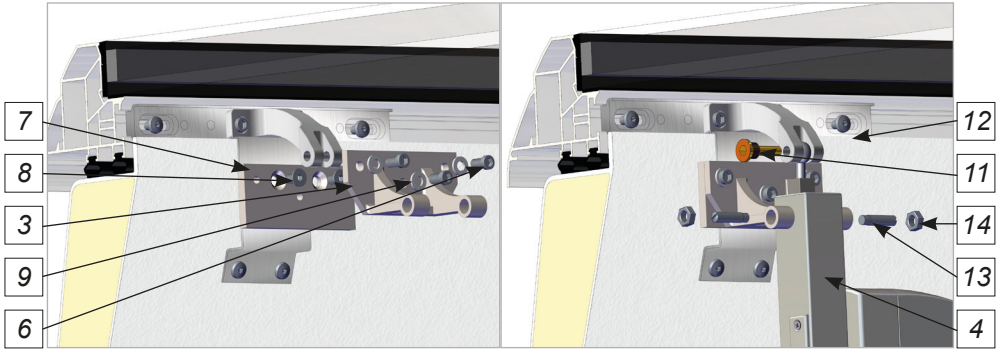


hexagonal nut M8

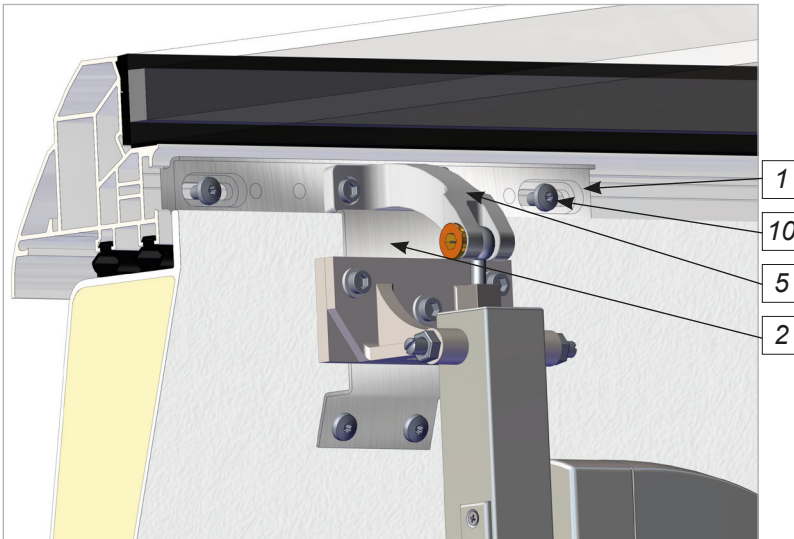
Assembly:



Align hinge bracket and connecting sleeve centred to the eyebolt of the motor. Remove position 10 for alignment.

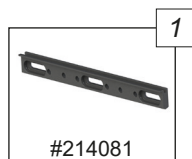


The motor should be smoothly mounted into the bracket.

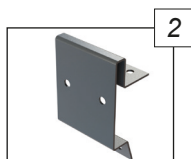


## Telescope spindle drive (hand spindle)

Components:



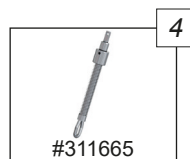
insert-sleeve F100



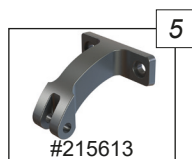
metal fitting blank



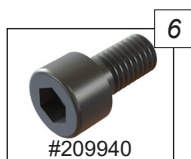
spindle bracket



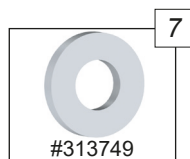
telescope spindle



wing bent RAL  
9016



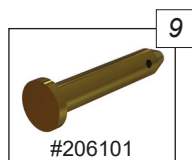
socket screw  
M6x12



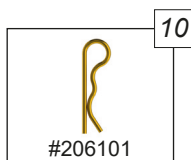
lock washer  $\text{Ø}=6,4$



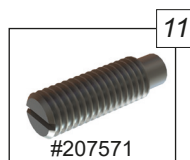
raised-head screw  
AW25 5,5x45



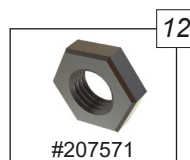
locating bolt



lock splint

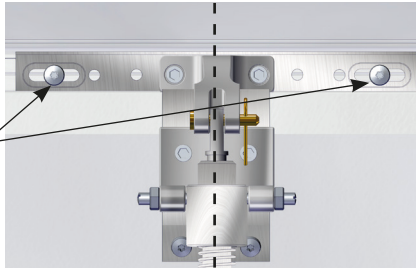


threaded pin M8

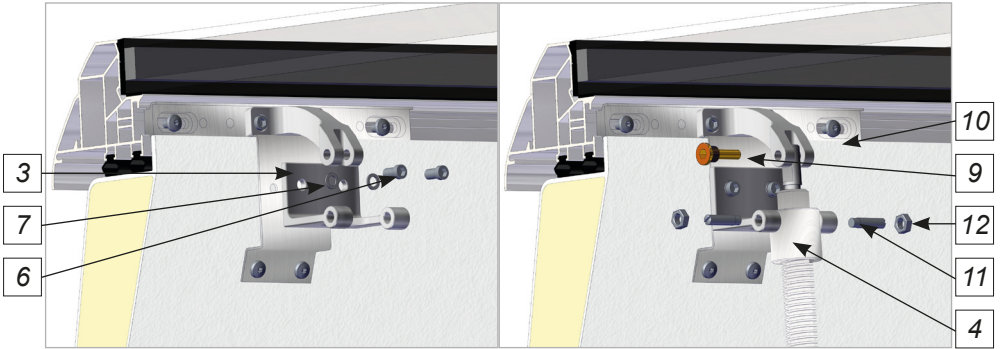


hexagonal nut M8

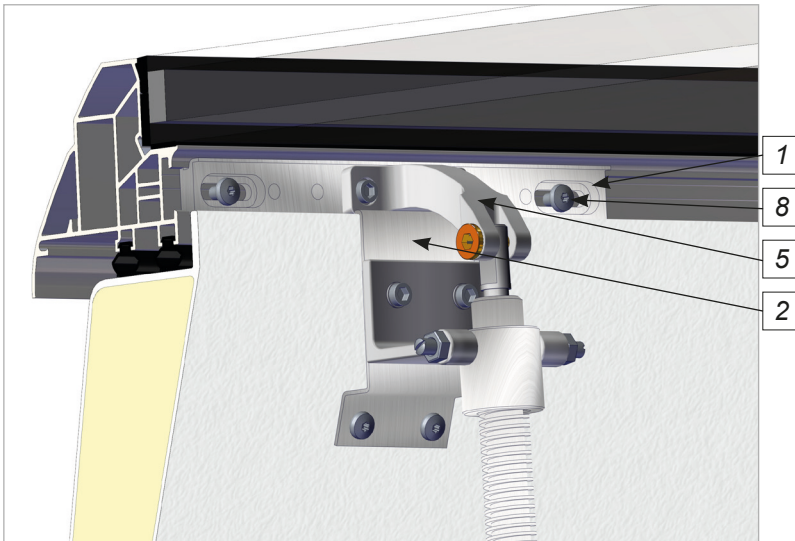
Assembly:



Align hinge bracket and connecting sleeve centred to the eyebolt of the motor. Remove position 8 for alignment.



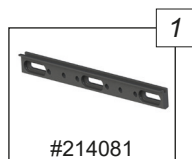
The motor should be smoothly mounted into the bracket.



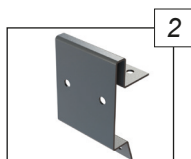


## 230V drive type "JMB"

Components:



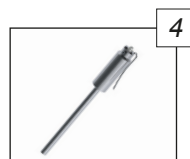
insert-sleeve F100



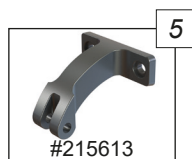
metal fitting blank



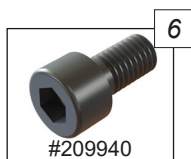
motor bracket



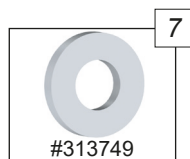
motor 230V JMB



wing bent RAL  
9016



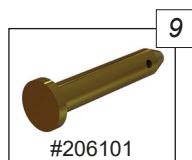
socket screw  
M6x12



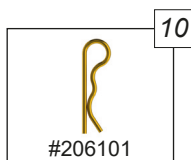
lock washer Ø=6,4



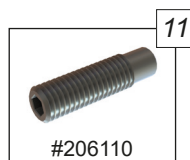
raised-head screw  
AW25 5,5x45



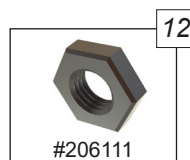
locating bolt



lock splint

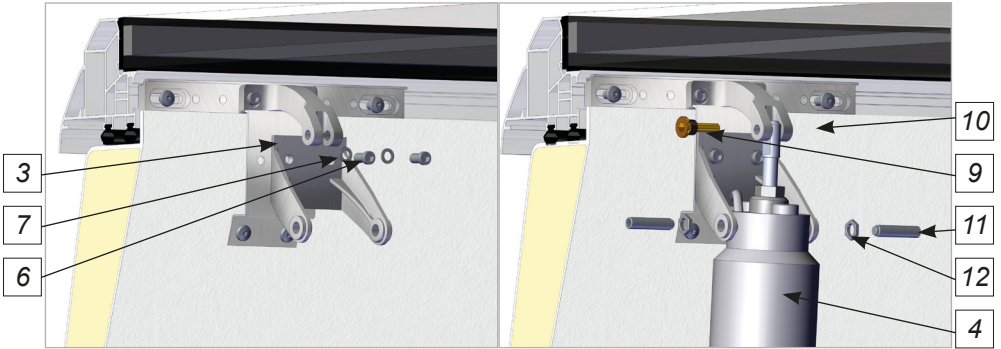
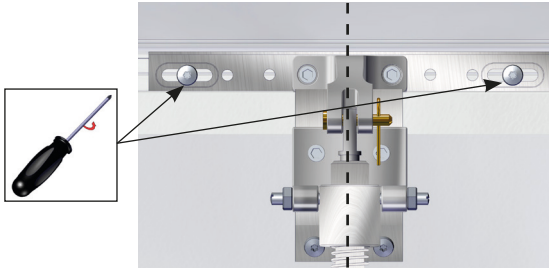


threaded pin  
M10x25

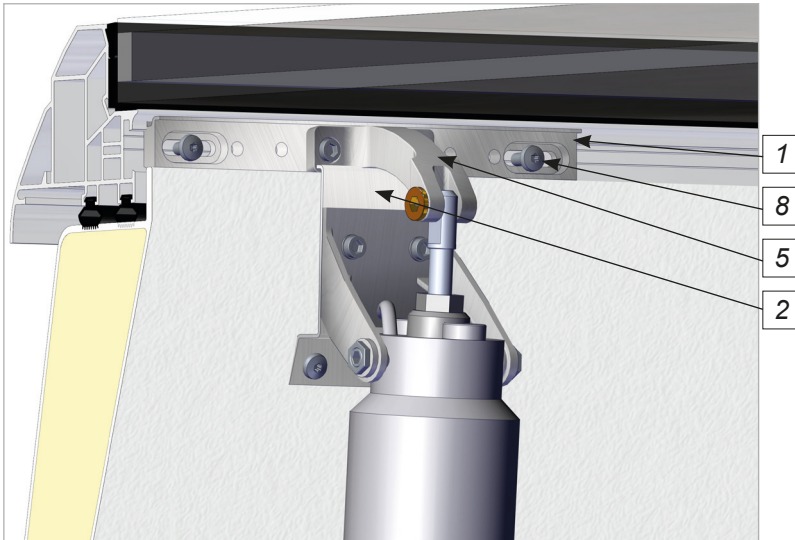


hexagonal nut M10

Assembly:



The motor should be smoothly mounted into the bracket.

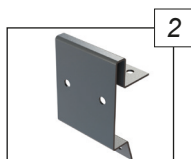


## 230V drive tandem Type "JMBB"

Components:



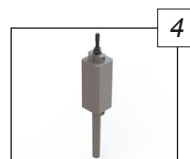
insert-sleeve F100



metal fitting blank



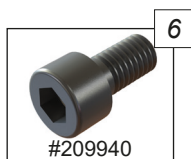
motor bracket



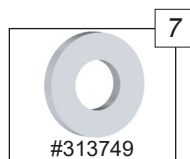
motor 230V JMBB



wing bent RAL  
9016



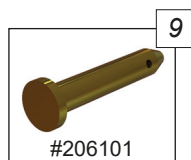
socket screw  
M6x12



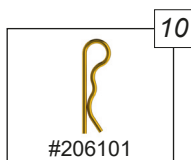
lock washer  $\text{Ø}=6,4$



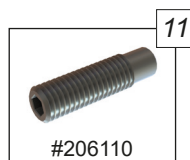
raised-head screw  
AW25 5,5x45



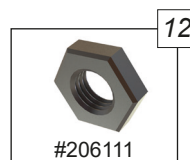
locating bolt



lock splint

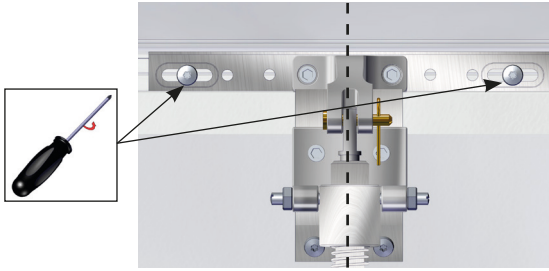


threaded pin  
M10x25

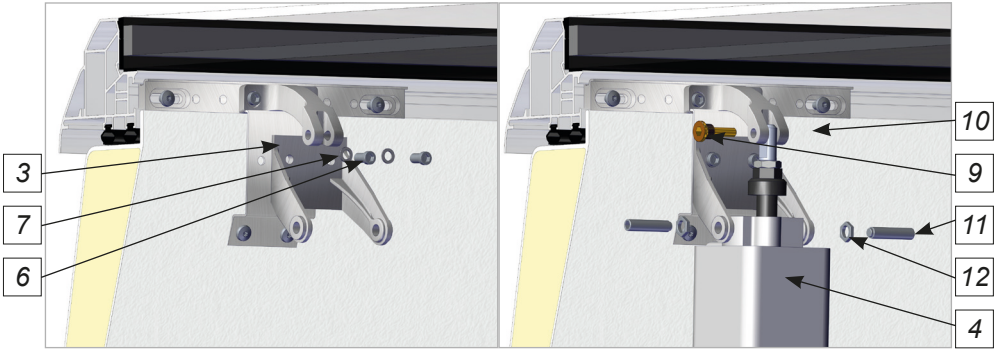


hexagonal nut M10

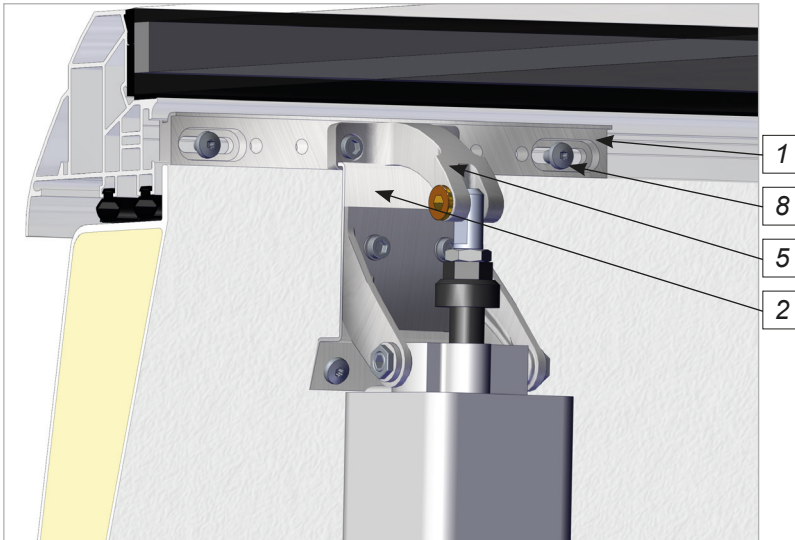
Assembly:



Align hinge bracket and connecting sleeve centred to the eyebolt of the motor. Remove position 8 for alignment.

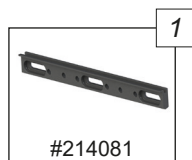


The motor should be smoothly mounted into the bracket.

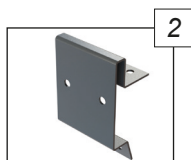


## 24V drive tandem Type "JM-DC"

Components:



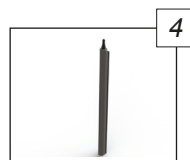
insert-sleeve F100



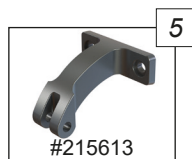
metal fitting blank



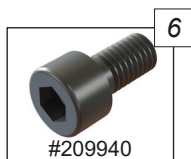
motor bracket



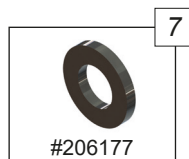
motor 24V



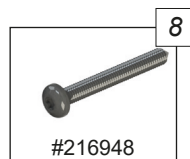
wing bent RAL  
9016



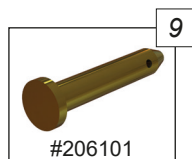
socket screw  
M6x12



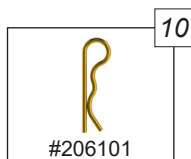
flat washer thick,  
Ø=6,4



raised-head screw  
AW25 5,5x45



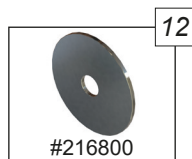
locating bolt



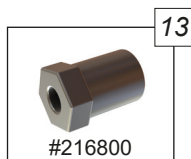
lock splint



stud screw M5



flat washer Ø=5,2

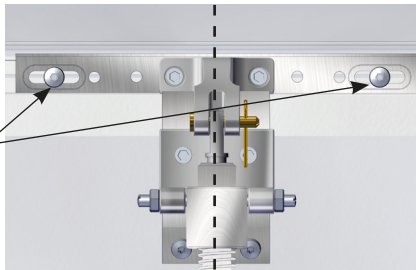


threaded bush M5

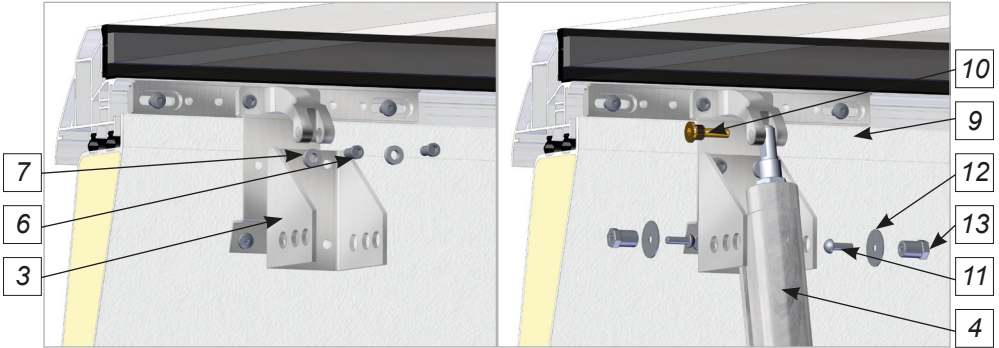


load breaking

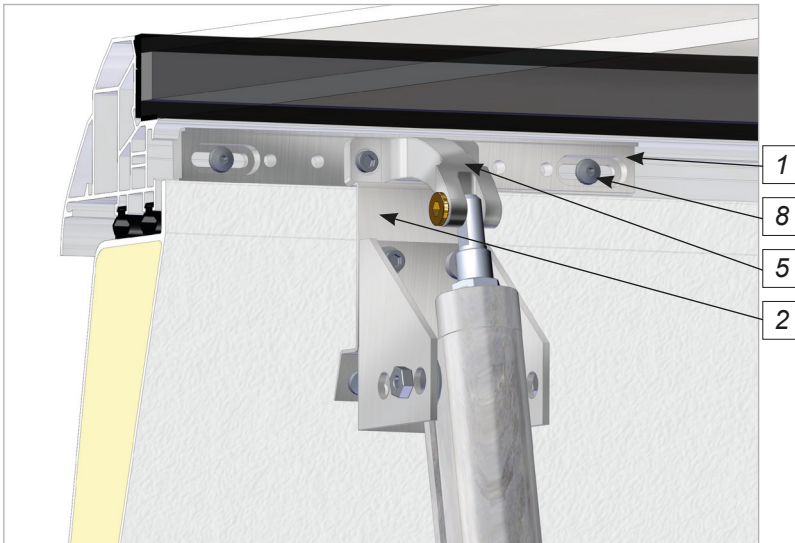
Assembly:



Align hinge bracket and connecting sleeve centred to the eyebolt of the motor. Remove position 9 for alignment.



The motor should be smoothly mounted into the bracket.

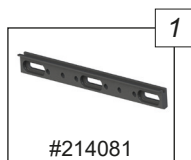


OR  
Installation of the motor  
bracket on the  
substructure

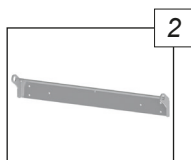


## Chain drive type "KSA"

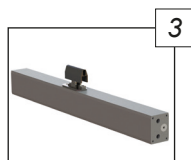
Components:



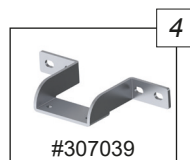
insert-sleeve F100



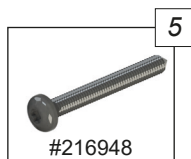
motor bracket



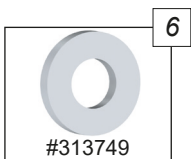
motor KSA



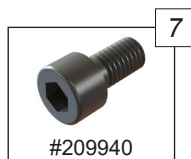
wing bracket



raised-head screw  
AW25 5,5x45



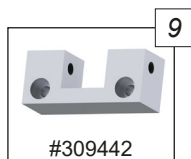
lock washer  $\text{Ø}=6,4$



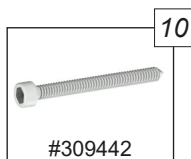
socket screw  
M6x12



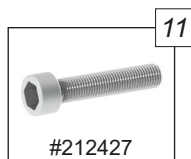
nut M5



wing bent F16



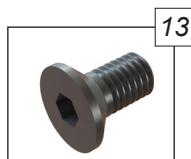
cylinder head screw  
M6x50



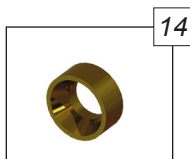
cylinder head screw  
M5x25



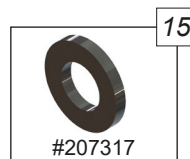
drilling screw  
4,8x25 AW20



countersunk screw

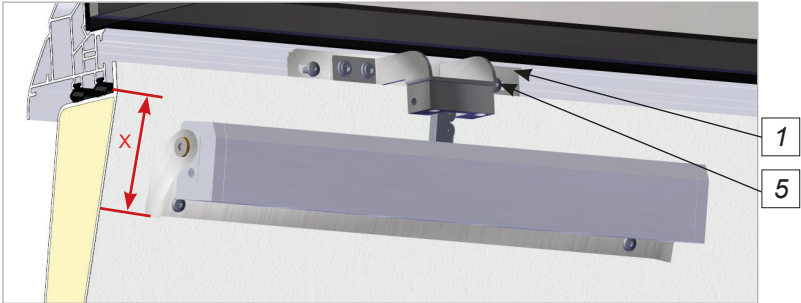
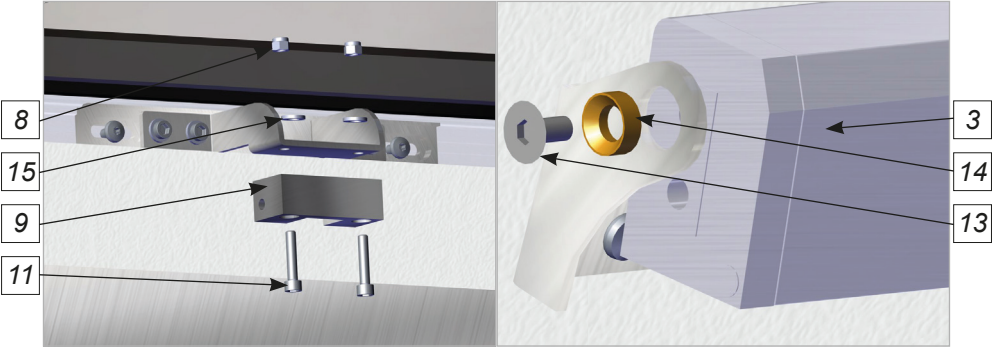
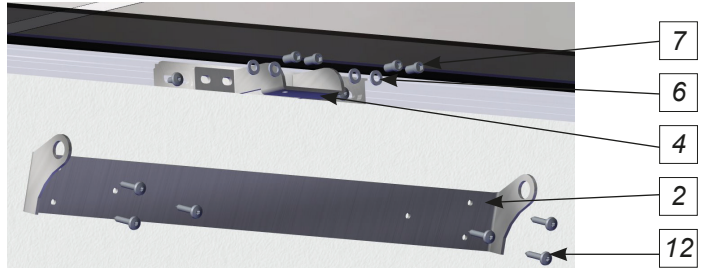


distance bush



flat washer  
thin  $\text{Ø}=5,3$

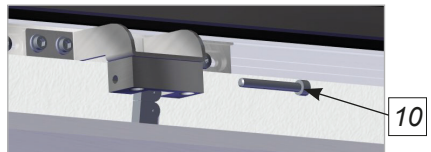
Assembly:



upstand	dimension X (mm)
150mm high	72
300mm high	80
400mm high	82
400mm high – 5°	84
500mm high	84
GRP extension element	89
vertical	89

Attention:  
The measure applies from the contact surface of the seal.

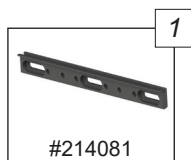
The motor should be smoothly mounted into the bracket.



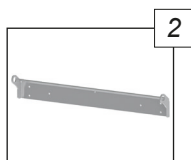


## Chain drive type "Ne-Ka"

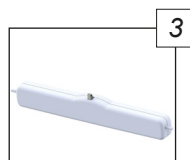
Components:



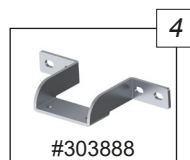
insert-sleeve F100



motor bracket



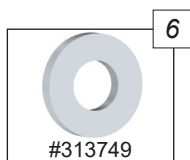
motor Neka



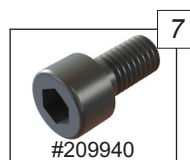
wing bracket



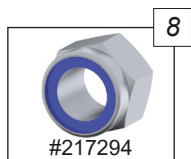
raised-head screw  
AW25 5,5x45



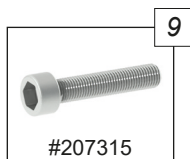
lock washer  $\varnothing=6,4$



socket screw  
M6x12



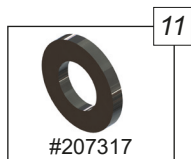
nut M5



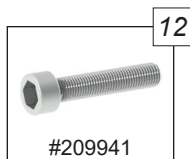
cylinder head screw  
M5x12



drilling screw  
4,8x25 AW20



flat washer  
thin  $\varnothing=5,3$

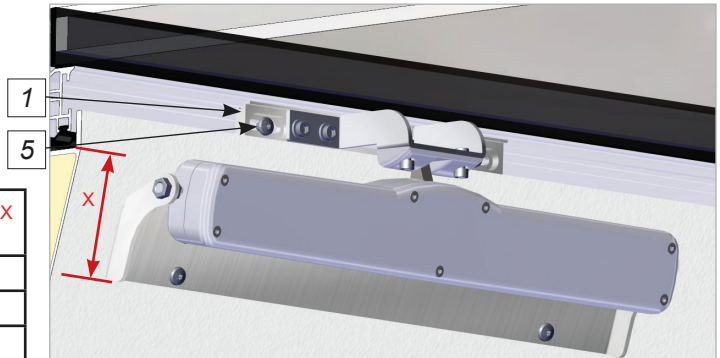
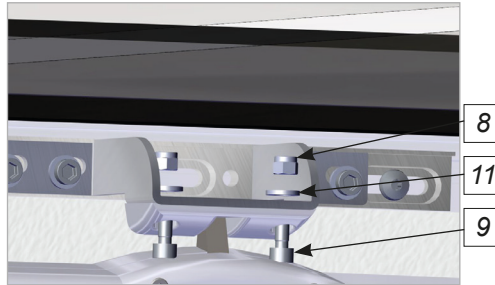
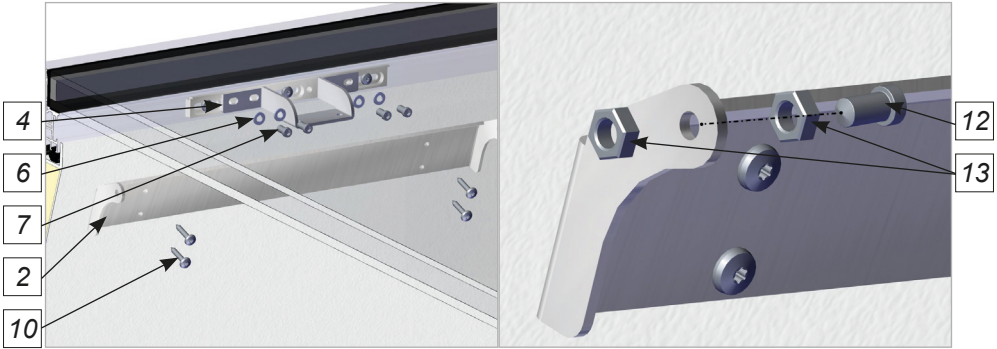


cylinder head screw  
M6x16



hexagon nut M5

Assembly:



upstand	dimension X (mm)
150mm high	68
300mm high	80
400mm high	85
400mm high – 5°	84
500mm high	86
GRP extension element	91
PVC extension element	94
vertical	95

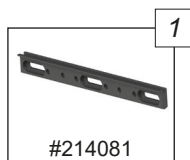
Attention:

The measure applies from the contact surface of the seal.

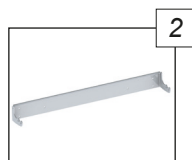
The motor should be smoothly mounted into the bracket.

## Chain drive type "Windowmaster"

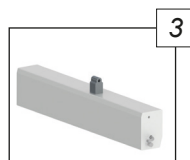
Components:



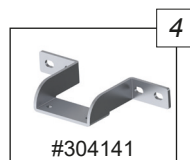
insert-sleeve F100



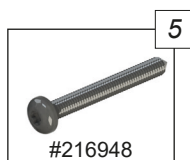
WMU bracket



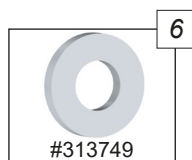
chain drive WMU



wing bracket for  
WMU 8xx



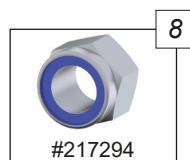
raised-head screw  
AW25 5,5x45



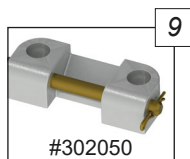
lock washer  $\text{Ø}=6,4$



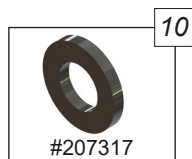
socket screw  
M6x12



nut M5



wing trestle



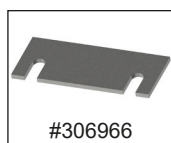
flat washer  
thin  $\text{Ø}=5,3$



cylinder head screw  
M5x25

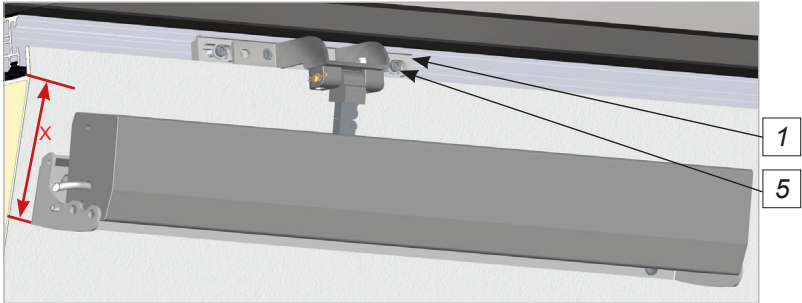
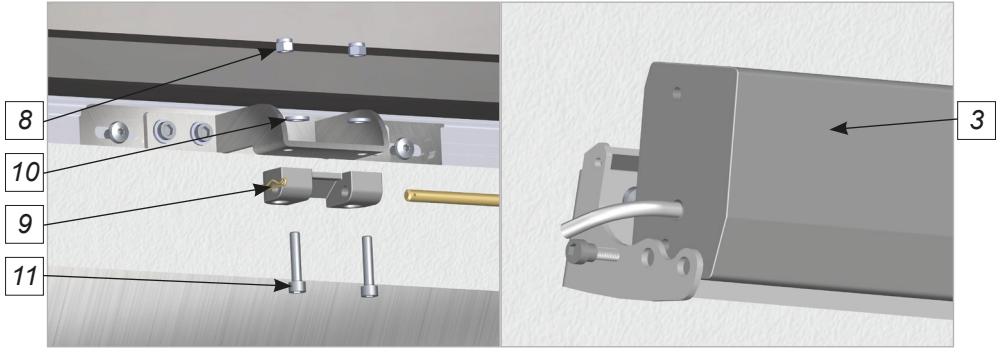
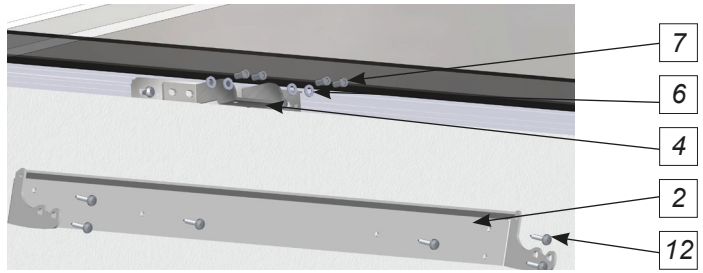


drilling screw  
4,8x25 AW20



distance plate between wing bracket  
and wing trestle  
- if required

Assembly:

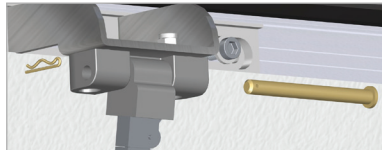


upstand	dimension X (mm)
150mm high	55
300mm high	81
400mm high	84
400mm high – 5°	82
500mm high	86
GRP extension element	94
PVC extension element	97
vertical	96

Attention:

The measure applies from the contact surface of the seal.

The motor should be smoothly mounted into the bracket.

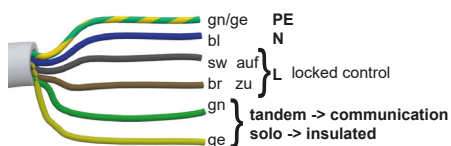


## Wiring diagrams of electric drives

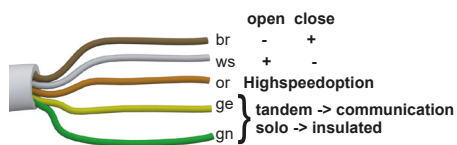
rack and pinion drive type "ZA"

technical details	230V	24V
driving force	rack and pinion drive	
maintenance	230V AC, 50Hz	24V DC
rated current	27W / 30VA	1A
nominal force	1000N	800N
run-time	ca. 10s/100mm	ca. 10s/71mm
case	aluminium/plastic	
safety class	IP65	
cable length	2,5m	

Solo/Tandem 230V



Solo/Tandem 24V



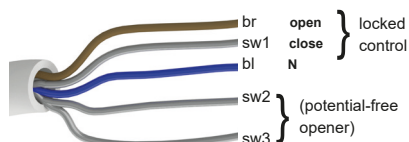
**Attention with tandem circuit:**

To synchronise, the communication wires of the drives need to be connected with each other.

230V driver type "JMB" and type "JMBB"

technical details	
driving force	spindle drive
maintenance	230V AC, 50Hz
rated current	0,6A / 140W
nominal force	550N
run-time	ca. 10s/100mm
case	plastic case
safety class	IP54
load breaking	integrated
cable length	1,4m

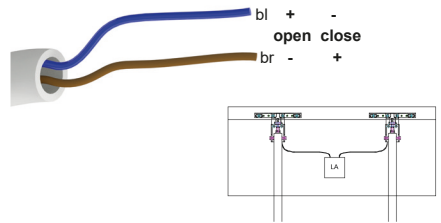
Solo/Tandem 230V



## 24V driver type "JM-DC"

technical details	Jo65	Jo100
driving force	spindle drive	
maintenance	24V DC, +4/-2V	
rated current	0,8A / 19,2W	
nominal force	650N	1000N
run-time	ca. 375mm/min	ca. 200mm/min
case	aluminium	
safety class	IP65	
load breaking	integrated	
cable length	1,7m - 2,4m	

### Solo/Tandem 24V

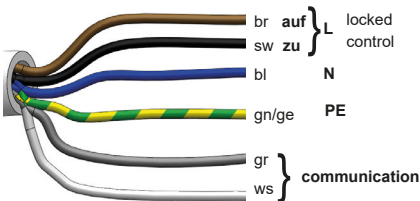


To ensure a smooth operation, the drives need to be synchronised via an external control panel!

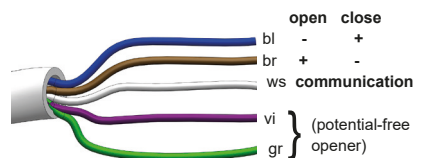
## chain drive type "KSA"

technical details	230V	24V
driving force	chain drive	
maintenance	230V AC, 50Hz	24V DC, +4/-2V
rated current	0,2A	1,2A
dimension	B 40mm x H 56mm	
nominal force	600N	
run-time	ca. 8mm/s	ca. 12mm/s
case	aluminium	
safety class	IP32	
load breaking	integrated	
cable length	5m	

### Solo/Tandem 230V



### Solo/Tandem 24V



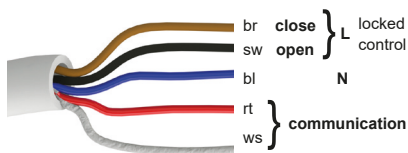
### Attention with tandem circuit:

To synchronise, the communication wires of the drives need to be connected with each other.

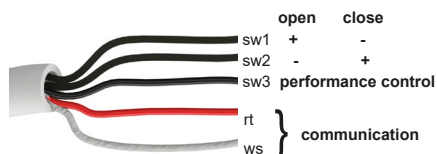
## chain drive type "Ne-Ka"

technical details	230V	24V
driving force	chain drive	
maintenance	230V	24V
current drain	0,115A	0,88A
dimension	L approx. 386,5mm	
maximum thrust/ tractive force	250N	
run-time	ca. 12,5mm/s	ca. 12,5mm/s
case	aluminium	
safety class	IP30	
load breaking	integrated	
cable length	2m	

## Solo/Tandem 230V



## Solo/Tandem 24V

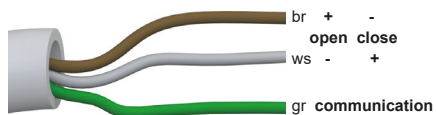
**Attention with tandem circuit:**

To synchronise, the communication wires of the drives need to be connected with each other.

## chain drive type "Windowmaster"

technical details	
driving force	chain drive
maintenance	24V DC
current drain	1 - 5A
nominal force	600N or 1000N
run-time	depending on the drive
case	aluminium
safety class	IP54
load breaking	integrated
cable length	5m

## Solo/Tandem 24V

**Attention with tandem circuit:**

To synchronise, the communication wires of the drives need to be connected with each other.



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The technical data listed in this brochure correspond to the current status at the time of printing and are subject to change. Our technical specifications are based on calculations and supplier specifications, or have been determined by independent testing authorities within the scope of applicable standards.

Thermal transmission coefficients for our plastic glazing were calculated using the finite element method with reference values in accordance with DIN EN 673 for insulated glass. Taking into account practical experience and the specific characteristics of plastic, the temperature difference between the outer surfaces of the material was defined as 15 K. Functional values refer to test specimens and the dimensions used in testing only. We cannot provide any further guarantees of technical values. This particularly applies to changed installation conditions or if dimensions are re-measured on site.



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