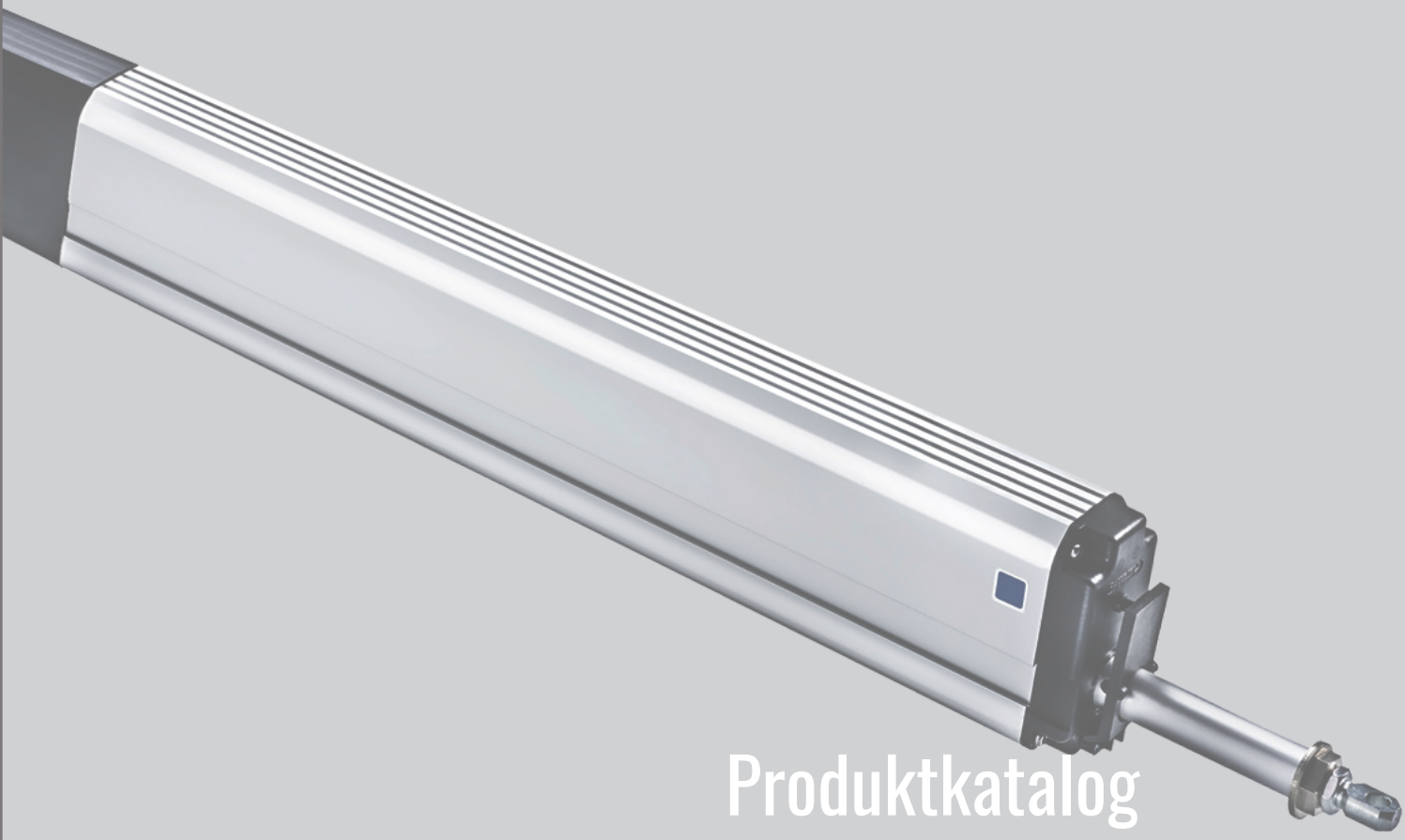
MBM || MAB



Produktkatalog

Spindelmotorer SP8

Oktober 2020

OVERVIEW OF SPINDLE DRIVES

Type	Form	Model		Stroke	Force		Speed		Stroke in	Cut-off current	Use			Loca-tion		Functions		
		Type of cut-off	Rated voltage	Range	Pushing force	Pulling force	OPEN	CLOSE	60 s	Max.	Natural ventilation	SHEV	NSHEV	Facade	Roof	Run monitoring	Synchronised run	Sequence control
			[VDC]	[mm]	[N]	[N]	[mm/s]	[mm/s]	[mm]	[A]								
PLA	PLA6	S3	24	100–1000	600	600	6,0	6,0	350	0,8	●	●	●	■	●	●		●
		S12		100–1000	600	600	6,0	6,0	350	0,8	●	●	●	■	●	●	●	●
	PLA8	S3	24	100–1000	800	800	10,0	10,0	600	1,4	●	●	●	■	●	●		●
		S12		100–1000	800	800	10,0	10,0	600	1,4	●	●	●	■	●	●	●	●
	PLA10	S12	24	100–1000	1000	1000	12,6	12,6	750	2,5	●	●	●	■	●	●	●	●
	PLA101	S3	24	100–1000	1000	1000	4,6	4,6	250	1,0	●	●	●	■	●	●		●
		S12		100–1000	1000	1000	4,6	4,6	250	1,0	●	●	●	■	●	●	●	●
	PLA16	S12		100–1000	1600	1600	7,0	7,0	400	2,5	●	●	●	■	●	●	●	●
	PLA116	S3	24	100–750	1600	1600	4,0	4,0	240	1,2	●	●	●	■	●	●		●
		S12		100–750	1600	1600	4,0	4,0	240	1,2	●	●	●	■	●	●	●	●
PLS	PLS15	S12	24	300–1000	1500	1500	16,0	16,0	950	4,0	●	●	●	■	●	●	●	●
	PLS30	S12	24	300–1000	3000	2000	7,8	7,8	450	5,0	●	●	●	■	●	●	●	●
	PLS50	S12	24	200–750	5000	5000	4,0	4,0	240	4,2	●	●	●	■	●	●	●	●
SP	SP8	S2	24	100–750	800	800	7,0	7,0	400	1,0	●	●		■	●	○		○
		S2	230	300–750	800	800	7,0	7,0	400	0,2	●			■	●			

LEGEND

● suitable ■ not recommended

S2 internal load dependend cut-off switch

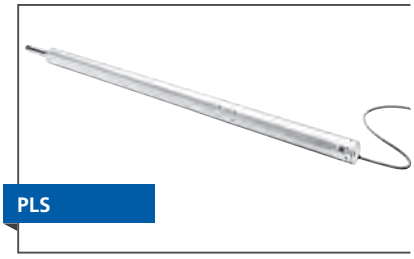
S3 internal load dependend cut-off switch, post cycle resistant, programmable for motion monitoring (up to 300 mm stroke) and sequence control

S12 internal Intelligent Control Electronics for synchronised run and programmable functions

○ only with external modules (cut-off switch system, synchronisation module, sequence control module)

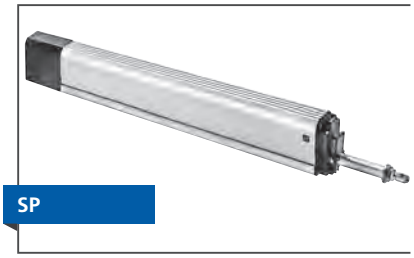
PLA SPINDLE DRIVES

- Model: 24V DC, S3 und S12
- Pulling force: 600–1600 N (type depending)
- Stroke length: 100–1000 mm
- Speed: 4,0–12,5 mm/s (type depending)
- Housing (DxL): D=36 mm, length depends on stroke
- Opening mechanism: stainless steel spindle tube
- Versions: SOLO, Tandem, Synchro
- Protection rating: IP65



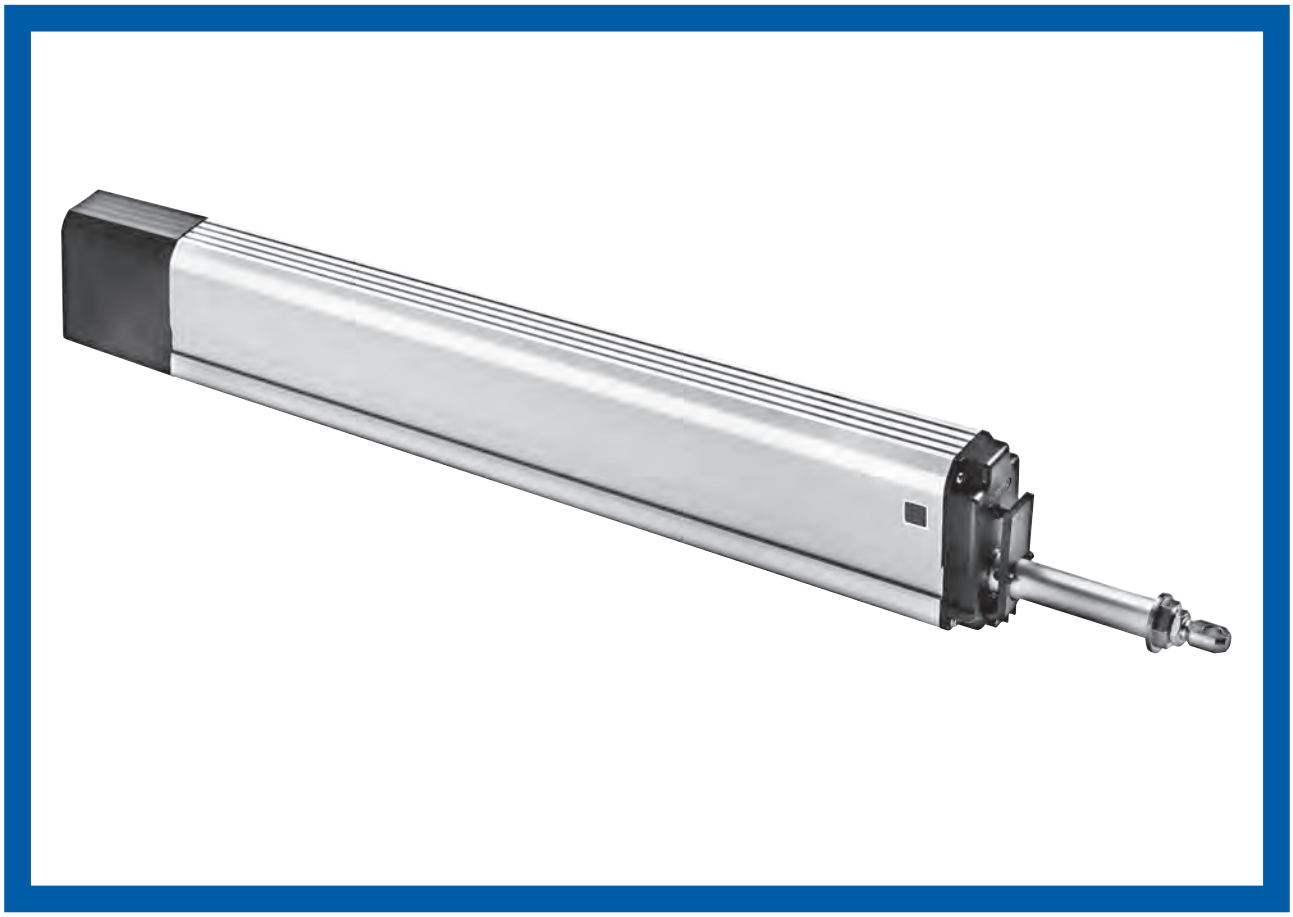
PLS SPINDLE DRIVES

- Model: 24V DC, S12
- Pulling force: 1500–5000 N
- Stroke length: 300–1200 mm
- Speed: 4,0–17,0 mm/s (type depending)
- Housing (DxL): D=50/(60) mm, length depends on stroke
- Opening mechanism: stainless steel spindle tube
- Versions: SOLO, Tandem, Synchro
- Protection rating: IP54



SP SPINDLE DRIVES

- Model: 24V DC, S2/230V AC, S2
- Pulling force: 800 N
- Stroke length: 100–750 mm (230V AC: 300–750)
- Speed: 8,5 mm/s
- Housing (DxL): 43x76 mm, length depends on stroke
- Opening mechanism: aluminium spindle tube
- Versions: SOLO, Z with feedback contact
- Protection rating: IP54/IP65



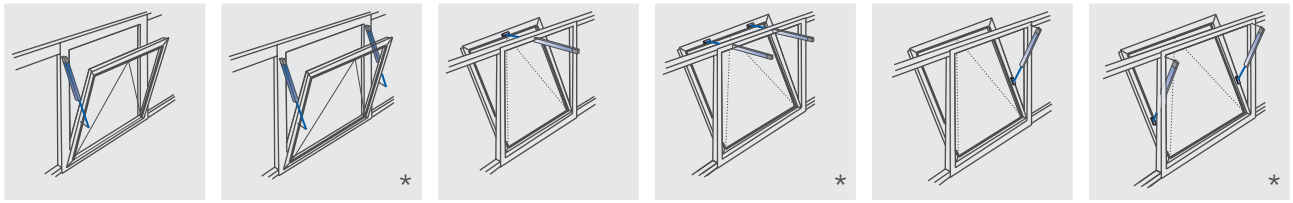
SPECIAL FEATURES SP

- For natural ventilation, smoke and heat exhausting systems
- Robust corrosion-resistant design
- Aluminium housing anodized finish or optionally in RAL colors - with plastic end caps
- Easy installation due to lateral dovetail guidence
- Phosphated steel spindle, aluminium spindle tube anodised finisch, damped end positions
- Available in 24 V DC and 230 V AC
- Limit switch to protect against overload

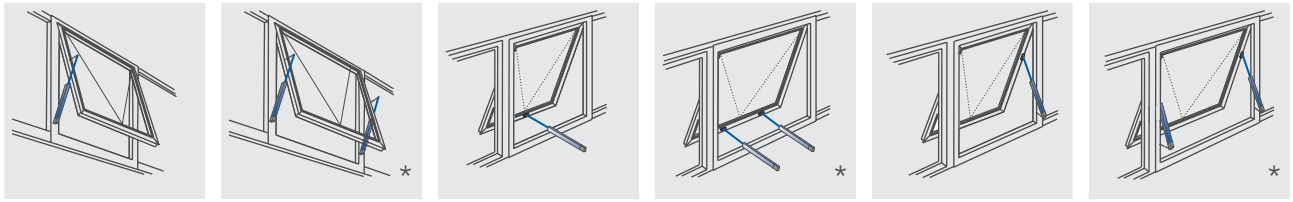
For this product series, a Type III Environmental Product Declaration (EPD) was issued according to ISO 14025 and EN 15804.
The LCA results of the different product types are listed at the end of this product catalogue.
The EPD documents can be viewed or downloaded from our homepage **www.aumueller-gmbh.de**.

FACADE

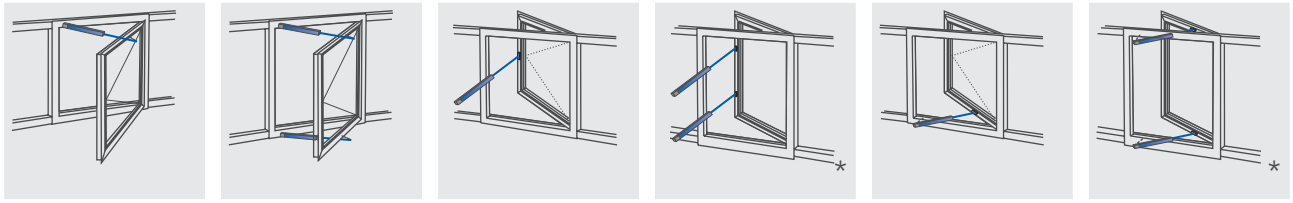
Bottom-hung



Top-hung

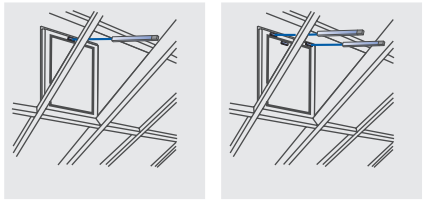


Side-hung

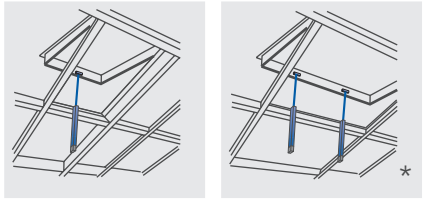


ROOF

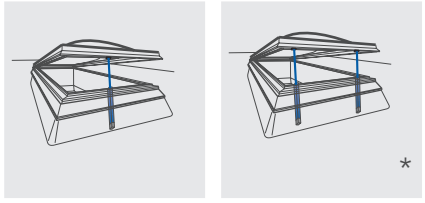
Bottom-hung



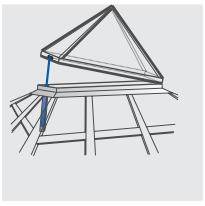
Top-hung



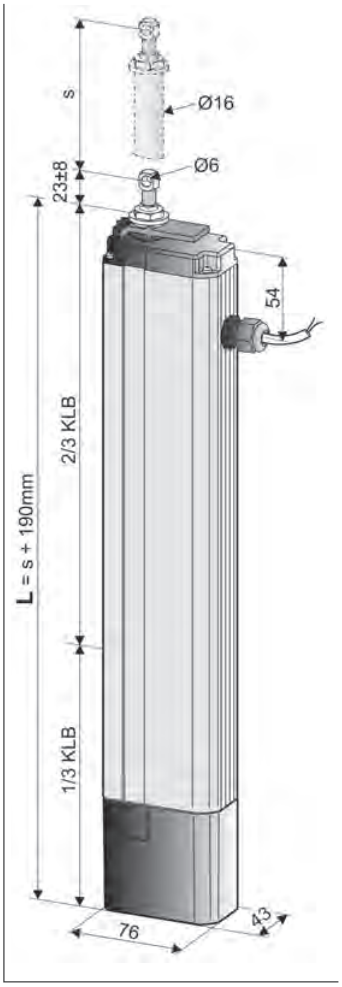
Skylight



Glass pyramid



* Monitored motion run up to s = 300 mm with USKM (Controll modul Part.-No.: 512140)

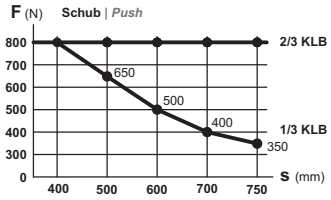


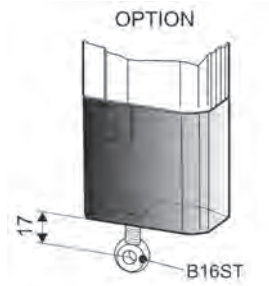
- Application: natural ventilation and SHEV
- Cut-off via limit switch
- „Z"-Version: Potential free NC contact for closed end position feedback (max. 24V, 500 mA)
- Preferably application for skylight domes

Options

- Rear suspension (only to 500 mm stroke)
- Stroke reduction
- Protection rating IP65

TECHNICAL DATA

U_N	Rated voltage	24V DC (± 20%), max. 2 Vpp
I_N	Rated current	0,8 A
I_A	Cut-off current	1,0 A
P_N	Rated power	20 W
ED	Duty cycle	30 % (ON: 3 min. / OFF: 7 min.)
	Protection rating	IP 54
	Ambient temperature range	-5 °C ... +75 °C
F_Z	Pulling force max.	800 N
F_A	Pushing force	
F_H	Pullout force	3000 N (fastening depended)
	Spindle tube	aluminium
	Connecting cable	non-halogen, grey SP8: 2 x 0,75 mm², ~ 1 m SP8-Z: 4 x 0,75 mm², ~ 1 m
v	Speed	7,0 mm/s 7,0 mm/s
S	Stroke	100 – 750 mm (± 5%)
L	Length	s + 190 mm see order data
	Sound pressure level A	≤ 70 dB (A)



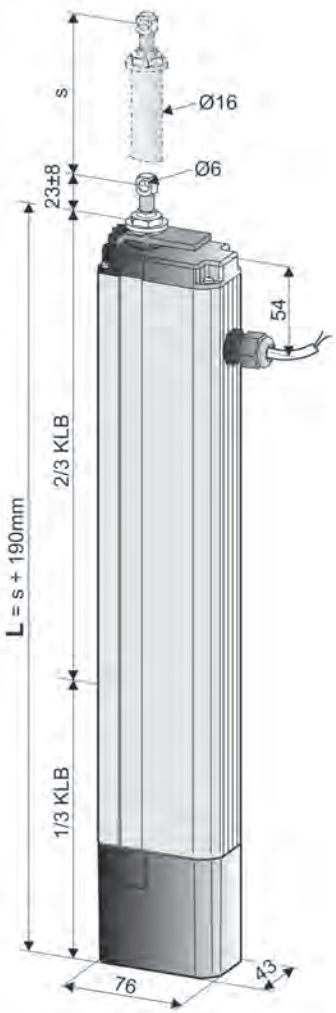
The **rear suspension** is fitted at the **factory**.
Only up to 500 mm stroke possible!

ORDER DATA

s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.
100	290	SP8 100 S2 24V	E6/C-0	1	**514110**
		SP8-Z 100 S2 24V		1	**514310**
200	390	SP8 200 S2 24V	E6/C-0	1	**514120**
		SP8-Z 200 S2 24V		1	**514320**
300	490	SP8 300 S2 24V	E6/C-0	1	**514130**
		SP8-Z 300 S2 24V		1	**514330**
400	590	SP8 400 S2 24V	E6/C-0	1	**514140**
		SP8-Z 400 S2 24V		1	**514340**
500	690	SP8 500 S2 24V	E6/C-0	1	**514150**
		SP8-Z 500 S2 24V		1	**514350**
600	790	SP8 600 S2 24V	E6/C-0	1	**514160**
		SP8-Z 600 S2 24V		1	**514360**
750	940	SP8 750 S2 24V	E6/C-0	1	**514175**
		SP8-Z 750 S2 24V		1	**514375**

OPTIONS

Special model	PU/pcs.	Part.-No.
Rear Suspension		
Cape for rear suspension (only to 500 mm stroke) incl. eyebolt B16ST M8 x 40 mm, bore Ø8 mm	1	**512002**
Protection rating IP65		
Drive with additional gaskets for IP65		**512005**
Mechanical stroke reduction		
Stroke reduction without construction length - mechanically		**516000**
Drive housing painted/powder coated in other RAL colours		
Lump sum for coating		**516030**
Specify at order stage:	1 – 20	**516004**
	21 – 50	**516004**
	51 – 100	**516004**
	up 101	**516004**
Extra length connecting cable:		
3 m – non-halogen, grey – 2 x 0,75 mm²		**501023**
5 m – non-halogen, grey – 2 x 0,75 mm²		**501024**
10 m – non-halogen, grey – 2 x 0,75 mm²		**501039**
5 m – non-halogen, grey – 4 x 0,75 mm² („Z"-Version)		**501044**
10 m – non-halogen, grey – 4 x 0,75 mm² („Z"-Version)		**501046**

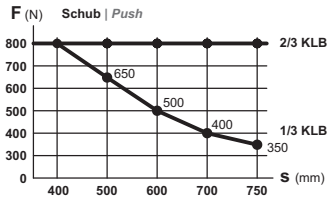


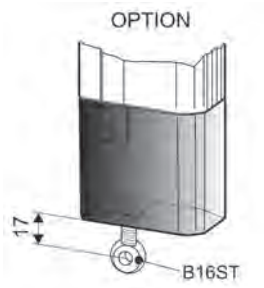
- Application: natural ventilation as single-drive
- Cut-off via limit switch
- Potential free NC contact for closed end position feedback (max. 24V, 500 mA)
- Parallel connection up to 8 drives in one group
- Preferably application for skylight domes
- Minimum basic lenght of housing for stroke s = 300 mm

Options

- Stroke reduction (for s < 300 mm)
- Rear suspension (only to 500 mm stroke)
- Protection rating IP65

TECHNICAL DATA

U_N	Rated voltage	230V AC (50 Hz)
I_N	Rated current	0,12 A
I_A	Cut-off current	0,2 A
P_N	Rated power	5 W
ED	Duty cycle	30 % (ON: 3 min. / OFF: 7 min.)
	Protection rating	IP 54
	Ambient temperature range	-5 °C ... +75 °C
F_Z	Pulling force max.	800 N
F_A	Pushing force	
F_H	Pullout force	3000 N (fastening depended)
	Spindle tube	aluminium
	Connecting cable	non-halogen, grey – 6 x 0,75 mm², ~ 1 m
v	Speed	7,0 mm/s 7,0 mm/s
s	Stroke	300 – 750 mm (± 5%)
L	Length	s + 190 mm see order data
	Minimum lenght of housing	490 mm (s 300 mm)
	Sound pressure level A	≤ 70 dB (A)



The **rear suspension** is fitted at the **factory**.
Only up to 500 mm stroke possible!

ORDER DATA

s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.
300	490	SP8-Z 300 S2 230V	E6/C-0	1	**496231**
400	590	SP8-Z 400 S2 230V	E6/C-0	1	**496241**
500	690	SP8-Z 500 S2 230V	E6/C-0	1	**496251**
600	790	SP8-Z 600 S2 230V	E6/C-0	1	**496261**
750	940	SP8-Z 750 S2 230V	E6/C-0	1	**496276**

OPTIONS

Special model	PU/pcs.	Part.-No.
Rear Suspension		
Cape for rear suspension (only to 500 mm stroke) incl. eyebolt B16ST M8 x 40 mm, bore Ø8 mm	1	**512002**
Protection rating IP65		
Drive with additional gaskets for IP65		**512005**
Mechanical stroke reduction		
Stroke reduction without construction length - mechanically		**516000**
Drive housing painted/powder coated in other RAL colours		
Lump sum for coating		**516030**
Specify at order stage:	1 – 20	**516004**
	21 – 50	**516004**
	51 – 100	**516004**
	up 101	**516004**
Extra length connecting cable:		
3 m – non-halogen, grey – 6 x 0,75 mm²		**501163**
5 m – non-halogen, grey – 6 x 0,75 mm²		**501164**
10 m – non-halogen, grey – 6 x 0,75 mm²		**501166**

OVERVIEW OF BRACKETS

Typical applications					1	2	3	4	5	6	7
Frame bracket					K4L	K7	K57, K57.2, K57.3	K59	K57, K57.2, K57.3, K59	K92	K82
Mounting aid									K9		
Bracket accessories					B11	B13	B10 inkl.				B13
Casement bracket					F2	F12	F1, F1V, F1.1, F10.6				
Special application					Sky light Eternit	Sky light Essmann				Sky light Lamilux	
Space requirement			min.	[mm]	140	120	40	35	50	60	45
Window material			Alu				●	●	●	●	●
			Wood				●	●	●	●	●
			PVC		●	●	●	●	●	●	●
Type of window and mounting	Bottom hung	inward	HSK	FM					■		■
				RM							
			NSK	FM							
				RM							
		outward	HSK	RM					●		●
				PR			●	●		●	
			NSK	RM							
				PR							
	Top hung	inward	HSK	FM					■		■
				RM							
			NSK	FM							
				RM							
		outward	HSK	RM					●		●
				PR			●	●		●	
			NSK	RM							
				PR							
	Side hung	inward	HSK	FM					■		■
				RM							
			NSK	FM							
				RM							
	Roof	outward	HSK	RM					●		●
				PR			●	●		●	
			NSK	RM							
				PR			●	●		●	
	Sky-light	outward	HSK	RM	●	●	●	●		●	●
			NSK	RM							
FAB(*1			Solo	[mm]	1200	1200	450 – 1300				
FAH(*1			Solo	[mm]	1200	1200	450 – 1500				

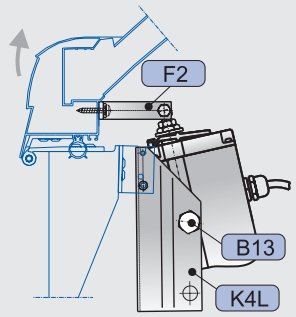
LEGEND

● suitable ■ not recommended

(*1 Sample value of the casement dimensions. The actuell casement dimensions depend on the stroke and the position of the drives to the hinges. The values of FAB/FAH are to be used analogue for side hung windows.

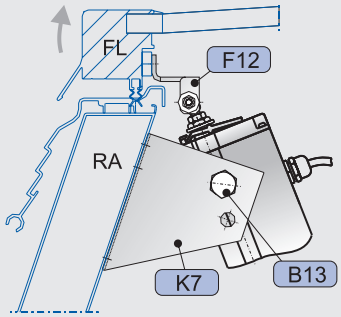
TYPICAL APPLICATIONS

1 RM, HSK, sky light



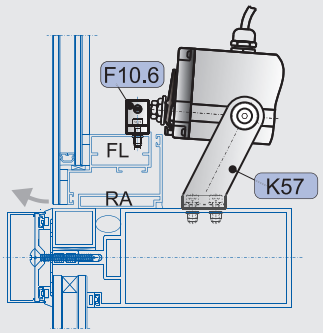
View on sky light Eternit

2 RM, HSK, sky light



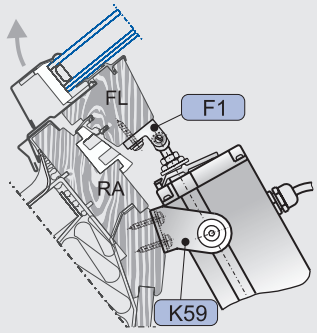
View on sky light Essmann

3 RM, HSK, top hung outward opening



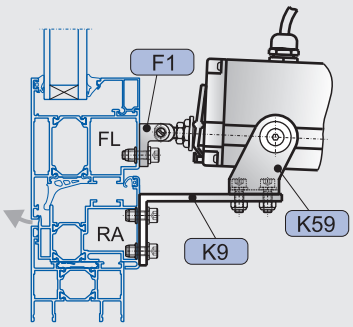
View on aluminium window

4 RM, HSK, roof



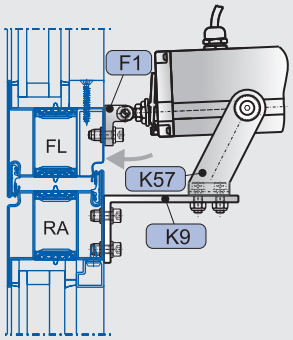
View on wooden window

5 RM, HSK, top hung outward opening



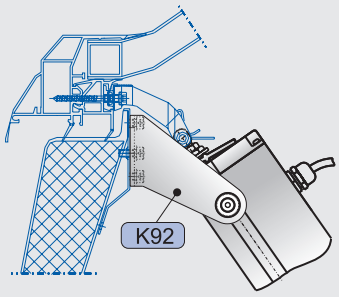
View on aluminium window

5 RM, HSK, top hung outward opening



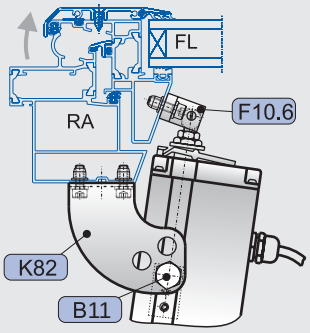
View on steel window

6 RM, HSK, sky light



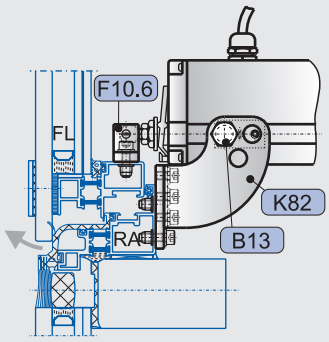
View on sky light Lamilux

7 RM, HSK, roof



View on aluminium window

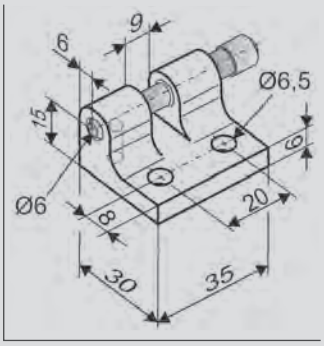
7 RM, HSK, top hung outward opening



View on aluminium window

CASEMENT BRACKETS

F1



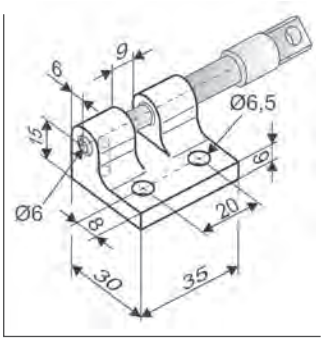
Application

Surface mounting on the **main closing edge** of casement profiles of outward opening windows or skylights, for drives with **front or rear suspension** with bore **Ø6 mm**, manual removal of the drive is possible

Part.-No. 150102

Material/Finish
aluminium, diecast
Feature/Equipment
1x locking bolt
Ø6 mm
Load
max. 1000 N

F1.1



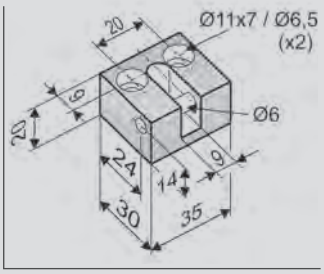
Application

Surface mounting on the **main closing edge** of casement profiles of outward opening windows or skylights, for drives with **front or rear suspension** with bore **Ø6 mm**, manual removal of the drive is possible

Part.-No. 150110

Material/Finish
aluminium, diecast
Feature/Equipment
1x locking spring bolt
Ø6 mm
Load
max. 600 N

F1V



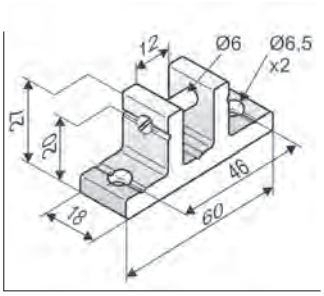
Application

Surface mounting on the **main closing edge** of casement profiles of outward opening windows or skylights, for drives with **front or rear suspension** with bore **Ø6 mm**

Part.-No. 150101

Material/Finish
aluminium
Feature/Equipment
1x grubscrew Ø6 mm
Load
max. 1600 N

F10.6



Application

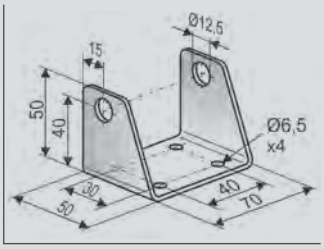
Surface mounting on **main closing edge** of casement profiles of outward opening windows or skylights, for drives with **front or rear suspension** with bore **Ø6 mm**, threaded stud bolt

Part.-No. 151000

Material/Finish
aluminium
Feature/Equipment
1x stud bolt Ø6 mm
Load
max. 1600 N

FRAME BRACKETS

K5



Application

Surface mounting on the **main closing edge** of window frame profiles or on the mullion/transom of outward opening (roof-)windows, for **swivelling suspension** of drives
PLA with **B4**,
SP with **B13,**
LKS with **B7**

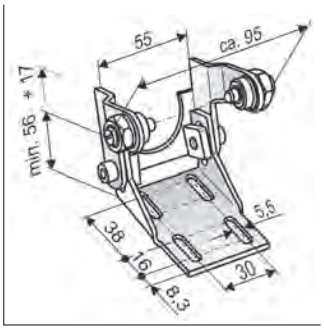
Part.-No. 155800

Material/Finish
steel galvanized
Feature/Equipment
drilled holes Ø12,5 mm

Accessories

B13 clamp block SP (12 mm, G1/8)	**Part.-No. 513901**
K21K Frame bracket	**Part.-No. 159900**
K21L Frame bracket	**Part.-No. 159905**

K17



Application

Surface mounting on the **main closing edge** of window frame profiles or on the mullion/transom of outward opening (roof-)windows, for **swivelling suspension** of drives
PLA with **B5**,
SP with **B12**

Part.-No. 159200

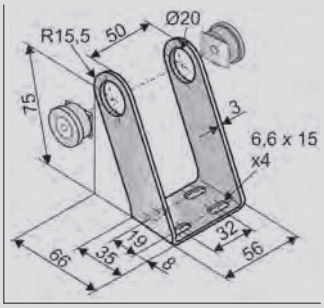
Material/Finish
steel galvanized
Feature/Equipment
adjustable height

Accessories

B12 clamp block SP (7,0 mm thick, Ø8 mm)	**Part.-No. 513903**

FRAME BRACKETS

K57



Application

Surface mounting on the **main closing edge** of the window frame of outward opening roof windows or skylight domes for **swivelling suspension** of drives **SP**, Space in between clamp axis and fixing level **75 mm**

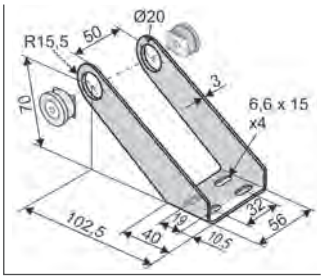
Part.-No. 160930

Material/Finish
steel galvanized
Feature/Equipment
2x B10 clamping bolts

Accessories

K9 Frame bracket — **Part.-No. 158501**

K57.2 ST



Application

Surface mounting on the **main closing edge** of the window frame of outward opening roof windows or skylight domes for **swivelling suspension** of drives **SP**, Space in between clamp axis and fixing plane **70 mm**

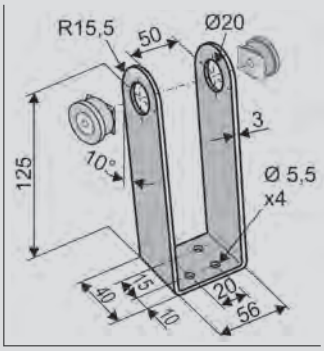
Part.-No. 160931

Material/Finish
steel galvanized
Feature/Equipment
2x B10 clamping bolts

Accessories

K9 Frame bracket — **Part.-No. 158501**

K57.3



Application

Surface mounting on the **main closing edge** of the window frame of outward opening roof windows or skylight domes for **swivelling suspension** of drives **SP**, Space in between clamp axis and fixing plane **125 mm**

Part.-No. 160935

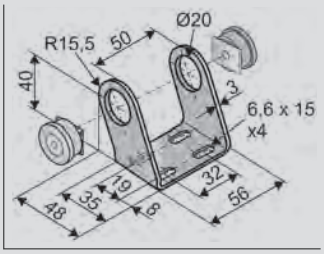
Material/Finish
steel galvanized
Feature/Equipment
2x B10 clamping bolts

Accessories

K9 Frame bracket — **Part.-No. 158501**

FRAME BRACKETS

K59



Application

Surface mounting on the **main closing edge** of the window frame of outward opening roof windows or skylight domes for **swivelling suspension** of drives **SP**, Space in between clamp axis and fixing plane **40 mm**

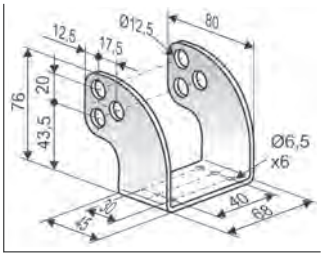
Part.-No. 160934

Material/Finish
steel, powdercoated (RAL 9006-silver)
Feature/Equipment
2x B10 clamping bolts

Accessories

K9 Frame bracket	**Part.-No. 158501**

K82



Application

Surface mounting on the **main closing edge** of window frame profiles or on the mullion/transom of outward opening (roof-)windows, for **swivelling suspension** of drives
PLA with **B4**,
SP with **B13,**
LKS with **B7**

Part.-No. 151320

Material/Finish
stainless steel
Feature/Equipment
drilled holes Ø12,5 mm

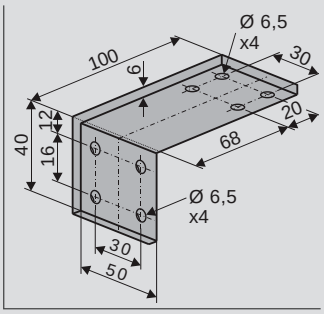
Accessories

B13 clamp block SP (12 mm, G1/8) thick	**Part.-No. 513901**

OPTIONAL ACCESSORIES

Window console

K9



Application

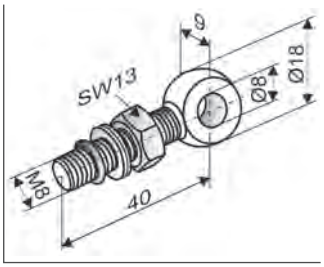
Shift the fastening level of the frame brackets **K57, K59** from the horizontal to the vertical side of the **main closing edge** of window frames

Part.-No. 158501

Material/Finish
aluminium

Eyebolt

B16ST



Application

Eye bolt for **rear or front suspension** of spindle drives with **M8** thread in the rear base cap or in the spindle tube

Part.-No. 100044

Material/Finish
steel galvanized
Feature/Equipment
M8x40 (Eye Ø8 mm),
1x nut M8,
1x Nordlock-safety-washer,
1x O-ring
max. screw-in depth in the drive 25 mm

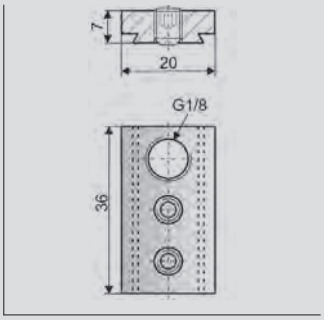
B16VA

Part.-No. 100144

Material/Finish
stainless steel (V2A)

Clamp blocks

B11



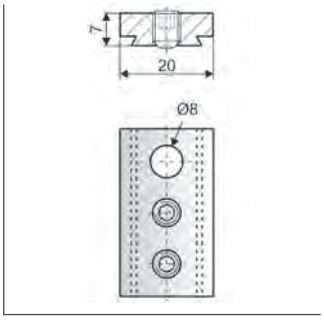
Application

Swivelling suspensin of drives **SP8** on frame brackets **K4-L** with collar screw **B8**

Part.-No. 513902

Material/Finish
aluminium
Feature/Equipment
7,0 mm thick,
thread G1/8“,
incl. 2 collar screws
B8, Ø12 mm

B12



Application

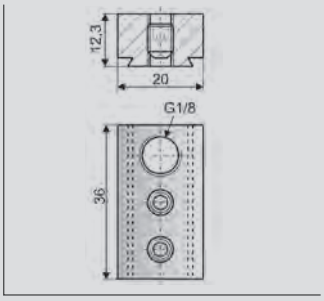
Swivelling suspensin of drives **SP8** on frame brackets **K17**

Part.-No. 513903

Material/Finish
aluminium
Feature/Equipment
7,0 mm thick,
bore Ø8,2 mm
2 pieces

OPTIONAL ACCESSORIES

B13



Application

Swivelling suspensin of drives **SP8** on frame brackets **K5, K7, K82** with collar screw **B8**

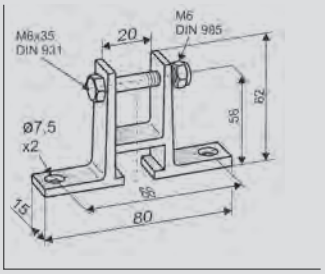
Part.-No. 513901

Material/Finish
aluminium
Feature/Equipment
12,3 mm thick,
thread G1/8“,
incl. 2 collar screws
B8, Ø12 mm

SPECIFIC APPLICATIONS

SKY-LIGHT ETERNIT

F2



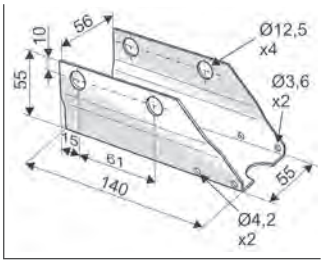
Application

Surface mounting on the **main closing edge** of skylight domes **Eternit**, for drives with **front suspension** with bore **Ø6 mm**

Part.-No. 150303

Material/Finish
aluminium
Feature/Equipment
1x nut M6,
1x screw M6x35
Load
max. 800 N

K4-L



Application

Surface mounting on the **main closing edge** of the upstand of skylight domes **Eternit** for swivelling suspension of drives **PLA** with **B4**, **SP** with **B11,**

Part.-No. 155610

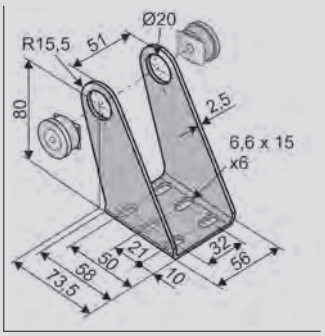
Material/Finish
steel galvanized
Feature/Equipment
2x nut Taptite M4x10,
1x nut M4,
1x nut M4x65

Accessories

B11 clamp block SP
(7 mm, G1/8)

SKY-LIGHT LAMILUX

K92



Application

Surface mounting on the **main closing edge** of the upstand of skylight domes **Lamilux** for **swivelling suspension** of drives **SP**. For the front suspension the original casment bracket of Lamilux is used

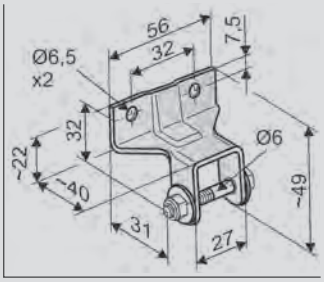
Part.-No. 160937

Material/Finish
steel, powder coated
(RAL 9010 white)
Feature/Equipment
2x B10 clamping bolts

SPECIFIC APPLICATIONS

SKY-LIGHT ESSMANN TYP 810

F12



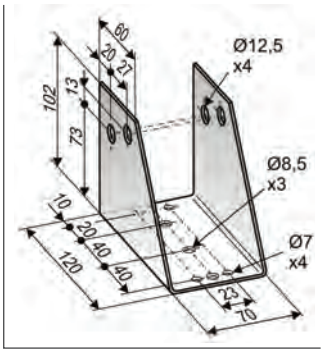
Application

Surface mounting on the **main closing edge** of the casement profiles of skylight domes **Essmann 810** for drives with **front suspension** with bore **Ø6 mm**

Part.-No. 151500

Material/Finish
steel galvanized
Feature/Equipment
1x screw M6,
washer,
nut
Load
max. 800 N

K7



Application

Surface mounting on the **main closing edge** of the upstand of skylight domes **Essmann 810** for **swivelling suspension** of drives **PLA** with **B4**, **SP** with **B13,** **LKS** with **B7**

Part.-No. 157500

Material/Finish
steel galvanized
Feature/Equipment
drilled holes Ø12,5 mm

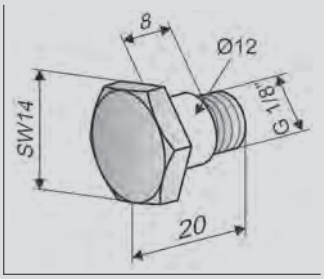
Accessories

B13 clamp block SP (12 mm, G1/8)

Part.-No. 513901

OPTIONAL ACCESSORIES

B8



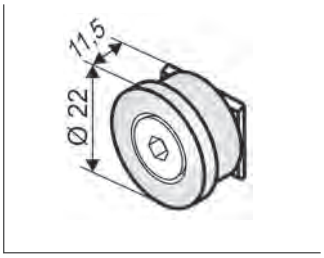
Application

Swivelling suspensin of the clamp rings **B4** for **PLA** **B7** for **LKS** or of the clamping blocks **B11**, **B13** for **SP** for U-shaped frame brackets with bore **Ø12,5 mm**

Part.-No. 172800

Material/Finish
stainless steel
Feature/Equipment
collar Ø12 mm, G1/8"

B10



Application

Swivelling suspensin of drives **SP8** on frame brackets **K57, K57.2, K57.3, K59, K92**

Part.-No. 155010

Material/Finish
cast steel, nickel plated
Feature/Equipment
2 pieces (for drilled holes Ø20 mm)

Special accessories

Special model	PU/pcs.	Part.-No.			
Casement brackets painted / powder coated in other RAL colours					
Lump sum for coating		**516030**			
Specify at order stage:	1 – 20	**516032**			
	21 – 50	**516032**			
	51 – 100	**516032**			
	up 101	**516032**			
Frame brackets painted / powder coated in other RAL colours					
Lump sum for coating		**516030**			
Specify at order stage:	1 – 20	**516031**			
	21 – 50	**516031**			
	51 – 100	**516031**			
	up 101	**516031**			

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