



SPECIAL FEATURES PLA

- For natural ventilation, smoke and heat exhausting and ferralux® NRWG (EN12101-2)
- Robust corrosion-resistant design in a slim aluminium housing (D = 36 mm), optionally in RAL colors
- Easy installation due to adjustable clamp ring and rear suspension
- Spindle is ball beared with end position dampening
- Stainless steel spindle tube
- Programmable parameters of Intelligent Control Electronics S12
 - Synchronised multi-operation and sequence control without add. devices
 - Electronic soft-start, soft-close and soft-stop at end of stroke control
 - Stroke, force, speed
 - Rebate control
- Protection rating IP 65
- With GoreTex membrane
- Suitable for operation with M-COM for the automatic configuration of synchronised run of multi drive systems and sequence control

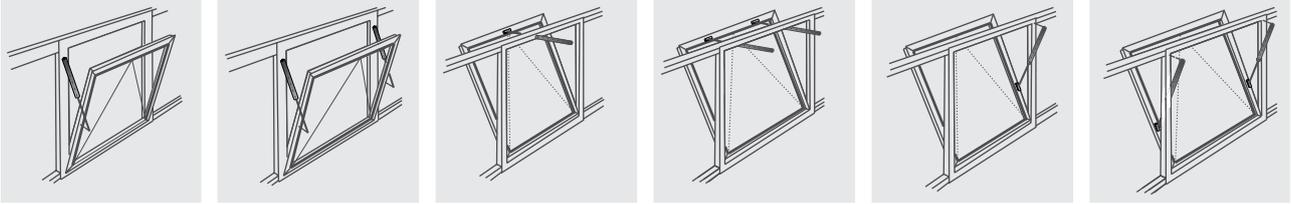
For this product series, a Type III Environmental Product Declaration (EPD) was issued according to ISO 14025 and EN 15804.

The LCA results of the different product types are listed at the end of this product catalogue.

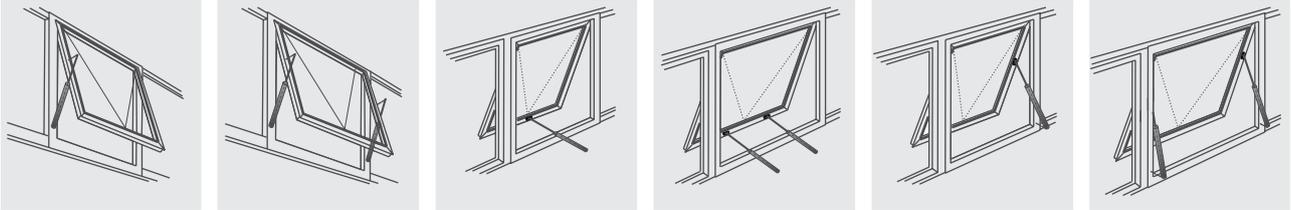
The EPD documents can be viewed or downloaded from our homepage www.aumueller-gmbh.de.

FACADE

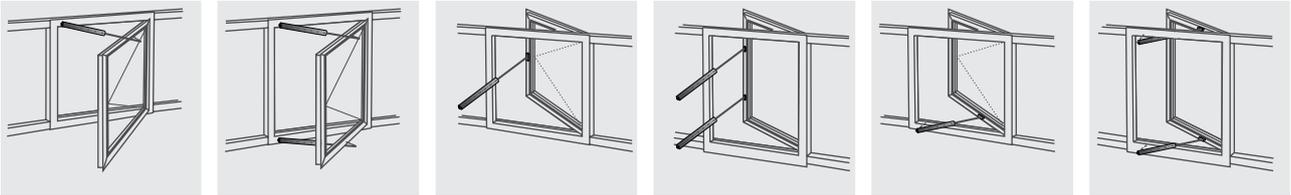
Bottom-hung



Top-hung



Side-hung

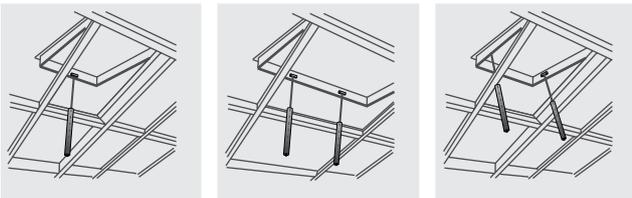


ROOF

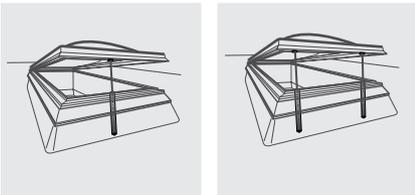
Bottom-hung



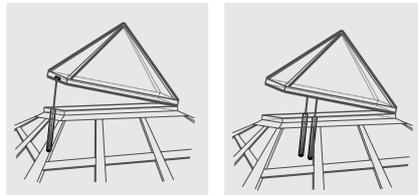
Top-hung

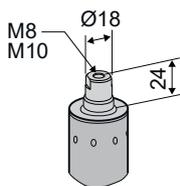


Sky light

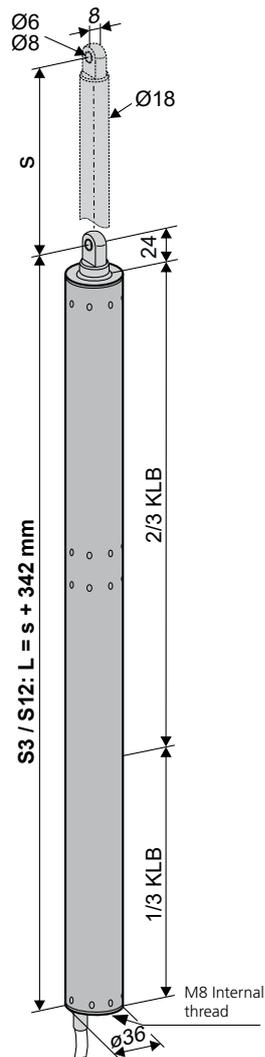


Glass pyramid





OPTION



S3 / S12: L = s + 342 mm

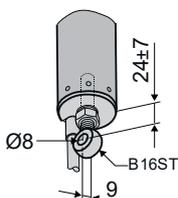
2/3 KLB

1/3 KLB

M8 Internal thread

Ø36

OPTION



Ø8

B16ST

24±7

9

- Application: natural ventilation, RWA, ferralux®-NRWG

Options

- Spindle tube end with interior thread for clevis
- Eyebolt and clevis for rear suspension

S3

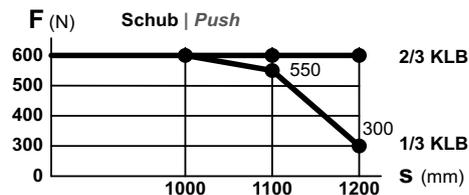
- Internal load dependend cut-off switch, post cycle resistant S3
- Programmable motion monitored run (up to 300 mm stroke)
- Programmable sequence control with Locking drives (S3 / S12)

S12

- Internal Intelligent Control Electronics S12
- Options**
- Programmable synchronised run (max. 4 drives) and special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)

TECHNICAL DATA

U_N	Rated voltage	24 V DC (19V ... 28V)
I_N	Rated current	0,6 A
I_A	Cut-off current	0,8 A
P_N	Rated power	15 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 65
	Ambient temperature range	-5 °C ... +60 °C
F_Z	Pulling force max.	600 N
F_A	Pushing force max.	



F_H	Pullout force	5000 N (fastening depended)
----------------------	---------------	-----------------------------

Spindle tube stainless steel

Connecting cable non-halogen, grey 3 x 1,0 mm², ~ 3 m

v	Speed	⚡ 6,0 mm/s ⤴ 6,0 mm/s
----------	-------	--------------------------

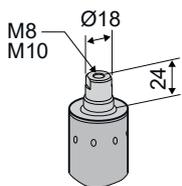
s	Stroke	100 – 1200 mm
----------	--------	---------------

L	Length	S3 / S12: s + 342 mm (see order data)
----------	--------	---------------------------------------

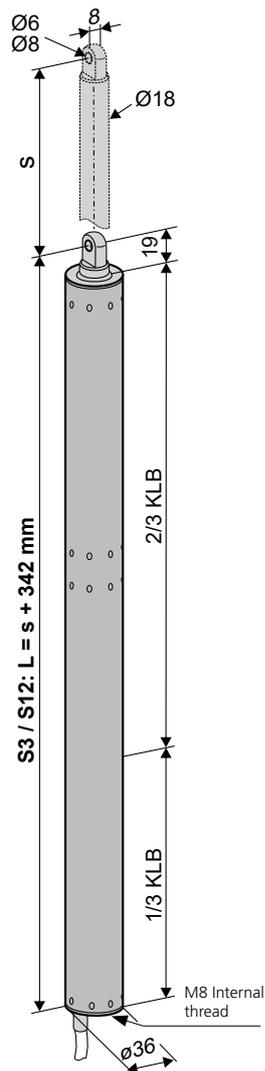
Sound pressure level ≤ 70 dB (A)

ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
100	442	PLA6 100 S3	E6/C-0	1	564111	
	442	PLA6 100 S12		1	546310	
200	542	PLA6 200 S3	E6/C-0	1	564122	
	542	PLA6 200 S12		1	546320	
300	642	PLA6 300 S3	E6/C-0	1	564131	
	642	PLA6 300 S12		1	546330	
400	742	PLA6 400 S3	E6/C-0	1	564141	
	742	PLA6 400 S12		1	546340	
500	842	PLA6 500 S3	E6/C-0	1	564151	
	842	PLA6 500 S12		1	546350	
600	942	PLA6 600 S3	E6/C-0	1	564161	
	942	PLA6 600 S12		1	546360	
750	1092	PLA6 750 S3	E6/C-0	1	564176	
	1092	PLA6 750 S12		1	546375	
1000	1342	PLA6 1000 S3	E6/C-0	1	564201	
	1342	PLA6 1000 S12		1	546400	

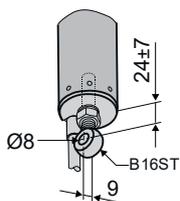
OPTIONS							
Special model				PU/pcs.	Part.-No.		
Front Fixing							
Spindle tube end with interior thread M8				1	515061		
Spindle tube end with interior thread M10				1	515060		
Drive housing painted/powder coated in other RAL colours							
Lump sum for coating						516030	
Specify at order stage:				1 – 20	516004		
				21 – 50	516004		
				51 – 100	516004		
				from 101	516004		
Extra length connecting cable:							
5 m – non-halogen, grey – 3 x 1,0 mm ²					501037		
10 m – non-halogen, grey – 3 x 1,0 mm ²					501039		
Mechanic stroke reduction S3							
Stroke reduction without construction length - mechanically				1	516000		
Accessories for front / rear suspension							
B16ST Eyebolt Ø8 mm, galvanized				1	100044		
B16VA Eyebolt Ø8 mm, stainless steel				1	100144		
B27ST Clevis M8x16 mm, galvanized, thread M8x45 mm				1	105510		
B28ST Clevis M10x20 mm, galvanized, thread M10x50 mm				1	105520		
Microprocessor programming S3							
Motion monitored run / sequence control				1	524181		
Microprocessor programming S12							
Electronic stroke reduction 24V S12				1	524190		
Programming drives 24V / 230V S12				1	524180		
Other lengths available on request							
Optional accessories				PU/pcs.	Part.-No.		
M-COM Configuration module for synchronised multi-drive systems				1	524177		



OPTION



OPTION



- Application: natural ventilation, RWA, ferralux®-NRWG

Options

- Spindle tube end with interior thread for clevis
- Eyebolt and clevis for rear suspension

S3

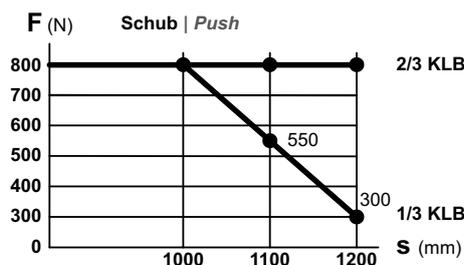
- Internal load dependend cut-off switch, post cycle resistant S3
- Programmable motion monitored run (up to 300 mm stroke)
- Programmable sequence control with locking drives (S3 / S12)

S12

- Internal Intelligent Control Electronics S12
- Options
 - Programmable synchronised run (max. 4 drives) and special functions
 - M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)

TECHNICAL DATA

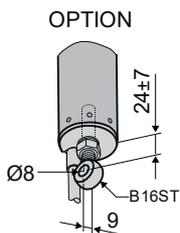
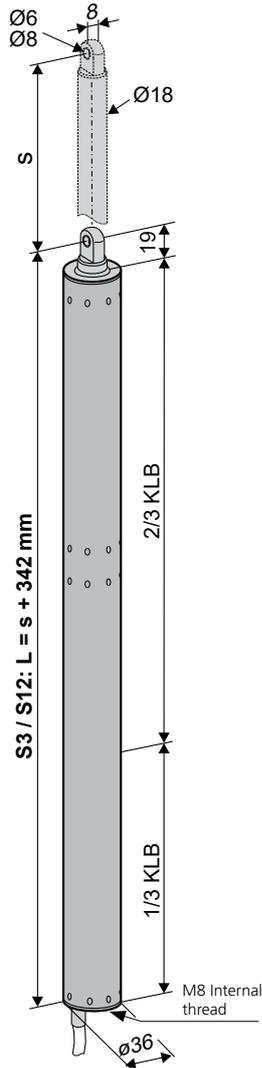
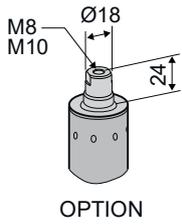
U_N	Rated voltage	24 V DC (19V ... 28V)
I_N	Rated current	1,0 A
I_A	Cut-off current	1,4 A
P_N	Rated power	24 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 65
	Ambient temperature range	-5 °C ... +60 °C
F_Z	Pulling force max.	800 N
F_A	Pushing force max.	



F_H	Pullout force	5000 N (fastening depended)
	Spindle tube	stainless steel
	Connecting cable	non-halogen, grey 3 x 1,0 mm ² , ~ 3 m
v	Speed	↔ 10,0 mm/s ↶ 10,0 mm/s
s	Stroke	100 – 1200 mm
L	Length	S3 / S12: s + 342 mm (see order data)
	Sound pressure level	≤ 70 dB (A)

ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
100	442	PLA8 100 S3	E6/C-0	1	523711	
	442	PLA8 100 S12		1	515210	
200	542	PLA8 200 S3	E6/C-0	1	523721	
	542	PLA8 200 S12		1	515220	
300	642	PLA8 300 S3	E6/C-0	1	523731	
	642	PLA8 300 S12		1	515230	
400	742	PLA8 400 S3	E6/C-0	1	523741	
	742	PLA8 400 S12		1	515240	
500	842	PLA8 500 S3	E6/C-0	1	523751	
	842	PLA8 500 S12		1	515250	
600	942	PLA8 600 S3	E6/C-0	1	523761	
	942	PLA8 600 S12		1	515260	
750	1092	PLA8 750 S3	E6/C-0	1	523776	
	1092	PLA8 750 S12		1	515275	
1000	1342	PLA8 1000 S3	E6/C-0	1	523801	
	1342	PLA8 1000 S12		1	515295	

OPTIONS							
Special model				PU/pcs.	Part.-No.		
Front Fixing							
Spindle tube end with interior thread M8				1	515061		
Spindle tube end with interior thread M10				1	515060		
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		
				from 101	516004		
Extra length connecting cable:							
5 m – non-halogen, grey – 3 x 1,0 mm ²					501037		
10 m – non-halogen, grey – 3 x 1,0 mm ²					501039		
Mechanic stroke reduction S3							
Stroke reduction without construction length - mechanically				1	516000		
Accessories for front / rear suspension							
B16ST Eyebolt Ø8 mm, galvanized				1	100044		
B16VA Eyebolt Ø8 mm, stainless steel				1	100144		
B27ST Clevis M8x16 mm, galvanized, thread M8x45 mm				1	105510		
B28ST Clevis M10x20 mm, galvanized, thread M10x50 mm				1	105520		
Microprocessor programming S3							
Motion monitored run / sequence control				1	524181		
Microprocessor programming S12							
Electronic stroke reduction 24V S12				1	524190		
Programming drives 24V / 230V S12				1	524180		
Other lengths available on request							
Optional accessories				PU/pcs.	Part.-No.		
M-COM Configuration module for synchronised multi-drive systems				1	524177		



- Application: natural ventilation, RWA, ferralux®-NRWG

Options

- Spindle tube end with interior thread for clevis
- Eyebolt and clevis for rear suspension

S3

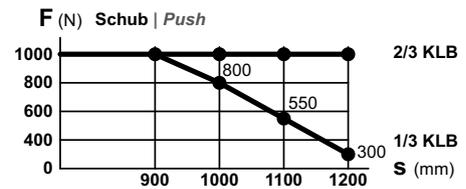
- Internal load dependent cut-off switch, post cycle resistant S3
- Programmable motion monitored run (up to 300 mm stroke)
- Programmable sequence control with locking drives (S3 / S12)

S12

- Internal Intelligent Control Electronics S12
- Options**
- Programmable synchronised run (max. 4 drives) and special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)

TECHNICAL DATA

U_N	Rated voltage	24V DC (19V ... 28V)
I_N	Rated current	0,8 A
I_A	Cut-off current	1,0 A
P_N	Rated power	19 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 65
	Ambient temperature range	-5 °C ... +60 °C
F_Z	Pulling force max.	1000 N
F_A	Pushing force max.	



F_H	Pullout force	5000 N (fastening depended)
----------------------	---------------	-----------------------------

Spindle tube stainless steel

Connecting cable non-halogen, grey 3 x 1,0 mm², ~ 3 m

v	Speed	4,6 mm/s
----------	-------	----------

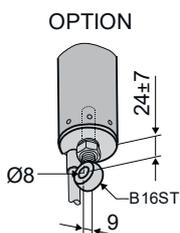
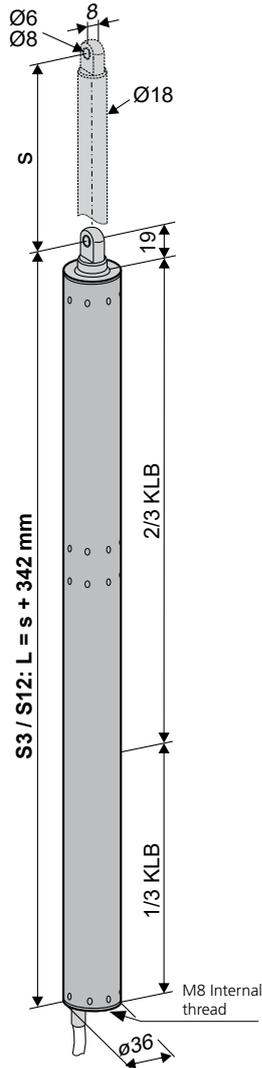
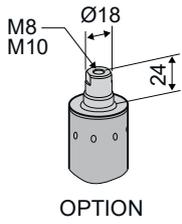
s	Stroke	100 – 1200 mm
----------	--------	---------------

L	Length	S3 / S12: s + 342 mm (see order data)
----------	--------	---------------------------------------

Sound pressure level ≤ 70 dB (A)

ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
100	442	PLA101 100 S3	E6/C-0	1	565111	
	442	PLA101 100 S12		1	564910	
200	542	PLA101 200 S3	E6/C-0	1	565121	
	542	PLA101 200 S12		1	564922	
300	642	PLA101 300 S3	E6/C-0	1	565131	
	642	PLA101 300 S12		1	564930	
400	742	PLA 01 400 S3	E6/C-0	1	565141	
	742	PLA101 400 S12		1	564940	
500	842	PLA101 500 S3	E6/C-0	1	565151	
	842	PLA101 500 S12		1	564950	
600	942	PLA101 600 S3	E6/C-0	1	565161	
	942	PLA101 600 S12		1	564960	
750	1092	PLA101 750 S3	E6/C-0	1	565176	
	1092	PLA101 750 S12		1	564975	
1000	1342	PLA101 1000 S3	E6/C-0	1	565201	
	1342	PLA101 1000 S12		1	565000	

OPTIONS							
Special model				PU/pcs.	Part.-No.		
Front Fixing							
Spindle tube end with interior thread M8				1	515061		
Spindle tube end with interior thread M10				1	515060		
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		
				from 101	516004		
Extra length connecting cable:							
5 m – non-halogen, grey – 3 x 1,0 mm ²					501037		
10 m – non-halogen, grey – 3 x 1,0 mm ²					501039		
Mechanic stroke reduction S3							
Stroke reduction without construction length - mechanically				1	516000		
Accessories for front / rear suspension							
B16ST Eyebolt Ø8 mm, galvanized				1	100044		
B16VA Eyebolt Ø8 mm, stainless steel				1	100144		
B27ST Clevis M8x16 mm, galvanized, thread M8x45 mm				1	105510		
B28ST Clevis M10x20 mm, galvanized, thread M10x50 mm				1	105520		
Microprocessor programming S3							
Motion monitored run / sequence control				1	524181		
Microprocessor programming S12							
Electronic stroke reduction 24V S12				1	524190		
Programming drives 24V / 230V S12				1	524180		
Other lengths available on request							
Optional accessories				PU/pcs.	Part.-No.		
M-COM Configuration module for synchronised multi-drive systems				1	524177		



- Application: natural ventilation, RWA, ferralux®-NRWG
- Options**
- Spindle tube end with interior thread for clevis
- Eyebolt and clevis for rear suspension

S3

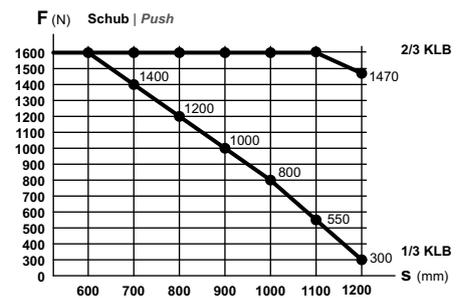
- Internal load dependent cut-off switch, post cycle resistant S3
- Programmable motion monitored run (up to 300 mm stroke)
- Programmable sequence control with locking drives (S3 / S12)

S12

- Internal Intelligent Control Electronics S12
- Options**
- Programmable synchronised run (max. 4 drives) and special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)

TECHNICAL DATA

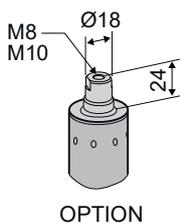
U_N	Rated voltage	24 V DC (19 V ... 28 V)
I_N	Rated current	1,0 A
I_A	Cut-off current	1,2 A
P_N	Rated power	24 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 65
	Ambient temperature range	-5 °C ... +60 °C
F_Z	Pulling force max.	1600 N
F_A	Pushing force max.	



F_H	Pullout force	5000 N (fastening depended)
	Spindle tube	stainless steel
	Connecting cable	non-halogen, grey 3 x 1,0 mm ² , ~ 3 m
v	Speed	4,0 mm/s
s	Stroke	100 – 1200 mm
L	Length	S3 / S12: s + 342 mm (see order data)
	Sound pressure level	≤ 70 dB (A)

ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
100	442	PLA116 100 S3	E6/C-0	1	565312	
	442	PLA116 100 S12		1	565510	
200	542	PLA116 200 S3	E6/C-0	1	565321	
	542	PLA116 200 S12		1	565520	
300	642	PLA116 300 S3	E6/C-0	1	565331	
	642	PLA116 300 S12		1	565530	
400	742	PLA116 400 S3	E6/C-0	1	565341	
	742	PLA116 400 S12		1	565540	
500	842	PLA116 500 S3	E6/C-0	1	565351	
	842	PLA116 500 S12		1	565550	
600	942	PLA116 600 S3	E6/C-0	1	565361	
	942	PLA116 600 S12		1	565560	
750	1092	PLA116 750 S3	E6/C-0	1	565376	
	1092	PLA116 750 S12		1	565575	

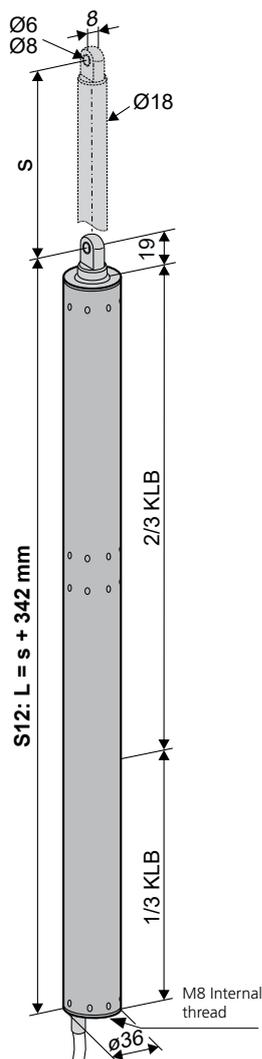
OPTIONS						
Special model				PU/pcs.	Part.-No.	
Front Fixing						
Spindle tube end with interior thread M8				1	515061	
Spindle tube end with interior thread M10				1	515060	
Drive housing painted/powder coated in other RAL colours						
Lump sum for coating					516030	
Specify at order stage:				1 – 20	516004	
				21 – 50	516004	
				51 – 100	516004	
				from 101	516004	
Extra length connecting cable:						
5 m – non-halogen, grey – 3 x 1,0 mm ²					501037	
10 m – non-halogen, grey – 3 x 1,0 mm ²					501039	
Mechanic stroke reduction S3						
Stroke reduction without construction length - mechanically				1	516000	
Accessories for front / rear suspension						
B16ST Eyebolt Ø8 mm, galvanized				1	100044	
B16VA Eyebold Ø8 mm, stainless steel				1	100144	
B27ST Clevis M8x16 mm, galvanized, thread M8x45 mm				1	105510	
B28ST Clevis M10x20 mm, galvanized, thread M10x50 mm				1	105520	
Microprocessor programming S3						
Motion monitored run / sequence control				1	524181	
Microprocessor programming S12						
Electronic stroke reduction 24V S12				1	524190	
Programming drives 24V / 230V S12				1	524180	
Other lengths available on request						
Optional accessories				PU/pcs.	Part.-No.	
M-COM Configuration module for synchronised multi-drive systems				1	524177	



- Application: natural ventilation, RWA, ferralux®-NRWG
- Internal Intelligent Control Electronics S12

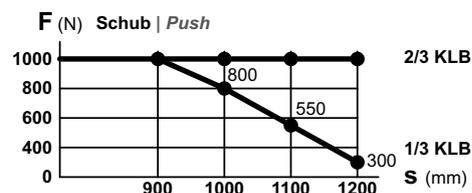
Options

- Programmable synchronised run (max. 4 drives) and special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)
- Spindle tube end with interior thread for clevis
- Eyebolt and clevis for rear suspension



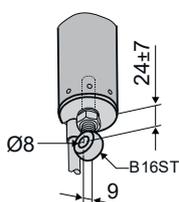
TECHNICAL DATA

U_N	Rated voltage	24V DC (19V ... 28V)
I_N	Rated current	1,9 A
I_A	Cut-off current	2,5 A
P_N	Rated power	45 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 65
	Ambient temperature range	-5 °C ... +60 °C
F_Z	Pulling force max.	1000 N
F_A	Pushing force max.	



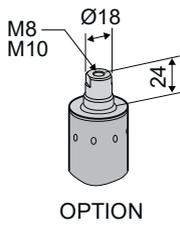
F_H	Pullout force	5000 N (fastening depended)
	Spindle tube	stainless steel
	Connecting cable	non-halogen, grey 3 x 1,0 mm ² , ~ 3 m
v	Speed	∇ 12,6 mm/s \curvearrowright 12,6 mm/s
s	Stroke	100 – 1200 mm
L	Length	s + 342 mm (see order data)
	Sound pressure level	≤ 70 dB (A)

OPTION



ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
100	442	PLA10 100 S12	E6/C-0	1	523610	
200	542	PLA10 200 S12	E6/C-0	1	523620	
300	642	PLA10 300 S12	E6/C-0	1	523630	
400	742	PLA10 400 S12	E6/C-0	1	523640	
500	842	PLA10 500 S12	E6/C-0	1	523650	
600	942	PLA10 600 S12	E6/C-0	1	523660	
750	1092	PLA10 750 S12	E6/C-0	1	523675	
1000	1342	PLA10 1000 S12	E6/C-0	1	523700	

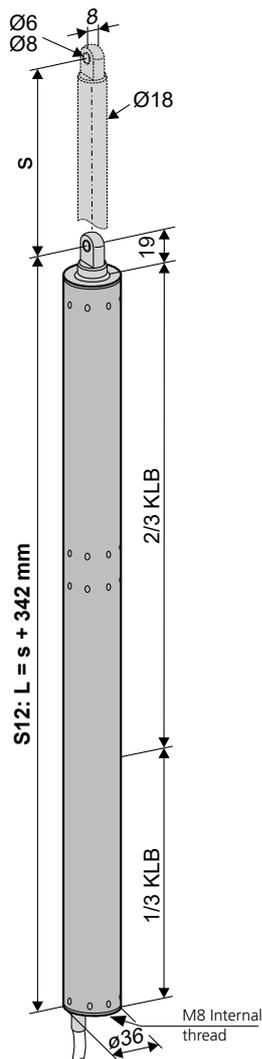
OPTIONS						
Special model		PU/pcs.	Part.-No.			
Front Fixing						
Spindle tube end with interior thread M8		1	515061			
Spindle tube end with interior thread M10		1	515060			
Drive housing painted/powder coated in other RAL colours						
Lump sum for coating				516030		
Specify at order stage:		1 – 20	516004			
		21 – 50	516004			
		51 – 100	516004			
		from 101	516004			
Extra length connecting cable:						
5 m – non-halogen, grey – 3 x 1,0 mm ²			501037			
10 m – non-halogen, grey – 3 x 1,0 mm ²			501039			
Accessories for front / rear suspension						
B16ST Eyebolt Ø8 mm, galvanized		1	100044			
B16VA Eyebold Ø8 mm, stainless steel		1	100144			
B27ST Clevis M8x16 mm, galvanized, thread M8x45 mm		1	105510			
B28ST Clevis M10x20 mm, galvanized, thread M10x50 mm		1	105520			
Microprocessor programming S12						
Electronic stroke reduction 24V S12		1	524190			
Programming drives 24V / 230V S12		1	524180			
Other lengths available on request						
Optional accessories			PU/pcs.	Part.-No.		
M-COM Configuration module for synchronised multi-drive systems		1	524177			



- Application: natural ventilation, RWA, ferralux®-NRWG
- Internal Intelligent Control Electronics S12

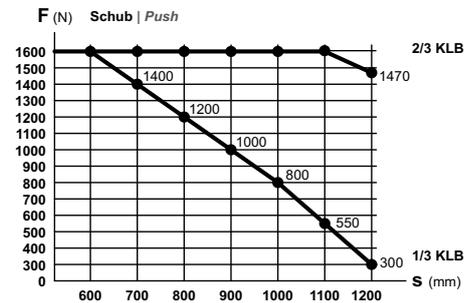
Options

- Programmable synchronised run (max. 4 drives) and special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)
- Spindle tube end with interior thread for clevis
- Eyebolt and clevis for rear suspension

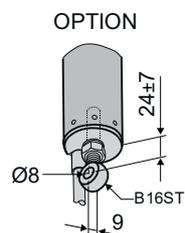


TECHNICAL DATA

U_N	Rated voltage	24V DC (19V ... 28V)
I_N	Rated current	1,9 A
I_A	Cut-off current	2,5 A
P_N	Rated power	45 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 65
	Ambient temperature range	-5 °C ... +60 °C
F_Z	Pulling force max.	1600 N
F_A	Pushing force max.	



F_H	Pullout force	5000 N (fastening depended)
	Spindle tube	stainless steel
	Connecting cable	non-halogen, grey 3 x 1,0 mm ² , ~ 3 m
v	Speed	↖ 7,0 mm/s ↗ 7,0 mm/s
s	Stroke	100 – 1200 mm
L	Length	s + 342 mm (see order data)
	Sound pressure level	≤ 70 dB (A)



ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
100	442	PLA16 100 S12	E6/C-0	1	565710	
200	542	PLA16 200 S12	E6/C-0	1	565720	
300	642	PLA16 300 S12	E6/C-0	1	565730	
400	742	PLA16 400 S12	E6/C-0	1	565740	
500	842	PLA16 500 S12	E6/C-0	1	565750	
600	942	PLA16 600 S12	E6/C-0	1	565760	
750	1092	PLA16 750 S12	E6/C-0	1	565775	
1000	1342	PLA16 1000 S12	E6/C-0	1	565800	

OPTIONS						
Special model		PU/pcs.	Part.-No.			
Front Fixing						
Spindle tube end with interior thread M8		1	515061			
Spindle tube end with interior thread M10		1	515060			
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			
		from 101	516004			
Extra length connecting cable:						
5 m – non-halogen, grey – 3 x 1,0 mm ²			501037			
10 m – non-halogen, grey – 3 x 1,0 mm ²			501039			
Accessories for front / rear suspension						
B16ST Eyebolt Ø8 mm, galvanized		1	100044			
B16VA Eyebold Ø8 mm, stainless steel		1	100144			
B27ST Clevis M8x16 mm, galvanized, thread M8x45 mm		1	105510			
B28ST Clevis M10x20 mm, galvanized, thread M10x50 mm		1	105520			
Microprocessor programming S12						
Electronic stroke reduction 24V S12		1	524190			
Programming drives 24V / 230V S12		1	524180			
Other lengths available on request						
Optional accessories			PU/pcs.	Part.-No.		
M-COM Configuration module for synchronised multi-drive systems		1	524177			

OVERVIEW OF BRACKETS													
Typical applications			1	2	3	4	5	6	7	8	9	10	
Frame bracket			K5	K5	K5	K17	K82	K122	K127	K122-1	K122-1	K7	
Mounting aid					K21								
Bracket accessories			clamping ring B4 (36 mm-G1/8)										
Casement bracket			F29-1	F1, F1V, F1.1, F10.6, F10.8S, F11, F13, F40				F29	F11	F36	F30	F12	
Special application			Heroal 085D					Heroal 085 D	Wing 105D	AWS 57RO	Wictec 50	Sky light Essmann	
Space requirement		min. [mm]	50	50	40 – 50	70	45	60	35	68	68	120	
Window material		Alu	●	●	●	●	●	●	●	●	●		
		Wood		●	●	●	●						
		PVC		●	●	●	●					●	
Type of window and mounting	Bot- tom hung	in- ward	HSK	FM			■		■				
				RM									
			NSK	FM									
		RM											
		out- ward	HSK	RM			●		●				
				PR		●		●					
	NSK		RM										
			PR										
	Top hung	in- ward	HSK	FM			■		■				
				RM									
			NSK	FM									
		RM											
		out- ward	HSK	RM			●		●				
				PR		●		●					
	NSK		RM										
			PR										
	Side hung	in- ward	HSK	FM			■		■				
				RM									
			NSK	FM									
		RM											
		Roof	out- ward	HSK	RM	●		●		●			
					PR		●		●				
	NSK		RM			●			●	●	●	●	
			PR		●		●						
Sky- light	out- ward	HSK	RM		●		●	●			●		
		NSK	RM										
FAB(*1)		Solo [mm]					450 – 1300				600 – 1200		
		Sync2 [mm]					1200 – 2400				1200 – 2400		
FAH(*1)		Solo [mm]					450 – 1500				600 – 1200		
		Sync2 [mm]					450 – 2500				1200 – 1500		

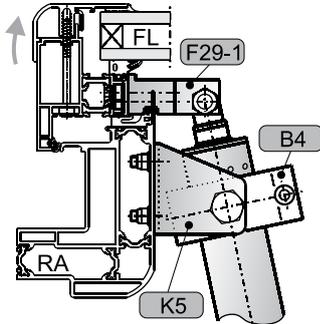
LEGEND

- suitable
- not recommended

(*1) Sample value of the casement dimensions. The actual 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.

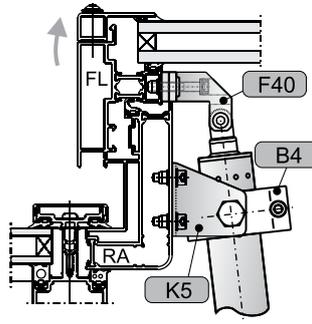
TYPICAL APPLICATIONS

1 RM, HSK, roof



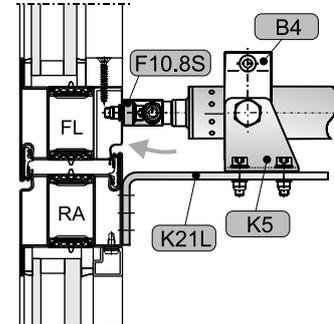
View on aluminium window

2 RM, HSK, roof



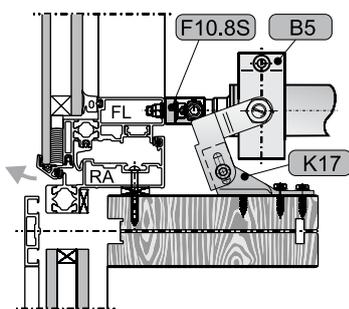
View on aluminium window

3 RM, HSK, top hung outward opening



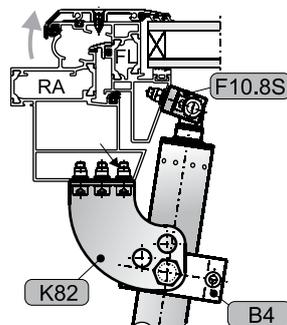
View on steel window

4 RM, HSK, top hung outward opening



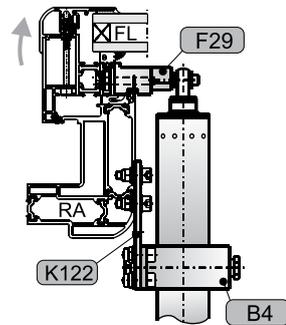
View on aluminium window

5 RM, HSK, roof



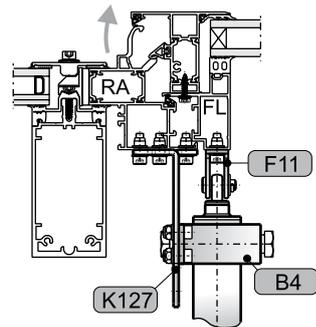
View on aluminium window

6 RM, NSK, roof



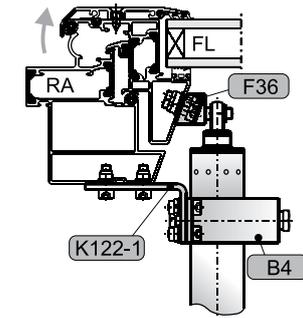
View on aluminium window

7 RM, NSK, roof



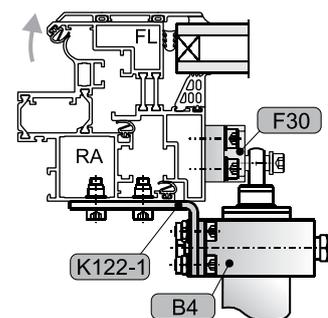
View on aluminium window

8 RM, NSK, roof



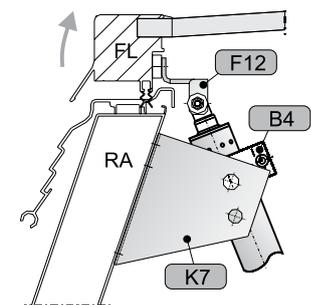
View on aluminium window

9 RM, NSK, roof



View on aluminium window

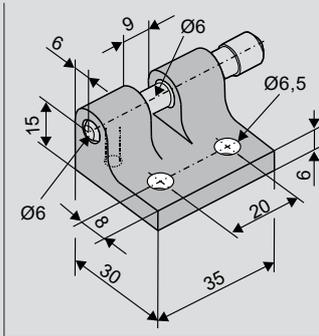
10 RM, HSK, sky-light



View on sky light

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 drive possible

Part.-No. 150102

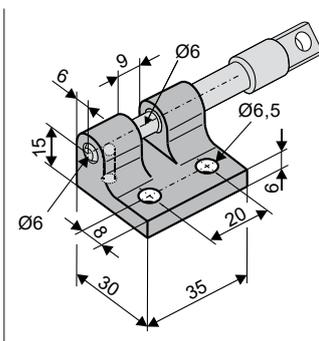
Material/Finish
aluminium, diecast

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 drive possible

Part.-No. 150110

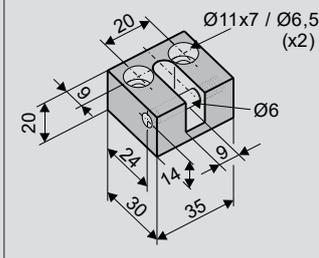
Material/Finish
aluminium, diecast

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

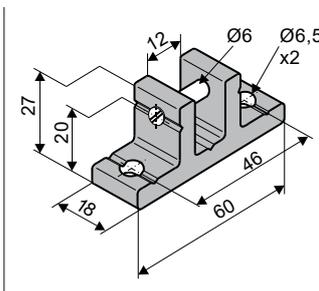
Material/Finish
aluminium

Feature/Equipment

1x grub screw 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

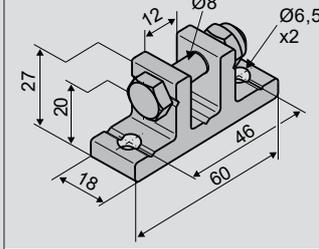
Feature/Equipment

1x stud bolt Ø6 mm

Load
max. 1600 N

CASEMENT BRACKETS

F10.8S

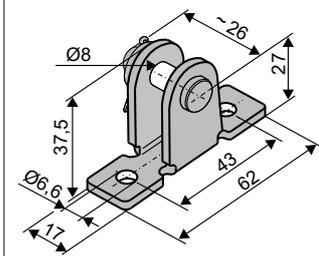
**Application**

Surface mounting on the **main closing edge** of casement profiles of outward opening windows, for drives with **front or rear suspension** with bore **Ø8 mm**

Part-No. 151105**Material/Finish**
aluminium**Feature/Equipment**1x nut M8,
1x screw M8x35**Load**

max. 3000 N

F11ST

**Application**

Surface mounting on the **side closing edge** of casement/window frame profiles of in-/outward opening windows or on skylights, for drives with front or rear suspension with bore **Ø8 mm**, mounting holes aligned with central axis of drive

Part-No. 151400**Material/Finish**

steel galvanized

Feature/Equipment1x bolt Ø8 mm,
washer,
cotter pin**Load**

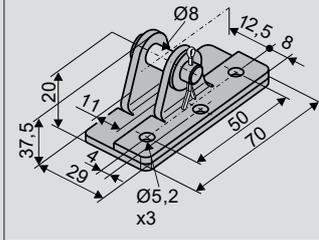
max. 3000 N

F11VA

**Part-No. 151401****Material/Finish**

stainless steel

F13

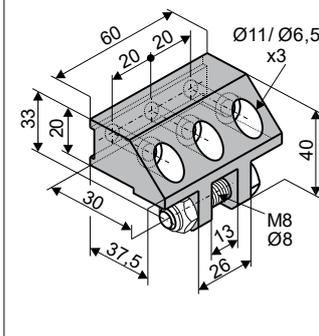
**Application**

Surface mounting on the **side closing edge** of casement/window frame profiles of in-/outward opening windows or on skylights, for drives with front or rear suspension with bore **Ø8 mm**, mounting holes not aligned with the central axis of drive

Part-No. 151405**Material/Finish**
steel galvanized**Feature/Equipment**1x bolt Ø8 mm,
washer,
cotter pin**Load**

max. 1600 N

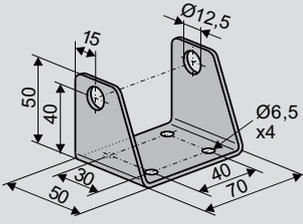
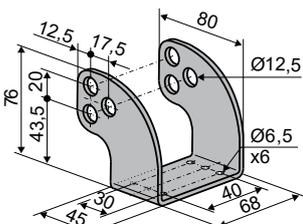
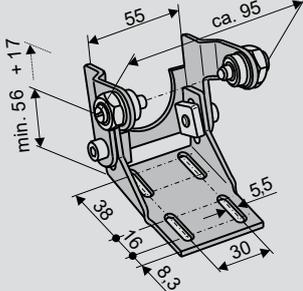
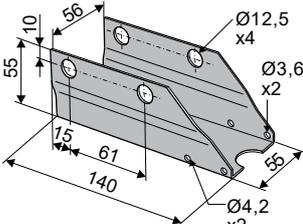
F40

**Application**

Surface mounting on the **main closing edge** of the casement profiles of outward opening roof windows, for drives with **front or rear suspension** with bore **Ø8 mm**

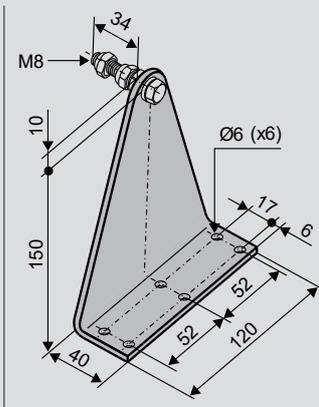
Part-No. 155172**Material/Finish**
aluminium**Feature/Equipment**1x screw M8x35,
nut M8

FRAME BRACKETS

<p>K5</p>		<p>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, SP8 with B13, LKS with B7</p>	<p>Part.-No. 155800 Material/Finish steel galvanized Feature/Equipment drilled holes Ø12,5 mm</p>	
<p>Accessories</p>		<p>B4 clamp ring PLA (Ø36 mm, G1/8)</p>	<p>Part.-No. 515900</p>	
		<p>K21K Frame bracket</p>	<p>Part.-No. 159900</p>	
		<p>K21L Frame bracket</p>	<p>Part.-No. 159905</p>	
<p>K82</p>		<p>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, SP8 with B13, LKS with B7</p>	<p>Part.-No. 151320 Material/Finish stainless steel Feature/Equipment drilled holes Ø12,5 mm</p>	
<p>Accessories</p>		<p>B4 clamp ring PLA (Ø36 mm, G1/8)</p>	<p>Part.-No. 515900</p>	
<p>K17</p>		<p>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</p>	<p>Part.-No. 159200 Material/Finish steel galvanized Feature/Equipment adjustable height</p>	
<p>Accessories</p>		<p>B5 clamp ring PLA (Ø36 mm, Ø8 mm)</p>	<p>Part.-No. 515825</p>	
<p>K4-L</p>		<p>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,</p>	<p>Part.-No. 155610 Material/Finish steel galvanized Feature/Equipment 2x screw Taptite M4x10, 1x nut M4, 1x screw M4x65</p>	
<p>Accessories</p>		<p>B4 clamp ring PLA (Ø36 mm, G1/8)</p>	<p>Part.-No. 515900</p>	

FRAME BRACKETS

K15

**Application**

Surface mounting on the **side closing edge** of window frame profiles of in-/outward opening windows, by obliquely arranged drives with **rear suspension** with bore **Ø8 mm**

Required space on the frame **40 mm**

Part.-No. 307000**Material/Finish**

steel galvanized

Feature/Equipment

H=150 mm, t=4 mm

Optional accessories

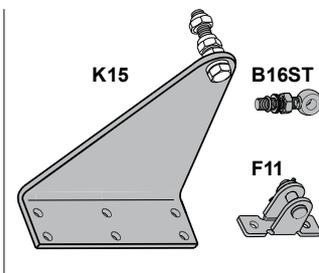
B16ST Eyebolt
(Ø8 x 40 mm ST)

Part.-No. 100044

B16VA Eyebolt
(Ø8 x 40 mm VA)

Part.-No. 100144

K15-Set

**Application**

Surface mounting on the **side closing edge** like RWA-1000/1100 hardware sets

Required space on the frame **40 mm**

Part.-No. 517590**Material/Finish**

steel galvanized

Feature/Equipment

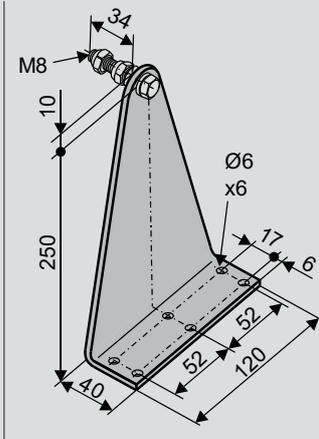
Set:

1x K15

1x F11ST

1x B16ST

K37

**Application**

Surface mounting on the **side closing edge** of window frame profiles of in-/outward opening windows, by obliquely arranged drives with rear suspension with bore **Ø8 mm**

Required space on the frame **40 mm**

Part.-No. 307500**Material/Finish**

steel galvanized

Feature/Equipment

H=250 mm, t=5 mm

Optional accessories

B16ST Eyebolt
(Ø8 x 40 mm ST)

Part.-No. 100044

B16VA Eyebolt
(Ø8 x 40 mm VA)

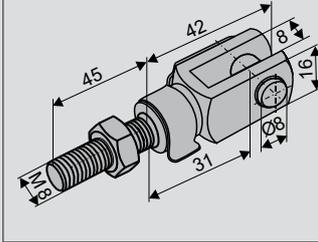
Part.-No. 100144

FRAME BRACKETS

<p>K97L</p>		<p>Application Surface mounting on the side closing edge of window frame profiles of inward opening side hung windows, by obliquely arranged drives with rear suspension with bore Ø8 mm. Required space on the frame 20 mm</p>	<p>Part.-No. 160938 Material/Finish stainless steel, vibratory grinding Feature/Equipment left hand</p>			
		<p>Optional accessories</p>				
		<p>B16ST Eyebolt (Ø8 x 40 mm ST)</p>	<p>Part.-No. 100044</p>			
		<p>B16VA Eyebolt (Ø8 x 40 mm VA)</p>	<p>Part.-No. 100144</p>			
<p>K97R</p>		<p>Application Surface mounting on the side closing edge of window frame profiles of inward opening side hung windows, by obliquely arranged drives with rear suspension with bore Ø8 mm. Required space on the frame 20 mm</p>	<p>Part.-No. 160939 Material/Finish stainless steel, vibratory grinding Feature/Equipment right hand</p>			
		<p>Accessories</p>				
		<p>B16ST Eyebolt (Ø 8 x 40 mm ST)</p>	<p>Part.-No. 100044</p>			
		<p>B16VA Eyebolt (Ø8 x 40 mm VA)</p>	<p>Part.-No. 100144</p>			

OPTIONAL ACCESSORIES

B27ST



Application

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

Part.-No. 105510

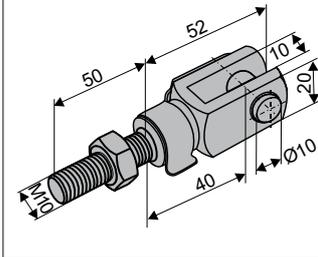
Material/Finish

steel galvanized

Feature/Equipment

Clevis M8 x 40 mm with spring bolt Ø8 mm and thread M8 x 45 mm
1x nut M10 + Nordlock-safety-washer + O-ring, max. screw-in depth in the drive 25 mm

B28ST



Application

Clevis for rear or front suspension of spindle drives with M10 thread in the rear base cap or in the spindle tube

Part.-No. 105520

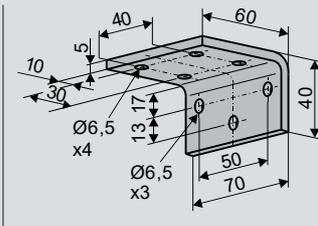
Material/Finish

steel galvanized

Feature/Equipment

Clevis M10 x 40 mm with spring bolt Ø10 mm and thread M10 x 50 mm
1x nut M10 + Nordlock-safety-washer + O-ring, max. screw-in depth in the drive 25 mm

K21K



Application

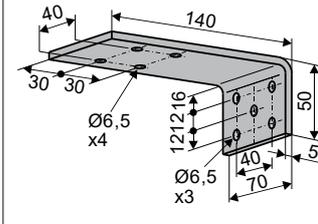
Shift the fastening level of the frame brackets **K5**, **K29** from the horizontal to the vertical position of the **main closing edge** of window frame profiles

Part.-No. 159900

Material/Finish

steel galvanized

K21L



Application

Shift the fastening level of the frame brackets **K5**, **K29** from the horizontal to the vertical position of the **main closing edge** of window frame profiles

Part.-No. 159905

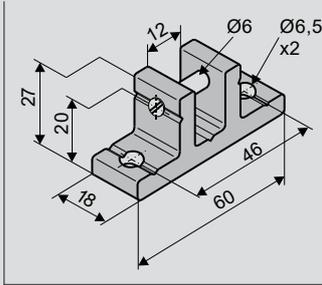
Material/Finish

steel galvanized

SPECIFIC APPLICATIONS

SCHÜCO AWS 57RO, WICONA WICTEC 50, RAICO WING 105D – HSK

F10.85



Application

Surface mounting on the **main closing edge** of casement profiles of outward opening windows, for drives with **front or rear suspension** with bore **Ø8 mm**

Part-No. 151105

Material/Finish
aluminium

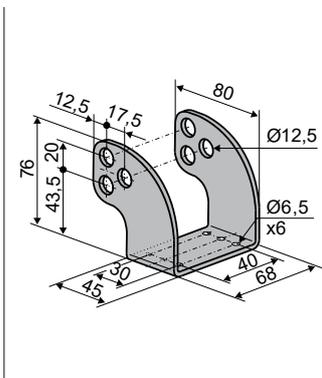
Feature/Equipment

1x nut M8,
1x screw M8x35

Load

max. 3000 N

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**,
SP8 with **B13**,
LKS with **B7**

Part-No. 151320

Material/Finish

stainless steel

Feature/Equipment

drilled holes Ø12,5 mm

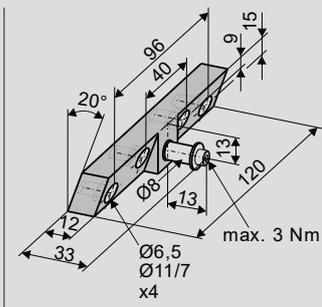
Accessories

B4 clamp ring PLA
(Ø36 mm, G1/8)

Part-No. 515900

SCHÜCO AWS 57R – NSK

F36



Application

Surface mounting on the **side closing edge** of outward opening casement profiles of roof windows **Schüco AWS 57RO**, for drives with **front suspension** with bore **Ø8 mm**

Part-No. 155170

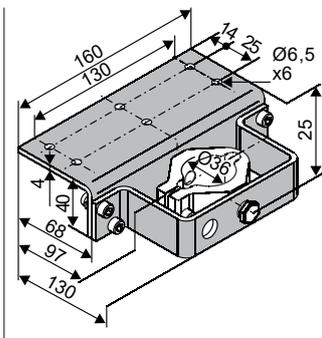
Material/Finish

aluminium,
stainless steel

Feature/Equipment

1x bolt Ø8 mm,
screw M4,
washer A4,3

K122-1



Application

Surface mounting on the **side closing edge** of window frame profiles of outward opening roof windows **Schüco AWS 57RO**, **Wicona Wictec 50** for **swivelling suspension** of drives
PLA with **B4**

Part-No. 155116

Material/Finish

stainless steel

Feature/Equipment

without clamping ring B4

Accessories

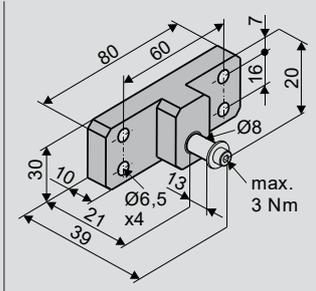
B4 clamp ring PLA
(Ø 36 mm, G1/8)

Part-No. 515900

SPECIFIC APPLICATIONS

WICONA WICTEC 50 – NSK

F30

**Application**

Surface mounting on the **side closing edge** of the outward opening casement profiles of roof windows **Wicona Wictec 50**, for drives with **front suspension** with bore **Ø8 mm**

Part-No. 155160**Material/Finish**

aluminium,

stainless steel

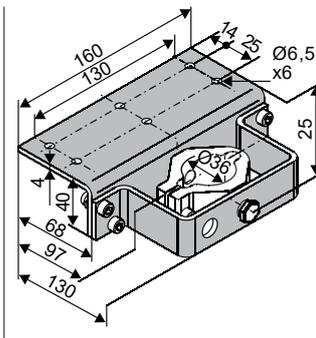
Feature/Equipment

1x bolt Ø8 mm,

screw M4,

washer A4,3

K122-1

**Application**

Surface mounting on the **side closing edge** of window frame profiles of outward opening roof windows **Schüco AWS 57RO**, **Wicona Wictec 50** for **swivelling suspension** of drives **PLA** with **B4**

Part-No. 155116**Material/Finish**

stainless steel

Feature/Equipment

without clamping ring B4

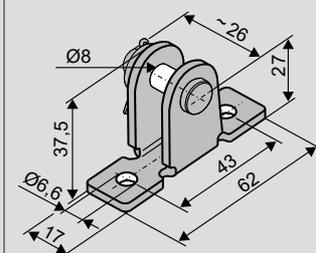
Accessories

B4 clamp ring PLA
(Ø36 mm, G1/8)

Part-No. 515900

RAICO WING 105D – NSK

F11ST

**Application**

Surface mounting on the **side closing edge** of casement/window frame profiles of in-/outward opening windows or on skylights, for drives with **front or rear suspension** with bore **Ø8 mm**, mounting holes aligned with central axis of drive

Part-No. 151400**Material/Finish**

steel galvanized

Feature/Equipment

1x bolt Ø8 mm,

washer,

cotter pin

Load

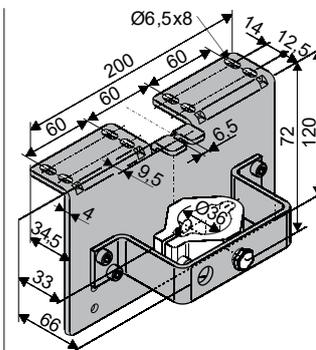
max. 3000 N

F11VA

Part-No. 151401**Material/Finish**

stainless steel

K127

**Application**

Surface mounting on the **side closing edge** of window frame profiles of outward opening roof windows **Raico Wing 105D** for **swivelling suspension** of drives **PLA** with **B4**

Part-No. 155119**Material/Finish**

stainless steel

Feature/Equipment

without clamping ring B4

Accessories

B4 clamp ring PLA
(Ø36 mm, G1/8)

Part-No. 515900

OPTIONAL ACCESSORIES

Main control unit				
M-COM		Application Configuration module for automatic configuration and surveillance of max. 4 opening drives / 2 locking drives version S12 / S3 in synchronised multi-drive systems	Part.-No. 524177 Protection rating IP30 rubber envelope Ambient temperature range 0 °C ... + 70 °C Dimensions 45 x 17 x 6 mm Connecting wires 3 wires 0,5 mm ² x 50 mm Feature/Equipment Printed circuit board with components and connection wires to be installed in connection box to be supplied on site.	
		Rated voltage: 24 V DC (19 V ... 28 V) Current consumption: <12 mA Drive type: S12		

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		
	from 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		
	from 101	516031		