



PRODUCT FEATURES KSA

- For natural ventilation, RWA und ferralux® NRWG nach EN12101-2
- TWIN versions with two chains and doubled force
- Adjustable chain tension
- Mechanical chain unlocking
- Aluminium housing anodized or optionally in RAL colors
- High-quality stainless steel roller chain
- 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
- Integrated plug solution
- Compatible with the plug-in configuration modulel M-COM® Click

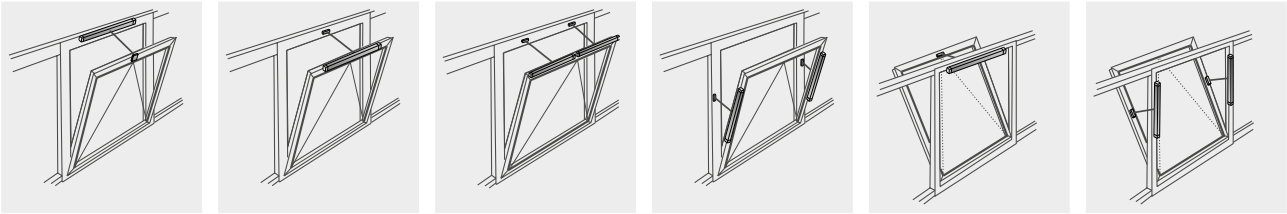
For this product series, a Type III Environmental Product Declaration (EPD) was issued according to ISO 14025 and EN 15804.

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

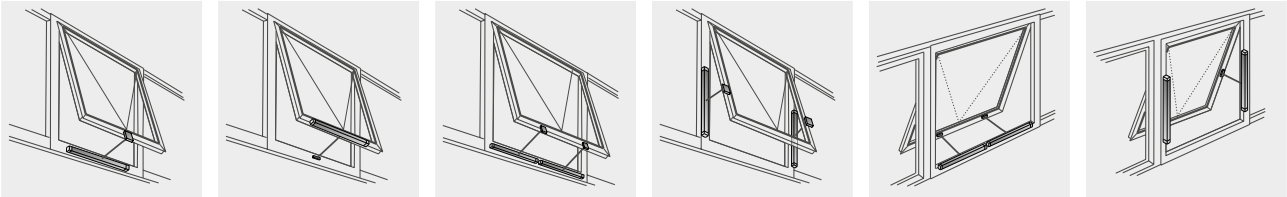
The EPD documents can be viewed or downloaded from our homepage www.aumueller-gmbh.de.

FACADE

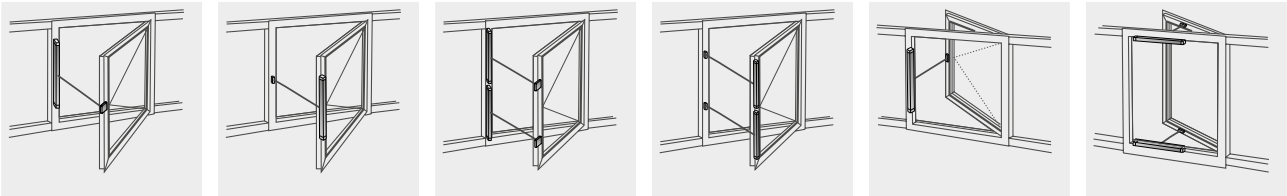
Bottom-hung



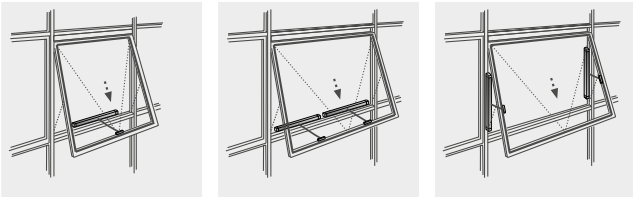
Top-hung



Side-hung



Friction hinged

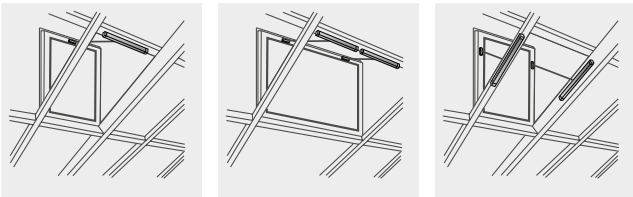


Parallel outward opening

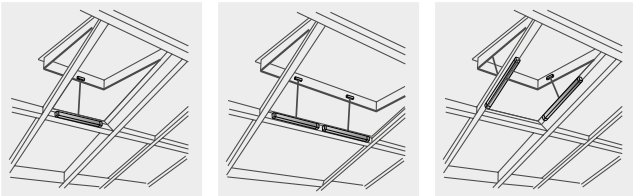


ROOF

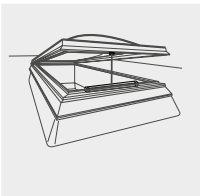
Bottom-hung



Top-hung

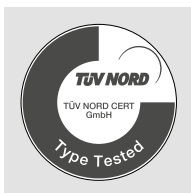


Sky light



Glass pyramid





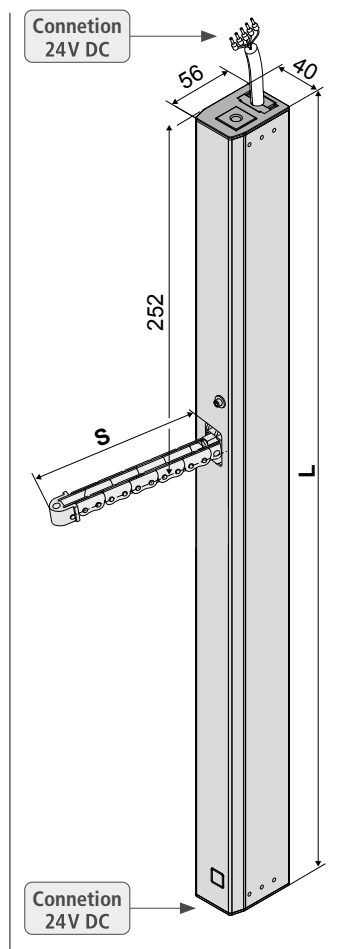
- Application: natural ventilation, RWA, ferralux®-NRWG
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking

Equipment

- Additional **AUMÜLLER-Click plug set** for multi-drive operation

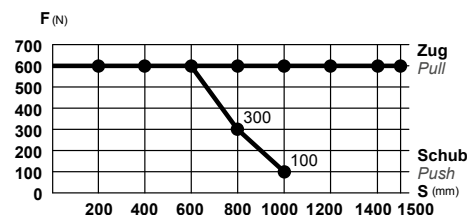
Options

- Programmable 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	0,9 A
I_A	Cut-off current	1,2 A
P	Rated power	22 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 32
	Ambient temperature range	-5 °C ... +60 °C
F	Pulling force max.	600 N
F_A	Pushing force max.	

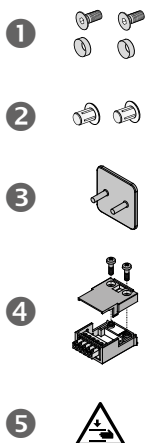


s > 800 mm only for pulling application

Pullout force	3.000 N (fastening depended)									
Chain	stainless steel									
Connecting cable	non-halogen, grey 5 x 0,5 mm ² , ~ 3 m									
Speed	<table border="0"> <tr> <td>$s \leq 400$</td> <td> 8,0 mm/s</td> <td> 8,0 mm/s</td> </tr> <tr> <td>$s > 400 - 600$</td> <td> 12,0 mm/s</td> <td> 8,0 mm/s</td> </tr> <tr> <td>$s > 600$</td> <td> 13,5 mm/s</td> <td> 8,0 mm/s</td> </tr> </table>	$s \leq 400$	8,0 mm/s	8,0 mm/s	$s > 400 - 600$	12,0 mm/s	8,0 mm/s	$s > 600$	13,5 mm/s	8,0 mm/s
$s \leq 400$	8,0 mm/s	8,0 mm/s								
$s > 400 - 600$	12,0 mm/s	8,0 mm/s								
$s > 600$	13,5 mm/s	8,0 mm/s								
S	Stroke	250 – 1.500 mm								
L	Length	see order data								
	Sound pressure level	≤ 70 dB (A)								

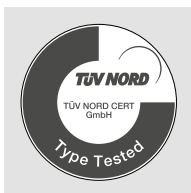
In delivery

- 2x countersunk screws M8x16 and 2x Spacer ring (brass)
- 2x blind plug for unused cable entry
- 1x chain unlocking key
- 1x **AUMÜLLER-Click plug set** (24V) for multi-drive operation
- 1x warning sign sticker „Risk of entrapment“



ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU / pcs.	Part.-No.	
250	515	KSA 250 S12 24V	E6/C-0	1	522725	
300	591	KSA 300 S12 24V	E6/C-0	1	522730	
400	591	KSA 400 S12 24V	E6/C-0	1	522740	
500	693	KSA 500 S12 24V	E6/C-0	1	522750	
600	693	KSA 600 S12 24V	E6/C-0	1	522760	
800	794	KSA 800 S12 24V	E6/C-0	1	522780	
1000	896	KSA 1000 S12 24V	E6/C-0	1	522810	
1200	998	KSA 1200 S12 24V	E6/C-0	1	522812	
1500	1151	KSA 1500 S12 24V	E6/C-0	1	522815	

OPTIONS						
Special model		PU / pcs.	Part.-No.			
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		
Plug solution:						
AUMÜLLER-Click plug solution - 5 m – non-halogen, grey – 5 x 0,5 mm²				501252		
AUMÜLLER-Click plug solution - 10 m – non-halogen, grey – 5 x 0,5 mm²				501253		
Microprocessor programming S12						
Electronic stroke reduction 24V S12				524190		
Programming drives 24V / 230V S12				524180		
Optional accessories			PU / pcs.	Part.-No.		
M-COM® Click Configuration module for synchronised multi-drive systems			1	524167		
M-COM Configuration module for synchronised multi-drive systems			1	524177		



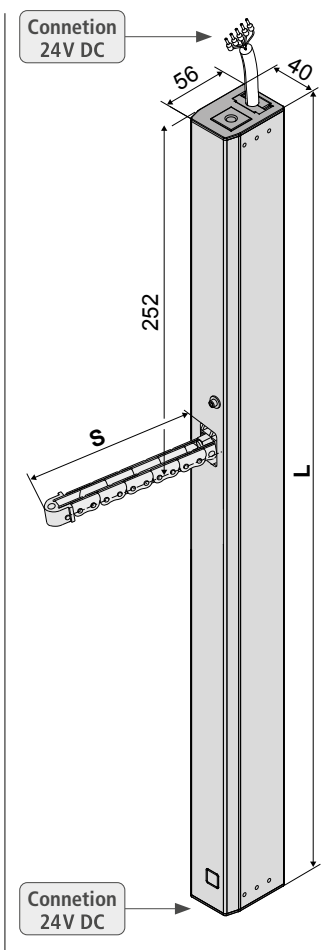
- Application: natural ventilation, RWA, ferralux®-NRWG
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking
- Programmable feedback limit position „OPEN“ and „CLOSE“ (max. 24 V, 500 mA)

Equipment

- Additional **AUMÜLLER-Click plug set** for multi-drive operation

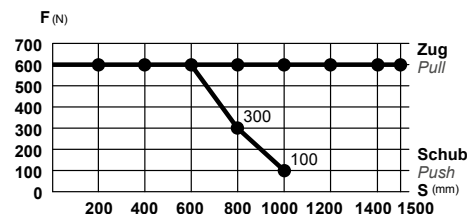
Options

- Programmable 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	0,9 A
I_A	Cut-off current	1,2 A
P	Rated power	22 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 32
	Ambient temperature range	-5 °C ... +60 °C
F	Pulling force max.	600 N
F_A	Pushing force max.	

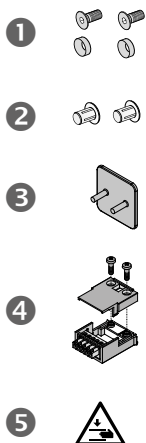


s > 800 mm only for pulling application

	Pullout force	3.000 N (fastening depended)
	Chain	stainless steel
	Connecting cable	non-halogen, grey 5 x 0,5 mm ² , ~ 3 m
	Speed	$s \leq 400$ 8,0 mm/s 8,0 mm/s $s > 400 - 600$ 12,0 mm/s 8,0 mm/s $s > 600$ 13,5 mm/s 8,0 mm/s
S	Stroke	250 – 1.500 mm
L	Length	see order data
	Sound pressure level	≤70 dB (A)

In delivery

- 1 2x countersunk screws M8x16 and 2x Spacer ring (brass)
- 2 2x blind plug for unused cable entry
- 3 1x chain unlocking key
- 4 1x **AUMÜLLER-Click plug set** (24V) for multi-drive operation
- 5 1x warning sign sticker „Risk of entrapment“



ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU / pcs.	Part.-No.	
250	515	KSA 250 S12 24V Z	E6/C-0	1	522723	
300	591	KSA 300 S12 24V Z	E6/C-0	1	522733	
400	591	KSA 400 S12 24V Z	E6/C-0	1	522743	
500	693	KSA 500 S12 24V Z	E6/C-0	1	522753	
600	693	KSA 600 S12 24V Z	E6/C-0	1	522763	
800	794	KSA 800 S12 24V Z	E6/C-0	1	522783	
1000	896	KSA 1000 S12 24V Z	E6/C-0	1	522813	
1200	998	KSA 1200 S12 24V Z	E6/C-0	1	522823	
1500	1151	KSA 1500 S12 24V Z	E6/C-0	1	522853	

OPTIONS						
Special model		PU / pcs.	Part.-No.			
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		
Plug solution:						
AUMÜLLER-Click plug solution - 5 m – non-halogen, grey – 5 x 0,5 mm²				501252		
AUMÜLLER-Click plug solution - 10 m – non-halogen, grey – 5 x 0,5 mm²				501253		
Microprocessor programming S12						
Electronic stroke reduction 24V S12				524190		
Programming drives 24V / 230V S12				524180		
Optional accessories			PU / pcs.	Part.-No.		
M-COM® Click Configuration module for synchronised multi-drive systems			1	524167		
M-COM Configuration module for synchronised multi-drive systems			1	524177		



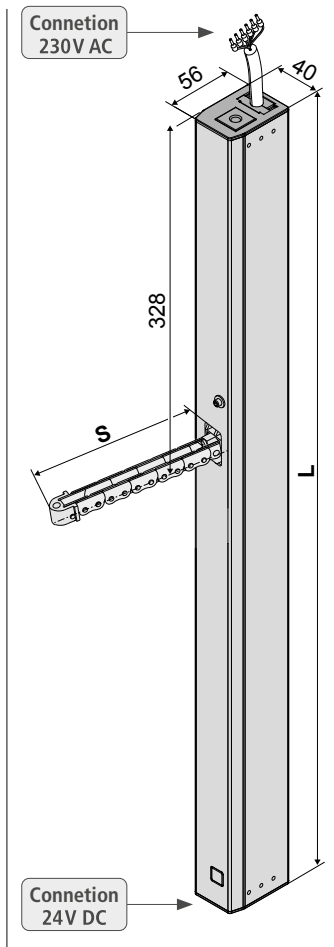
- Application: natural ventilation
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking
- Parallel connection up to 8 drives in one group
- Additional connection of a 24V drive possible (on the 24V side)

Equipment

- Additional **AUMÜLLER-Click plug set** for multi-drive operation

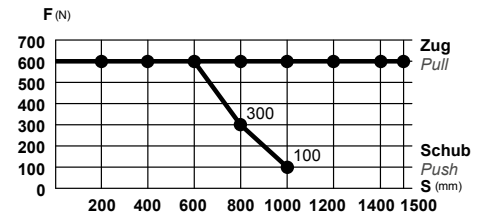
Options

- Programmable synchronised run (max. 4 drives) and special functions



TECHNICAL DATA

U_N	Rated voltage	230 V AC (50 Hz)
I_N	Rated current	0,2 A
I_A	Cut-off current	0,2 A
P_N	Rated power	46 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 32
	Ambient temperature range	-5 °C ... +60 °C
F_Z	Pulling force max.	600 N
F_A	Pushing force max.	

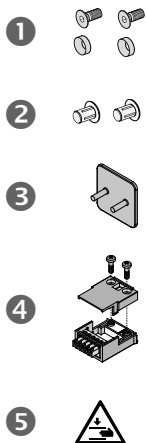


s > 800 mm only for pulling application

F_H	Pullout force	3.000 N (fastening depended)
	Chain	stainless steel
	Connecting cable	non-halogen, grey 6 x 0,75 mm ² , ~ 3 m
v	Speed	\times 8,0 mm/s \curvearrowright 8,0 mm/s
s	Stroke	250 – 1.500 mm
L	Length	see order data
	Sound pressure level	≤70 dB (A)

In delivery

- 2x countersunk screws M8x16 and 2x Spacer ring (brass)
- 2x blind plug for unused cable entry
- 1x chain unlocking key
- 1x **AUMÜLLER-Click plug set** (24V) for multi-drive operation
- 1x warning sign sticker „Risk of entrapment“



ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU / pcs.	Part.-No.	
250	591	KSA 250 S12 230V	E6/C-0	1	497025	
300	667	KSA 300 S12 230V	E6/C-0	1	497030	
400	667	KSA 400 S12 230V	E6/C-0	1	497040	
500	769	KSA 500 S12 230V	E6/C-0	1	497050	
600	769	KSA 600 S12 230V	E6/C-0	1	497060	
800	870	KSA 800 S12 230V	E6/C-0	1	497080	
1000	972	KSA 1000 S12 230V	E6/C-0	1	497110	
1200	1074	KSA 1200 S12 230V	E6/C-0	1	497112	
1500	1227	KSA 1500 S12 230V	E6/C-0	1	497115	

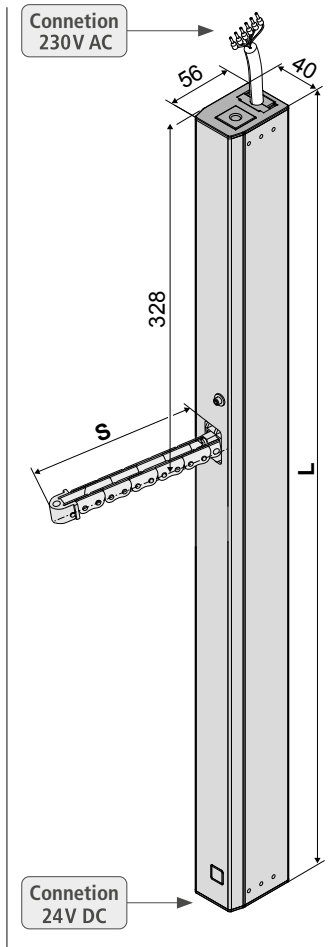
OPTIONS			
Special model	PU / pcs.	Part.-No.	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
Specify at order stage:	1 – 20	516004	
	21 – 50	516004	
	51 – 100	516004	
	from 101	516004	
Plug solution:			
AUMÜLLER-Click plug solution - 5 m – non-halogen, grey – 6 x 0,75 mm²		501275	
AUMÜLLER-Click plug solution - 10 m – non-halogen, grey – 6 x 0,75 mm²		501280	
Microprocessor programming S12			
Programming synchronised multi-drive systems 230V S12 (each drive)		495588	
Electronic stroke reduction 230V S12		495590	
Programming drives 24V / 230V S12		524180	



- Application: natural ventilation
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking
- Programmable feedback limit position „OPEN“ and „CLOSE“ (max. 24 V, 500 mA)
- Parallel connection up to 8 drives in one group
- Additional connection of a 24V drive possible (on the 24V side)

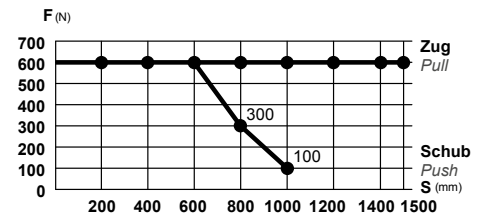
Equipment

- Additional **AUMÜLLER-Click plug set** for multi-drive operation



TECHNICAL DATA

U_N	Rated voltage	230 V AC (50 Hz)
I_N	Rated current	0,2 A
I_A	Cut-off current	0,2 A
P_N	Rated power	46 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 32
	Ambient temperature range	-5 °C ... +60 °C
F_Z	Pulling force max.	600 N
F_A	Pushing force max.	

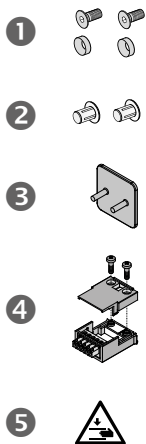


s > 800 mm only for pulling application

F_H	Pullout force	3.000 N (fastening depended)
	Chain	stainless steel
	Connecting cable	non-halogen, grey 6 x 0,75 mm ² , ~ 3 m
v	Speed	\leftarrow 8,0 mm/s \rightarrow 8,0 mm/s
s	Stroke	250 – 1.500 mm
L	Length	see order data
	Sound pressure level	≤ 70 dB (A)

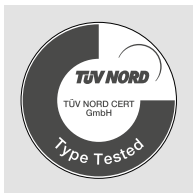
In delivery

- 2x countersunk screws M8x16 and 2x Spacer ring (brass)
- 2x blind plug for unused cable entry
- 1x chain unlocking key
- 1x **AUMÜLLER-Click plug set** (24V) for multi-drive operation
- 1x warning sign sticker „Risk of entrapment“



ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU / pcs.	Part.-No.	
250	591	KSA 250 S12 230V Z	E6/C-0	1	497023	
300	667	KSA 300 S12 230V Z	E6/C-0	1	497033	
400	667	KSA 400 S12 230V Z	E6/C-0	1	497043	
500	769	KSA 500 S12 230V Z	E6/C-0	1	497053	
600	769	KSA 600 S12 230V Z	E6/C-0	1	497063	
800	870	KSA 800 S12 230V Z	E6/C-0	1	497083	
1000	972	KSA 1000 S12 230V Z	E6/C-0	1	497113	
1200	1074	KSA 1200 S12 230V Z	E6/C-0	1	497123	
1500	1227	KSA 1500 S12 230V Z	E6/C-0	1	497153	

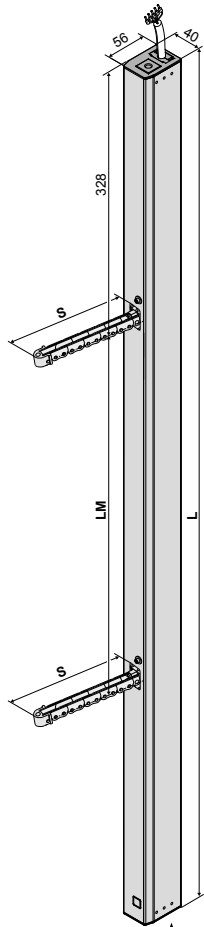
OPTIONS			
Special model	PU / pcs.	Part.-No.	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
Specify at order stage:	1 – 20	516004	
	21 – 50	516004	
	51 – 100	516004	
	from 101	516004	
Plug solution:			
AUMÜLLER-Click plug solution - 5 m – non-halogen, grey – 6 x 0,75 mm²		501275	
AUMÜLLER-Click plug solution - 10 m – non-halogen, grey – 6 x 0,75 mm²		501280	
Microprocessor programming S12			
Electronic stroke reduction 230V S12		495590	
Programming drives 24V / 230V S12		524180	



- Application: natural ventilation, RWA
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking

Options

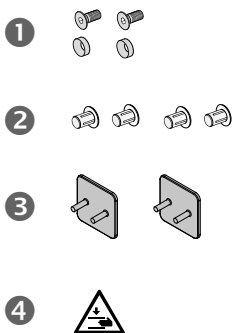
- Programmable special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)



No electrical connection possible

TECHNICAL DATA

U_N	Rated voltage	24 V DC (19 V ... 28 V)
I_N	Rated current	1,8 A
I_A	Cut-off current	2,4 A
P_N	Rated power	43 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 32
	Ambient temperature range	-5 °C ... +60 °C
F_Z	Pulling force max.	1.200 N
F_A	Pushing force max.	1.200 N
F_H	Pullout force	2 x 2.500 N (fastening depended)
	Chain	stainless steel
	Connecting cable	non-halogen, grey 5 x 0,5 mm ² , ~ 3 m
v	Speed	$s \leq 400$ 8,0 mm/s 8,0 mm/s $s > 400 - 600$ 12,0 mm/s 8,0 mm/s
s	Stroke	400 – 600 mm
L	Length	see order data
LM	Distance in between chains	see order data
	Sound pressure level	≤ 70 dB (A)

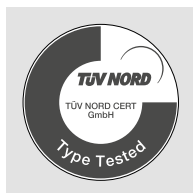


In delivery

- 2x countersunk screws M8x16 and 2x Spacer ring (brass)
- 4x blind plug for unused cable entry
- 2x chain unlocking key
- 1x warning sign sticker „Risk of entrapment“

ORDER DATA							
s [mm]	L [mm]	LM [mm]	Version	Finish	PU/pcs.	Part.-No.	
400	1150	485	KSA TWIN 400 S12 24V	E6/C-0	1	522745	
500	1353	587	KSA TWIN 500 S12 24V	E6/C-0	1	522755	
600	1353	587	KSA TWIN 600 S12 24V	E6/C-0	1	522765	

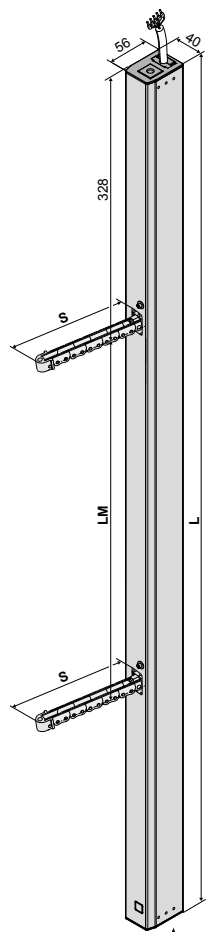
OPTIONS			
Special model	PU/pcs.	Part.-No.	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
Specify at order stage:	1 – 20	516004	
	21 – 50	516004	
	51 – 100	516004	
	from 101	516004	
Plug solution:			
AUMÜLLER-Click plug solution - 5 m – non-halogen, grey – 5 x 0,5 mm²		501252	
AUMÜLLER-Click plug solution - 10 m – non-halogen, grey – 5 x 0,5 mm²		501253	
Microprocessor programming S12			
Electronic stroke reduction 24V S12		524190	
Programming drives 24V / 230V S12		524180	
Optional accessories	PU/pcs.	Part.-No.	
M-COM Configuration module for synchronised multi-drive systems	1	524177	



- Application: natural ventilation, RWA
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking
- Programmable feedback limit position „OPEN“ and „CLOSE“ (max. 24 V, 500 mA)

Options

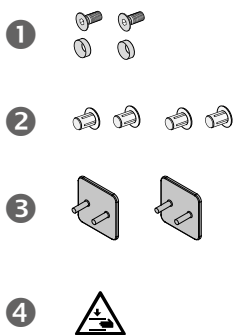
- Programmable special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)



No electrical connection possible

TECHNICAL DATA

U_N	Rated voltage	24 V DC (19 V ... 28 V)
I_N	Rated current	1,8 A
I_A	Cut-off current	2,4 A
P_N	Rated power	43 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 32
	Ambient temperature range	-5 °C ... +60 °C
F_Z	Pulling force max.	1.200 N
F_A	Pushing force max.	1.200 N
F_H	Pullout force	2 x 2.500 N (fastening depended)
	Chain	stainless steel
	Connecting cable	non-halogen, grey 5 x 0,5 mm ² , ~ 3 m
v	Speed	$s \leq 400$ 8,0 mm/s 8,0 mm/s $s > 400 - 600$ 12,0 mm/s 8,0 mm/s
s	Stroke	400 – 600 mm
L	Length	see order data
LM	Distance in between chains	see order data
	Sound pressure level	≤ 70 dB (A)

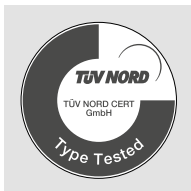


In delivery

- 2x countersunk screws M8x16 and 2x Spacer ring (brass)
- 4x blind plug for unused cable entry
- 2x chain unlocking key
- 1x warning sign sticker „Risk of entrapment“

ORDER DATA							
s [mm]	L [mm]	LM [mm]	Version	Finish	PU/pcs.	Part.-No.	
400	1150	485	KSA TWIN 400 S12 24V Z	E6/C-0	1	522747	
500	1353	587	KSA TWIN 500 S12 24V Z	E6/C-0	1	522757	
600	1353	587	KSA TWIN 600 S12 24V Z	E6/C-0	1	522767	

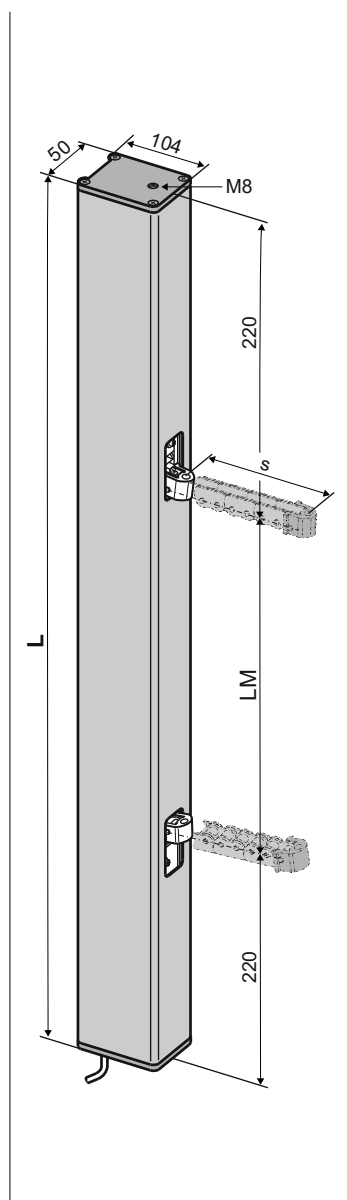
OPTIONS			
Special model	PU/pcs.	Part.-No.	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
Specify at order stage:	1 – 20	516004	
	21 – 50	516004	
	51 – 100	516004	
	from 101	516004	
Plug solution:			
AUMÜLLER-Click plug solution - 5 m – non-halogen, grey – 5 x 0,5 mm²		501252	
AUMÜLLER-Click plug solution - 10 m – non-halogen, grey – 5 x 0,5 mm²		501253	
Microprocessor programming S12			
Electronic stroke reduction 24V S12		524190	
Programming drives 24V / 230V S12		524180	
Optional accessories			
M-COM Configuration module for synchronised multi-drive systems	1	524177	



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

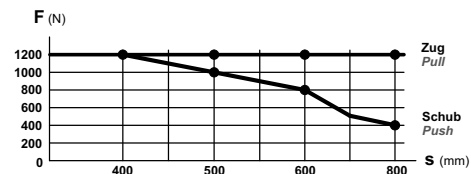
Options

- Programmable 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	1,8 A
I_A	Cut-off current	2,4 A
P_N	Rated power	43 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 32
	Ambient temperature range	-5 °C ... +60 °C
F_Z	Pulling force max.	1.200 N
F_A	Pushing force max.	



F_H	Pullout force	2 x 2.500 N (fastening depended)
	Chain	Stainless steel
	Connecting cable	non-halogen, grey- 5 x 0,5 mm ² , ~ 5 m
v	Speed	$s \leq 400$ ↘ = 8,0 mm/s ↙ = 8,0 mm/s $s > 400 - 600$ ↘ = 12,0 mm/s ↙ = 8,0 mm/s $s > 600$ ↘ = 13,5 mm/s ↙ = 8,0 mm/s
s	Stroke	400 – 800 mm
L	Length	see order data
LM	Distance in between chains	see order data
	Sound pressure level	≤ 70 dB (A)

Components packed with drive

2x Countersunk-head screw M8x16, 2x Spacer ring (brass)

ORDER DATA							
s [mm]	L [mm]	LM [mm]	Version	Finish	PU/pcs.	Part.-No.	
400	737	297	KSA D 400 S12 24V	E6/C-0	1	522140	
500	837	397	KSA D 500 S12 24V	E6/C-0	1	522150	
600	837	397	KSA D 600 S12 24V	E6/C-0	1	522160	
800	942	502	KSA D 800 S12 24V	E6/C-0	1	522180	

OPTIONS			
Special model	PU/pcs.	Part.-No.	
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:			
10 m – non-halogen, grey– 5 x 0,5 mm ²		501056	
Microprocessor programming S12			
Electronic stroke reduction 24V S12		524190	
Programming drives 24V / 230V S12		524180	
Optional accessories			
M-COM Configuration module for synchronised multi-drive systems	1	524177	

OVERVIEW OF BRACKETS					1	2	3	4	5		
Typical application											
Frame bracket					K-A1	K84-1, K87, K-C3, K-E1, K-E2	K-B1	K-B2	K-D3		
Casement bracket					F16, F49	F16, F16-1, F29-2, F33, F38, F39, F49	F16, F49				
Space requirement		min.	[mm]	35	65 – 90	45 – 55		45			
Overlap thickness *1			[mm]	0 – 21	irrelevant	0 – 21		0 – 21			
Opening angle *2		max.	[DEG]	20	60	50		40			
Casement weight *3		max.	[Kg]	250	130	130		130			
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		■					
PAF	outward		RM	●		●	●				
Concealed											
FAB*4		Solo	[mm]	700 – 1300							
		Sync2	[mm]	1250 – 2500							
FAH*4		Solo	[mm]	450 – 1500							
		Sync2	[mm]	250 – 2500							

LEGEND

● suitable ■ not recommended

*1 Window sizes and opening angles may be different.

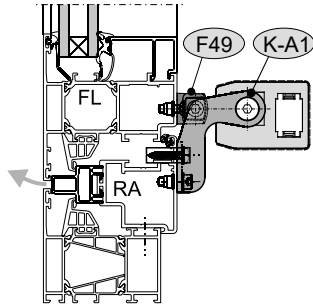
*2 Sample values of the opening angle evaluated on the basis of FAB/FAH for inward opening windows with drives mounted at the main closing edge. For any other window heights, for outward opening windows and for windows with drives mounted at the side edges the opening angle will vary.

*3 Please respect the individual geometry of the different windows. The listed max. casement weight refers to a single drive on button hung window with a max. opening angle.

*4 Sample value of the casement dimensions for corner joints of 110 mm. The actual casement dimensions depend on length of the corner joints, profile dimensions, stroke and position of the drives. The values of FAB/FAH are to be used analogue for side hung windows.

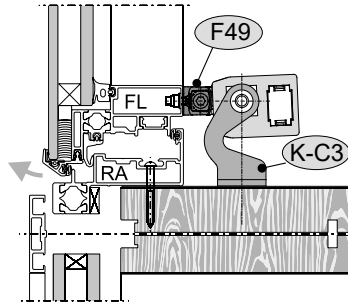
TYPICAL APPLICATIONS

1 RM, top hung, outward opening



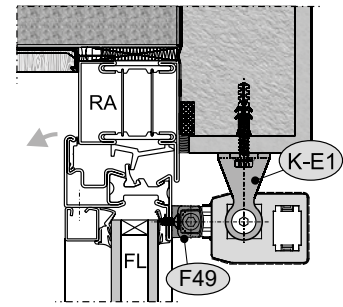
View on aluminium window

2 PR, top hung, outward opening



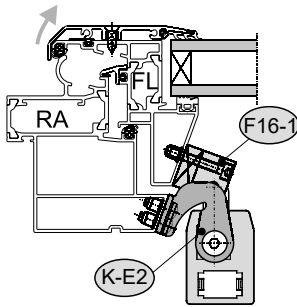
View on aluminium window

2 PR, bottom hung, outward opening



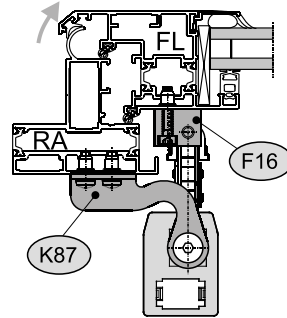
View on steel window

2 RM, roof



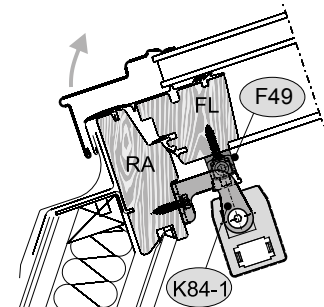
View on aluminium window

2 RM, roof



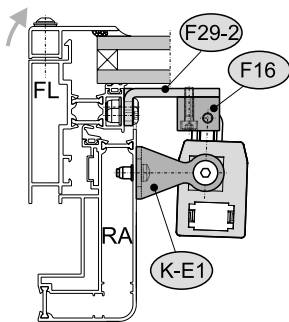
View on aluminium window

2 RM, roof



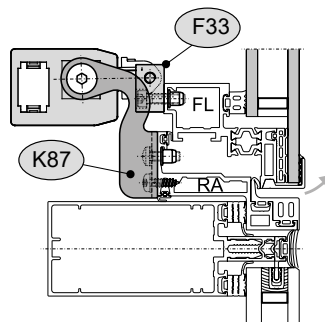
View on aluminium window

2 RM, roof



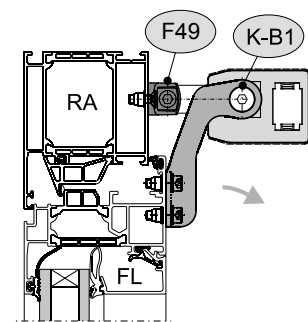
View on aluminium window

2 RM, top hung, outward opening



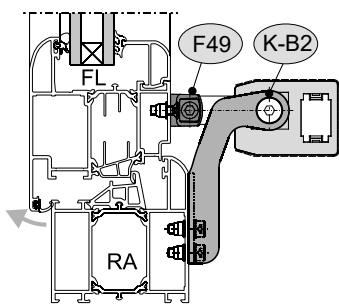
View on aluminium window

3 FM, bottom hung, inward opening



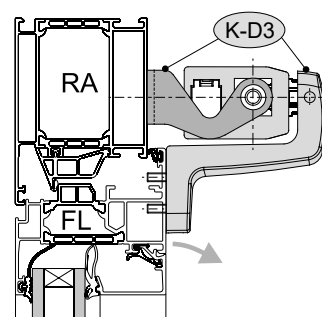
View on aluminium window

4 RM, top hung, outward opening



View on aluminium window

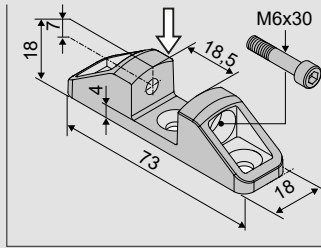
5 RM, bottom hung, inward opening



View on aluminium window

CASEMENT BRACKETS

F49



Application

Surface mounting on the casement profiles of inward opening windows, for **swivelling** fixing of drives **KSA** with **K-A1, K-B1, K-B2, K-C3, K-E1, K-E2, K84-1, K125**

Chain fixing in direction of the arrow

Part.-No. 524299

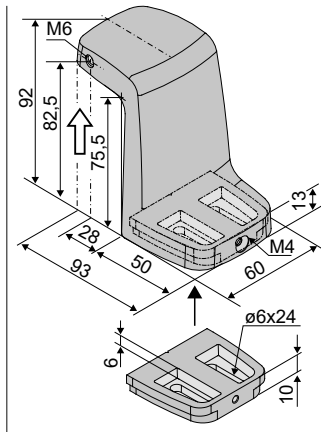
Material / Finish

Cast aluminum, RAL 9006

Feature / Equipment

1x cylinder head screw M6x30

F44



Application

Surface mounting on the casement profiles of inward opening windows, for surface mounted drives **KSA** with **K-C3**

Chain fixing in direction of the arrow

Part.-No. 524297

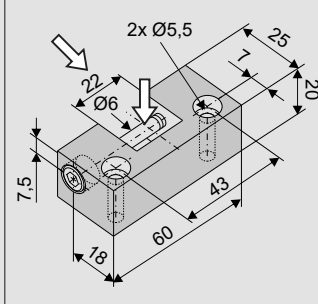
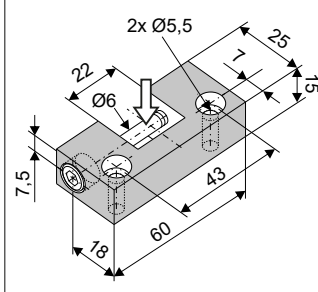
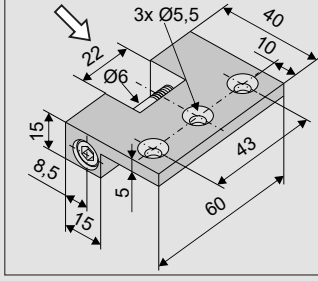
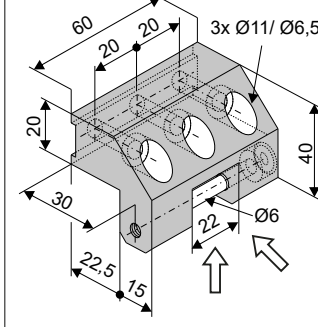
Material / Finish

Cast aluminum, RAL 9006

Feature / Equipment

1x baseplate
1x countersunk screw M4x10
1x cylinder head screw M6x35

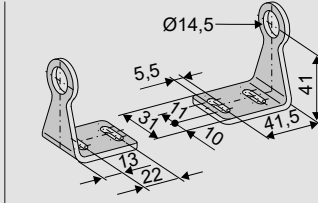
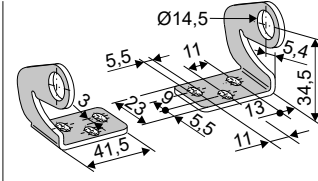
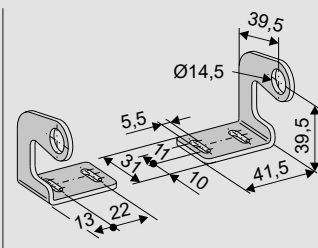
CASEMENT BRACKETS

<p>F16</p> 		<p>Application Surface mounting on the casement/window frame profiles of in-/outward opening windows (e.g. friction hinged or roof windows), for surface mounted drives KSA with K-A1, K-B1, K-B2, K-C3, K-E1, K-E2, K84-1, K87</p> <p>Chain fixing in direction of the arrow</p>	<p>Part.-No. 524204 Material/Finish aluminium (natural anodized) Feature/Equipment 1x cylinder head screw M6x50</p>			
<p>F33</p> 		<p>Application Surface mounting on the casement profile of outward opening windows (e.g. friction hinged or roof windows), for surface mounted drives KSA with K-A1, K-B1, K-B2, K-C3, K-E1, K84-1, K87</p> <p>Chain fixing in direction of the arrow</p>	<p>Part.-No. 524203 Material/Finish aluminium (natural anodized) Feature/Equipment 1x cylinder head screw M6x50</p>			
<p>F38</p> 		<p>Application Surface mounting on the casement profile of outward opening friction hinged windows, for surface mounted drives KSA with K-A1, K-B1, K87</p> <p>Chain fixing in direction of the arrow</p>	<p>Part.-No. 524199 Material/Finish aluminium (natural anodized) Feature/Equipment 1x cylinder head screw M6x5</p>			
<p>F39</p> 		<p>Application Surface mounting on the casement profile of outward opening roof windows, for surface mounted drives KSA with K-A1, K-B1, K-B2, K-C3, K-E1, K-E2, K84-1</p> <p>Chain fixing in direction of the arrow</p>	<p>Part.-No. 524295 Material/Finish aluminium (natural anodized) Feature/Equipment 1x cylinder head screw M6x50</p>			
		<p>Optional accessories</p> <p>B2 Base Plate F39</p>	<p>Part.-No. 155173</p>			

FRAME BRACKETS

<p>K-A1</p>		<p>Application Surface mounting on the case-ment/window frame profiles of in-/outward opening windows, for swivelly fixing of drives KSA with F16, F33, F38, F39, F49 (Required space on frame profile 35 mm)</p>	<p>Part.-No. 524057 Material/Finish Stainless steel Feature/Equipment 1x right, 1x left</p>	
<p>K-B1</p>		<p>Application Surface mounting on the case-ment/ window frame profiles of in-/outward opening windows, for swivelling fixing of drives KSA with F16, F33, F38, F39, F49 (Required space on frame profile 35 – 52 mm)</p>	<p>Part.-No. 524053 Material/Finish Stainless steel Feature/Equipment 1x right, 1x left</p>	
<p>K-B2</p>		<p>Application Surface mounting on the case-ment/ window frame profiles of in-/outward opening (wooden) windows, for swivelling fixing of drives KSA with F16, F33, F39, F49 (Required space on frame profile 35 – 52 mm)</p>	<p>Part.-No. 524063 Material/Finish Stainless steel Feature/Equipment 1x right, 1x left</p>	
<p>K-C3</p>		<p>Application Surface mounting on the case-ment/window frame profiles or on the mullion/transom of outward opening windows, for swivelling fixing of drives KSA with F16, F33, F39, F49</p>	<p>Part.-No. 524067 Material/Finish Stainless steel Feature/Equipment 1x right, 1x left</p>	
<p>K-D3</p>		<p>Application Surface mounting on the case-ment and frame profile of inward opening windows, for swivelling fixing of drives KSA on the frame profile (required space 50 mm)</p>	<p>Part.-No. 524068 Material/Finish Stainless steel (K-C3), Aluminum casting (F44) Feature/Equipment 1x K-C3, 1x F44</p>	
		<p>Accessories for F44 Casement bracket „Z“</p>	<p>Part.-No. 524297</p>	

FRAME BRACKETS

<p>K-E1</p>		<p>Application Surface mounting on the mullion/transom of outward opening windows, for swivelling fixing of drives KSA with F16, F33, F39, F49</p>	<p>Part.-No. 524056 Material/Finish Stainless steel Feature/Equipment 1x right, 1x left</p>	
<p>K-E2</p>		<p>Application Surface mounting on the window frame profiles or on the mullions/transoms of outward opening roof windows, for swivelling fixing of drives KSA with F16, F16-1, F33, F39, F49</p>	<p>Part.-No. 524066 Material/Finish Stainless steel Feature/Equipment 1x right, 1x left</p>	
<p>K84-1</p>		<p>Application Surface mounting on the window frame profiles or on the mullions/transoms of outward opening roof windows, for swivelling fixing of drives KSA with F16, F33, F39, F49</p>	<p>Part.-No. 524224 Material/Finish Stainless steel Feature/Equipment 1x right, 1x left</p>	

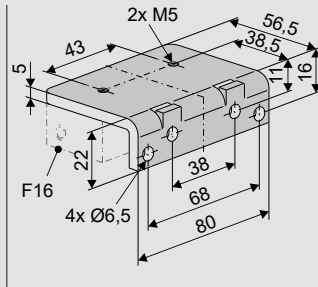
SPECIFIC APPLICATIONS

ROOF WINDOWS SCHÜCO AWS 57RO				
F16-1		<p>Application</p> <p>Surface mounting on the case-ment profile of outward opening roof windows series Schüco AWS 57RO, for fixing of drives KSA</p> <p>Chain fixing in direction of the arrow</p>	<p>Part.-No. 155171</p> <p>Material/Finish aluminium (natural anodized)</p> <p>Feature/Equipment 1x cylinder head screw M6x50 with base plate</p>	
K-E2		<p>Application</p> <p>Surface mounting on the window frame profiles or on the mullions/transoms of outward opening roof windows, for swivelling fixing of drives KSA with F16, F16-1, F33, F39, F49</p>	<p>Part.-No. 524066</p> <p>Material/Finish Stainless steel</p> <p>Feature/Equipment 1x right, 1x left</p>	
FRICTION HINGED WINDOWS SCHÜCO FW50				
K87		<p>Application</p> <p>Surface mounting on the window frame profiles of outward opening friction hinged windows Schüco FW50+, for swivelling fixing of drives KSA (Required space on frame profile 35 mm)</p>	<p>Part.-No. 524319</p> <p>Material/Finish Stainless steel</p> <p>Feature/Equipment 1x right, 1x left, incl. F33 + B3</p>	

SPECIFIC APPLICATIONS

ROOF WINDOWS | HEROAL 085 / 180

F29-2



Application

Surface mounting on the casement profile of outward opening roof windows series Heroal 085 / 180, for fixing of drives KSA with F16

Part.-No. 155157

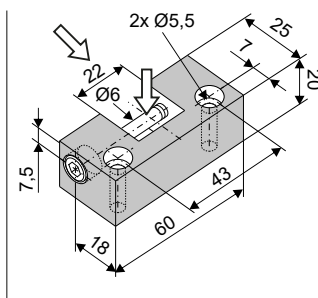
Material/Finish

Stainless steel

Feature/Equipment

2x cylinder head screw M6x20

F16



Application

Surface mounting on the casement/window frame profiles of in-/outward opening windows (e.g. friction hinged or roof windows), for surface mounted drives KSA with K-A1, K-B1, K-B2, K-C3, K-E1, K-E2, K84-1, K87

Chain fixing in direction of the arrow

Part.-No. 524204

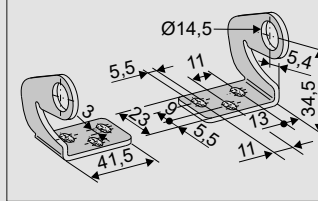
Material/Finish

aluminium
(natural anodized)

Feature/Equipment

1x cylinder head screw M6x50

K-E2



Application

Surface mounting on the window frame profiles or on the mullions/transoms of outward opening roof windows, for swivelling fixing of drives KSA with F16, F33, F39, F49

Part.-No. 524066

Material/Finish

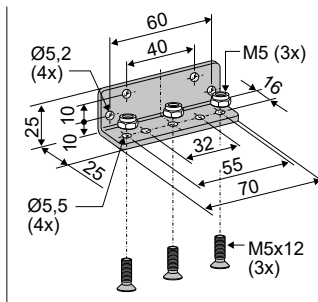
Stainless steel

Feature/Equipment

1x right,
1x left

SKYLIGHT DOME

B1



Application

Mounting angle for mounting of drives KS2 with F21 and KSA with F49 on skylight domes

Part.-No. 151422

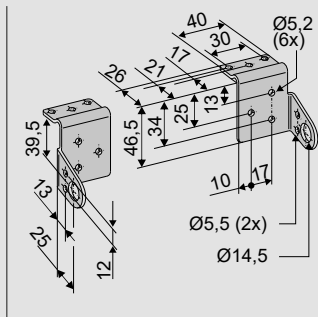
Material/Finish

Stainless steel

Feature/Equipment

3x countersunk-head screw M5x12,
3x nut M5

K125



Application

Surface mounting on the upstand of skylight domes for fixing of drives KS2 and KSA with B1

Part.-No. 523979

Material/Finish

Stainless steel

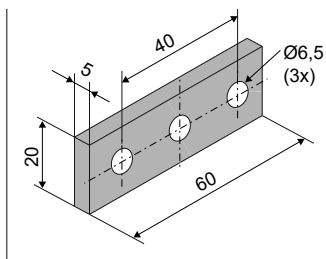
Feature/Equipment

4x screw M5x10

OPTIONAL ACCESSORIES

Base Plate F39

B2



Application

Support for F39 as packing plate for mounting on the casement profiles of outward opening roof windows

Part.-No. 155173

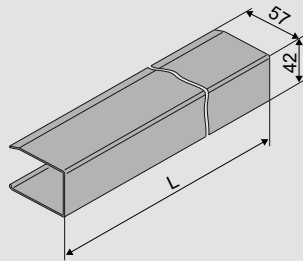
Material/Finish
aluminium
(natural anodized)

Feature/Equipment
60 x 20 x 5 mm

OPTIONAL ACCESSORIES

Cover-profile Set

AP-KSA



Application

Cover profile for surface mounted drives **KSA** with frame bracket sets **K-A1, K-B1, K-B2, K-E2, K84-1**. Profile length adjustable to the length of the drives or of the casement

Material/Finish

aluminium (natural anodized) + plastic (grey)

Feature/Equipment

incl. mounting aid for cover profile shortening on the job site + mounting set

L = 1,45 m
(length w/o end caps)

Part.-No. 524307

incl. end cap and mounting aid

L = 2,90 m
(length w/o end caps)

Part.-No. 524313

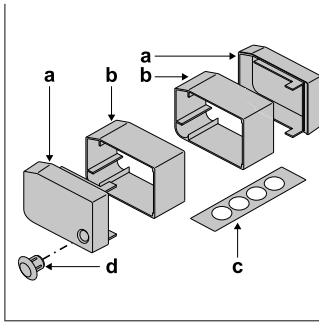
incl. end cap and mounting aid

L = customized
(Price per metre)

Part.-No. 524314

only profile

Assembly-set for cover profile (grey)



Part.-No. 524300

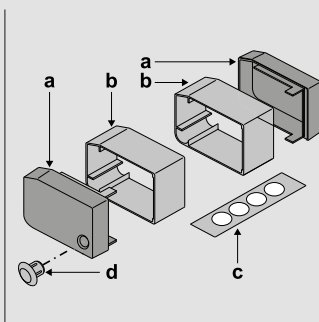
Material/Finish

aluminium, plastic (grey)

Feature/Equipment

- a. 2x end cap
- b. 2x spacer
- c. 4x stickers
- d. 1x dummy plug

Assembly-set for cover profile (black)



Part.-No. 524303

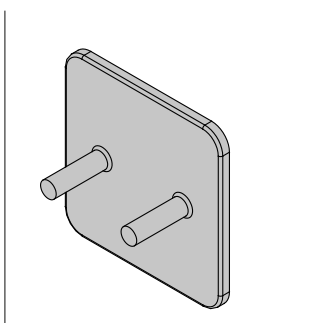
Material/Finish

aluminium, plastic (black)

Feature/Equipment

- a. 2x end cap
- b. 2x spacer
- c. 4x stickers
- d. 1x dummy plug

Chain unlocking key



Application




Manual unlocking of the drive chain for mounting of drives **KSA**

Part.-No. 524210

Material/Finish

plastic

OPTIONAL ACCESSORIES

Main control unit																			
<p>M-COM</p> 	<p>Application Configuration module for automatic configuration and surveillance of max. 4 opening drives / 2 locking drives version S12 / S3 in synchronised multi-drive systems</p> <p>Rated voltage: 24 V DC (19 V ... 28 V)</p> <p>Current consumption: <12 mA</p> <p>Drive type: S12</p> <p>Protection rating IP30 rubber envelope</p>	<p>Part.-No. 524177</p> <p>Ambient temperature range: 0 °C ... + 70 °C</p> <p>Dimensions 45 x 17 x 6 mm</p> <p>Connecting wires 3 wires 0,5 mm² x 50 mm</p> <p>Feature/Equipment Printed circuit board with components and connection wires to be installed in connection box to be supplied on site</p>																	
<p>M-COM® Click</p> 	<p>Application Configuration module for automatic configuration and surveillance of max. 4 opening drives / 2 locking drives version S12 / S3 in synchronised multi-drive systems</p> <p>Rated voltage: 24 V DC (19 V ... 28 V)</p> <p>Current consumption: <12 mA</p> <p>Drive type: S12</p> <p>Protection rating: IP30</p>	<p>Part.-No. 524167</p> <p>Ambient temperature range: -5 °C ... +70 °C</p> <p>Dimensions: 40 x 26 x 15 mm</p> <p>Connection: for AUMÜLLER chain drives with AUMÜLLER-Click plug solution</p> <p>Equipment Tongs for removing the M-COM® Click</p>																	
Plug solution																			
<p>AUMÜLLER-Click plug solution</p>  <p>Picture: 24V</p>	<p>Application AUMÜLLER-Click plug solution: Unified plug solution for all AUMÜLLER chain drives and AUMÜLLER folding arm drives.</p> <p>Rated voltage: 24 V DC (19 V ... 28 V)</p> <p>Connecting cable: non-halogen, grey 5 x 0,5 mm² (24V) 6 x 0,75 mm² (230V)</p> <p>Terminal: to 1,5 mm²</p>	<p>Feature/Equipment</p> <ul style="list-style-type: none"> • Flexible cable length • Connect multiple drives in series connection • Torsion-plug • Locking hooks prevent withdrawal of the plug under tensile load • Strain relief according DIN EN 60335-1 by screwing the housing halves 	<table border="1"> <thead> <tr> <th colspan="2">VARIANTEN: 24V</th> </tr> </thead> <tbody> <tr> <td>3 m cable length - 24V DC</td> <td>Part.-No. 501251</td> </tr> <tr> <td>5 m cable length - 24V DC</td> <td>Part.-No. 501252</td> </tr> <tr> <td>10 m cable length - 24V DC</td> <td>Part.-No. 501253</td> </tr> <tr> <th colspan="2">VARIANTEN: 230V</th> </tr> <tr> <td>3 m cable length - 230V AC</td> <td>Part.-No. 501273</td> </tr> <tr> <td>5 m cable length - 230V AC</td> <td>Part.-No. 501275</td> </tr> <tr> <td>10 m cable length - 230V AC</td> <td>Part.-No. 501280</td> </tr> </tbody> </table>	VARIANTEN: 24V		3 m cable length - 24V DC	Part.-No. 501251	5 m cable length - 24V DC	Part.-No. 501252	10 m cable length - 24V DC	Part.-No. 501253	VARIANTEN: 230V		3 m cable length - 230V AC	Part.-No. 501273	5 m cable length - 230V AC	Part.-No. 501275	10 m cable length - 230V AC	Part.-No. 501280
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CASEMENT BRACKETS AND FRAME BRACKETS

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			