

PRODUCT FEATURES KSA

- For natural ventilation, SHEV 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.

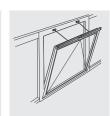


FACADE

Bottom-hung











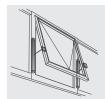


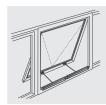
Top-hung





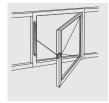






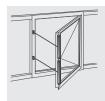


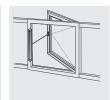
Side-hung













Friction hinged









ROOF

Bottom-hung















Sky light

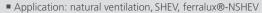


Glass pyramid







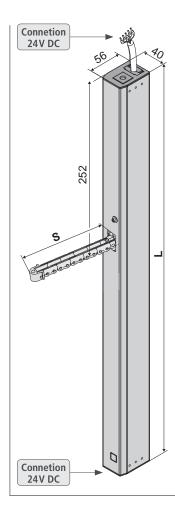


- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking *Equipment*

■ 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)



TECH	INICAL DATA	
U _N	Rated voltage	24V DC (19 V 28 V)
I _N	Rated current	0,9 A
I _A	Cut-off current	1,2 A
Р	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.	F(N) 700 600 500 400 300 200 100 200 400 600 800 1000 1200 1400 1500 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 mm², ~ 3 m
	Speed	s < 400
S	Stroke	250 – 1.500 mm
L	Length	see order data
	Sound pressure level	≤ 70 dB (A)
In deli	very	
1	2x countersunk screws M8x16 and 2x	Spacer ring (brass)
2	2x blind plug for unused cable entry	
3	1x chain unlocking key	

1x **Aumüller**-Click plug set (24V) for multi-drive operation

1x warning sign sticker "Risk of entrapment"









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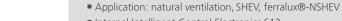
ORDEF	RDATA					
s [mm]	L [mm]	Version	Finish	PU / pcs.	PartNo.	
250	515	KSA 250 S12 24V	E6/C-0	1	522725	
300	591	KSA 300 S12 24V	E6/C-0	1	522730	
400	591	KSA 400 S12 24V	E6/C-0	1	522740	
500	693	KSA 500 S12 24V	E6/C-0	1	522750	
600	693	KSA 600 S12 24V	E6/C-0	1	522760	
800	794	KSA 800 S12 24V	E6/C-0	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.	PartNo.	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
	1 – 20	516004	
Specify at order stage:	21 - 50	516004	
Specify at order stage.	51 – 100	516004	
	from 101	516004	
Plug solution:			
Aumüller-Click plug solution - 5 m – non-halogen, grey – 5 x 0,5 mm²		501252	
А имüller-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.	PartNo.	
M-COM® Click Configuration module for synchronised multi-drive systems	1	524167	
M-COM Configuration module for synchronised multi-drive systems	1	524177	







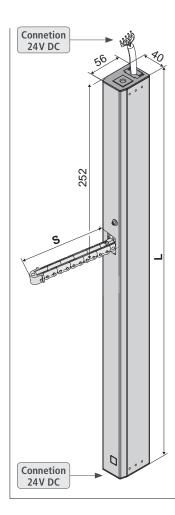


- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking
- Programmable feedback limit position "OPEN" and "CLOSE" (max. 24V, 500 mA)

■ 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)



TECH	NICAL DATA	
U _N	Rated voltage	24V DC (19 V 28 V)
I _N	Rated current	0,9 A
I _A	Cut-off current	1,2 A
Р	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.	F (N) 700 600 500 400 200 100 200 400 600 800 1000 1200 1400 1500 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 mm², ~ 3 m
	Speed	s < 400 s 500 – 600 X = 12,0 mm/s S > 600 X = 13,5 mm/s X = 8,0 mm/s X = 8,0 mm/s X = 8,0 mm/s
S	Stroke	250 – 1.500 mm
L	Length	see order data
	Sound pressure level	≤70 dB (A)
In deli	very	
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 m	nulti-drive operation



















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1x warning sign sticker "Risk of entrapment"



ORDEF	R DATA					
s [mm]	L [mm]	Version	Finish	PU / pcs.	PartNo.	
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.	PartNo.	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
	1 – 20	516004	
Specify at order stage:	21 - 50	516004	
Specify at order stage.	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.	PartNo.	
$\hbox{M-COM$@Click Configuration module for synchronised multi-drive systems}\\$	1	524167	
M-COM Configuration module for synchronised multi-drive systems	1	524177	



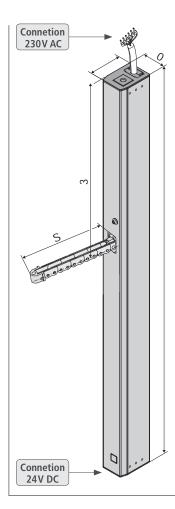
- Application: natural ventilation
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking
- Parallel connection up to 8 drives in one group
- Additional connection of a 24V drive possible (on the 24V side)

Equipment

■ Additional **Aumüller-Click plug set** for multi-drive operation

Options

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



TECH	INICAL DATA	
U _N	Rated voltage	230V 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
1	Ambient temperature range	-5 °C +60 °C
F _z	Pulling force max.	600 N
F_{A}	Pushing force max.	F (N) 700 600 500 400 200 100 200 400 600 800 1000 1200 1400 1500 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 mm², ~ 3 m
٧	Speed	X ₌ 8,0 mm/s
S	Stroke	250 – 1.500 mm
L	Length	see order data
	Sound pressure level	≤70 dB (A)
In del	ivery	
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 r	nulti-drive operation











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1x warning sign sticker "Risk of entrapment"



ORDER	R DATA					
s [mm]	L [mm]	Version	Finish	PU / pcs.	PartNo.	
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.	PartNo.		
Drive housing painted/powder coated in other RAL colours				
Lump sum for coating		516030		
	1 – 20	516004	4 4 4 4 4 4 4 4 4 5 5 0 0 0 0 0 0 0 0 0	
Specify at order stage:	21 – 50	516004		
Specify at Graci stage.	51 – 100	516004		
	from 101	516004		
Plug solution:				
Aumüller -Click plug solution − 5 m − non-halogen, grey − 6 x 0,75 mm ²		501275		
А имüller-Click plug solution - 10 m – non-halogen, grey – 6 x 0,75 mm²		501280		
Microprocessor programming S12				
Programming synchronised multi-drive systems 230V S12		495588		
Electronic stroke reduction 230V S12		495590		
Programming drives 24V / 230V S12		524180		
Optional accessories	PU / pcs.	PartNo.		
$\hbox{M-COM$@Click Configuration module for synchronised multi-drive systems}\\$	1	524167		
M-COM Configuration module for synchronised multi-drive systems	1	524177		



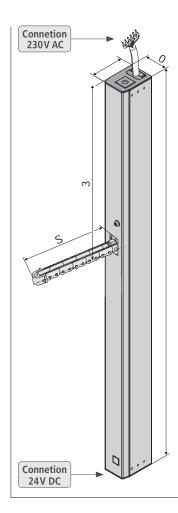


- Application: natural ventilation
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking
- Programmable feedback limit position "OPEN" and "CLOSE" (max. 24V, 500 mA)
- Parallel connection up to 8 drives in one group
- Additional connection of a 24V drive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

Equipment

TECHNICAL DATA

■ AAdditional **Aumüller-Click plug set** for multi-drive operation



TECI	INICAL DATA	
$\mathbf{U}_{_{\mathrm{N}}}$	Rated voltage	230V 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
1	Ambient temperature range	-5 °C +60 °C
F _z	Pulling force max.	600 N
F _A	Pushing force max.	F (N) 700 600 500 400 300 300 300 200 100 200 400 600 800 1000 1200 1400 1500 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 mm², ~ 3 m
V	Speed	X = 8,0 mm/s
v s	Speed Stroke	X _■ 8,0 mm/s 3,8,0 mm/s 250 – 1.500 mm
	·	
S	Stroke	250 – 1.500 mm
S	Stroke Length Sound pressure level	250 – 1.500 mm see order data
s L	Stroke Length Sound pressure level	250 – 1.500 mm see order data ≤70 dB (A)
s L In del	Stroke Length Sound pressure level	250 – 1.500 mm see order data ≤70 dB (A)
s L In del	Stroke Length Sound pressure level ivery 2x countersunk screws M8x16 and 2x	250 – 1.500 mm see order data ≤70 dB (A)
s L In del 1	Stroke Length Sound pressure level ivery 2x countersunk screws M8x16 and 2x 2x blind plug for unused cable entry	250 – 1.500 mm see order data ≤70 dB (A) Spacer ring (brass)













ORDER	RDATA					
s [mm]	L [mm]	Version	Finish	PU / pcs.	PartNo.	
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.	PartNo.	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
	1 – 20	516004	
Specify at order stage:	21 - 50	516004	
Specify at order stage.	51 – 100	516004	
	from 101	516004	
Plug solution:			
Aumüller -Click plug solution - 5 m – non-halogen, grey – 6 x 0,75 mm ²		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	
Optional accessories	PU / pcs.	PartNo.	
$\hbox{M-COM} \& \ \hbox{Click Configuration module for synchronised multi-drive systems}$	1	524167	
M-COM Configuration module for synchronised multi-drive systems	1	524177	

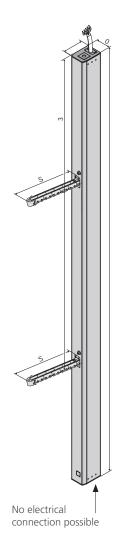




- Application: natural ventilation, SHEV
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking

Options

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



TECH	HNICAL DATA			
U _N	Rated voltage	24V DC (19 V 28 V)		
I _N	Rated current	1,8 A		
I_A	Cut-off current	2,4 A		
$\mathbf{P}_{_{\mathrm{N}}}$	Rated power	43 W		
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)		
	Protection rating	IP 32		
1	Ambient temperature range	-5 °C +60 °C		
F _z	Pulling force max.	1.200 N		
$\mathbf{F}_{\mathbf{A}}$	Pushing force max. 1.200 N			
F _H	Pullout force	5.000 N (fastening depended)		
	Chain	stainless steel		
	Connecting cable	non-halogen, grey 5 x 0,5 mm², ~ 3 m		
v	Speed	s = 400		
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 deliver						
in deliver	-	-	п			

- 2x countersunk screws M8x16 and 2x Spacer ring (brass)
- 2 4x blind plug for unused cable entry
- 3 2x chain unlocking key
- 4 1x warning sign sticker "Risk of entrapment"

08/2019



ORDER	R DATA							
s [mm]	L [mm]	LM [mm]	Version	Finish	PU/pcs.	PartNo.		
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		

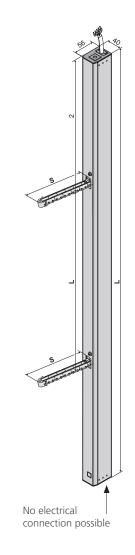
OPTIONS			
Special model	PU/pcs.	PartNo.	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
	1 – 20	516004	
Enocify at auday stage	21 – 50	516004	
Specify at order stage:	51 – 100	516004	
	from 101	516004	
Plug solution:			
А им ü LLER-Click plug solution - 5 m – non-halogen, grey – 5 x 0,5 mm²		501252	
А имüller-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.	PartNo.	
M-COM Configuration module for synchronised multi-drive systems	1	524177	





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

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



TECH	INICAL DATA	
$\mathbf{U}_{_{\mathrm{N}}}$	Rated voltage	24V 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
1	Ambient temperature range	-5 °C +60 °C
F _z	Pulling force max.	1.200 N
$\mathbf{F}_{\!_{\mathbf{A}}}$	Pushing force max.	1.200 N
F _H	Pullout force	5.000 N (fastening depended)
	Chain	stainless steel
	Connecting cable	non-halogen, grey 5 x 0,5 mm², ~ 3 m
V	Speed	s = 400
S	Stroke	400 – 600 mm
L	Length	see order data
LM	Distance in between chains	see order data
	Sound pressure level	≤70 dB (A)

















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- 1 2x countersunk screws M8x16 and 2x Spacer ring (brass)
- 2 4x blind plug for unused cable entry
- 3 2x chain unlocking key
- 4 1x warning sign sticker "Risk of entrapment"



ORDER	R DATA							
s [mm]	L [mm]	LM [mm]	Version	Finish	PU/pcs.	PartNo.		
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.	PartNo.	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
	1 – 20	516004	
Specify at arder stage.	21 - 50	516004	
Specify at order stage:	51 – 100	516004	
	from 101	516004	
Plug solution:			
А им ü LLER-Click plug solution - 5 m – non-halogen, grey – 5 x 0,5 mm²		501252	
А имüller-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.	PartNo.	
M-COM Configuration module for synchronised multi-drive systems	1	524177	

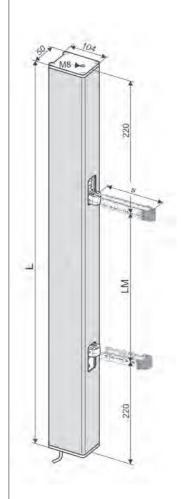




- Application: natural ventilation, SHEV
- Internal Intelligent Control Electronics S12

Options

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



TECH	HNICAL DATA	
$U_{_{\rm N}}$	Rated voltage	24V 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
1	Ambient temperature range	-5 °C +60 °C
F _z	Pulling force max.	1.200 N
F _A	Pushing force max.	F (N) 1200 1000 800 600 400 500 600 800 Schub Push Push S (mm)
$\mathbf{F}_{_{\mathrm{H}}}$	Pullout force	5.000 N (fastening depended)
	Chain	Stainless steel
	Connecting cable	non-halogen, grey– 5 x 0,5 mm², ~ 5 m
v	Speed	s = 400 s 500 - 600 s > 600 x = 12,0 m/s x = 12,0 m/s x = 13,5 m/s x = 8,0 m/s x = 8,0 m/s x = 8,0 m/s
s	Stroke	400 – 800 mm
L	Length	see order data
LM	Distance in between chains	see order data
		see order data
	Sound pressure level	≤ 70 dB (A)

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



ORDER	ORDER DATA							
s [mm]	L [mm]	LM [mm]	Version	Finish	PU/pcs.	PartNo.		
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.	PartNo.	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
	1 – 20	516004	
Constituent and an atomic	21 – 50	516004	
Specify at order stage:	51 – 100	516004	
	from 101	516004	
Extra length connecting cable:			
10 m – non-halogen, grey– 5 x 0,5 mm²		501056	
Microprocessor programming S12			
Electronic stroke reduction 24V S12		524190	
Programming drives 24V / 230V S12		524180	
Optional accessories	PU/pcs.	PartNo.	
M-COM Configuration module for synchronised multi-drive systems	1	524177	

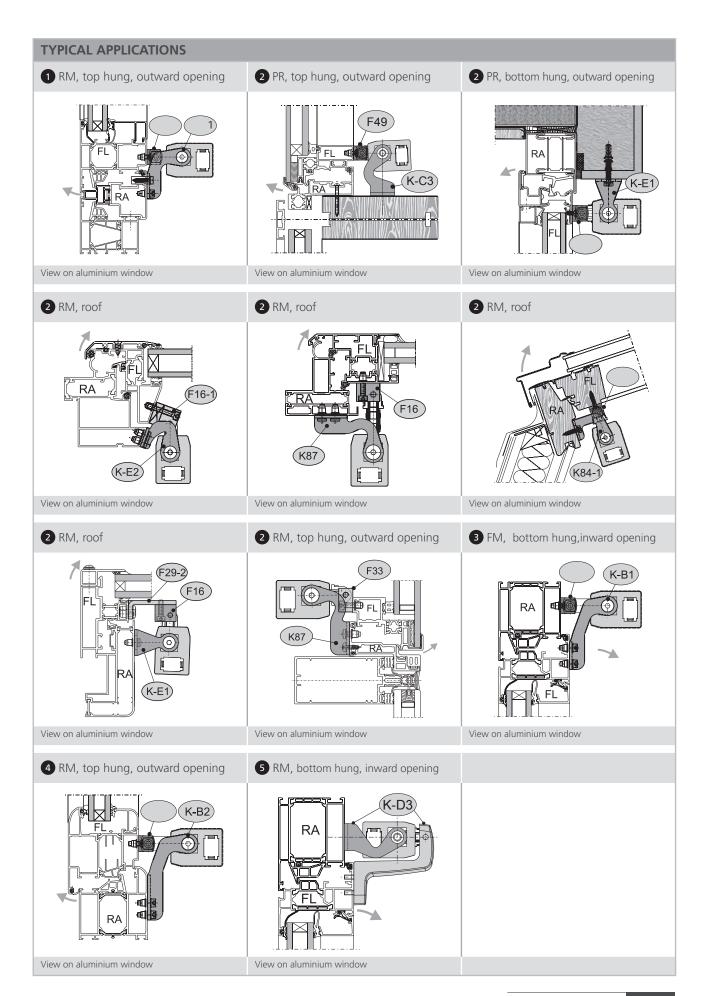


Typical applicatio	n				0	2	3	4	5	
Frame bracket					K-A1	K84-1, K87, K-C3, K-E1, K-E2	K-B1	K-B2	K-D3	
Casement bracket					F16, F49	F16, F16-1, F29-2, F33, F38, F39, F49	F16, F49			
Space requirement			min.	[mm]	35	65 – 90	45 – 55		45	
Overlap thickness *1				[mm]	0 – 21	irrelevant	0 – 21		0 – 21	
Opening angle	*2		max.	[DEG]	20	60	50		40	
Casement weigh	t *3		max.	[Kg]	250	130	130		130	
Window material			Alu		•	•	•	•	•	
			Wood			•	•	•	•	
			PVC				•	•	•	
Type of window	Bottom hung	inward	HSK	FM RM	•		•	•	•	
and mounting				NSK	FM RM	•		•	•	•
		outward	HSK	RM	•		•	•		
				PR		•				
			NSK	RM	•	•	•	•		
				PR						
	Тор	inward	HSK	FM	•		•	•		
	hung	IIIVVala	HISIC	RM					•	
			NSK	FM	•		•	•		
			NSK	RM					•	
		auturard.	11614							
		outward	HSK	RM	•	•	•	•		
				PR						
			NSK	RM	•		•	•		
				PR		•				
	Side	inward	HSK	FM	•		•	•		
	hung			RM					•	
			NSK	FM	•		•	•		
				RM					•	
	Roof	outward	HSK	RM						
				PR						
			NSK	RM						
				PR						
	PAF	outward		RM	•		•	•		
	Conceale	d								
	Concedie		Solo	[mm]			700 1200			
FAB*4 Solo [mm] Sync2 [mm]			[mm]	700 – 1300 1250 – 2500						
FAH*4			Solo	[mm]	450 – 1500					
			Sync2	[mm]			250 – 2500			

LEGEND

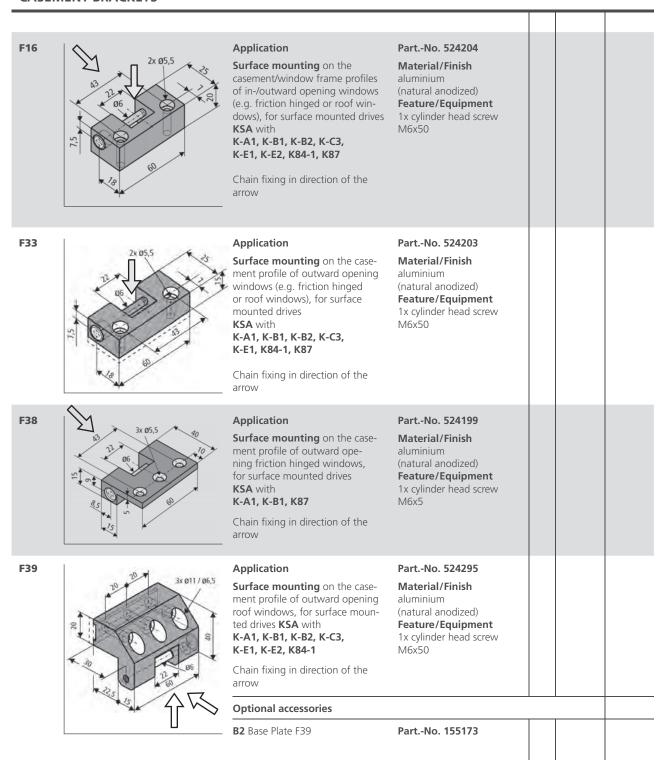
not recommended

- *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 actuell 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.

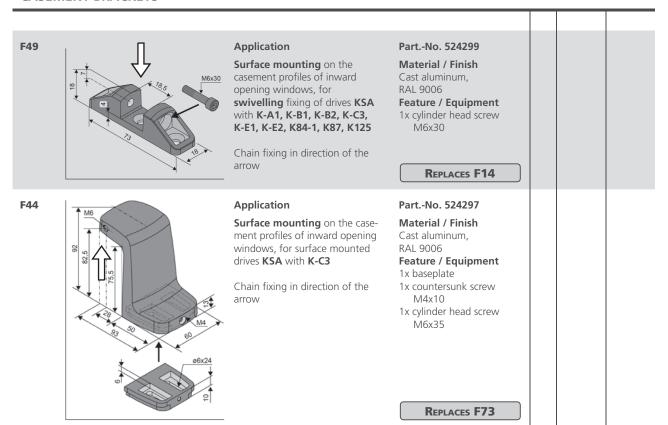




CASEMENT BRACKETS



CASEMENT BRACKETS



FRAME BRACKETS

K-A1 **Application** Part.-No. 524057 Surface mounting on the case-Material/Finish ment/window frame profiles of Stainless steel Feature/Equipment in-/outward opening windows, for swivelly fixing of drives **KSA** with 1x right, F16, F33, F38, F39, F49 1x left (Required space on frame profile **35 mm**) Application Part.-No. 524053 K-B1 Surface mounting on the Material/Finish casement/ window frame profiles Stainless steel of in-/outward opening windows, Feature/Equipment for swivelling fixing of drives KSA 1x right, with **F16**, **F33**, **F38**, **F39**, **F49** 1x left (Required space on frame profile 35 - 52 mm) 41,5 K-B2 **Application** Part.-No. 524063 Ø14.5 Surface mounting on the Material/Finish casement/ window frame profiles Stainless steel of in-/outward opening (wooden) Feature/Equipment windows, for swivelling fixing of 1x right, drives **KSA** with 1x left F16, F33, F39, F49 (Required space on frame profile 35 – 52 mm) 41,5 K-C3 Application Part.-No. 524067 ø14,5 Material/Finish Surface mounting on the casement/window frame profiles or on Stainless steel the mullion/transom of outward Feature/Equipment opening windows, for swivelling 1x right, fixing of drives KSA with 1x left F16, F33, F39, F49 K-D3 **Application** Part.-No. 524068 Material/Finish Surface mounting on the case-Stainless steel (K-C3), ment and frame profile of inward Aluminum casting (F44) opening windows, for swivelling Feature/Equipment fixing of drives **KSA** on the frame profile (required space **50 mm**) 1x K-C3, 1x F44

Accessories for

F44 Casement bracket "Z"

Part.-No. 524297





FRAME BRACKETS

K-E1	Ø14,5 5,5 3,-77 70 22 41,5	Application Surface mounting on the mullion/transom of outward opening windows, for swivelling fixing of drives KSA with F16, F33, F39, F49	PartNo. 524056 Material/Finish Stainless steel Feature/Equipment 1x right, 1x left		
K-E2	914,5 914,5 95,5 97,5	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	PartNo. 524066 Material/Finish Stainless steel Feature/Equipment 1x right, 1x left		
K84-1	Ø14,5 00 00 00 00 00 00 00 00 00 00 00 00 00	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	PartNo. 524224 Material/Finish Stainless steel Feature/Equipment 1x right, 1x left		

SPECIFIC APPLICATIONS

ROOF WINDOWS I SCHÜCO AWS 57RO F16-1 Part.-No. 155171 **Application** Surface mounting on the case-Material/Finish ment profile of outward opening aluminium roof windows series Schüco AWS 57RO, for fixing (natural anodized) Feature/Equipment of drives **KSA** 1x cylinder head screw M6x50 with base plate Chain fixing in direction of the arrow Part.-No. 524066 K-E2 Application Material/Finish Surface mounting on the window frame profiles or on the Stainless steel mullions/transoms of outward Feature/Equipment opening roof windows, for 1x right, swivelling fixing of drives KSA 1x left with F16, F16-1, F33, F39, F49 FRICTION HINGED WINDOWS I SCHÜCO FW50 **K87** Application Part.-No. 524319 60x25x4 Ø14,5 Surface mounting on the Material/Finish window frame profiles of outward Stainless steel opening friction hinged Feature/Equipment windows Schüco FW50+, 1x right, for swivelling fixing of drives 1x left, **KSA** (Required space on frame incl. F33 + B3 profile **35 mm**)



SPECIFIC APPLICATIONS

ROOF W	VINDOWS I HEROAL 085 / 180				
F29-2	2x M5 38,5 F16 4x 06,5 80	Application Surface mounting on the casement profile of outward opening roof windows series Heroal 085 / 180, for fixing of drives KSA with F16	PartNo. 155157 Material/Finish Stainless steel Feature/Equipment 2x cylinder head screw M6x20		
F16	2x 05,5	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	PartNo. 524204 Material/Finish aluminium (natural anodized) Feature/Equipment 1x cylinder head screw M6x50		
K-E2	5.5 5.5 5.5 5.5 5.5 5.5 5.7 5.7 5.7 5.7	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	PartNo. 524066 Material/Finish Stainless steel Feature/Equipment 1x right, 1x left		
SKYLIG	HT DOME				
В1	Ø5,2 40 X3 X3 X3 X4 X4 X5 X4 X5 X4 X5 X4 X3 X3 X4 X5 X5 X4 X5 X4 X5 X5 X4 X5 X5 X4 X5 X5 X6	Application Mounting angle for mounting of drives KS2 with F21 and KSA with F49 on skylight domes	PartNo. 151422 Material/Finish Stainless steel Feature/Equipment 3x countersunk-head screw M5x12, 3x nut M5		
K125	95,2 x6 95,5 x2 95,5 x2 95,5 x2 95,5 x2 914,5	Application Surface mounting on the upstand of skylight domes for fixing of drives KS2 and KSA with B1	PartNo. 523979 Material/Finish Stainless steel Feature/Equipment 4x screw M5x10		



OPTIONAL ACCESSORIES

Base	Plate F39				
В2	Ø6,5	Application Support for F39 as packing plate for mounting on the casement profiles of outward opening roof windows	PartNo. 155173 Material/Finish aluminium (natural anodized) Feature/Equipment 60 x 20 x 5 mm		



OPTIONAL ACCESSORIES

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 lenght 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 (lenght w/o end caps)	PartNo. 524307 incl. end cap and mounting aid		
	L = 2,90 m (lenght w/o end caps)	PartNo. 524313 incl. end cap and mounting aid		
	L = customized (Price per metre)	PartNo. 524314 only profile		
Assembly-set for cover profile (grey)				
a b a a c c		PartNo. 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)			
a b c c	_	PartNo. 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	PartNo. 524210 Material/Finish plastic		

OPTIONAL ACCESSORIES

Main control unit			
M-COM	Application	PartNo. 524177	
	Configuration module for automatic configuration and surveillance of max. 4 opening drives / 2 locking drives version S12 / S3 in synchronised multi-drive systems Rated voltage: 24V DC (19 V 28 V) Current consumption: <12 mA Drive type: S12 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 mm² x 50 mm Feature/Equipment Printed circuit board with components and connection wires to be installed in connection box to be supplied on site	
M-COM® Click	Application	PartNo. 524167	
	Configuration module for automatic configuration and surveillance of max. 4 opening drives / 2 locking drives version \$12 / \$3 in synchronised multi-drive systems	Ambient temperature range: -5 °C +70 °C Dimensions: 40 × 26 × 15 mm Connection: for Aumüller chain drives with Aumüller-Click plug	
10 11	Rated voltage: 24V DC (19 V 28 V) Current consumption: <12 mA Drive type: \$12 Protection rating: IP30	solution Equipment Tongs for removing the M-COM® Click	
Plug solution			
Aumüller-Click plug solution	Application		
	Aumüller-Click plug solution: Unified plug solution for all Aumüller chain drives and Aumüller folding arm drives. Rated voltage: 24V DC (19V 28 V) Connecting cable: non-halogen, grey 5 x 0,5 mm² (24V) 6 x 0,75 mm² (230V) Terminal: to 1,5 mm²	Feature/Equipment 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	
	VARIANTEN: 24V		
•	3 m cable length - 24 V DC	PartNo. 501251	
	5 m cable length - 24 V DC	PartNo. 501252	
	10 m cable length - 24 V DC	PartNo. 501253	
	VARIANTEN: 230V		
	3 m cable length - 230 V AC	PartNo. 501273	
Picture: 24V	5 m cable length - 230 V AC	PartNo. 501275	

10 m cable length - 230 V AC

Part.-No. 501280



CASEMENT BRACKETS AND FRAME BRACKETS

Special model	PU/pcs.	PartNo.	
Casement brackets painted / powder coated in other RAL colours			
Lump sum for coating		516030	
	1 – 20	516032	
Specify at order stage:	21 – 50	516032	
specify at order stage.	51 – 100	516032	
	from 101	516032	
Frame brackets painted / powder coated in other RAL colours			
Lump sum for coating		516030	
	1 – 20	516031	
Specify at order stage:	21 – 50	516031	
specify at order stage.	51 – 100	516031	
	from 101	516031	