



### PRODUCT FEATURES KS2

- For natural ventilation, smoke and heat exhausting systems and ferralux® NRWG (EN12101-2)
- Versions R (right) or L (left) or TWIN
- Aluminium housing anodized or optionally in RAL colors
- High-quality stainless steel sidebow roller chain, without protruding rivet heads
- Slim line body that suits concealed fitting within profiles
- Rigid drive mounting on frame without brackets
- 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
- Suitable for operation with M-COM for the automatic configuration of synchronised run of multi drive systems and sequence control

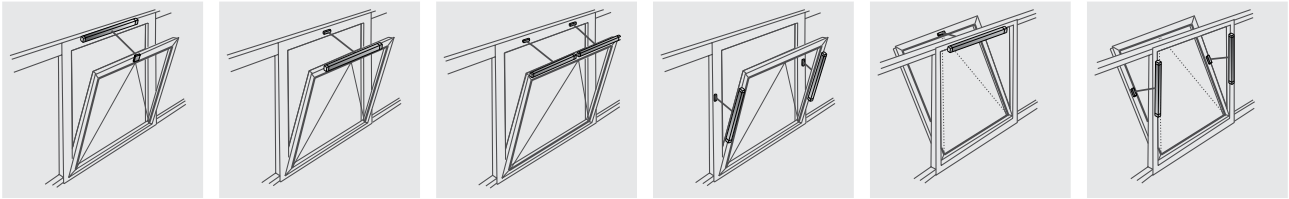
For this product series, a Type III Environmental Product Declaration (EPD) was issued according to ISO 14025 and EN 15804.

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

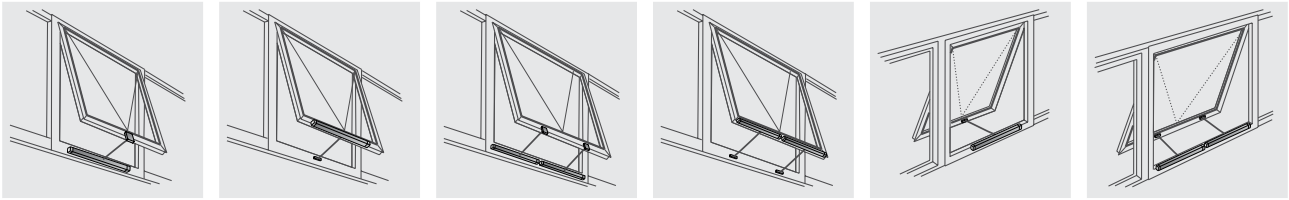
The EPD documents can be viewed or downloaded from our homepage [www.aumueller-gmbh.de](http://www.aumueller-gmbh.de).

**FACADE**

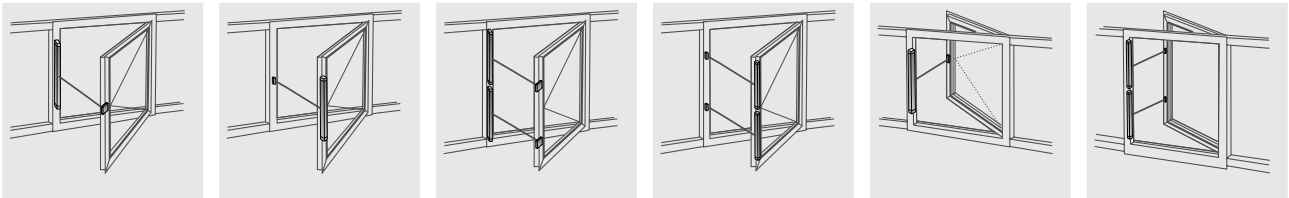
Bottom-hung



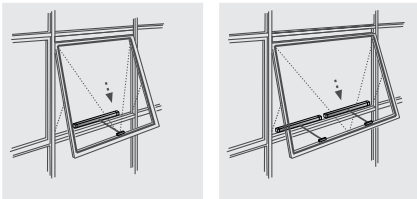
Top-hung



Side-hung



Friction hinged

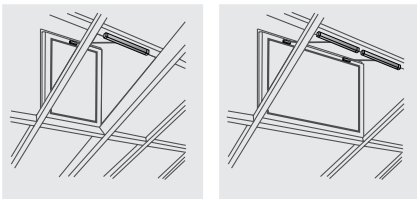


Parallel outward opening

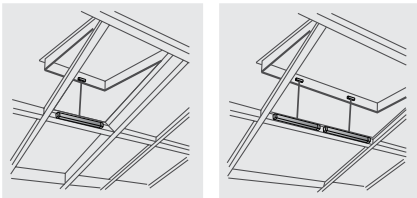


**ROOF**

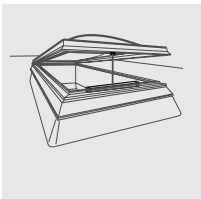
Bottom-hung

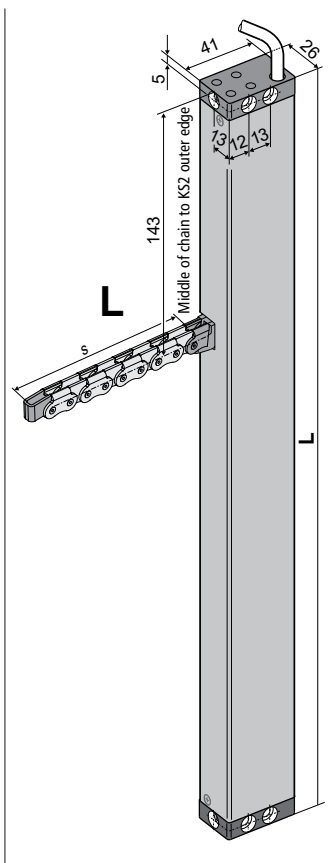
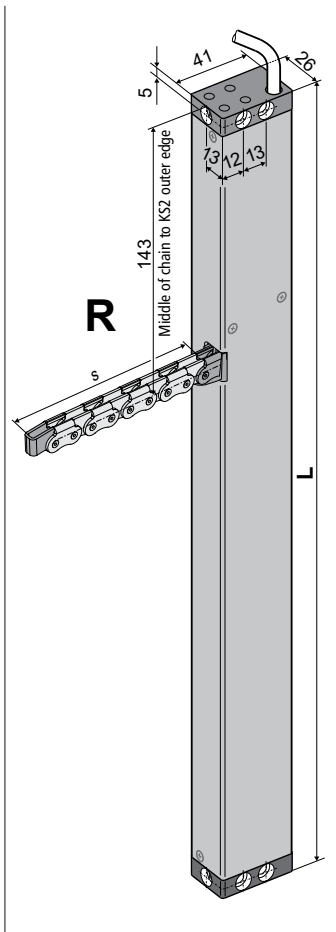


Top-hung

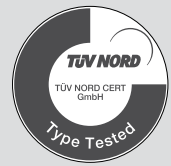


Sky light



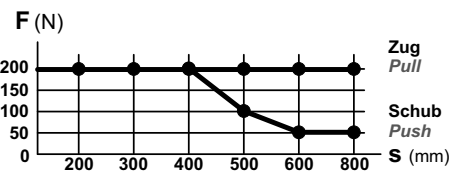


- Application: Natural ventilation as single-drive
- Internal load dependent cut-off switch S2 in OPEN / CLOSE direction



### TECHNICAL DATA

<b>U<sub>N</sub></b>	Rated voltage	24 V DC (19 V ... 28 V)
<b>I<sub>N</sub></b>	Rated current	0,5 A
<b>I<sub>A</sub></b>	Cut-off current	0,7 A
<b>P<sub>N</sub></b>	Rated power	12 W
<b>DC</b>	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 32
	Ambient temperature range	-5 °C ... +60 °C
<b>F<sub>Z</sub></b>	Pulling force max.	200 N
<b>F<sub>A</sub></b>	Pushing force max.	

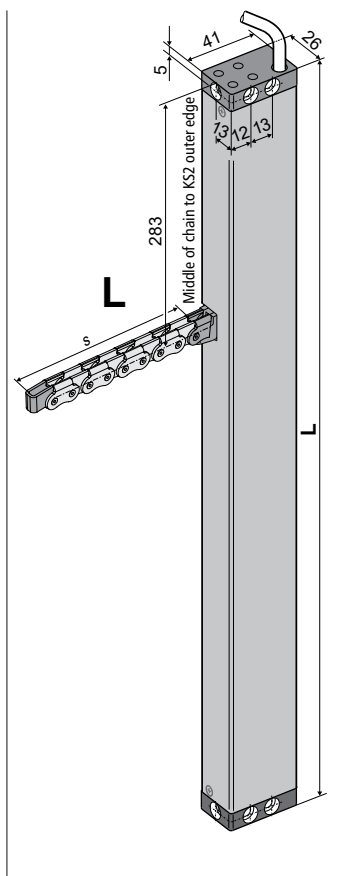
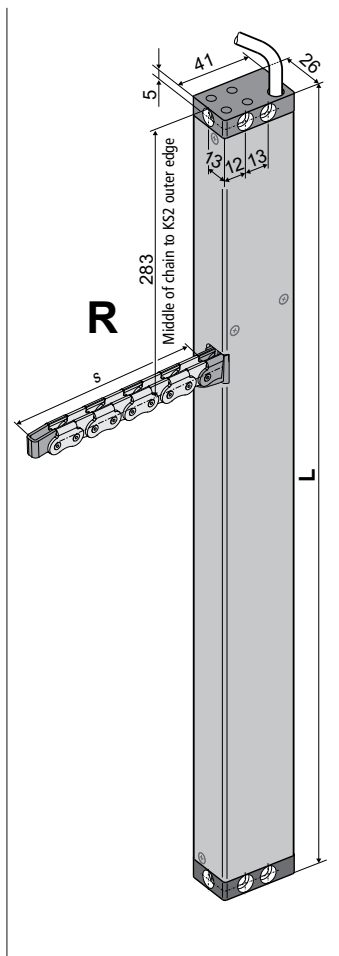


s > 600 mm only for pulling application

<b>F<sub>H</sub></b>	Pullout force	1.800 N (fastening depended)
	Chain	Stainless steel, without protruding rivet heads. Simple connection to casement brackets. Small bending radii allow maximum opening angles of small windows.
	Connecting cable	non-halogen, grey 3 x 0,5 mm <sup>2</sup> , ~ 3 m
<b>v</b>	Speed	10,0 mm/s  10,0 mm/s
<b>s</b>	Stroke	50 – 800 mm
<b>L</b>	Length	see order data
	Sound pressure level	≤ 70 dB (A)

ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
200	335	KS2 200 S2 24V R	E6/C-0	1	521120	
		KS2 200 S2 24V L	E6/C-0	1	521420	
300	380	KS2 300 S2 24V R	E6/C-0	1	521130	
		KS2 300 S2 24V L	E6/C-0	1	521430	
400	430	KS2 400 S2 24V R	E6/C-0	1	521140	
		KS2 400 S2 24V L	E6/C-0	1	521440	
500	545	KS2 500 S2 24V R	E6/C-0	1	521150	
		KS2 500 S2 24V L	E6/C-0	1	521450	
600	545	KS2 600 S2 24V R	E6/C-0	1	521160	
		KS2 600 S2 24V L	E6/C-0	1	521460	
800	625	KS2 800 S2 24V R	E6/C-0	1	521180	
		KS2 800 S2 24V L	E6/C-0	1	521480	

OPTIONS			
Special model	PU/pcs.	Part.-No.	
<b>Drive housing painted/powder coated in other RAL colours</b>			
<b>Lump sum for coating</b>		516030	
Specify at order stage:	1 – 20	516004	
	21 – 50	516004	
	51 – 100	516004	
	from 101	516004	
<b>Extra length connecting cable:</b>			
5 m – non-halogen, grey – 3 x 0,5 mm <sup>2</sup>		501034	
10 m – non-halogen, grey – 3 x 0,5 mm <sup>2</sup>		501036	

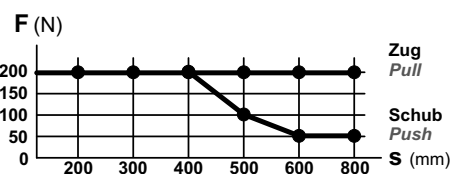


- Application: Natural ventilation as single-drive
- Internal load dependent cut-off switch S2 in OPEN / CLOSE direction
- Parallel connection up to 8 drives in one group

### TECHNICAL DATA

<b>U<sub>N</sub></b>	Rated voltage	230 V AC (50 Hz)
<b>I<sub>N</sub></b>	Rated current	0,13 A
<b>I<sub>A</sub></b>	Cut-off current	0,2 A
<b>P<sub>N</sub></b>	Rated power	30 W
<b>DC</b>	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 32
	Ambient temperature range	-5 °C ... +60°C
<b>F<sub>Z</sub></b>	Pulling force max.	200 N

**F<sub>A</sub>** Pushing force max.



s > 600 mm only for pulling application

**F<sub>H</sub>** Pullout force 1.800 N (fastening depended)

Chain

Stainless steel, without protruding rivet heads. Simple connection to casement brackets. Small bending radii allow maximum opening angles of small windows.

Connecting cable non-halogen, grey 6 x 0,75 mm<sup>2</sup>, ~ 3 m

**v** Speed 10,0 mm/s 10,0 mm/s

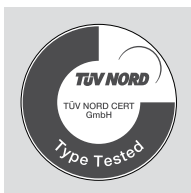
**s** Stroke 50 – 800 mm

**L** Length see order data

Sound pressure level ≤ 70 dB (A)

ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
200	475	KS2 200 S2 230V R	E6/C-0	1	<b>494920</b>	
		KS2 200 S2 230V L	E6/C-0	1	<b>494720</b>	
300	520	KS2 300 S2 230V R	E6/C-0	1	<b>494930</b>	
		KS2 300 S2 230V L	E6/C-0	1	<b>494730</b>	
400	570	KS2 400 S2 230V R	E6/C-0	1	<b>494940</b>	
		KS2 400 S2 230V L	E6/C-0	1	<b>494740</b>	
500	685	KS2 500 S2 230V R	E6/C-0	1	<b>494950</b>	
		KS2 500 S2 230V L	E6/C-0	1	<b>494750</b>	
600	685	KS2 600 S2 230V R	E6/C-0	1	<b>494960</b>	
		KS2 600 S2 230V L	E6/C-0	1	<b>494760</b>	
800	765	KS2 800 S2 230V R	E6/C-0	1	<b>494980</b>	
		KS2 800 S2 230V L	E6/C-0	1	<b>494780</b>	

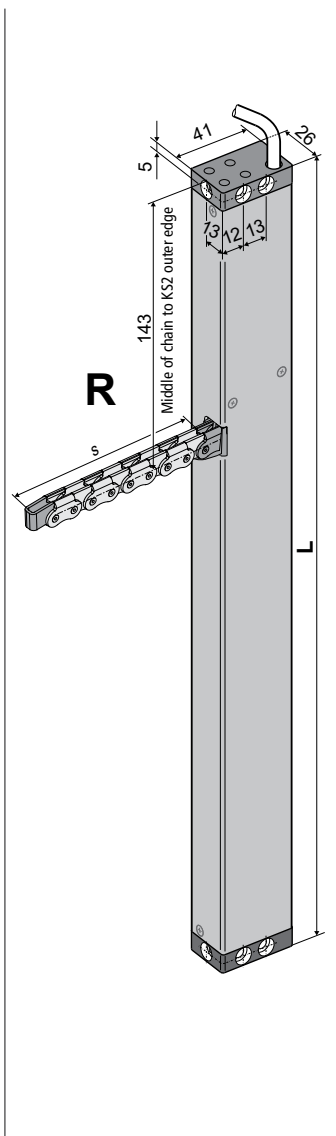
OPTIONS			
Special model	PU/pcs.	Part.-No.	
<b>Drive housing painted/powder coated in other RAL colours</b>			
<b>Lump sum for coating</b>		<b>516030</b>	
Specify at order stage:	1 – 20	<b>516004</b>	
	21 – 50	<b>516004</b>	
	51 – 100	<b>516004</b>	
	from 101	<b>516004</b>	
<b>Extra length connecting cable:</b>			
5 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup>		<b>501164</b>	
10 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup>		<b>501166</b>	



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

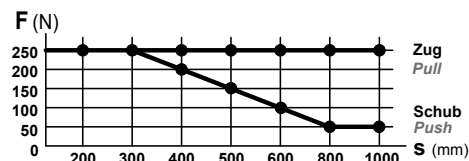
### Options

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



### TECHNICAL DATA

$U_N$	Rated voltage	24 V DC (19 V ... 28 V)
$I_N$	Rated current	0,7 A
$I_A$	Cut-off current	1,0 A
$P_N$	Rated power	17 W
<b>DC</b>	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.	250 N
$F_A$	Pushing force max.	



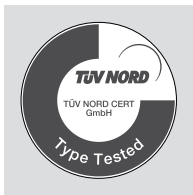
s > 600 mm only for pulling application

$F_H$	Pullout force	1.800 N (fastening depended)
	Chain	Stainless steel, without protruding rivet heads. Simple connection to casement brackets. Small bending radii allow maximum opening angles of small windows.
	Connecting cable	non-halogen, grey 3 x 0,5 mm <sup>2</sup> , ~ 3 m non-halogen, grey 5 x 0,5 mm <sup>2</sup> , ~ 3 m (Z version)
<b>v</b>	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
<b>s</b>	Stroke	50 – 1000 mm
<b>L</b>	Length	see order data
	Sound pressure level	≤ 70 dB (A)

ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
200	335	KS2 200 S12 24V R	E6/C-0	1	521620	
		KS2 200 S12 24V Z R	E6/C-0	1	521623	
300	380	KS2 300 S12 24V R	E6/C-0	1	521630	
		KS2 300 S12 24V Z R	E6/C-0	1	521633	
400	430	KS2 400 S12 24V R	E6/C-0	1	521640	
		KS2 400 S12 24V Z R	E6/C-0	1	521643	
500	545	KS2 500 S12 24V R	E6/C-0	1	521650	
		KS2 500 S12 24V Z R	E6/C-0	1	521653	
600	545	KS2 600 S12 24V R	E6/C-0	1	521660	
		KS2 600 S12 24V Z R	E6/C-0	1	521663	
800	625	KS2 800 S12 24V R	E6/C-0	1	521680	
		KS2 800 S12 24V Z R	E6/C-0	1	521683	

OPTIONS						
Special model		PU/pcs.	Part.-No.			
<b>Drive housing painted/powder coated in other RAL colours</b>						
<b>Lump sum for coating</b>				516030		
Specify at order stage:		1 – 20		516004		
		21 – 50		516004		
		51 – 100		516004		
		from 101		516004		
<b>Extra length connecting cable:</b>						
5 m – non-halogen, grey – 3 x 0,5 mm <sup>2</sup>				501034		
10 m – non-halogen, grey – 3 x 0,5 mm <sup>2</sup>				501036		
5 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>				501054		
10 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>				501056		
<b>Microprocessor programming S12</b>						
Electronic stroke reduction 24V S12				524190		
Programming drives 24V / 230V S12				524180		
<b>Optional accessories</b>			PU/pcs.	Part.-No.		
M-COM Configuration module for synchronised multi-drive systems			1	524177		

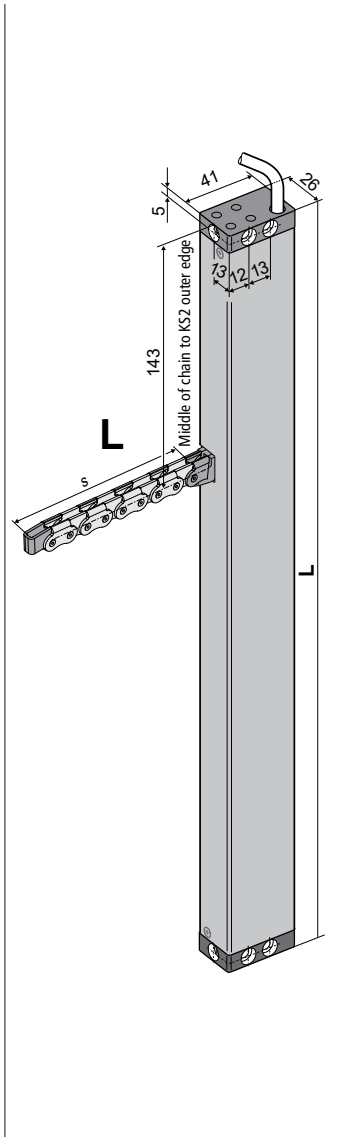




- Application: natural ventilation, RWA, ferralux®-NRWG
- Internal Intelligent Control Electronics S12
- Z-Version: Programmable feedback limit position „OPEN“ and „CLOSE“ (max. 24 V, 500 mA)

### Options

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



### TECHNICAL DATA

**U<sub>N</sub>** Rated voltage 24 V DC (19 V ... 28 V)

**I<sub>N</sub>** Rated current 0,7 A

**I<sub>A</sub>** Cut-off current 1,0 A

**P<sub>N</sub>** Rated power 17 W

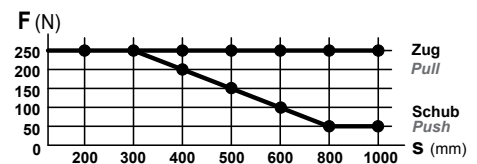
**DC** Duty cycle 5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)

Protection rating IP 32

Ambient temperature range range -5 °C ... +60 °C

**F<sub>Z</sub>** Pulling force max. 250 N

**F<sub>A</sub>** Pushing force max.



s > 600 mm only for pulling application

**F<sub>H</sub>** Pullout force 1.800 N (fastening depended)

**Chain** Stainless steel, without protruding rivet heads. Simple connection to casement brackets. Small bending radii allow maximum opening angles of small windows.

**Connecting cable** non-halogen, grey 3 x 0,5 mm<sup>2</sup>, ~ 3 m  
non-halogen, grey 5 x 0,5 mm<sup>2</sup>, ~ 3 m (Z version)

**v** Speed

s ≤ 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 50 – 1000 mm

**L** Length see order data

Sound pressure level ≤ 70 dB (A)

ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
200	335	KS2 200 S12 24V L	E6/C-0	1	521720	
		KS2 200 S12 24V Z L	E6/C-0	1	521723	
300	380	KS2 300 S12 24V L	E6/C-0	1	521730	
		KS2 300 S12 24V Z L	E6/C-0	1	521733	
400	430	KS2 400 S12 24V L	E6/C-0	1	521740	
		KS2 400 S12 24V Z L	E6/C-0	1	521743	
500	545	KS2 500 S12 24V L	E6/C-0	1	521750	
		KS2 500 S12 24V Z L	E6/C-0	1	521753	
600	545	KS2 600 S12 24V L	E6/C-0	1	521760	
		KS2 600 S12 24V Z L	E6/C-0	1	521763	
800	625	KS2 800 S12 24V L	E6/C-0	1	521780	
		KS2 800 S12 24V Z L	E6/C-0	1	521783	

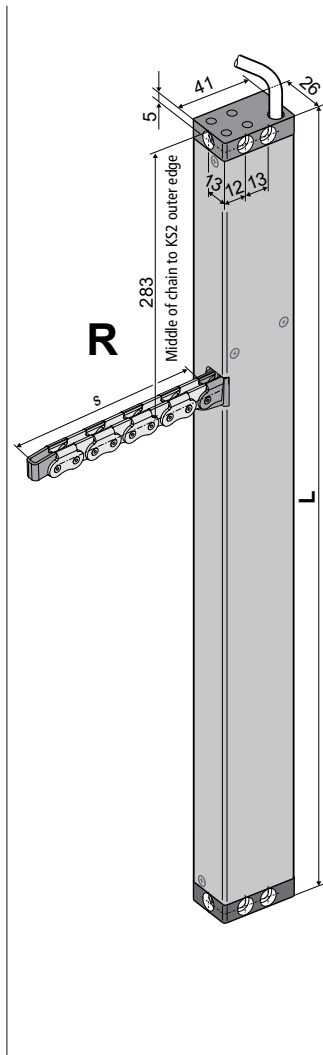
OPTIONS						
Special model		PU/pcs.	Part.-No.			
<b>Drive housing painted/powder coated in other RAL colours</b>						
<b>Lump sum for coating</b>				516030		
Specify at order stage:		1 – 20		516004		
		21 – 50		516004		
		51 – 100		516004		
		from 101		516004		
<b>Extra length connecting cable:</b>						
5 m – non-halogen, grey – 3 x 0,5 mm <sup>2</sup>				501034		
10 m – non-halogen, grey – 3 x 0,5 mm <sup>2</sup>				501036		
5 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>				501054		
10 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>				501056		
<b>Microprocessor programming S12</b>						
Electronic stroke reduction 24V S12				524190		
Programming drives 24V / 230V S12				524180		
<b>Optional accessories</b>			PU/pcs.	Part.-No.		
M-COM Configuration module for synchronised multi-drive systems			1	524177		



- Application: natural ventilation
- Internal Intelligent Control Electronics S12
- Parallel connection up to 8 drives in one group
- Z-Version: Programmable feedback limit position „OPEN“ and „CLOSE“ (max. 24 V, 500 mA)

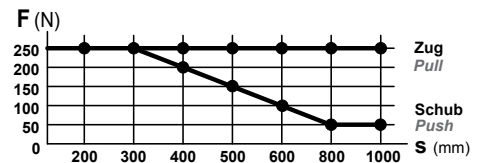
### Options

- Programmable synchronised run (max. 4 drives) and special functions (Attention: not possible with Z-version)



### TECHNICAL DATA

$U_N$	Rated voltage	230 V AC (50 Hz)
$I_N$	Rated current	0,13 A
$I_A$	Cut-off current	0,2 A
$P_N$	Rated power	30 W
<b>DC</b>	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.	250 N
$F_A$	Pushing force max.	



s > 600 mm only for pulling application

$F_H$	Pullout force	1.800 N (fastening depended)
	Chain	Stainless steel, without protruding rivet heads. Simple connection to casement brackets. Small bending radii allow maximum opening angles of small windows.
	Connecting cable	non-halogen, grey 6 x 0,75 mm <sup>2</sup> , ~ 3 m
<b>v</b>	Speed	8,0 mm/s  8,0 mm/s
<b>s</b>	Stroke	50 – 1000 mm
<b>L</b>	Length	see order data
	Sound pressure level	≤ 70 dB (A)

ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
200	475	KS2 200 S12 230V R	E6/C-0	1	494020	
		KS2 200 S12 230V Z R	E6/C-0	1	494023	
300	520	KS2 300 S12 230V R	E6/C-0	1	494030	
		KS2 300 S12 230V Z R	E6/C-0	1	494033	
400	570	KS2 400 S12 230V R	E6/C-0	1	494040	
		KS2 400 S12 230V Z R	E6/C-0	1	494043	
500	685	KS2 500 S12 230V R	E6/C-0	1	494050	
		KS2 500 S12 230V Z R	E6/C-0	1	494053	
600	685	KS2 600 S12 230V R	E6/C-0	1	494060	
		KS2 600 S12 230V Z R	E6/C-0	1	494063	
800	765	KS2 800 S12 230V R	E6/C-0	1	494080	
		KS2 800 S12 230V Z R	E6/C-0	1	494083	

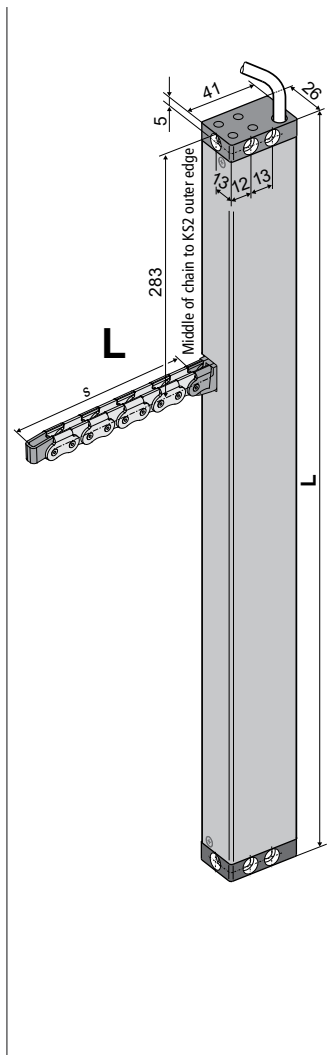
OPTIONS						
Special model		PU/pcs.	Part.-No.			
<b>Drive housing painted/powder coated in other RAL colours</b>						
<b>Lump sum for coating</b>				516030		
Specify at order stage:		1 – 20		516004		
		21 – 50		516004		
		51 – 100		516004		
		from 101		516004		
<b>Extra length connecting cable:</b>						
5 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup>				501164		
10 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup>				501166		
<b>Microprocessor programming S12</b>						
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
- Parallel connection up to 8 drives in one group
- Z-Version: Programmable feedback limit position „OPEN“ and „CLOSE“ (max. 24 V, 500 mA)

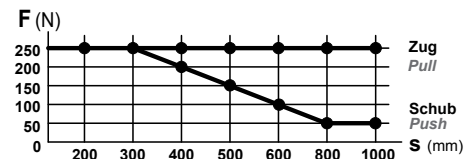
### Options

- Programmable synchronised run (max. 4 drives) and special functions (Attention: not possible with Z-version)



### TECHNICAL DATA

$U_N$	Rated voltage	230 V AC (50 Hz)
$I_N$	Rated current	0,13 A
$I_A$	Cut-off current	0,2 A
$P_N$	Rated power	30 W
<b>DC</b>	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.	250 N
$F_A$	Pushing force max.	

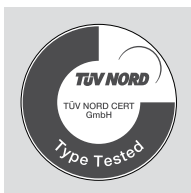


s > 600 mm only for pulling application

$F_H$	Pullout force	1.800 N (fastening depended)
	Chain	Stainless steel, without protruding rivet heads. Simple connection to casement brackets. Small bending radii allow maximum opening angles of small windows.
	Connecting cable	non-halogen, grey 6 x 0,75 mm <sup>2</sup> , ~ 3 m
$v$	Speed	8,0 mm/s  8,0 mm/s
$s$	Stroke	50 – 1000 mm
$L$	Length	see order data
	Sound pressure level	≤ 70 dB (A)

ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
200	475	KS2 200 S12 230V L	E6/C-0	1	<b>494120</b>	
		KS2 200 S12 230V Z L	E6/C-0	1	<b>494123</b>	
300	520	KS2 300 S12 230V L	E6/C-0	1	<b>494130</b>	
		KS2 300 S12 230V Z L	E6/C-0	1	<b>494133</b>	
400	570	KS2 400 S12 230V L	E6/C-0	1	<b>494140</b>	
		KS2 400 S12 230V Z L	E6/C-0	1	<b>494143</b>	
500	685	KS2 500 S12 230V L	E6/C-0	1	<b>494150</b>	
		KS2 500 S12 230V Z L	E6/C-0	1	<b>494153</b>	
600	685	KS2 600 S12 230V L	E6/C-0	1	<b>494160</b>	
		KS2 600 S12 230V Z L	E6/C-0	1	<b>494163</b>	
800	765	KS2 800 S12 230V L	E6/C-0	1	<b>494180</b>	
		KS2 800 S12 230V Z L	E6/C-0	1	<b>494183</b>	

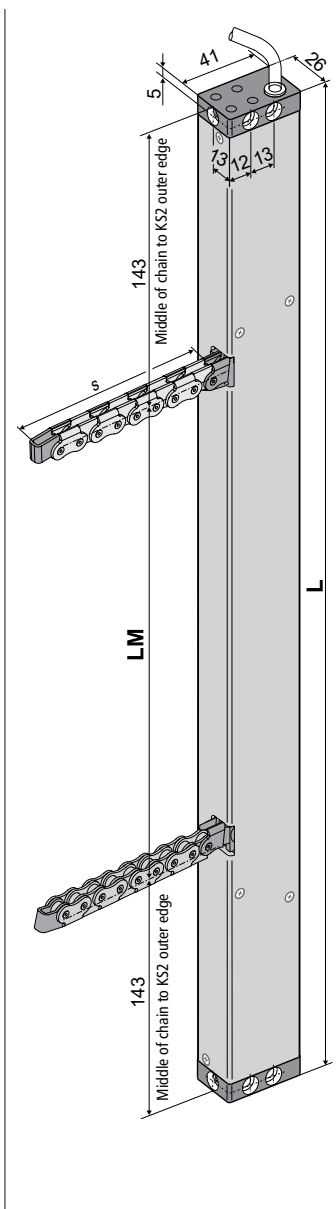
OPTIONS						
Special model		PU/pcs.	Part.-No.			
<b>Drive housing painted/powder coated in other RAL colours</b>						
<b>Lump sum for coating</b>				<b>516030</b>		
Specify at order stage:		1 – 20		<b>516004</b>		
		21 – 50		<b>516004</b>		
		51 – 100		<b>516004</b>		
		from 101		<b>516004</b>		
<b>Extra length connecting cable:</b>						
5 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup>				<b>501164</b>		
10 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup>				<b>501166</b>		
<b>Microprocessor programming S12</b>						
Programming synchronised multi-drive systems 230V S12 (each drive)				<b>495588</b>		
Electronic stroke reduction 230V S12				<b>495590</b>		
Programming drives 24V / 230V S12				<b>524180</b>		



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



### TECHNICAL DATA

**U<sub>N</sub>** Rated voltage 24 V DC (19 V ... 28 V)

**I<sub>N</sub>** Rated current 1,4 A

**I<sub>A</sub>** Cut-off current 2,0 A

**P<sub>N</sub>** Rated power 34 W

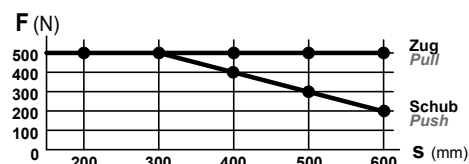
**DC** Duty cycle 5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)

Protection rating IP 32

Ambient temperature range -5 °C ... +60 °C

**F<sub>Z</sub>** Pulling force max. 500 N

**F<sub>A</sub>** Pushing force max.



**F<sub>H</sub>** Pullout force 2 x 1.800 N (fastening depended)

Chain Stainless steel, without protruding rivet heads. Simple connection to casement brackets. Small bending radii allow maximum opening angles of small windows.

Connecting cable non-halogen, grey 3 x 0,5 mm<sup>2</sup>, ~ 3 m  
non-halogen, grey 5 x 0,5 mm<sup>2</sup>, ~ 3 m (Z version)

**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 50 – 600 mm

**L** Length see order data

**LM** Distance in between chains see order data

Sound pressure level  $\leq 70$  dB (A)

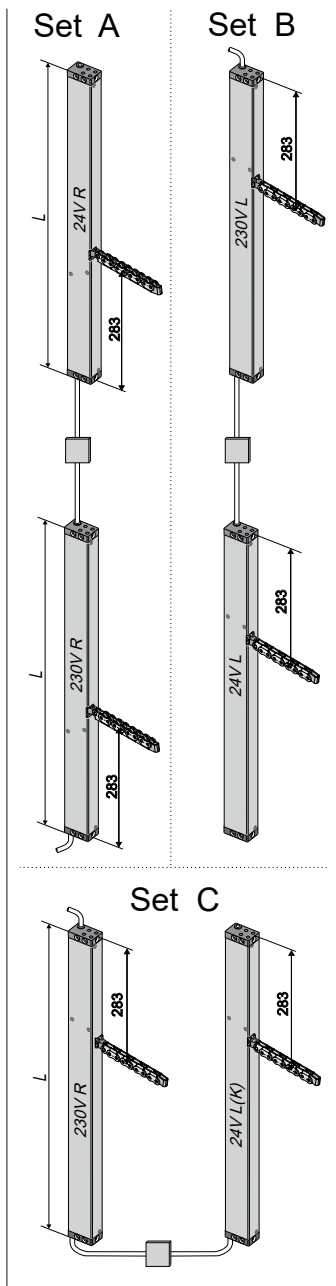
ORDER DATA							
s [mm]	L [mm]	LM [mm]	Version	Finish	PU/pcs.	Part.-No.	
200	640	354	KS2 TWIN 200 S12 24V	E6/C-0	1	<b>521820</b>	
			KS2 TWIN 200 S12 24V Z	E6/C-0	1	<b>521823</b>	
400	830	544	KS2 TWIN 400 S12 24V	E6/C-0	1	<b>521840</b>	
			KS2 TWIN 400 S12 24V Z	E6/C-0	1	<b>521843</b>	
500	1060	774	KS2 TWIN 500 S12 24V	E6/C-0	1	<b>521850</b>	
			KS2 TWIN 500 S12 24V Z	E6/C-0	1	<b>521853</b>	
600	1060	774	KS2 TWIN 600 S12 24V	E6/C-0	1	<b>521860</b>	
			KS2 TWIN 600 S12 24V Z	E6/C-0	1	<b>521863</b>	

OPTIONS							
Special model					PU/pcs.	Part.-No.	
<b>Drive housing painted/powder coated in other RAL colours</b>							
<b>Lump sum for coating</b>						<b>516030</b>	
Specify at order stage:					1 – 20	<b>516004</b>	
					21 – 50	<b>516004</b>	
					51 – 100	<b>516004</b>	
					from 101	<b>516004</b>	
<b>Extra length connecting cable:</b>							
5 m – non-halogen, grey – 3 x 0,5 mm <sup>2</sup>						<b>501034</b>	
10 m – non-halogen, grey – 3 x 0,5 mm <sup>2</sup>						<b>501036</b>	
5 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>						<b>501054</b>	
10 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>						<b>501056</b>	
<b>Microprocessor programming S12</b>							
Electronic stroke reduction 24V S12						<b>524190</b>	
Programming drives 24V / 230V S12						<b>524180</b>	
<b>Optional accessories</b>					PU/pcs.	Part.-No.	
M-COM Configuration module for synchronised multi-drive systems					1	<b>524177</b>	





- Application: natural ventilation
- Factory-configured set includes:
  - Master: KS2 xxx S12 230V AC R / L with voltage output 24V DC
  - Slave: KS2 xxx S12 24V DC R / L with connection cable on the motor side
  - KS2 xxx S12 24V DC L-K with connection cable on the chain side
- Parallel connection up to 8 sets of drives in one group
- Junction box to be site supplied
- Options:**
  - Programmable special functions and sequence control with locking drives (S3 / S12)
  - Screw terminal connections in drive housing upon request



### TECHNICAL DATA

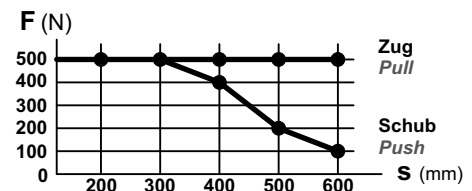
$U_N$	Rated voltage	230 V AC (50 Hz)
$I_N$	Rated current	0,15 A
$I_A$	Cut-off current	0,2 A
$P_N$	Rated power	35 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)

	Protection rating	IP 32
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	Ambient temperature range	-5 °C ... +60 °C
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$F_Z$	Pulling force max.	2 x 250 N
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$F_A$	Pushing force max.	
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s > 600 mm only for pulling application

$F_H$	Pullout force	1.800 N (fastening depended)
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Chain  
Stainless steel, without protruding rivet heads.  
Simple connection to casement brackets.  
Small bending radii allow maximum opening angles of small windows.

Connecting cable	Master: non-halogen, grey 6 x 0,75 mm <sup>2</sup> , ~ 3 m 3 x 0,5 mm <sup>2</sup> , ~ 3 m Slave: non-halogen, grey 3 x 0,5 mm <sup>2</sup> , ~ 3 m
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v	Speed	$\times$ 8,0 mm/s $\curvearrowright$ 8,0 mm/s
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s	Stroke	50 – 1000 mm
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L	Length	see order data
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	Sound pressure level	≤ 70 dB (A)
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ORDER DATA						
s [mm]	L [mm]	Version	Finish	PU/pcs.	Part.-No.	
200	475	KS2 200 S12 230V Set A (R/R)	E6/C-0	1	494220	
		KS2 200 S12 230V Set B (L/L)	E6/C-0	1	494320	
		KS2 200 S12 230V Set C (R/L-K)	E6/C-0	1	494420	
300	520	KS2 300 S12 230V Set A (R/R)	E6/C-0	1	494230	
		KS2 300 S12 230V Set B (L/L)	E6/C-0	1	494330	
		KS2 300 S12 S 230V et C (R/L-K)	E6/C-0	1	494430	
400	570	KS2 400 S12 230V Set A (R/R)	E6/C-0	1	494240	
		KS2 400 S12 230V Set B (L/L)	E6/C-0	1	494340	
		KS2 400 S12 230V Set C (R/L-K)	E6/C-0	1	494440	
500	685	KS2 500 S12 230V Set A (R/R)	E6/C-0	1	494250	
		KS2 500 S12 230V Set B (L/L)	E6/C-0	1	494350	
		KS2 500 S12 230V Set C (R/L-K)	E6/C-0	1	494450	
600	685	KS2 600 S12 230V Set A (R/R)	E6/C-0	1	494260	
		KS2 600 S12 230V Set B (L/L)	E6/C-0	1	494360	
		KS2 600 S12 230V Set C (R/L-K)	E6/C-0	1	494460	
800	765	KS2 800 S12 230V Set A (R/R)	E6/C-0	1	494280	
		KS2 800 S12 230V Set B (L/L)	E6/C-0	1	494380	
		KS2 800 S12 230V Set C (R/L-K)	E6/C-0	1	494480	

OPTIONS						
Special model		PU/pcs.	Part.-No.			
<b>Drive housing painted/powder coated in other RAL colours</b>						
<b>Lump sum for coating</b>				516030		
Specify at order stage:		1 – 20		516004		
		21 – 50		516004		
		51 – 100		516004		
		from 101		516004		
<b>Extra length connecting cable:</b>						
5 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup>				501164		
10 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup>				501166		
5 m – non-halogen, grey – 3 x 0,5 mm <sup>2</sup>				501034		
10 m – non-halogen, grey – 3 x 0,5 mm <sup>2</sup>				501036		
5 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>				501054		
10 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>				501056		
<b>Microprocessor programming S12</b>						
Programming synchronised multi-drive systems 230V S12 (each drive)				495588		

OVERVIEW OF BRACKETS												
Typical application				1	2	3	4	5	6			
Frame bracket				K93, K94	K129, K130	K96, K96-1	No	K105A, K105B, K105S, K106	K128			
Casement bracket				F41, F35, F37, F17 (F21 with K130)		F95, F42	F95, F42	F18, F19, F20, F22	F21			
Space requirement	min.	[mm]	16 – 30	25 – 30	38	30	Note profile depth	Schüco AWS 57RO				
Overlap thickness *1		[mm]	0 – 21	0 – 21	0 – 21	0 – 21						
Opening angle *2	max.	[DEG]	35	45	60	40	60	45				
Casement weight *3	max.	[Kg]	70	60	50	70	70	70				
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]	600 – 1200									
	Sync2	[mm]	1000 – 2500									
FAH *4	Solo	[mm]	250 – 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.

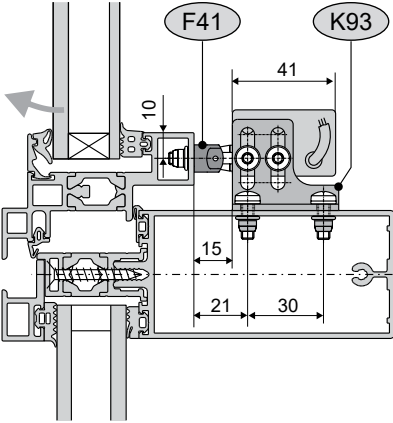
\*3 Please respect the individual geometry of the different windows. The listed max. casement weight refers to a single drive on button hung window with a max. opening angle.

\*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.

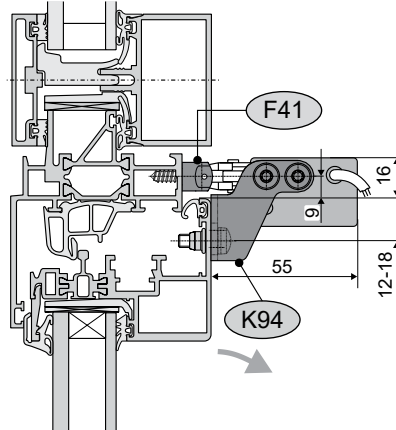
TYPICAL APPLICATIONS

1 PR, top hung outward opening



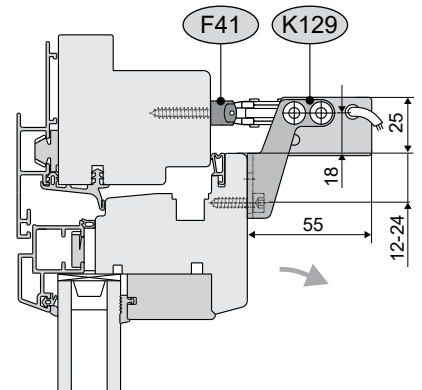
View on aluminium window

1 FM, bottom hung inward opening



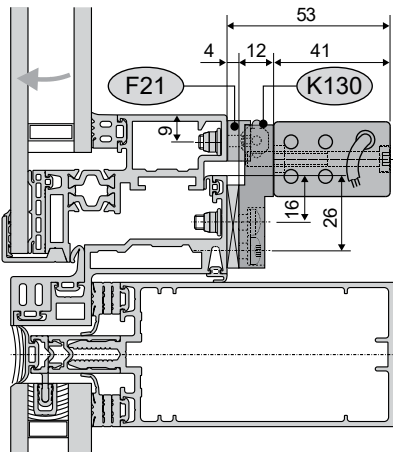
View on aluminium window

2 FM, bottom hung inward opening



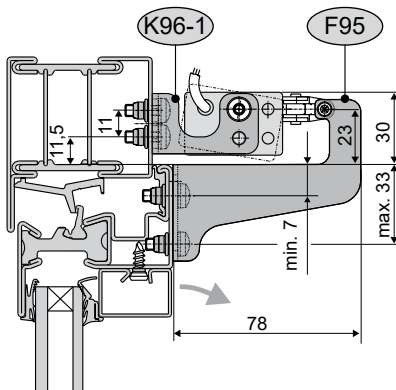
View on aluminium-wood window

2 RM, bottom hung outward opening



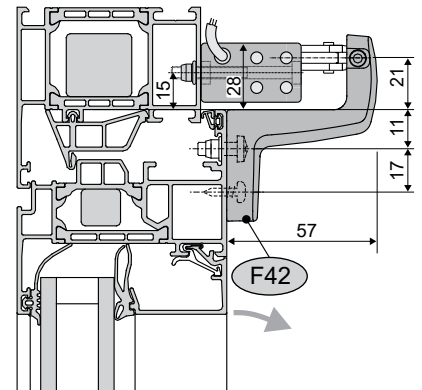
View on aluminium window

3 RM, bottom hung inward opening



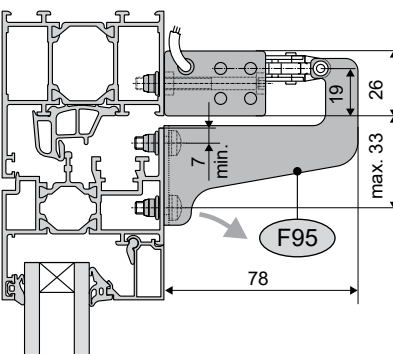
View on steel window

4 RM, bottom hung inward opening



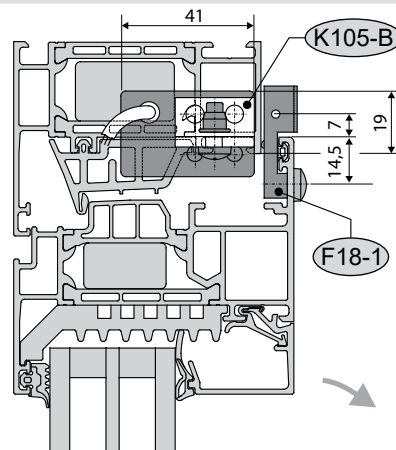
View on aluminium window

4 RM, bottom hung inward opening



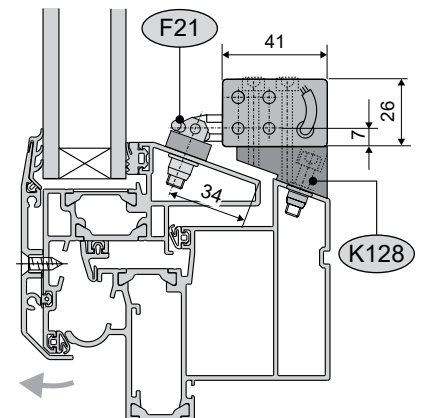
View on aluminium window

5 Concealed, bottom hung inward opening



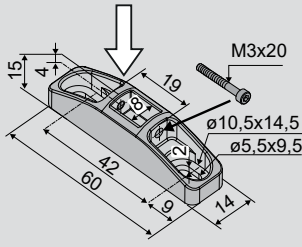
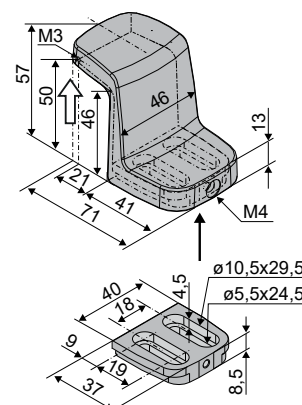
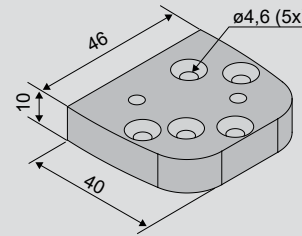
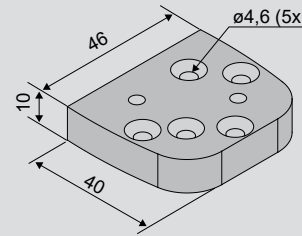
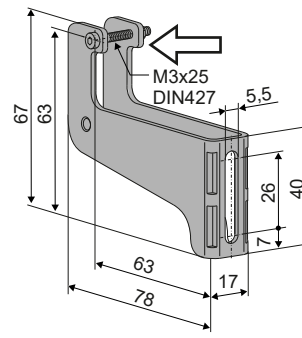
View on aluminium window

6 RM, top hung outward opening



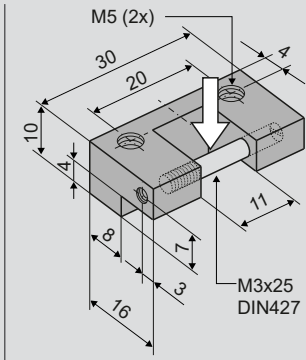
View on aluminium window (Facade)

### CASEMENT BRACKETS

<p><b>F41</b></p>		<p><b>Application</b>  <b>Surface mounting</b> on the casement profiles / window frame profiles of inward / outward opening windows, for surface mounted drives <b>KS2</b></p> <p>Chain fixing in direction of the arrow</p>	<p><b>Part-No. 151440</b>  <b>Material / Finish</b>            Cast aluminum, bright chrome  <b>Feature / Equipment</b>            1x screw M3x20            Drilling template</p>	
<p><b>F42</b></p>		<p><b>Application</b>  <b>Surface mounting</b> on the casement profiles of inward opening windows, for surface mounted drives <b>KS2</b></p> <p>Chain fixing in direction of the arrow</p>	<p><b>Part-No. 151441</b>  <b>Material / Finish</b>            Cast aluminum, bright chrome  <b>Feature / Equipment</b>            1x baseplate            1x countersunk screw M4x10            1x screw M3x25            Drilling template</p>	
<p><b>F42-Support</b></p>		<p><b>Application</b>  <b>F42-Support</b> as a compensating plate when mounting on the wooden windows and plastic windows  <b>t = 10 mm</b></p>	<p><b>Part-No. 151446</b>  <b>Material / Finish</b>            Cast aluminum, RAL 9006</p>	
<p><b>F42-Support</b></p>		<p><b>Application</b>  <b>F42-Support</b> as a compensating plate when mounting on the wooden windows and plastic windows  <b>t = 10 mm</b></p>	<p><b>Part-No. 523961</b>  <b>Material / Finish</b>            aluminum (E6/C-0)</p>	
<p><b>F95</b></p>		<p><b>Application</b>  <b>Surface mounting</b> on the casement profiles of inward opening windows, for surface mounted drives <b>KS2</b> with <b>K96-1</b></p> <p>Chain fixing in direction of the arrow</p>	<p><b>Part-No. 523972</b>  <b>Material/Finish</b>            Stainless steel  <b>Feature/Equipment</b>            1x screw M3x25, spring pin M3,</p>	

## CASEMENT BRACKETS

F17

**Application**

**Concealed mounting** inside in-/outward opening face- or flush-fitted casements, fixing inside rebate below the secondary gasket with screws removable from outside, for inside the window frame profiles concealed mounted drives **KS2** with **K105**

Chain fixing in direction of the arrow

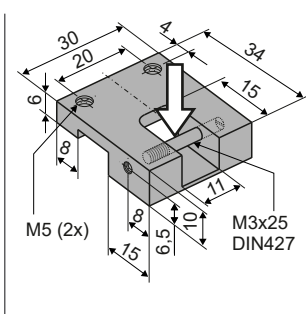
**Part.-No. 151417****Material/Finish**

aluminium  
(natural anodized)

**Feature/Equipment**

1x shaft screw M3x25,  
2x rounded head screw  
M5x10

F18

**Application**

**Partially concealed mounting** on inner profile side of inward opening face-fitted casements, fixing below the secondary gasket with screws removable from outside, for inside the window frame profiles concealed mounted drives **KS2** with **K105**

Chain fixing in direction of the arrow

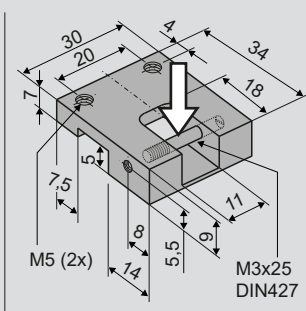
**Part.-No. 151418****Material/Finish**

aluminium  
(natural anodized)

**Feature/Equipment**

1x shaft screw M3x25,  
2x rounded head screw  
M5x10

F18-1

**Application**

**Surface mounting** on inward opening face-fitted casements, for inside the window frame profiles concealed mounted drives **KS2** with **K105**

Chain fixing in direction of the arrow

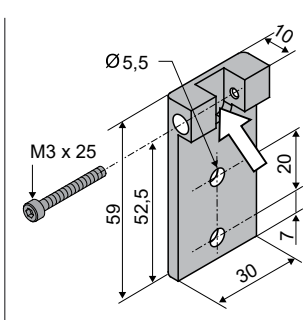
**Part.-No. 151428****Material/Finish**

aluminium  
(natural anodized)

**Feature/Equipment**

1x shaft screw M3x25  
2x rounded head screw  
M5x10

F19

**Application**

**Surface mounting** on inward opening face-fitted casements, for inside the window frame profiles concealed mounted drives **KS2** with **K105**

Chain fixing in direction of the arrow

**Part.-No. 151419****Material/Finish**

aluminium  
(natural anodized)

**Feature/Equipment**

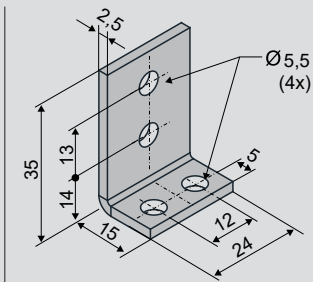
1x screw M3x25

### CASEMENT BRACKETS

<p><b>F20</b></p>		<p><b>Application</b>  <b>Surface mounting</b> on inward opening face-fitted casements, for inside the window frame profiles concealed mounted drives <b>KS2</b> with <b>K105</b></p> <p>Chain fixing in direction of the arrow</p>	<p><b>Part.-No. 151420</b>  <b>Material/Finish</b>          aluminium          (natural anodized)  <b>Feature/Equipment</b>          1x shaft screw M3x25,          2x rounded head screw M5x20</p>		
<p><b>F21</b></p>		<p><b>Application</b>  <b>Surface mounting</b> on the casement/window frame profiles on the main/side closing edge of in-/outward opening windows, for surface mounted drives <b>KS2</b> with <b>K128, K130</b></p> <p>Chain fixing in direction of the arrow</p>	<p><b>Part.-No. 151421</b>  <b>Material/Finish</b>          aluminium          (natural anodized)  <b>Feature/Equipment</b>          1x spring pin Ø 3 mm</p>		
		<b>Optional accessories</b>			
		<b>B1</b> for skylight Eternit	<b>Part.-No. 151422</b>		
		<b>K128</b> for Schüco AWS 57RO	<b>Part.-No. 523974</b>		
<p><b>F35</b></p>		<p><b>Application</b>  <b>Surface mounting</b> on the horizontal side of deep casement profiles of outward opening (friction hinged) windows, for surface mounted drives <b>KS2</b> with <b>K93, K94, K129, K130</b></p> <p>Chain fixing in direction of the arrow</p>	<p><b>Part.-No. 151425</b>  <b>Material/Finish</b>          aluminium          (natural anodized)  <b>Feature/Equipment</b>          1x shaft screw M3x25</p>		
<p><b>F37</b></p>		<p><b>Application</b>  <b>Surface mounting</b> on the horizontal side of deep casement profiles of outward opening (friction hinged) windows, for surface mounted drives <b>KS2</b> with <b>K93, K94, K129, K130</b></p> <p>Chain fixing in direction of the arrow</p>	<p><b>Part.-No. 151424</b>  <b>Material/Finish</b>          aluminium          (natural anodized)  <b>Feature/Equipment</b>          1x shaft screw M3x25</p>		

## FRAME BRACKETS

## K105-B



## Application

**Concealed mounting** inside the window frame profiles of in-/outward opening windows, for rigid fixing of concealed drives **KS2** with **F17, F18, F19, F20**

Part.-No. 523977

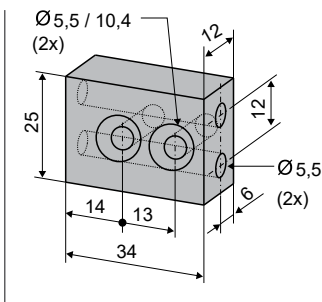
## Material/Finish

Stainless steel

## Feature/Equipment

2x angle brackets,  
4x rounded head screw  
M5x10,  
4x washer A 5,3

## K105-A



## Application

**Concealed mounting** inside the window frame profiles of in-/outward opening windows, for rigid fixing of concealed drives **KS2** with casement brackets **F17**, (FAH min. 700 mm)

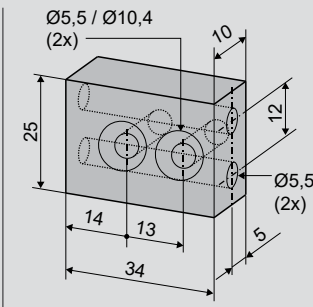
Part.-No. 523975

## Material/Finish

aluminium  
(natural anodized)

## Feature/Equipment

2x angle brackets

K105-A  
-W77

## Application

**Concealed mounting** inside the window frame profiles of in-/outward opening windows, for rigid fixing of concealed drives **KS2** with casement brackets **F18-1**, (FAH min. 400 mm)

Part.-No. 523965

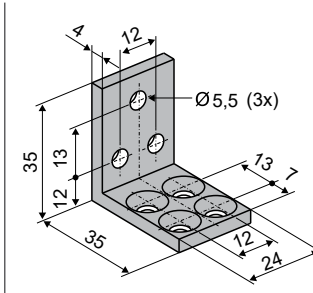
## Material/Finish

aluminium  
(natural anodized)

## Feature/Equipment

2x angle brackets

## K106



## Application

**Concealed mounting** inside the window frame profiles of in-/outward opening windows, for rigid fixing of concealed drives **KS2** with **F19** (FAH min. 700 mm), **F20** (FAH min 500 mm)

Part.-No. 523976

## Material/Finish

aluminium  
(natural anodized)

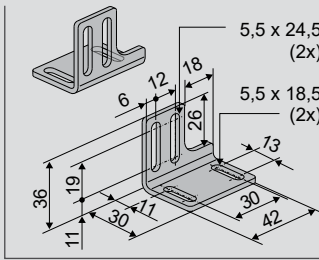
## Feature/Equipment

2x angle brackets,  
4x countersunk screw  
M5x10



### FRAME BRACKETS

**K93**



**Application**

**Surface mounting** on the transom/mullion profiles of outward opening windows, for rigid fixing of surface mounted drives **KS2** with **F41**

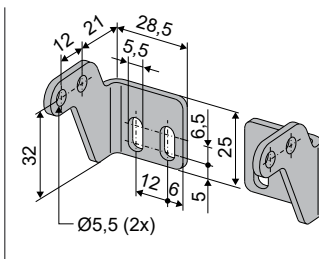
**Part.-No. 523916**

**Material/Finish**

Stainless steel

**Feature/Equipment**  
4x allen screw M5x10,  
4x washer A 5,3

**K94**



**Application**

**Surface mounting** on the casement/window frame profiles of in-/outward opening windows, for rigid or swivelling fixing of drives **KS2** with **F41, F35, F37**

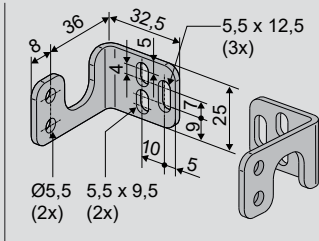
**Part.-No. 523921**

**Material/Finish**

Stainless steel

**Feature/Equipment**  
4x torx screw M5x10  
4x washer A 5,3  
2x torx screw M5x16

**K96-1**



**Application**

**Surface mounting** on the casement profiles of inward opening windows, for rigid or swivelling fixing of drives **KS2** with **F95**

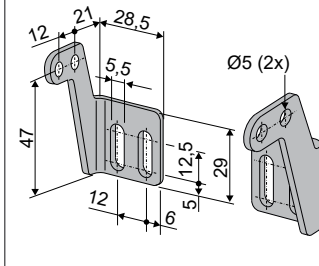
**Part.-No. 523997**

**Material/Finish**

Stainless steel

**Feature/Equipment**  
4x torx screw M5x10,  
2x torx screw M5x16,  
4x washer A 5,3

**K129**



**Application**

**Surface mounting** on the casement/window frame profiles of in-/outward opening windows, for rigid or swivelling fixing of drives **KS2** with **F41, F35, F37**

**Part.-No. 523969**

**Material/Finish**

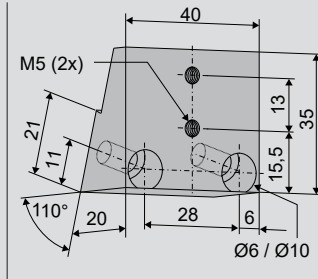
Stainless steel

**Feature/Equipment**  
4x torx screw M5x10,  
4x washer A 5,3

## SPECIFIC APPLICATIONS

## ROOF WINDOWS | SCHÜCO AWS 57RO

K128



## Application

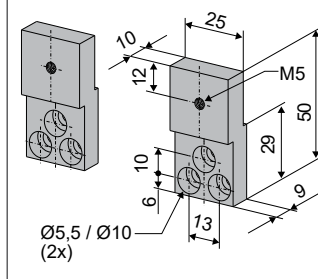
Support for F21 for mounting of drives **KS2** on the casement profiles of outward opening roof windows  
**Schüco AWS 57RO**

Part.-No. 523974

Material/Finish  
aluminium  
(natural anodized)Feature/Equipment  
4x cylinder head screw  
M5x10

## FRICTION HINGED WINDOW | SCHÜCO AWS 102 SK

K130



## Application

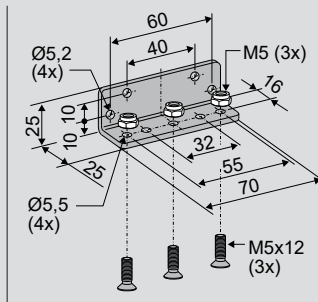
Surface mounting on the window frame profiles of the main closing edge of outward opening friction hinged windows series **Schüco AWS102**, for rigid fixing of drives **KS2** with **F21**

Part.-No. 523968

Material/Finish  
aluminium  
(natural anodized)Feature/Equipment  
2x cylinder head screw  
M5x45

## SKYLIGHT DOME

B1



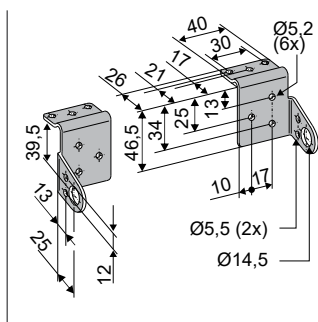
## Application

Mounting angle for mounting of drives **KS2** with **F41** and **KSA** with **F14** on skylight domes

Part.-No. 151422

Material/Finish  
Stainless steelFeature/Equipment  
3x countersunk-head screw  
M5x12,  
3x nut M5

K125



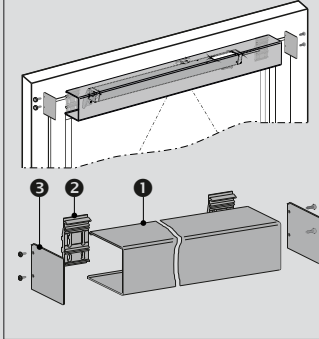
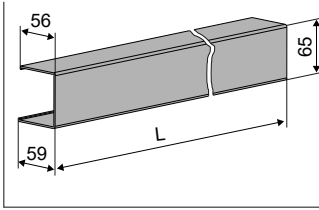
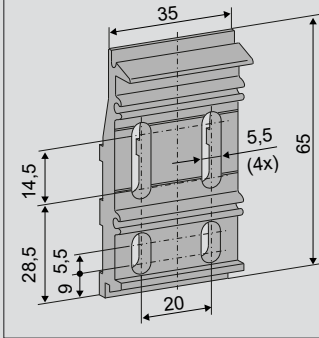
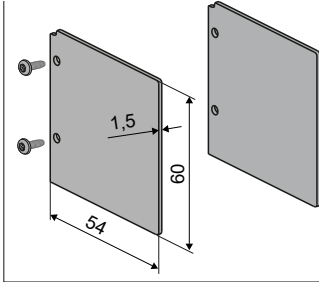
## Application

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

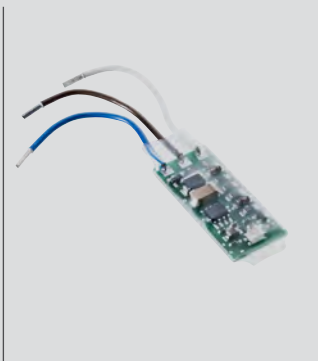
Part.-No. 523979

Material/Finish  
Stainless steelFeature/Equipment  
4x screw M5x10

### OPTIONAL ACCESSORIES

Cover profile set				
<b>AP KS2</b> 	<b>Application</b> <b>Cover profile</b> for surface mounted drives <b>KS2</b> with brackets <b>K94, K129, K130</b> . Profile length adjustable to the length of the drives (end caps recommended) or of the casement (without end caps)	<b>Material/Finish</b> see detailed description of componets <b>Feature/Equipment</b> incl. profile brackets, <b>without</b> end caps		
	<b>L = 1,5 m</b> (incl. 2x profile bracket)	<b>Part.-No. 523952</b>		
	<b>L = 2,0 m</b> (incl. 3x profile bracket)	<b>Part.-No. 523954</b>		
	<b>L = 2,9 m</b> (incl. 4x profile bracket)	<b>Part.-No. 523956</b>		
Cover profile				
	<b>1</b> <b>Cover profile</b> for drives <b>KS2</b> for cutting on site  Price per metre	<b>Part.-No. 523951</b> <b>Material/Finish</b> aluminium (natural anodized) <b>Feature/Equipment</b> <b>without</b> profile brackets and end caps		
Profile bracket				
	<b>2</b> <b>Profile bracket</b> for <b>KS2</b> cover profile <b>&lt; 2 m length: 2 pieces</b> <b>&gt; 2 m length: 3 – 4 pieces</b>	<b>Part.-No. 523948</b> <b>Material/Finish</b> aluminium (natural anodized) <b>Feature/Equipment</b> 1 piece (for fixing the cover profile)		
End caps				
	<b>3</b> <b>End caps</b> for <b>KS2</b> cover profile	<b>Part.-No. 523950</b> <b>Material/Finish</b> aluminium (natural anodized) <b>Feature/Equipment</b> 2 pieces + 4x screw M3x12 (taptite)		

## OPTIONAL ACCESSORIES

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

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