



### 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

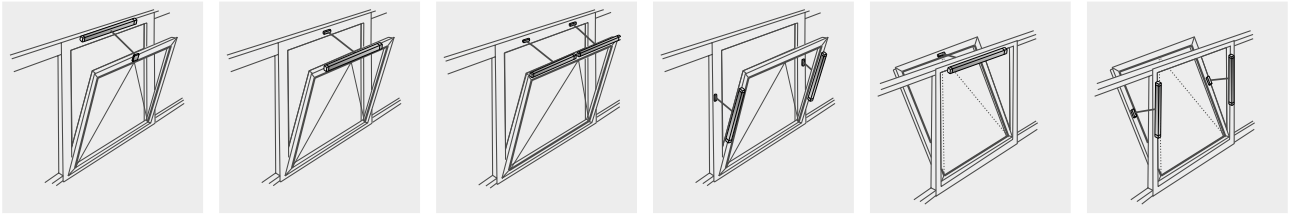
For this product series, a Type III Environmental Product Declaration (EPD) was issued according to ISO 14025 and EN 15804.

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

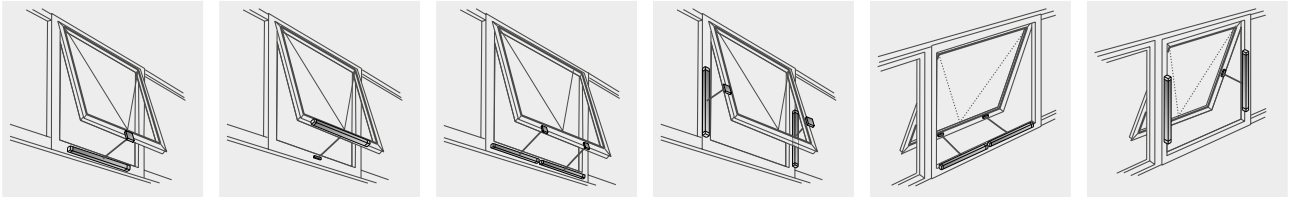
The EPD documents can be viewed or downloaded from our homepage [www.aumueller-gmbh.de](http://www.aumueller-gmbh.de).

**FACADE**

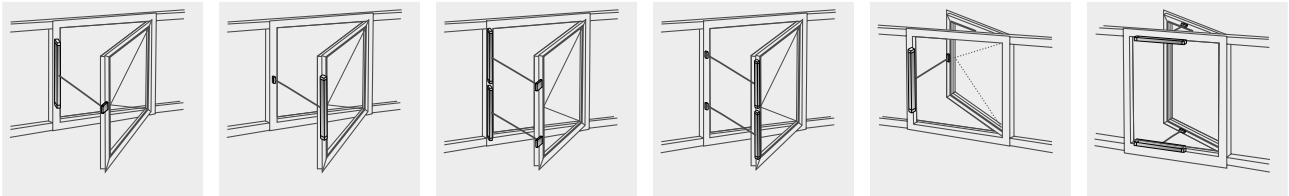
Bottom-hung



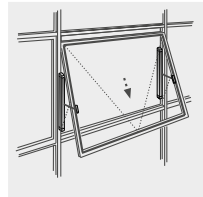
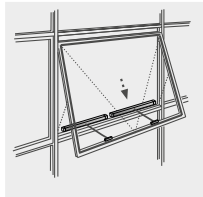
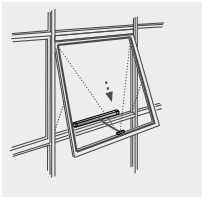
Top-hung



Side-hung



Friction hinged

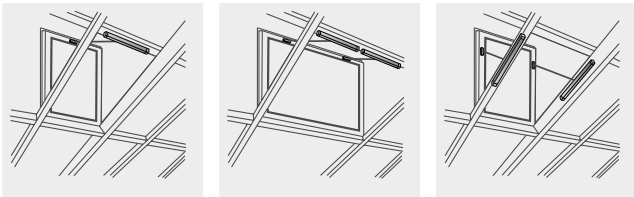


Parallel outward opening

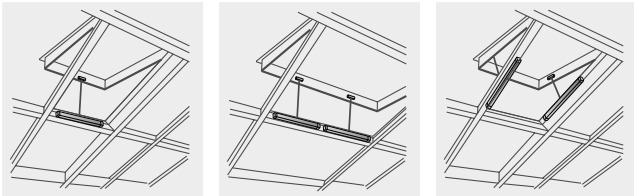


**ROOF**

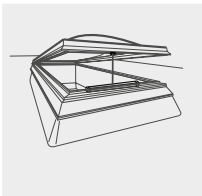
Bottom-hung



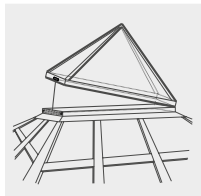
Top-hung

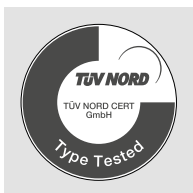


Sky light



Glass pyramid





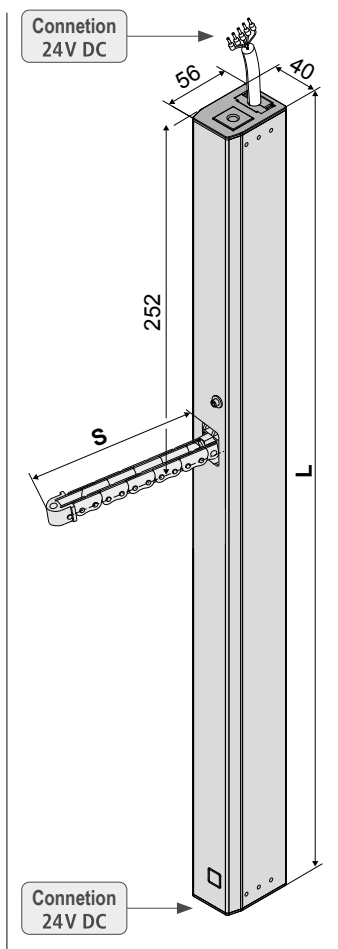
- Application: natural ventilation, RWA, ferralux®-NRWG
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking

### Equipment

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

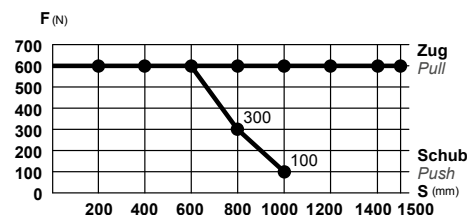
### Options

- 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.        |   |

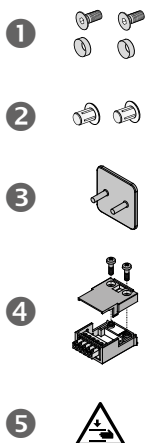


s > 800 mm only for pulling application

|                  |   |                |
|------------------|---|----------------|
| Pullout force    | 3.000 N (fastening depended)  |                |
| Chain            | stainless steel   |                |
| Connecting cable | non-halogen, grey 5 x 0,5 mm <sup>2</sup> , ~ 3 m   |                |
| Speed            | $s \leq 400$ 8,0 mm/s  8,0 mm/s<br>$s > 400 - 600$ 12,0 mm/s  8,0 mm/s<br>$s > 600$ 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)    |

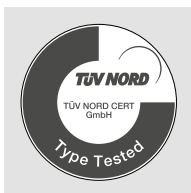
### In delivery

- 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  | E6/C-0 | 1         | <b>522725</b> |  |
| 300        | 591    | KSA 300 S12 24V  | E6/C-0 | 1         | <b>522730</b> |  |
| 400        | 591    | KSA 400 S12 24V  | E6/C-0 | 1         | <b>522740</b> |  |
| 500        | 693    | KSA 500 S12 24V  | E6/C-0 | 1         | <b>522750</b> |  |
| 600        | 693    | KSA 600 S12 24V  | E6/C-0 | 1         | <b>522760</b> |  |
| 800        | 794    | KSA 800 S12 24V  | E6/C-0 | 1         | <b>522780</b> |  |
| 1000       | 896    | KSA 1000 S12 24V | E6/C-0 | 1         | <b>522810</b> |  |
| 1200       | 998    | KSA 1200 S12 24V | E6/C-0 | 1         | <b>522812</b> |  |
| 1500       | 1151   | KSA 1500 S12 24V | E6/C-0 | 1         | <b>522815</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>Plug solution:</b>  |  |           |           |  |               |               |
| <b>Wire Click</b> - 5 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>  |  |           |           |  | <b>501252</b> |               |
| <b>Wire Click</b> - 10 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup> |  |           |           |  | <b>501253</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>  |  |           |           |  |               |               |
| M-COM® Click Configuration module for synchronised multi-drive systems |  |           |           |  | 1             | <b>524167</b> |
| M-COM Configuration module for synchronised multi-drive systems        |  |           |           |  | 1             | <b>524177</b> |



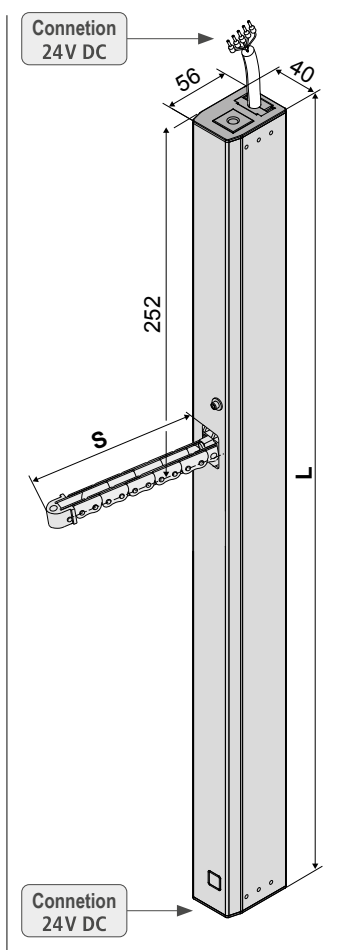
- Application: natural ventilation, RWA, ferralux®-NRWG
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking
- Programmable feedback limit position „OPEN“ and „CLOSE“ (max. 24 V, 500 mA)

### Equipment

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

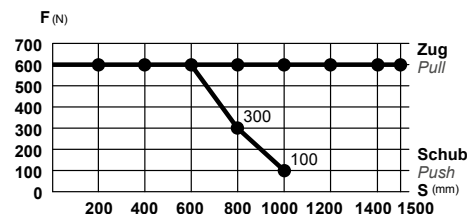
### Options

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



### TECHNICAL DATA

|                      |                           |   |
|----------------------|---------------------------|---|
| <b>U<sub>N</sub></b> | Rated voltage             | 24 V DC (19 V ... 28 V)                     |
| <b>I<sub>N</sub></b> | Rated current             | 0,9 A                                       |
| <b>I<sub>A</sub></b> | Cut-off current           | 1,2 A                                       |
| <b>P</b>             | Rated power               | 22 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</b>             | Pulling force max.        | 600 N                                       |
| <b>F<sub>A</sub></b> | Pushing force max.        |   |

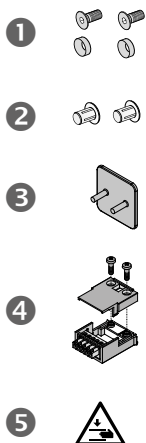


s > 800 mm only for pulling application

|               |                      |   |         |          |          |               |           |          |         |           |          |
|---------------|----------------------|---|---------|----------|----------|---------------|-----------|----------|---------|-----------|----------|
|               | Pullout force        | 3.000 N (fastening depended)  |         |          |          |               |           |          |         |           |          |
|               | Chain                | stainless steel   |         |          |          |               |           |          |         |           |          |
|               | Connecting cable     | non-halogen, grey 5 x 0,5 mm <sup>2</sup> , ~ 3 m   |         |          |          |               |           |          |         |           |          |
|               | Speed                | <table border="0"> <tr> <td>s ≤ 400</td> <td> 8,0 mm/s</td> <td> 8,0 mm/s</td> </tr> <tr> <td>s &gt; 400 – 600</td> <td> 12,0 mm/s</td> <td> 8,0 mm/s</td> </tr> <tr> <td>s &gt; 600</td> <td> 13,5 mm/s</td> <td> 8,0 mm/s</td> </tr> </table> | 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 ≤ 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               | 250 – 1.500 mm  |         |          |          |               |           |          |         |           |          |
| <b>L</b>      | 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         | <b>522723</b> |  |
| 300        | 591    | KSA 300 S12 24V Z  | E6/C-0 | 1         | <b>522733</b> |  |
| 400        | 591    | KSA 400 S12 24V Z  | E6/C-0 | 1         | <b>522743</b> |  |
| 500        | 693    | KSA 500 S12 24V Z  | E6/C-0 | 1         | <b>522753</b> |  |
| 600        | 693    | KSA 600 S12 24V Z  | E6/C-0 | 1         | <b>522763</b> |  |
| 800        | 794    | KSA 800 S12 24V Z  | E6/C-0 | 1         | <b>522783</b> |  |
| 1000       | 896    | KSA 1000 S12 24V Z | E6/C-0 | 1         | <b>522813</b> |  |
| 1200       | 998    | KSA 1200 S12 24V Z | E6/C-0 | 1         | <b>522823</b> |  |
| 1500       | 1151   | KSA 1500 S12 24V Z | E6/C-0 | 1         | <b>522853</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>Plug solution:</b>  |  |           |               |   |               |  |
| <b>Wire Click</b> - 5 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>  |  |           |               |   | <b>501252</b> |  |
| <b>Wire Click</b> - 10 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup> |  |           |               |   | <b>501253</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>  |  |           |               |   |               |  |
| M-COM® Click Configuration module for synchronised multi-drive systems |  |           |               | 1 | <b>524167</b> |  |
| M-COM Configuration module for synchronised multi-drive systems        |  |           |               | 1 | <b>524177</b> |  |



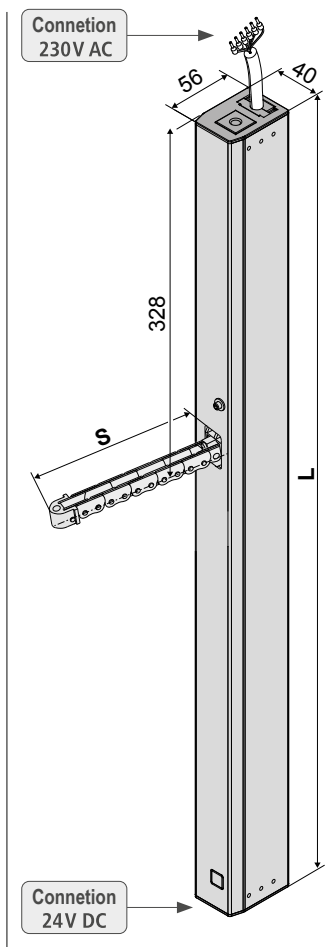
- Application: natural ventilation
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking
- Parallel connection up to 8 drives in one group
- Additional connection of a 24V drive possible (on the 24V side)

### Equipment

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

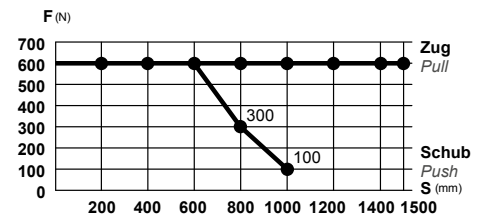
### Options

- 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  |
| <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.        | 600 N                                       |
| $F_A$     | Pushing force max.        |   |

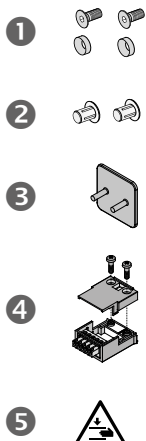


$s > 800$  mm only for pulling application

|       |                      |  |
|-------|----------------------|--|
| $F_H$ | Pullout force        | 3.000 N (fastening depended)                       |
|       | Chain                | stainless steel                                    |
|       | Connecting cable     | non-halogen, grey 6 x 0,75 mm <sup>2</sup> , ~ 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 | $\leq$ 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        | 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. |  |
| <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>Plug solution:</b>   |           |           |  |
| <b>Wire Click</b> - 5 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup>  |           | 501275    |  |
| <b>Wire Click</b> - 10 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup> |           | 501280    |  |
| <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    |  |

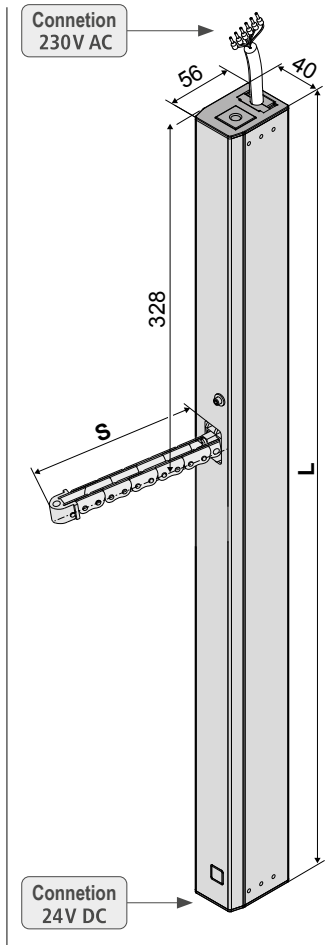




- Application: natural ventilation
- Internal Intelligent Control Electronics S12
- Adjustable chain tension / Mechanical chain unlocking
- Programmable feedback limit position „OPEN“ and „CLOSE“ (max. 24 V, 500 mA)
- Parallel connection up to 8 drives in one group
- Additional connection of a 24V drive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

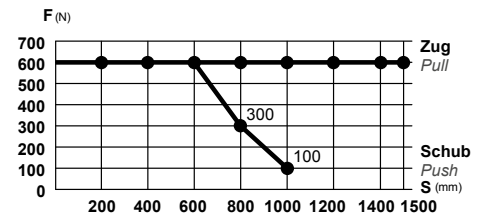
### Equipment

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



### TECHNICAL DATA

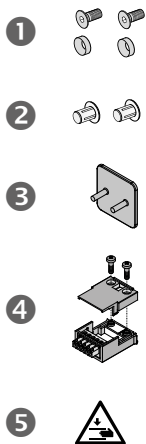
|           |                           |   |
|-----------|---------------------------|---|
| $U_N$     | Rated voltage             | 230 V AC (50 Hz)                            |
| $I_N$     | Rated current             | 0,2 A                                       |
| $I_A$     | Cut-off current           | 0,2 A                                       |
| $P_N$     | Rated power               | 46 W  |
| <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.        | 600 N                                       |
| $F_A$     | Pushing force max.        |   |



|       |                      |  |
|-------|----------------------|--|
| $F_H$ | Pullout force        | 3.000 N (fastening depended)                       |
|       | Chain                | stainless steel                                    |
|       | Connecting cable     | non-halogen, grey 6 x 0,75 mm <sup>2</sup> , ~ 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)  |

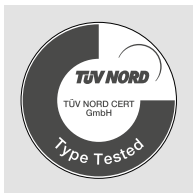
### In delivery

- 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        | 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    |  |

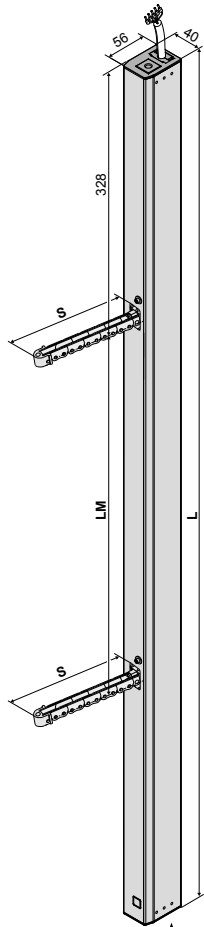
| OPTIONS   |           |           |  |
|---|-----------|-----------|--|
| Special model   | PU / pcs. | Part.-No. |  |
| <b>Drive housing painted/powder coated in other RAL colours</b>         |           |           |  |
| <b>Lump sum for coating</b>   |           | 516030    |  |
| Specify at order stage:   | 1 – 20    | 516004    |  |
|   | 21 – 50   | 516004    |  |
|   | 51 – 100  | 516004    |  |
|   | from 101  | 516004    |  |
| <b>Plug solution:</b>   |           |           |  |
| <b>Wire Click</b> - 5 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup>  |           | 501275    |  |
| <b>Wire Click</b> - 10 m – non-halogen, grey – 6 x 0,75 mm <sup>2</sup> |           | 501280    |  |
| <b>Microprocessor programming S12</b>                                   |           |           |  |
| 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

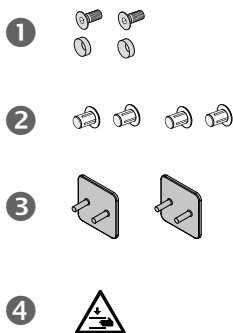
- Programmable special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)



No electrical connection possible

### TECHNICAL DATA

|                      |                            |  |
|----------------------|----------------------------|--|
| <b>U<sub>N</sub></b> | Rated voltage              | 24 V DC (19 V ... 28 V)  |
| <b>I<sub>N</sub></b> | Rated current              | 1,8 A  |
| <b>I<sub>A</sub></b> | Cut-off current            | 2,4 A  |
| <b>P<sub>N</sub></b> | Rated power                | 43 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.         | 1.200 N  |
| <b>F<sub>A</sub></b> | Pushing force max.         | 1.200 N  |
| <b>F<sub>H</sub></b> | Pullout force              | 2 x 2.500 N (fastening depended)                                       |
|                      | Chain                      | stainless steel  |
|                      | Connecting cable           | non-halogen, grey 5 x 0,5 mm <sup>2</sup> , ~ 3 m                      |
| <b>v</b>             | Speed                      | $s \leq 400$ 8,0 mm/s  8,0 mm/s<br>$s > 400 - 600$ 12,0 mm/s  8,0 mm/s |
| <b>s</b>             | Stroke                     | 400 – 600 mm   |
| <b>L</b>             | Length                     | see order data   |
| <b>LM</b>            | Distance in between chains | see order data   |
|                      | Sound pressure level       | ≤ 70 dB (A)  |

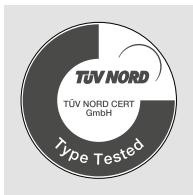


### In delivery

- 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       | <b>522745</b> |  |
| 500        | 1353   | 587     | KSA TWIN 500 S12 24V | E6/C-0 | 1       | <b>522755</b> |  |
| 600        | 1353   | 587     | KSA TWIN 600 S12 24V | E6/C-0 | 1       | <b>522765</b> |  |

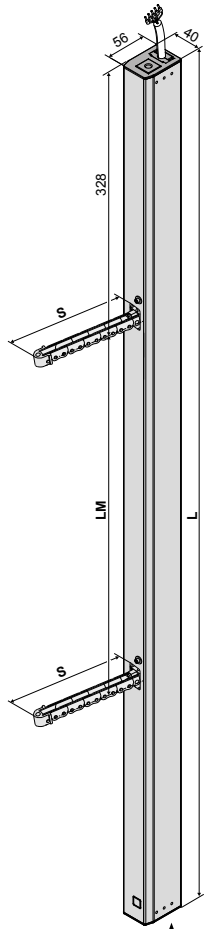
| OPTIONS  |          |               |  |
|--|----------|---------------|--|
| Special model  | PU/pcs.  | Part.-No.     |  |
| <b>Drive housing painted/powder coated in other RAL colours</b>        |          |               |  |
| <b>Lump sum for coating</b>  |          | <b>516030</b> |  |
| <b>Specify at order stage:</b>   | 1 – 20   | <b>516004</b> |  |
|  | 21 – 50  | <b>516004</b> |  |
|  | 51 – 100 | <b>516004</b> |  |
|  | from 101 | <b>516004</b> |  |
| <b>Plug solution:</b>  |          |               |  |
| <b>Wire Click</b> - 5 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>  |          | <b>501252</b> |  |
| <b>Wire Click</b> - 10 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup> |          | <b>501253</b> |  |
| <b>Microprocessor programming S12</b>                                  |          |               |  |
| Electronic stroke reduction 24V S12                                    |          | <b>524190</b> |  |
| Programming drives 24V / 230V S12                                      |          | <b>524180</b> |  |
| Optional accessories   | PU/pcs.  | Part.-No.     |  |
| M-COM Configuration module for synchronised multi-drive systems        | 1        | <b>524177</b> |  |



- 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

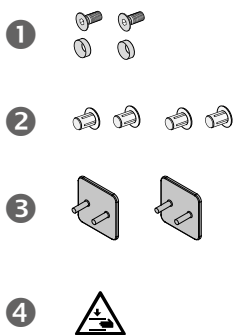
- Programmable special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)



No electrical connection possible

### TECHNICAL DATA

|                      |                            |  |
|----------------------|----------------------------|--|
| <b>U<sub>N</sub></b> | Rated voltage              | 24 V DC (19 V ... 28 V)  |
| <b>I<sub>N</sub></b> | Rated current              | 1,8 A  |
| <b>I<sub>A</sub></b> | Cut-off current            | 2,4 A  |
| <b>P<sub>N</sub></b> | Rated power                | 43 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.         | 1.200 N  |
| <b>F<sub>A</sub></b> | Pushing force max.         | 1.200 N  |
| <b>F<sub>H</sub></b> | Pullout force              | 2 x 2.500 N (fastening depended)   |
|                      | Chain                      | stainless steel  |
|                      | Connecting cable           | non-halogen, grey 5 x 0,5 mm <sup>2</sup> , ~ 3 m                            |
| <b>v</b>             | Speed                      | $s \leq 400$ 8,0 mm/s     8,0 mm/s<br>$s > 400 - 600$ 12,0 mm/s     8,0 mm/s |
| <b>s</b>             | Stroke                     | 400 – 600 mm   |
| <b>L</b>             | Length                     | see order data   |
| <b>LM</b>            | Distance in between chains | see order data   |
|                      | Sound pressure level       | ≤ 70 dB (A)  |

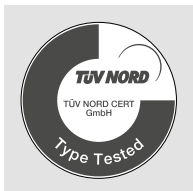


### In delivery

- 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       | <b>522747</b> |  |
| 500        | 1353   | 587     | KSA TWIN 500 S12 24V Z | E6/C-0 | 1       | <b>522757</b> |  |
| 600        | 1353   | 587     | KSA TWIN 600 S12 24V Z | E6/C-0 | 1       | <b>522767</b> |  |

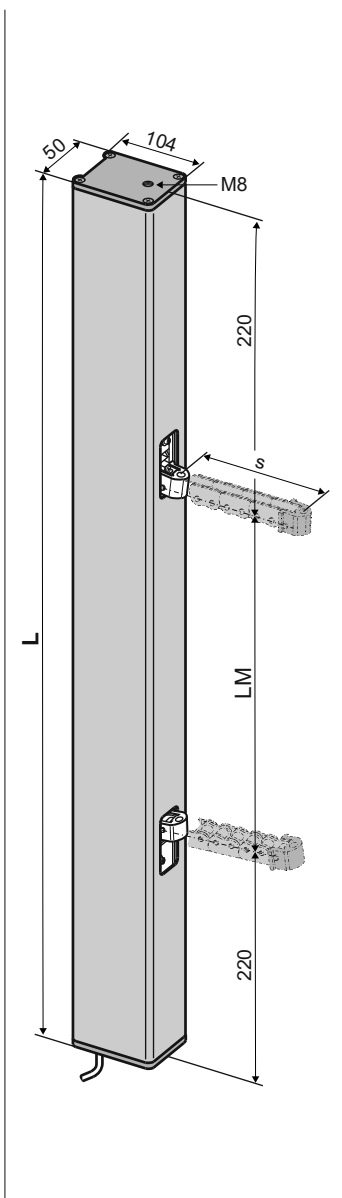
| OPTIONS  |          |               |  |
|--|----------|---------------|--|
| Special model  | PU/pcs.  | Part.-No.     |  |
| <b>Drive housing painted/powder coated in other RAL colours</b>        |          |               |  |
| <b>Lump sum for coating</b>  |          | <b>516030</b> |  |
| <b>Specify at order stage:</b>   | 1 – 20   | <b>516004</b> |  |
|  | 21 – 50  | <b>516004</b> |  |
|  | 51 – 100 | <b>516004</b> |  |
|  | from 101 | <b>516004</b> |  |
| <b>Plug solution:</b>  |          |               |  |
| <b>Wire Click</b> - 5 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup>  |          | <b>501252</b> |  |
| <b>Wire Click</b> - 10 m – non-halogen, grey – 5 x 0,5 mm <sup>2</sup> |          | <b>501253</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, 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

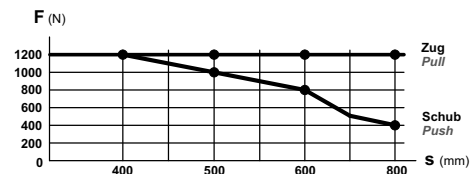
|                      |                 |   |
|----------------------|-----------------|---|
| <b>U<sub>N</sub></b> | Rated voltage   | 24 V DC (19 V ... 28 V)                     |
| <b>I<sub>N</sub></b> | Rated current   | 1,8 A                                       |
| <b>I<sub>A</sub></b> | Cut-off current | 2,4 A                                       |
| <b>P<sub>N</sub></b> | Rated power     | 43 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. | 1.200 N |
|----------------------|--------------------|---------|

|                      |                    |  |
|----------------------|--------------------|--|
| <b>F<sub>A</sub></b> | Pushing force max. |  |
|----------------------|--------------------|--|



|                      |               |                                  |
|----------------------|---------------|----------------------------------|
| <b>F<sub>H</sub></b> | Pullout force | 2 x 2.500 N (fastening depended) |
|----------------------|---------------|----------------------------------|

|  |       |                 |
|--|-------|-----------------|
|  | Chain | Stainless steel |
|--|-------|-----------------|

|  |                  |  |
|--|------------------|--|
|  | Connecting cable | non-halogen, grey- 5 x 0,5 mm <sup>2</sup> , ~ 5 m |
|--|------------------|--|

|          |       |   |
|----------|-------|---|
| <b>v</b> | Speed | $s \leq 400$ 8,0 mm/s  8,0 mm/s<br>$s > 400 - 600$ 12,0 mm/s  8,0 mm/s<br>$s > 600$ 13,5 mm/s  8,0 mm/s |
|----------|-------|---|

|          |        |              |
|----------|--------|--------------|
| <b>s</b> | Stroke | 400 – 800 mm |
|----------|--------|--------------|

|          |        |                |
|----------|--------|----------------|
| <b>L</b> | Length | see order data |
|----------|--------|----------------|

|           |                            |                |
|-----------|----------------------------|----------------|
| <b>LM</b> | 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       | <b>522140</b> |  |
| 500        | 837    | 397     | KSA D 500 S12 24V | E6/C-0 | 1       | <b>522150</b> |  |
| 600        | 837    | 397     | KSA D 600 S12 24V | E6/C-0 | 1       | <b>522160</b> |  |
| 800        | 942    | 502     | KSA D 800 S12 24V | E6/C-0 | 1       | <b>522180</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>    |  |
| <b>Specify at order stage:</b>                                  | 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>                           |          |                  |  |
| 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.  | <b>Part.-No.</b> |  |
| M-COM Configuration module for synchronised multi-drive systems | 1        | <b>524177</b>    |  |



| 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.

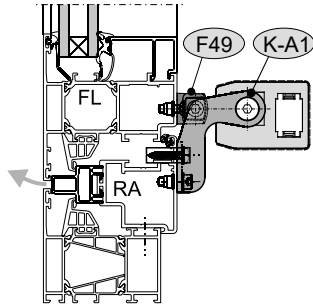
\*2 Sample values of the opening angle evaluated on the basis of FAB/FAH for inward opening windows with drives mounted at the main closing edge. For any other window heights, for outward opening windows and for windows with drives mounted at the side edges the opening angle will vary.

\*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.

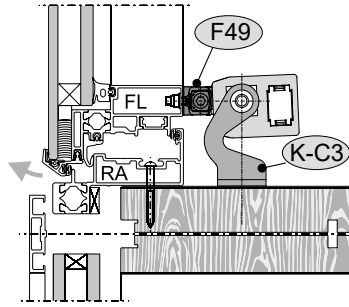
TYPICAL APPLICATIONS

1 RM, top hung, outward opening



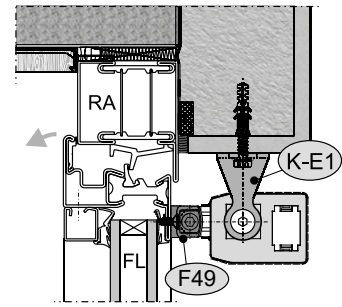
View on aluminium window

2 PR, top hung, outward opening



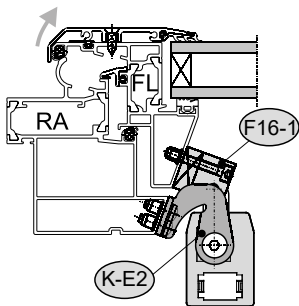
View on aluminium window

2 PR, bottom hung, outward opening



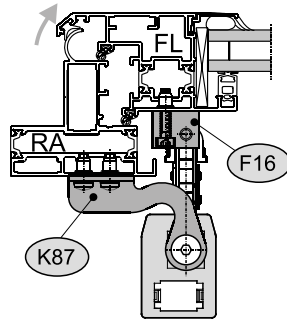
View on steel window

2 RM, roof



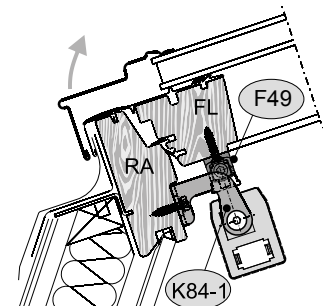
View on aluminium window

2 RM, roof



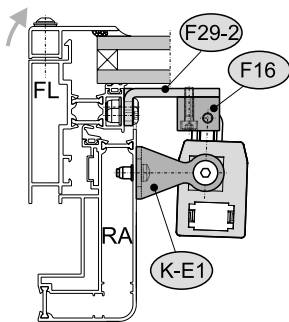
View on aluminium window

2 RM, roof



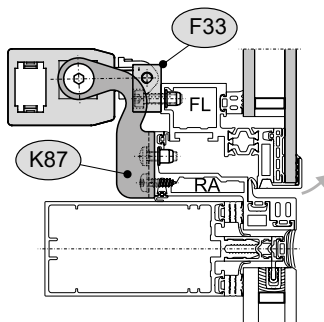
View on aluminium window

2 RM, roof



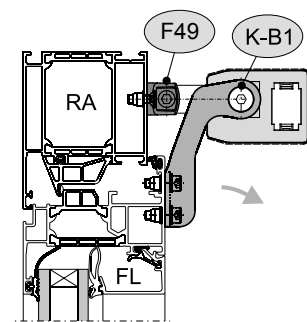
View on aluminium window

2 RM, top hung, outward opening



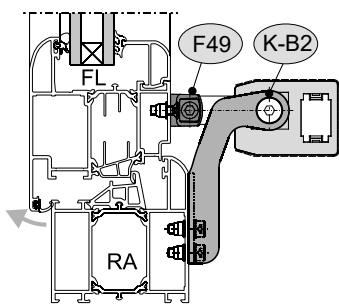
View on aluminium window

3 FM, bottom hung, inward opening



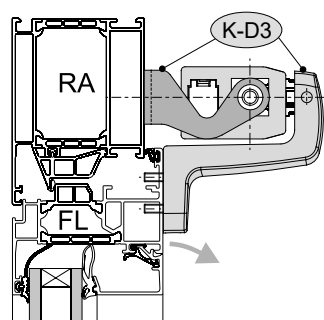
View on aluminium window

4 RM, top hung, outward opening



View on aluminium window

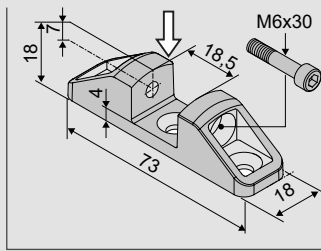
5 RM, bottom hung, inward opening



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**

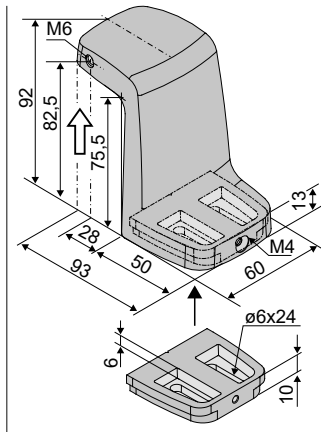
**Material / Finish**

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**

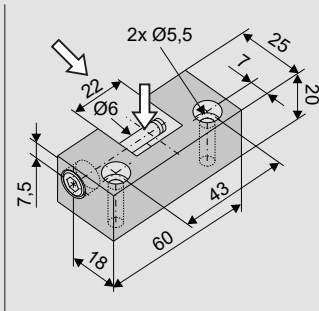
Cast aluminum, RAL 9006

**Feature / Equipment**

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

## CASEMENT BRACKETS

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

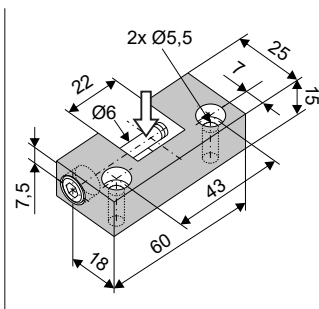
**Part.-No. 524204****Material/Finish**

aluminium  
(natural anodized)

**Feature/Equipment**

1x cylinder head screw  
M6x50

F33

**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**

Chain fixing in direction of the arrow

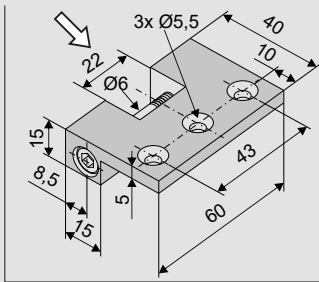
**Part.-No. 524203****Material/Finish**

aluminium  
(natural anodized)

**Feature/Equipment**

1x cylinder head screw  
M6x50

F38

**Application**

**Surface mounting** on the casement profile of outward opening friction hinged windows, for surface mounted drives **KSA** with **K-A1, K-B1, K87**

Chain fixing in direction of the arrow

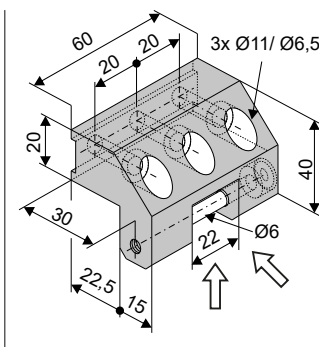
**Part.-No. 524199****Material/Finish**

aluminium  
(natural anodized)

**Feature/Equipment**

1x cylinder head screw  
M6x5

F39

**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**

Chain fixing in direction of the arrow

**Part.-No. 524295****Material/Finish**

aluminium  
(natural anodized)

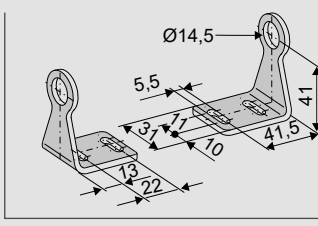
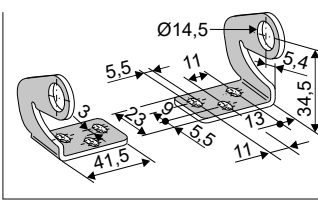
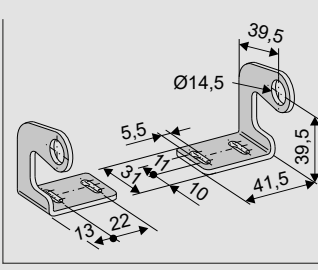
**Feature/Equipment**

1x cylinder head screw  
M6x50

### FRAME BRACKETS

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

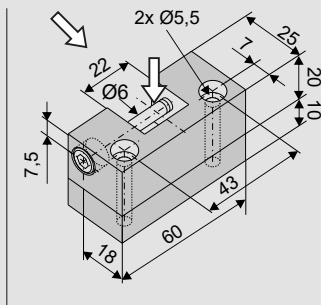
## FRAME BRACKETS

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

### SPECIFIC APPLICATIONS

#### ROOF WINDOWS | SCHÜCO AWS 57RO

**F16-1**



**Application**

**Surface mounting** on the case-ment profile of outward opening roof windows series **Schüco AWS 57RO**, for fixing of drives **KSA**

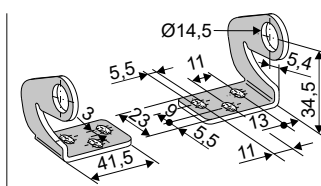
Chain fixing in direction of the arrow

**Part.-No. 155171**

**Material/Finish**  
aluminium  
(natural anodized)

**Feature/Equipment**  
1x cylinder head screw  
M6x50 with base plate

**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, F16-1, F33, F39, F49**

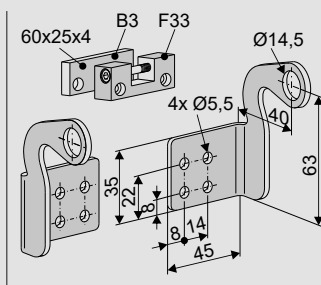
**Part.-No. 524066**

**Material/Finish**  
Stainless steel

**Feature/Equipment**  
1x right,  
1x left

#### FRICTION HINGED WINDOWS | SCHÜCO FW50

**K87**



**Application**

**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**)

**Part.-No. 524319**

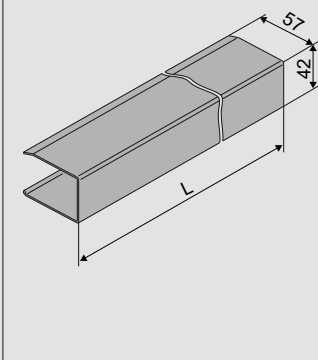
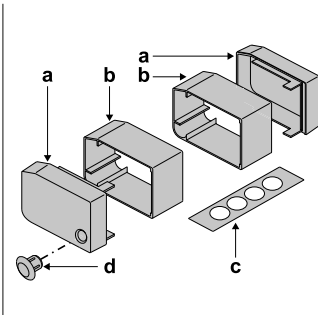
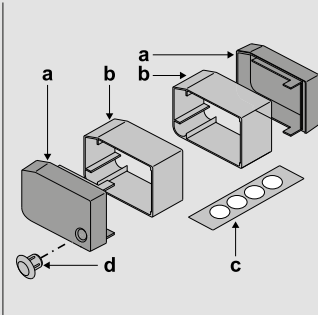
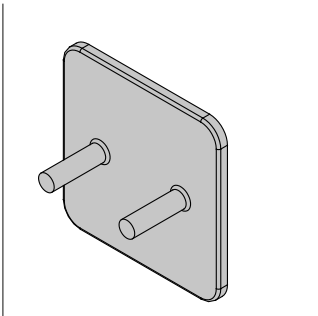
**Material/Finish**  
Stainless steel

**Feature/Equipment**  
1x right,  
1x left,  
incl. F33 + B3





### OPTIONAL ACCESSORIES

| Cover-profile Set   |  |   |  |  |
|---|--|---|--|--|
| <b>AP-KSA</b>  | <b>Application</b><br><b>Cover profile</b> for surface mounted drives <b>KSA</b> with frame bracket sets <b>K-A1, K-B1, K-B2, K-E2, K84-1</b> . Profile length adjustable to the length of the drives or of the casement | <b>Material/Finish</b><br>aluminium (natural anodized) + plastic (grey) |  |  |
|   | <b>L = 1,45 m</b><br>(length w/o end caps)   | <b>Part.-No. 524307</b><br>incl. end cap and mounting aid               |  |  |
|   | <b>L = 2,90 m</b><br>(length w/o end caps)   | <b>Part.-No. 524313</b><br>incl. end cap and mounting aid               |  |  |
|   | <b>L = customized</b><br>(Price per metre)   | <b>Part.-No. 524314</b><br>only profile                                 |  |  |
| <b>Assembly-set for cover profile (grey)</b>  |  |   |  |  |
|               | <b>Part.-No. 524300</b><br><b>Material/Finish</b><br>aluminium, plastic (grey)<br><b>Feature/Equipment</b><br>a. 2x end cap<br>b. 2x spacer<br>c. 4x stickers<br>d. 1x dummy plug  |   |  |  |
| <b>Assembly-set for cover profile (black)</b>   |  |   |  |  |
|              | <b>Part.-No. 524303</b><br><b>Material/Finish</b><br>aluminium, plastic (black)<br><b>Feature/Equipment</b><br>a. 2x end cap<br>b. 2x spacer<br>c. 4x stickers<br>d. 1x dummy plug                                       |   |  |  |
| <b>Chain unlocking key</b>  |  |   |  |  |
|              | <b>Application</b><br>Manual unlocking of the drive chain for mounting of drives KSA   | <b>Part.-No. 524210</b><br><b>Material/Finish</b><br>plastic            |  |  |

OPTIONAL ACCESSORIES

| Main control unit   |   |  |                  |  |
|---|---|--|------------------|--|
| <p><b>M-COM</b></p>          | <p><b>Application</b><br/> <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</p> <p><b>Rated voltage:</b><br/>24 V DC (19 V ... 28 V)<br/> <b>Current consumption:</b> &lt;12 mA<br/> <b>Drive type:</b> S12<br/> <b>Protection rating</b><br/>IP30 rubber envelope</p>       | <p><b>Part.-No. 524177</b></p> <p><b>Ambient temperature range:</b> 0 °C ... + 70 °C<br/> <b>Dimensions</b><br/>45 x 17 x 6 mm<br/> <b>Connecting wires</b><br/>3 wires 0,5 mm<sup>2</sup> x 50 mm<br/> <b>Feature/Equipment</b><br/>Printed circuit board with components and connection wires to be installed in connection box to be supplied on site</p> |                  |  |
| <p><b>M-COM® Click</b></p>  | <p><b>Application</b><br/> <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</p> <p><b>Rated voltage:</b><br/>24 V DC (19 V ... 28 V)<br/> <b>Current consumption:</b> &lt;12 mA<br/> <b>Drive type:</b> S12<br/> <b>Protection rating:</b> IP30</p>                          | <p><b>Part.-No. 524167</b></p> <p><b>Ambient temperature range:</b> -5 °C ... +70 °C<br/> <b>Dimensions:</b><br/>40 x 26 x 15 mm<br/> <b>Connection:</b><br/>for AUMÜLLER chain drives with <b>Wire Click</b><br/> <b>Equipment</b><br/>Tongs for removing the M-COM® Click</p>  |                  |  |
| Plug solution   |   |  |                  |  |
| <p><b>Wire Click</b></p>   | <p><b>Application</b><br/> <b>Wire Click:</b><br/>Unified plug solution for AUMÜLLER chain drives and AUMÜLLER folding arm drives.</p> <p><b>Rated voltage:</b><br/>24 V DC (19 V ... 28 V)<br/>230 V AC (± 20 %), max. 2 Vpp<br/> <b>Connecting cable:</b><br/>non-halogen, grey<br/>5 x 0,5 mm<sup>2</sup> (24V)<br/>6 x 0,75 mm<sup>2</sup> (230V)<br/> <b>Terminal:</b> to 1,5 mm<sup>2</sup></p> | <p><b>Feature/Equipment</b></p> <ul style="list-style-type: none"> <li>• Flexible cable length</li> <li>• Connect multiple drives in series connection</li> <li>• Torsion-plug</li> <li>• Locking hooks prevent withdrawal of the plug under tensile load</li> <li>• Strain relief according DIN EN 60335-1 by screwing the housing halves</li> </ul>        |                  |  |
|   |   | <b>VARIANTEN: 24V</b>  |                  |  |
|   |   | 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 |  |
|   |   | <b>VARIANTEN: 230V</b>   |                  |  |
|   |   | 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 |  |

Picture: 24V

### CASEMENT BRACKETS AND FRAME BRACKETS

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