

Catalogue

04/2009

HAUTAU GLT Drives

for wood, PVC, and aluminium elements



HAUTAU

HAUTAU Catalogue

**Building control technology
HAUTAU GLT Drives
04/2009**

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Labeling Drives

General information

The labeling of the drives always contains information on

- the **transmission unit** (stay, spindle or chain),
- the **rated voltage** (24 V DC, 230 V AC) and
- the **maximum stroke** or the **maximum opening width**.

Electric fitting stay



SBS 300 S SYN

| | | | |
 | | | | | synchronous
 | | | | | fast
 | | | | | **Stroke/opening width** in mm
 | | | | | **Fitting stay**
 | | | | | **Rated voltage** S = 24 V DC

Spindle drive



SA 60-750 SYN

| | | | |
 | | | | | synchronous
 | | | | | **Stroke/opening width** in mm
 | | | | | **max. tractive/compressive force x 10** in N
 | | | | | **Spindle drive**
 | | | | | **Rated voltage** S = 24 V DC, E = 230 V AC

Chain drive



SKA 60-750

| | | | |
 | | | | | **Stroke/opening width** in mm
 | | | | | **max. tractive/compressive force x 10** in N
 | | | | | **Chain drive**
 | | | | | **Rated voltage** S = 24 V DC, E = 230 V AC

PRIMAT^{compact}



PRIMAT-S^{compact}190

| | | | |
 | | | | | **Stroke/opening width** in mm,
 | | | | | A = outward opening
 | | | | | **Rated voltage** S = 24 V DC, E = 230 V AC

Electric fitting stay SBS

Device properties

- Stay opening widths 300 or 500 mm
- Large opening angles for side installation on tilt and top hung sashes
- Large opening angles for top/bottom installation on turn sashes
- Low space requirements of 40 - 50 mm on the frame
- Operation of two SBS on one sash with additional tandem control
- Optional synchronous version guaranteeing perfectly synchronous run by additional sync control system
- Suitable for inward and outward opening elements
- Perfect sealing combined with additional locking



Accessories

- Additional hinge for tilt, turn and top-hung sashes ①
- Sash bracket SBS with cap ②
- Z console 33.1, outward opening sash, including sash bracket ③
- Angle console 35.1, outward opening sash, including sash bracket SBS ④

Tools

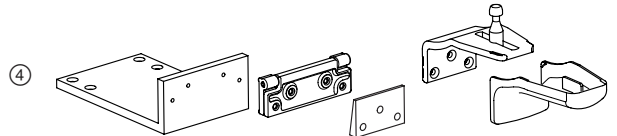
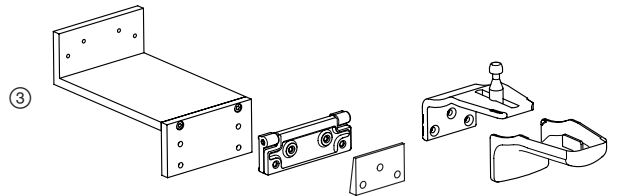
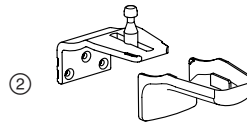
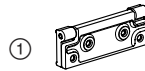
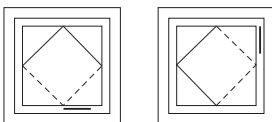
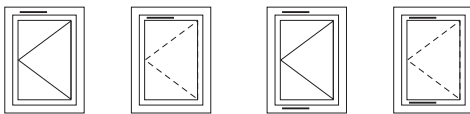
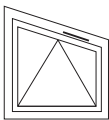
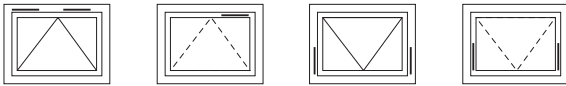
- SBS jig for tilt sashes, top installation
- SBS jig for tilt sashes, side installation, for top/bottom turn sashes
- SBS jig for outward opening sashes

Range of application

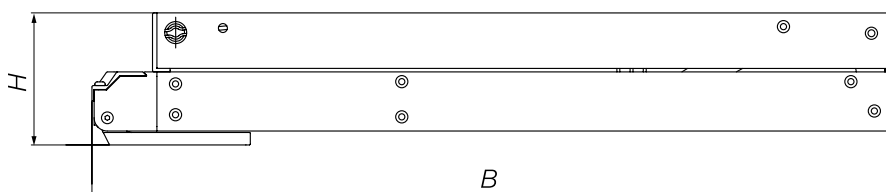
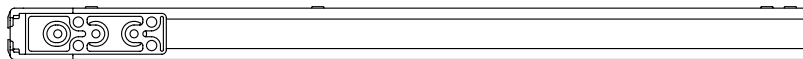
For tilt, top hung, turn, swing and rotating sashes made of wood, PVC, steel, aluminium and composite material

Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples



Electric fitting stay SBS



Technical specifications

| | SBS 300 S | SBS 300 S SYN | SBS 500 S | SBS 500 S SYN |
|-------------------------------|---------------------|--|---------------------|---------------------|
| Rated voltage (V) | 24 | 24 | 24 | 24 |
| Voltage tolerance range (%) | -20 / +30 | -20 / +30 | -20 / +30 | -20 / +30 |
| Remaining ripple (%) | 10 | 10 | 10 | 10 |
| Current consumption (A) | 0,9 | 0,9 | 0,9 | 0,9 |
| Starting current (A) | 3,7 | 3,7 | 3,7 | 3,7 |
| Compressive force (N) | 240 | 240 | 150 | 150 |
| Tractive force (N) | 240 | 240 | 150 | 150 |
| Locking force (N) | 250 | 250 | 250 | 250 |
| Stroke/opening width (in mm) | 300 | 300 | 500 | 500 |
| Opening mechanism | stay | stay | stay | stay |
| Running period | 30s | 30s | 45s | 45s |
| Duty cycle | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off |
| Ambient temperature | -5 °C to +75 °C | -5 °C to +75 °C | -5 °C to +75 °C | -5 °C to +75 °C |
| Protection class | IP54 | IP54 | IP54 | IP54 |
| Cutoff open | | Integrated electronic overload cutoff | | |
| Cutoff closed | | Integrated electronic overload cutoff | | |
| Connection technology | | plug-in screw terminal, max. 1 mm ² | | |
| Dimensions (B x H x T in mm) | 546 x 90 x 35 | 546 x 90 x 35 | 546 x 90 x 35 | 546 x 90 x 35 |
| Housing | aluminium | aluminium | aluminium | aluminium |
| Scope of delivery | without accessories | without accessories | without accessories | without accessories |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 |

Item code SBS

| | | | | |
|----------|--------|--------|--------|--------|
| EV 1 | 207121 | 207109 | 207115 | 207103 |
| RAL 9016 | 207124 | 207112 | 207118 | 207106 |

Item code accessories

| | |
|--|--------|
| Additional hinge | 161389 |
| SBS sash bracket with cap, RAL9005 | 188102 |
| SBS sash bracket with cap, RAL 9016 | 188099 |
| SBS sash bracket with cap, RAL 9006 | 225331 |
| Z console 33.1 with sash bracket, EV 1 | 188096 |
| Z console 33.1 with sash bracket, RAL 9016 | 188093 |
| Angle console 35.1 with sash bracket, EV 1 | 188123 |
| Angle console 35.1 with sash bracket, RAL 9016 | 188120 |
| SBS jig for tilt sashes, top installation | 188759 |
| SBS jig for tilt sashes, side installation, for top/bottom turn sashes | 161098 |
| SBS jig for outward opening sashes | 162441 |

Spindle drives SA 60

Device properties

- Opening width of up to 1000 mm
- Max. compressive and tractive force 600 N
- Maintenance-free
- Chromed push rod
- Integrated overload cutoff

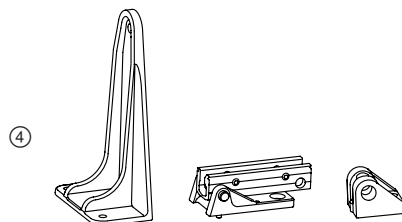
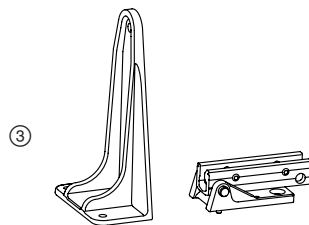
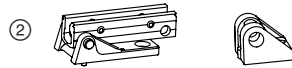
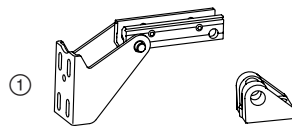
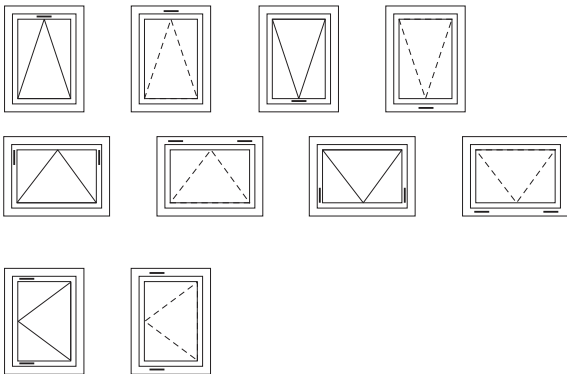
Accessories

- Frame console 2 and sash bracket ①
- Sliding console 2 and sash bracket ②
- High console 1 and sliding consoles for large opening widths ③
- High console for outward opening sashes and large opening widths ④

Range of application

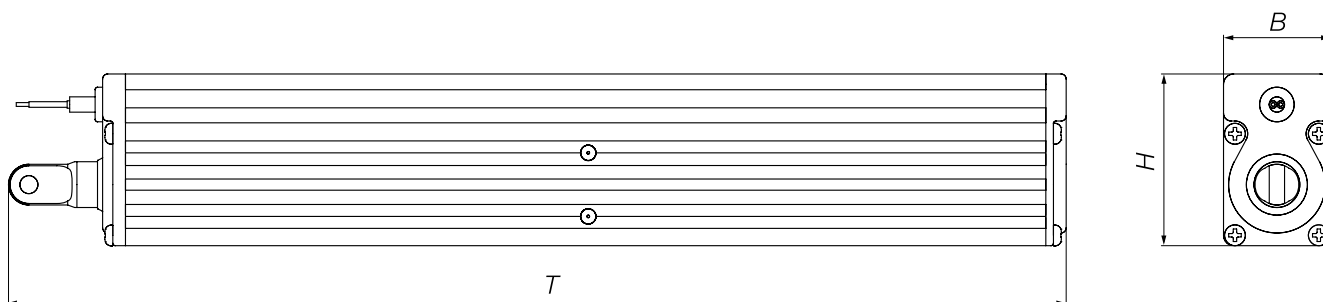
For sashes made of wood, PVC, aluminium and composite material.
Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples





Spindle drives SA 60



Technical specifications

| | SA 60-300 | SA 60-500 | SA 60-750 | SA 60-1000 |
|-------------------------------|--|---------------------------------------|------------------|------------------|
| Rated voltage (V) | 24 | 24 | 24 | 24 |
| Voltage tolerance range (%) | -20 / +30 | -20 / +30 | -20 / +30 | -20 / +30 |
| Remaining ripple (%) | 10 | 10 | 10 | 10 |
| Current consumption (A) | 0,6 | 0,6 | 0,6 | 0,6 |
| Starting current (A) | 3,1 | 3,1 | 3,1 | 3,1 |
| Compressive force (N) | 600 | 600 | 600 | 600 |
| Tractive force (N) | 600 | 600 | 600 | 600 |
| Locking force (N) | 2000 | 2000 | 2000 | 2000 |
| Stroke/opening width (in mm) | 300 | 500 | 750 | 1000 |
| Opening mechanism | spindle | spindle | spindle | spindle |
| Running period | 22s / 100 mm | 22s / 100 mm | 22s / 100 mm | 22s / 100 mm |
| Duty cycle | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off |
| Ambient temperature | -5 °C to +75 °C | -5 °C to +75 °C | -5 °C to +75 °C | -5 °C to +75 °C |
| Protection class | IP54 | IP54 | IP54 | IP54 |
| Cutoff open | | Integrated electronic overload cutoff | | |
| Cutoff closed | | Integrated electronic overload cutoff | | |
| Connection technology | silicon lead wire 2 x 0,75 mm ² , 1,5 m | | | |
| Dimensions (B x H x T in mm) | 42 x 67,5 x 579 | 42 x 67,5 x 779 | 42 x 67,5 x 1029 | 42 x 67,5 x 1349 |
| Housing | aluminium | aluminium | aluminium | aluminium |
| Scope of delivery | without accessories | | | |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 |

Item code SA

| | | | | |
|----------|--------|--------|--------|--------|
| EV 1 | 167690 | 167696 | 167702 | 168647 |
| RAL 9016 | 167693 | 167699 | 167705 | 168650 |

other strokes on request

Item code accessories

| | |
|---|--------|
| Frame console 2 and sash bracket, RAL 9006 | 163560 |
| Frame console 2 and sash bracket, RAL 9016 | 163563 |
| Sliding console 2 and sash bracket, RAL 9006 | 163569 |
| Sliding console 2 and sash bracket, RAL 9016 | 163572 |
| High console 1 and sliding console, RAL 9006 | 137288 |
| High console 1 and sliding console, RAL 9016 | 137291 |
| High console for outward opening sash, RAL 9006 | 162231 |
| High console for outward opening sash, RAL 9016 | 162234 |

Spindle drives SA 60 SYN / SA 60 VdS

Device properties

- Opening width of up to 1000 mm
- Max. compressive and tractive force 600 N
- Maintenance-free
- Chromed push rod
- Integrated limit stop and overload cutoff
- VdS-certified special versions

Accessories

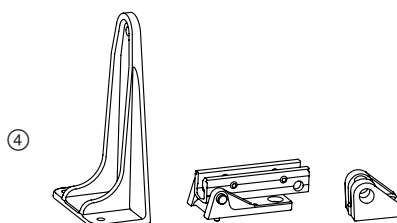
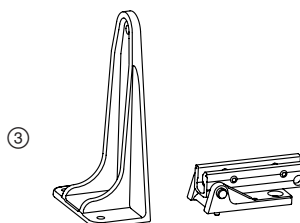
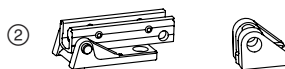
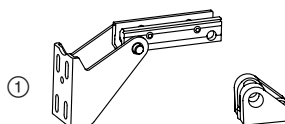
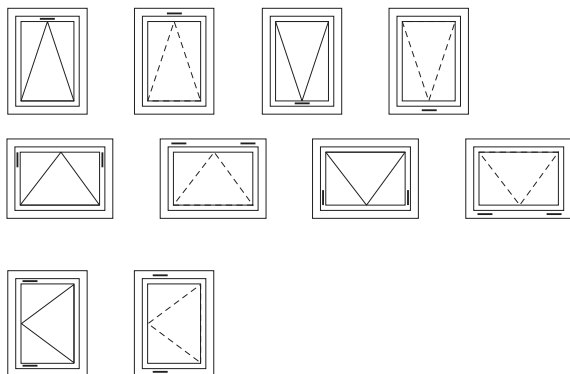
- Frame console 2 and sash bracket ①
- Frame console 2 VdS and sash bracket (for VdS)
- Sliding console 2 and sash bracket ②
- Sliding console 2 VdS and sash bracket (for VdS)
- High console 1 and sliding console for large opening widths ③
- High console 1 for outward opening sashes and large opening ④

Range of application

For sashes made of wood, PVC, aluminium and composite material.

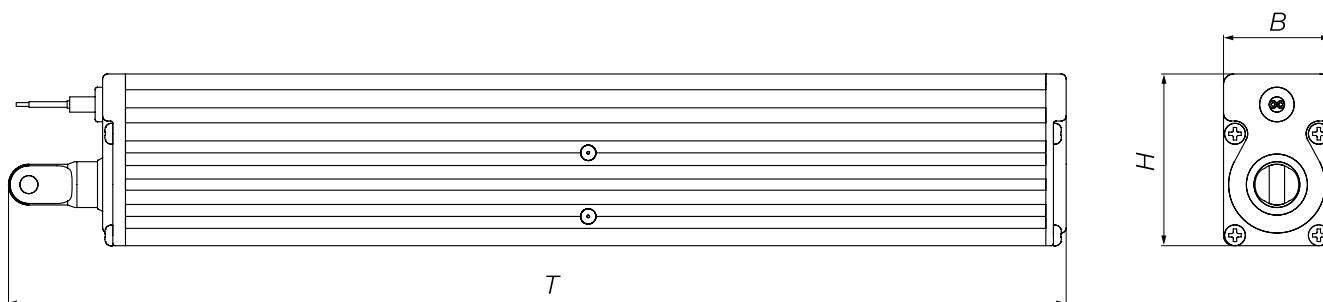
Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples





Spindle drives SA 60 SYN / SA 60 VdS



Technical specifications

| | SA 60-750 SYN | SA 60-1000 SYN | SA 60-300 VdS | SA 60-500 VdS |
|-------------------------------|---|---------------------|--|---------------------|
| Rated voltage (V) | 24 | 24 | 24 | 24 |
| Voltage tolerance range (%) | -20 / +30 | -20 / +30 | -20 / +30 | -20 / +30 |
| Remaining ripple (%) | 10 | 10 | 10 | 10 |
| Current consumption (A) | 0,6 | 0,6 | 1,25 | 1,25 |
| Starting current (A) | 3,1 | 3,1 | 3,1 | 3,1 |
| Compressive force (N) | 600 | 600 | 600 | 600 |
| Tractive force (N) | 600 | 600 | 600 | 600 |
| Locking force (N) | 2000 | 2000 | 2000 | 2000 |
| Stroke/opening width (in mm) | 750 | 1000 | 300 | 500 |
| Opening mechanism | spindle | spindle | spindle | spindle |
| Running period | 22s / 100 mm | 22s / 100 mm | 11s / 100 mm | 22s / 100 mm |
| Duty cycle | 60s on / 60s off | 60s on / 60s off | 60s on / 120s off | 60s on / 120s off |
| Ambient temperature | -5 °C to +75 °C | -5 °C to +75 °C | -5 °C to +75 °C | -5 °C to +75 °C |
| Protection class | IP54 | IP54 | IP54 | IP54 |
| Cutoff open | External sync control system required | | limit switch | limit switch |
| Cutoff closed | External sync control system required | | limit switch | limit switch |
| Connection technology | Lead wire 4 x 0,5 mm ² , 3,0 m | | silicon lead wire 2 x 0,75 mm ² , 1,5 m | |
| Dimensions (B x H x T in mm) | 42 x 67,5 x 1029 | 42 x 67,5 x 1349 | 42 x 67,5 x 579 | 42 x 67,5 x 779 |
| Housing | aluminium | aluminium | aluminium | aluminium |
| Scope of delivery | without accessories | without accessories | without accessories | without accessories |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 |

Item code

| | | | | |
|----------|--------|--------|--------|--------|
| EV 1 | 168674 | 168680 | 167672 | 167678 |
| RAL 9016 | 168677 | 168683 | 167675 | 167681 |

other strokes on request

Item code accessories

| | |
|--|--------|
| Frame console 2 and sash bracket, RAL 9006 | 163560 |
| Frame console 2 and sash bracket, RAL 9016 | 163563 |
| Frame console 2 VdS and sash bracket, RAL 9006 | 175113 |
| Frame console 2 VdS and sash bracket, RAL 9016 | 175116 |
| Sliding console 2 and sash bracket, RAL 9006 | 163569 |
| Sliding console 2 and sash bracket, RAL 9016 | 163572 |
| Sliding console 2 VdS and sash bracket, RAL 9006 | 175119 |
| Sliding console 2 VdS and sash bracket, RAL 9016 | 175122 |
| High console 1 and sliding console, RAL 9006 | 137288 |
| High console 1 and sliding console, RAL 9016 | 137291 |
| High console for outward opening sash, RAL 9006 | 162231 |
| High console for outward opening sash, RAL 9016 | 162234 |

Spindle drives SA 100

Device properties

- Opening width of up to 750 mm
- Max. compressive and tractive force 1000 N
- Maintenance-free
- Chromed push rod
- Integrated overload cutoff

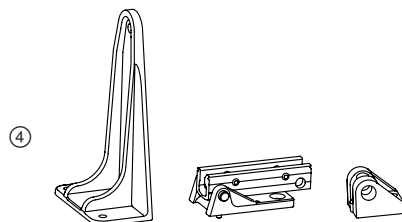
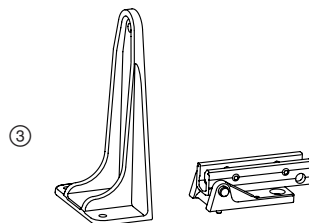
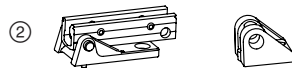
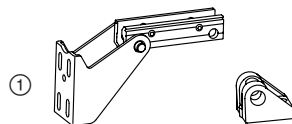
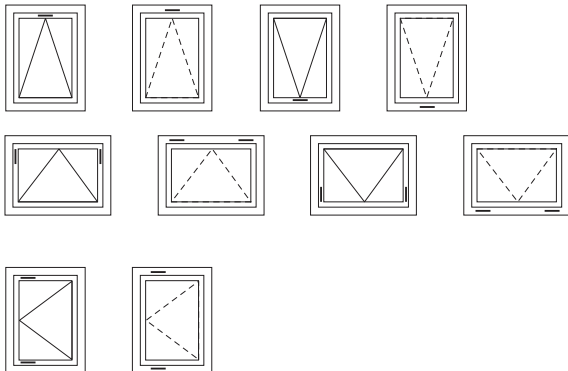
Accessories

- Frame console 2 and sash bracket ①
- Sliding console 2 and sash bracket ②
- High console 1 and sliding consoles for large opening widths ③
- High console for outward opening sashes and large opening widths ④

Range of application

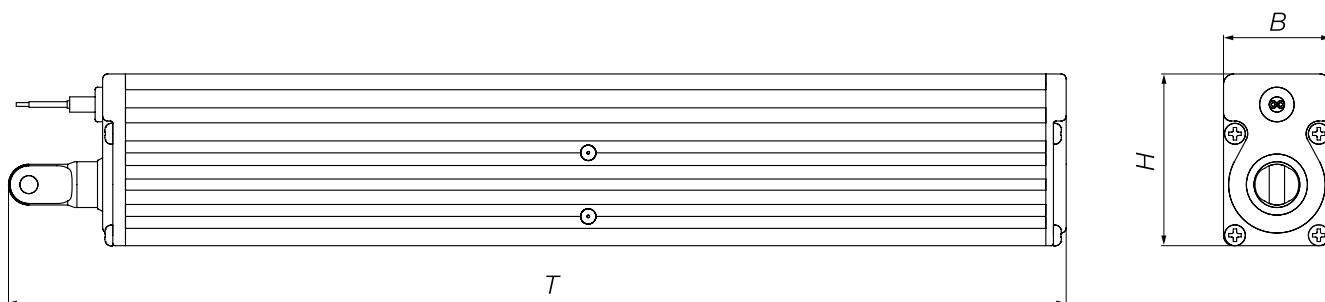
For sashes made of wood, PVC, aluminium and composite material.
Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples





Spindle drives SA 100



Technical specifications

| | SA 100-300 | SA 100-500 | SA 100-750 | SA 100-750 SYN |
|-------------------------------|--|-----------------------|---|---------------------|
| Rated voltage (V) | 24 | 24 | 24 | 24 |
| Voltage tolerance range (%) | -20 / +30 | -20 / +30 | -20 / +30 | -20 / +30 |
| Remaining ripple (%) | 10 | 10 | 10 | 10 |
| Current consumption (A) | 1,0 | 1,0 | 1,0 | 1,0 |
| Starting current (A) | 3,2 | 3,2 | 3,2 | 3,2 |
| Compressive force (N) | 1000 | 1000 | 1000 | 1000 |
| Tractive force (N) | 1000 | 1000 | 1000 | 1000 |
| Locking force (N) | 2000 | 2000 | 2000 | 2000 |
| Stroke/opening width (in mm) | 300 | 500 | 750 | 750 |
| Opening mechanism | spindle | spindle | spindle | spindle |
| Running period | 25s / 100 mm | 25s / 100 mm | 25s / 100 mm | 25s / 100 mm |
| Duty cycle | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off |
| Ambient temperature | -5 °C to +75 °C | -5 °C to +75 °C | -5 °C to +75 °C | -5 °C to +75 °C |
| Protection class | IP54 | IP54 | IP54 | IP54 |
| Cutoff open | | Integrated electronic | | External |
| Cutoff closed | | overload cutoff | | sync control system |
| Connection technology | silicon lead wire 2 x 0,75 mm ² , 1,5 m | | lead wire 4 x 0,5 mm ² , 3,0 m | |
| Dimensions (B x H x T in mm) | 42 x 67,5 x 579 | 42 x 67,5 x 779 | 42 x 67,5 x 1099 | 42 x 67,5 x 1099 |
| Housing | aluminium | aluminium | aluminium | aluminium |
| Scope of delivery | without accessories | without accessories | without accessories | without accessories |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 |

Item code

| | | | | |
|----------|--------|--------|--------|--------|
| EV 1 | 167714 | 167720 | 167726 | 168704 |
| RAL 9016 | 167717 | 167723 | 167729 | 168707 |

other strokes on request

Item code accessories

| | |
|---|--------|
| Frame console 2 and sash bracket, RAL 9006 | 163560 |
| Frame console 2 and sash bracket, RAL 9016 | 163563 |
| Sliding console 2 and sash bracket, RAL 9006 | 163569 |
| Sliding console 2 and sash bracket, RAL 9016 | 163572 |
| High console 1 and sliding console, RAL 9006 | 137288 |
| High console 1 and sliding console, RAL 9016 | 137291 |
| High console for outward opening sash, RAL 9006 | 162231 |
| High console for outward opening sash, RAL 9016 | 162234 |

Spindle drives SA 150

Device properties

- Opening width of up to 750 mm
- Max. compressive and tractive force 1500 N
- Maintenance-free
- Chromed push rod
- Integrated limit stop and overload cutoff

Accessories

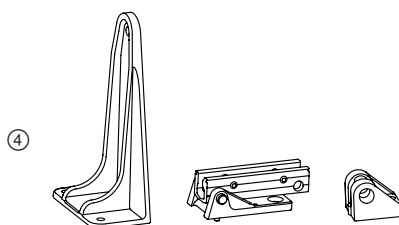
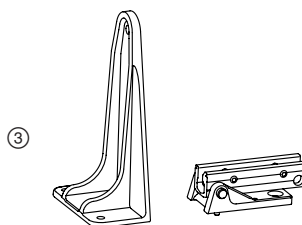
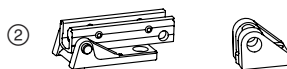
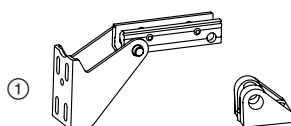
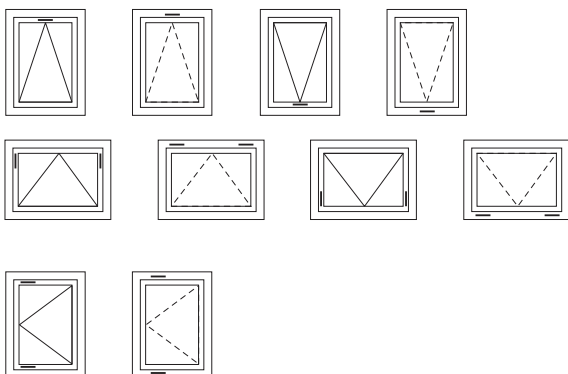
- Frame console 2 and sash bracket ①
- Sliding console 2 and sash bracket ②
- High console 1 and sliding consoles for large opening widths ③
- High console for outward opening sashes and large opening widths ④

Range of application

For sashes made of wood, PVC, aluminium and composite material.

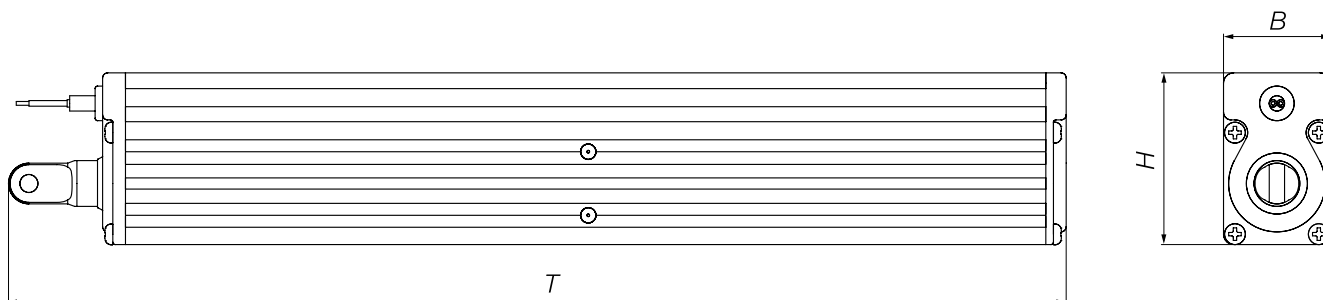
Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples





Spindle drives SA 150



Technical specifications

| | SA 150-300 | SA 150-500 | SA 150-750 | SA 150-300 SYN | SA 150-500 SYN | SA 150-750 SYN |
|-------------------------------|--|---------------------|---------------------|---|---------------------|---------------------|
| Rated voltage (V) | 24 | 24 | 24 | 24 | 24 | 24 |
| Voltage tolerance range (%) | -20 / +30 | -20 / +30 | -20 / +30 | -20 / +30 | -20 / +30 | -20 / +30 |
| Remaining ripple (%) | 10 | 10 | 10 | 10 | 10 | 10 |
| Current consumption (A) | 1,7 | 1,7 | 1,7 | 1,7 | 1,7 | 1,7 |
| Starting current (A) | 8,0 | 8,0 | 8,0 | 8,0 | 8,0 | 8,0 |
| Compressive force (N) | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 |
| Tractive force (N) | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 |
| Locking force (N) | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |
| Stroke/opening width (in mm) | 300 | 500 | 750 | 300 | 500 | 750 |
| Opening mechanism | spindle | spindle | spindle | spindle | spindle | spindle |
| Running period | 20s / 100 mm | 20s / 100 mm | 20s / 100 mm | 20s / 100 mm | 20s / 100 mm | 20s / 100 mm |
| Duty cycle | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off |
| Ambient temperature | -5 °C to +75 °C | -5 °C to +75 °C | -5°C to +75°C | -5 °C to +75 °C | -5 °C to +75 °C | -5 °C to +75 °C |
| Protection class | IP54 | IP54 | IP54 | IP54 | IP54 | IP54 |
| Cutoff open | | | | | | limit switch |
| Cutoff closed | | | | | | limit switch |
| Connection technology | silicon lead wire 2 x 0,75 mm ² , 1,5 m | | | lead wire 4 x 0,5 mm ² , 3,0 m | | |
| Dimensions (B x H x T in mm) | 42 x 67,5 x 579 | 42 x 67,5 x 779 | 42 x 67,5 x 1099 | 42 x 67,5 x 579 | 42 x 67,5 x 779 | 42 x 67,5 x 1099 |
| Housing | aluminium | aluminium | aluminium | aluminium | aluminium | aluminium |
| Scope of delivery | without accessories | without accessories | without accessories | without accessories | without accessories | without accessories |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 |

Item code

| | | | | | | |
|----------|--------|--------|--------|--------|--------|--------|
| EV 1 | 174127 | 174139 | 174151 | 174133 | 174145 | 174157 |
| RAL 9016 | 174130 | 174142 | 174154 | 174136 | 174148 | 174160 |

other strokes on request

Item code accessories

| | |
|---|--------|
| Frame console 2 and sash bracket, RAL 9006 | 163560 |
| Frame console 2 and sash bracket, RAL 9016 | 163563 |
| Sliding console 2 and sash bracket, RAL 9006 | 163569 |
| Sliding console 2 and sash bracket, RAL 9016 | 163572 |
| High console 1 and sliding console, RAL 9006 | 137288 |
| High console 1 and sliding console, RAL 9016 | 137291 |
| High console for outward opening sash, RAL 9006 | 162231 |
| High console for outward opening sash, RAL 9016 | 162234 |

Chain drives SKA 20

Device properties

- Opening width of up to 498 mm
- Max. compressive and tractive force 200 N
- For concealed and surface-mounted installation
- Low installation depth
- Maintenance-free stainless steel chain
- Integrated limit stop and overload cutoff
- Operation of 2 drives with additional tandem control
- Including sash bracket ①

Accessories

- Tilt console SKA 20 ② with packers ③

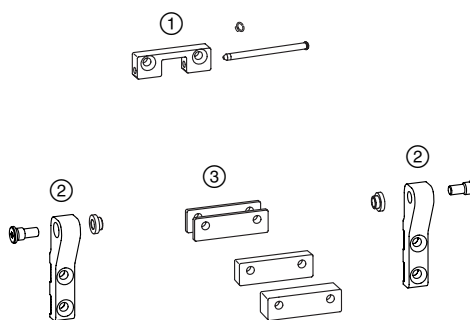
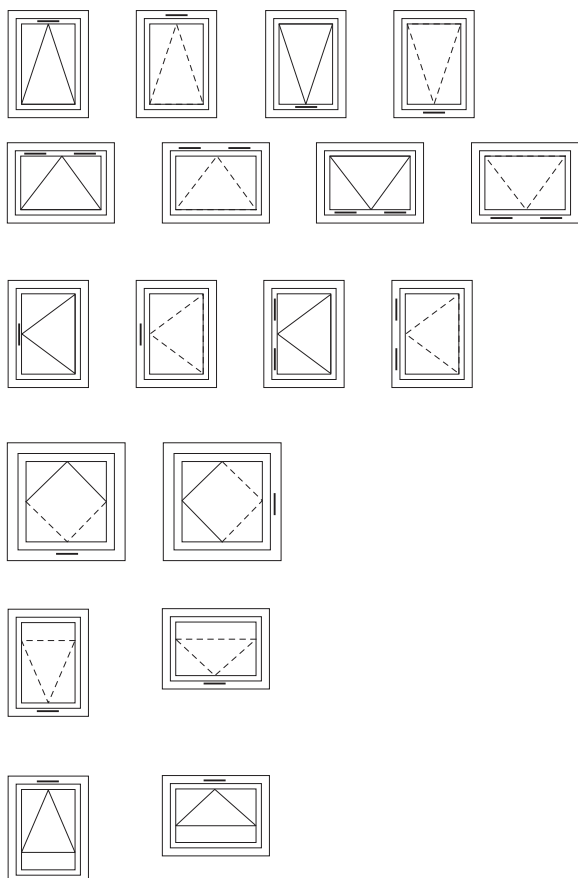
Range of application

For sashes made of timber, PVC, aluminium, steel, and composite material.

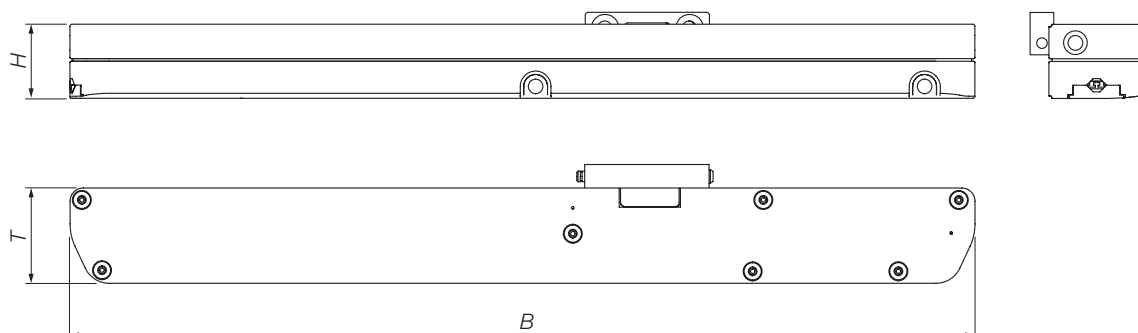
Suitable for smoke and heat exhaust as well as ventilation systems.



Installation examples



Chain drives SKA 20



Technical specifications

| | SKA 20-118 | SKA 20-213 | SKA 20-308 | SKA 20-403 | SKA 20-498 |
|-------------------------------|---|------------------------|------------------------|------------------------|------------------------|
| Rated voltage (V) | 24 | 24 | 24 | 24 | 24 |
| Voltage tolerance range (%) | -10 / + 30 | -10 / + 30 | -10 / + 30 | -10 / + 30 | -10 / + 30 |
| Remaining ripple (%) | 15 | 15 | 15 | 15 | 15 |
| Current consumption (A) | 0,7 | 0,7 | 0,7 | 0,7 | 0,7 |
| Starting current (A) | 1,1 | 1,1 | 1,1 | 1,1 | 1,1 |
| Compressive force (N) | 200 | 200 | 200 | 100 | 100 |
| Tractive force (N) | 200 | 200 | 200 | 200 | 200 |
| Locking force (N) | 3000 | 3000 | 3000 | 3000 | 3000 |
| Stroke/opening width (in mm) | 118 | 213 | 308 | 403 | 498 |
| Opening mechanism | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain |
| Running period | 18s / 100mm | 18s / 100mm | 18s / 100mm | 18s / 100mm | 18s / 100mm |
| Duty cycle | 60s on/120s off | 60s on/120s off | 60s on/120s off | 60s on/120s off | 60s on/120s off |
| Ambient temperature | 0°C to +70°C | 0°C to +70°C | 0°C to +70°C | 0°C to +70°C | 0°C to +70°C |
| Protection class | IP20 | IP20 | IP20 | IP20 | IP20 |
| Cutoff open | limit switch | limit switch | limit switch | limit switch | limit switch |
| Cutoff closed | Integrated electronic overload cutoff | | | | |
| Connection technology | 4 pole plug-in screw terminal, max. 1 mm ² | | | | |
| Dimensions (W x H x D in mm) | 342 x 28 x 36 | 342 x 28 x 36 | 342 x 28 x 36 | 442 x 28 x 36 | 442 x 28 x 36 |
| Housing | zinc mould | zinc mould | zinc mould | zinc mould | zinc mould |
| Scope of delivery | including sash bracket | including sash bracket | including sash bracket | including sash bracket | including sash bracket |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 |

Item code

| | | | | | |
|----------|--------|--------|--------|--------|--------|
| RAL 9006 | 226645 | 226648 | 226651 | 226654 | 226657 |
| RAL 9016 | 226660 | 226663 | 226666 | 226669 | 226672 |

other strokes on request

Item code accessories

| | |
|-------------------------------|--------|
| Tilt console SKA 20, RAL 9006 | 226003 |
| Tilt console SKA 20, RAL 9016 | 226000 |

Chain drives SKA 30

Device properties

- Opening width of up to 810 mm
- Max. compressive and tractive force 300 N
- Version for concealed installation available on request
- Maintenance-free stainless steel chain
- Integrated limit stop and overload cutoff

Accessories

- SKA/EKA 30 tilt console KF0/15 + sash bracket ①
- SKA/EKA 30 tilt console KF7 + sash bracket ②
- SKA/EKA 30 lowering tilt console SK0/15 + sash bracket ③
- SKA/EKA 30 roof window console DF + sash bracket ④
- A Support SKA 30 ⑤

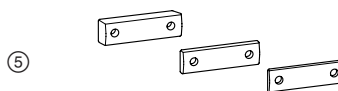
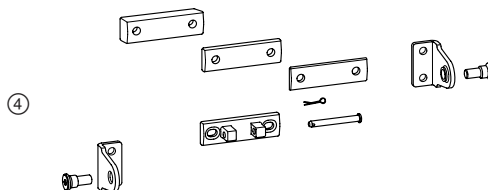
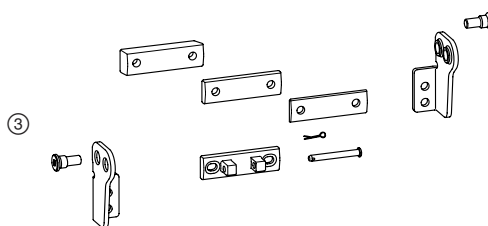
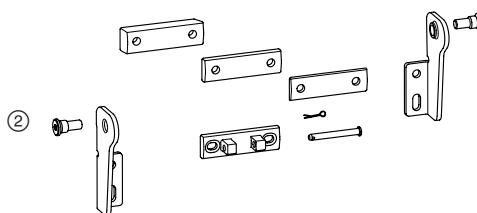
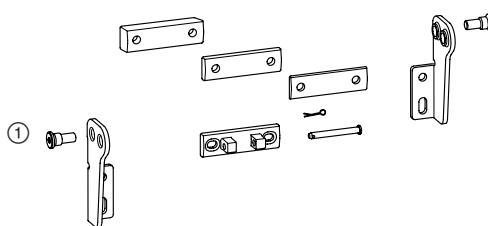
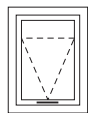
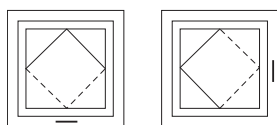
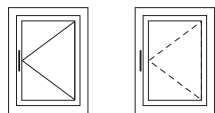
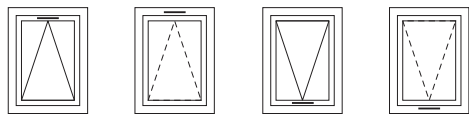
Range of application

For sashes made of wood, PVC, aluminium, steel and composite material.

Suitable for smoke and heat exhaust as well as ventilation systems.

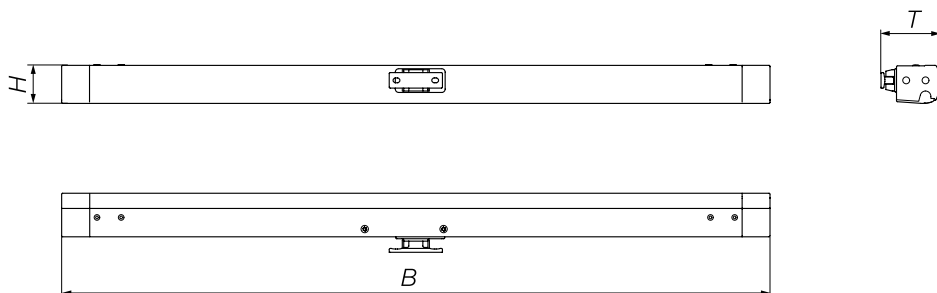


Installation examples





Chain drives SKA 30



Technical specifications

| | SKA 30-327 | SKA 30-419 | SKA 30-511 | SKA 30-603 | SKA30-810 |
|-------------------------------|---------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Rated voltage (V) | 24 | 24 | 24 | 24 | 24 |
| Voltage tolerance range (%) | -10 / +25 | -10 / +25 | -10 / +25 | -10 / +25 | -10 / +25 |
| Remaining ripple (%) | 35 | 35 | 35 | 35 | 35 |
| Current consumption (A) | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 |
| Starting current (A) | 2,1 | 2,1 | 2,1 | 2,1 | 2,6 |
| Compressive force (N) | 300 | 300 | 300 | 300 | 100 |
| Tractive force (N) | 300 | 300 | 300 | 300 | 250 |
| Locking force (N) | 3000 | 3000 | 3000 | 3000 | 3000 |
| Stroke/opening width (in mm) | 327 | 419 | 511 | 603 | 810 |
| Opening mechanism | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain |
| Running period | 11s / 100 mm | 11s / 100 mm | 11s / 100 mm | 11s / 100 mm | 7s / 100 mm |
| Duty cycle | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off |
| Ambient temperature | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C |
| Protection class | IP20 | IP20 | IP20 | IP20 | IP20 |
| Cutoff open | limit switch | limit switch | limit switch | limit switch | limit switch |
| Cutoff closed | Integrated electronic overload cutoff | | | | |
| Connection technology | plug-in screw terminal, max. 1 mm | | | | |
| Dimensions (B x H x T in mm) | 604 x 45 x 39 | 732 x 45 x 39 | 796 x 45 x 39 | 924 x 45 x 39 | 924 x 45 x 39 |
| Housing | aluminium | aluminium | aluminium | aluminium | aluminium |
| Scope of delivery | with accessories | with accessories | with accessories | with accessories | with accessories |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 |

Item code

| | | | | | |
|----------|--------|--------|--------|--------|--------|
| RAL 9006 | 204478 | 204484 | 204490 | 204496 | 204502 |
| RAL 9016 | 204481 | 204487 | 204493 | 204499 | 204505 |

other strokes on request

Item code accessories

| | |
|---|--------|
| SKA/EKA 30 tilt console KF0/15 + sash bracket, RAL 9006 | 204460 |
| SKA/EKA 30 tilt console KF0/15 + sash bracket, RAL 9016 | 204463 |
| SKA/EKA 30 tilt console KF7 + sash bracket, RAL 9006 | 204466 |
| SKA/EKA 30 tilt console KF7 + sash bracket, RAL 9016 | 204469 |
| SKA/EKA 30 lowering tilt console SK + sash bracket, RAL 9006 | 205843 |
| SKA/EKA 30 lowering tilt console SK + sash bracket, RAL 9016 | 205840 |
| SKA/EKA 30 roof window console DF + sash bracket, RAL 9006 | 204472 |
| SKA/EKA 30 roof window console DF + sash bracket, RAL 9016 | 204475 |
| SKA/EKA 30 mounting on frame console + sash bracket, RAL 9006 | 209783 |
| SKA/EKA 30 mounting on frame console + sash bracket, RAL 9016 | 209786 |
| Accessories support | 206740 |

Chain drives SKA 60 Twin

Device properties

- Opening width of up to 810 mm
- Max. compressive and tractive force 600 N
- Maintenance-free stainless steel chain
- Integrated limit stop and overload cutoff

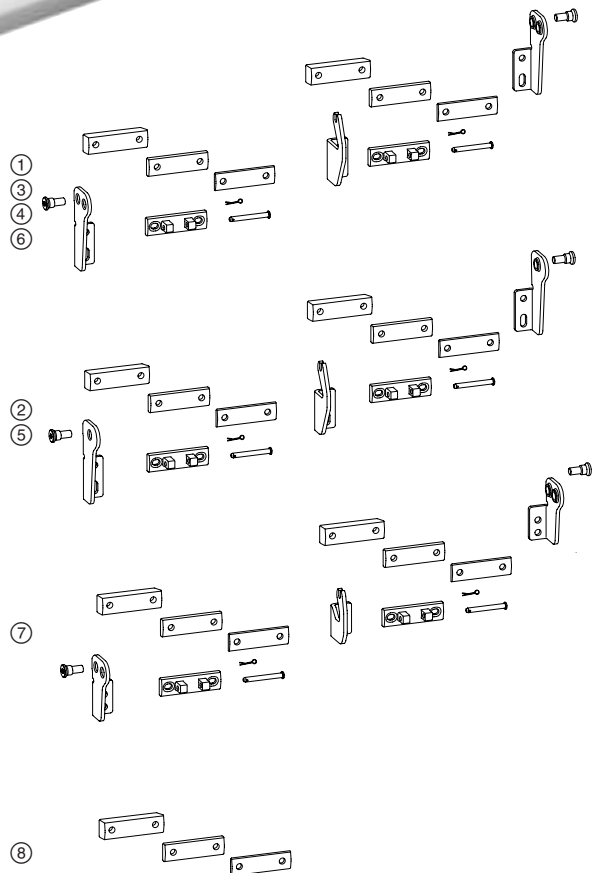
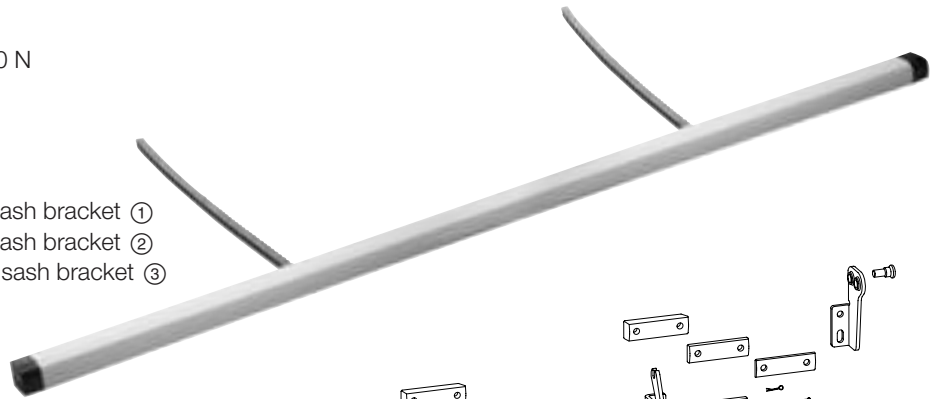
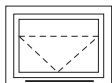
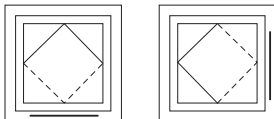
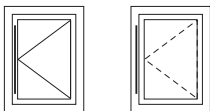
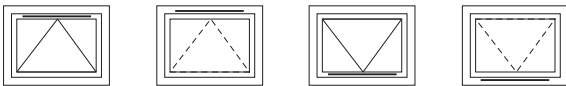
Accessories

- SKA/EKA 60 tilt console KF0 inward + sash bracket ①
- SKA/EKA 60 tilt console KF7 inward + sash bracket ②
- SKA/EKA 60 tilt console KF15 inward + sash bracket ③
- SKA/EKA 60 tilt console KF0 outward + sash bracket ④
- SKA/EKA 60 tilt console KF7 outward + sash bracket ⑤
- SKA/EKA 60 tilt console KF15 outward + sash bracket ⑥
- SKA/EKA 60 lowering tilt console SK0/15 + sash bracket ⑦
- A support SKA 30 ⑧

Range of application

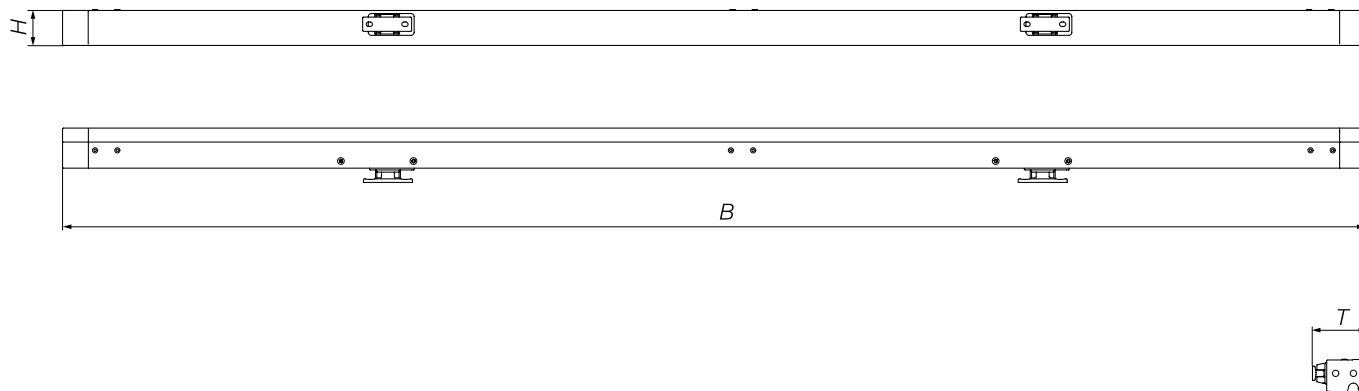
For sashes made of wood, PVC, aluminium, steel and composite material.
Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples





Chain drives SKA 60 Twin



Technical specifications

| | SKA60-327 | SKA60-419 | SKA60-511 | SKA60-603 | SKA60-810 |
|-------------------------------|---------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Rated voltage (V) | 24 | 24 | 24 | 24 | 24 |
| Voltage tolerance range (%) | -10 / +25 | -10 / +25 | -10 / +25 | -10 / +25 | -10 / +25 |
| Remaining ripple (%) | 35 | 35 | 35 | 35 | 35 |
| Current consumption (A) | 1,6 | 1,6 | 1,6 | 1,6 | 1,6 |
| Starting current (A) | 4,2 | 4,2 | 4,2 | 4,2 | 5,2 |
| Compressive force (N) | 600 | 600 | 600 | 600 | 200 |
| Tractive force (N) | 600 | 600 | 600 | 600 | 500 |
| Locking force (N) | 6000 | 6000 | 6000 | 6000 | 6000 |
| Stroke/opening width (in mm) | 327 | 419 | 511 | 603 | 810 |
| Opening mechanism | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain |
| Running period | 11s / 100 mm | 11s / 100 mm | 11s / 100 mm | 11s / 100 mm | 7s / 100 mm |
| Duty cycle | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off |
| Ambient temperature | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C |
| Protection class | IP20 | IP20 | IP20 | IP20 | IP20 |
| Cutoff open | limit switch | limit switch | limit switch | limit switch | limit switch |
| Cutoff closed | Integrated electronic overload cutoff | | | | |
| Connection technology | plug-in screw terminal, max. 1 mm | | | | |
| Dimensions (B x H x T in mm) | 1300 x 45 x 39 | 1300 x 45 x 39 | 1660 x 45 x 39 | 1660 x 45 x 39 | 1842 x 45 x 39 |
| Housing | aluminium | aluminium | aluminium | aluminium | aluminium |
| Scope of delivery | with accessories | with accessories | with accessories | with accessories | with accessories |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 |

Item code

| | | | | | |
|----------|--------|--------|--------|--------|--------|
| RAL 9006 | 205588 | 205594 | 205600 | 205606 | 205612 |
| RAL 9016 | 205591 | 205597 | 205603 | 205609 | 205615 |

other strokes on request

Item code accessories

| | |
|---|--------|
| SKA/EKA 60 tilt console KF0 inward + sash bracket, RAL 9006 | 206677 |
| SKA/EKA 60 tilt console KF0 inward + sash bracket, RAL 9016 | 206680 |
| SKA/EKA 60 tilt console KF7 inward + sash bracket, RAL 9006 | 206686 |
| SKA/EKA 60 tilt console KF7 inward + sash bracket, RAL 9016 | 206689 |
| SKA/EKA 60 tilt console KF15 inward + sash bracket, RAL 9006 | 206695 |
| SKA/EKA 60 tilt console KF15 inward + sash bracket, RAL 9016 | 206698 |
| SKA/EKA 60 tilt console KF0 outward + sash bracket, RAL 9006 | 206704 |
| SKA/EKA 60 tilt console KF0 outward + sash bracket, RAL 9016 | 206707 |
| SKA/EKA 60 tilt console KF7 outward + sash bracket, RAL 9006 | 206713 |
| SKA/EKA 60 tilt console KF7 outward + sash bracket, RAL 9016 | 206716 |
| SKA/EKA 60 tilt console KF15 outward + sash bracket, RAL 9006 | 206722 |
| SKA/EKA 60 tilt console KF15 outward + sash bracket, RAL 9016 | 206725 |
| SKA/EKA 60 lowering tilt console SK + sash bracket, RAL 9006 | 206731 |
| SKA/EKA 60 lowering tilt console SK + sash bracket, RAL 9016 | 206734 |
| Accessories support | 206740 |

Chain drive SKA 45

Device properties

- Opening width 400 mm
- Max. compressive and tractive force 450 N
- Maintenance-free stainless steel double chain following the principle of alternation
- Integrated limit stop and overload cutoff
- Other opening widths available on request

Accessories

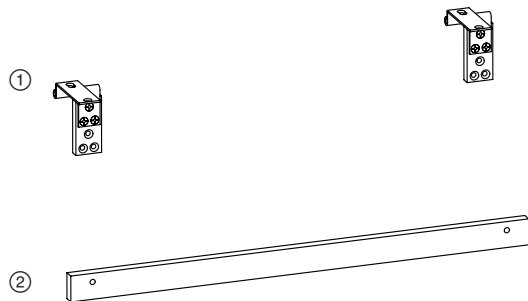
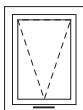
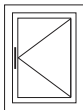
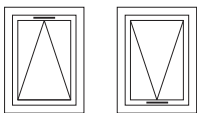
- Tilt console EKA/SKA 45 ①
- Packer SKA 45-400 ②

Range of application

For sashes made of wood, PVC, aluminium, steel and composite material.

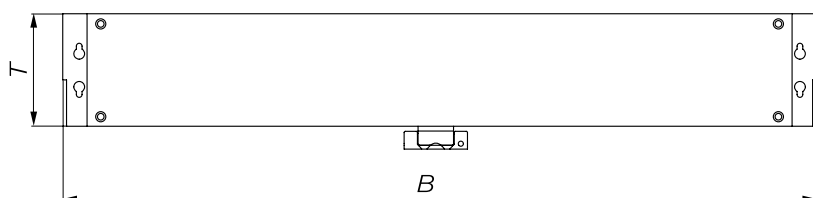
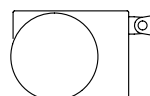
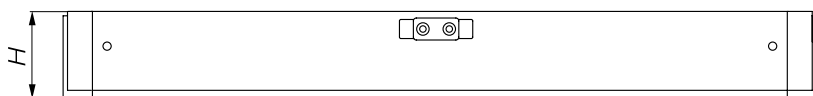
Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples





Chain drive SKA 45



Technical specifications

| | SKA 45-400 |
|-------------------------------|--|
| Rated voltage (V) | 24 |
| Voltage tolerance range (%) | -10 / +25 |
| Remaining ripple (%) | 45 |
| Current consumption (A) | 1,0 |
| Starting current (A) | 4,4 |
| Compressive force (N) | 450 |
| Tractive force (N) | 450 |
| Locking force (N) | 3000 |
| Stroke/opening width (in mm) | 401 |
| Opening mechanism | stainless steel chain |
| Running period | 10s / 100 mm |
| Duty cycle | 60s on / 120s off |
| Ambient temperature | -10 °C to +60 °C |
| Protection class | IP20 |
| Cutoff open | limit switch |
| Cutoff closed | limit switch, adjustable |
| Connection technology | plug-in screw terminal, max. 1 mm ² |
| Dimensions (B x H x T in mm) | 541 x 56,5 x 70 |
| Housing | aluminium |
| Scope of delivery | including sash bracket |
| Lifespan (Open/Closed cycles) | 10.000 |

Item code

| | |
|----------|--------|
| RAL 9006 | 148807 |
| RAL 9016 | 148810 |

other strokes on request

Item code accessories

| | |
|-----------------------------------|--------|
| Tilt console EKA/SKA 45, RAL 9006 | 158126 |
| Tilt console EKA/SKA 45, RAL 9016 | 158129 |
| Packer SKA 45-400, RAL 9006 | 151009 |
| Packer SKA 45-400, RAL 9016 | 151003 |

Chain drives SKA 50

Device properties

- Opening width of up to 700 mm
- Max. compressive and tractive force 500 N
- Maintenance-free stainless steel double chain following the principle of alternation
- Integrated limit stop and overload cutoff
- Other opening widths available on request

Accessories

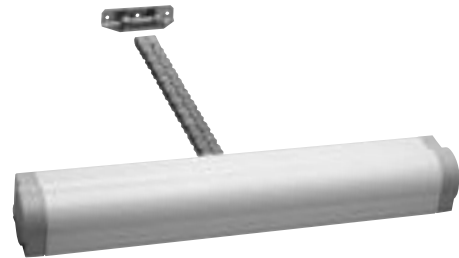
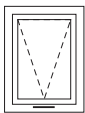
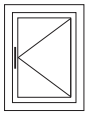
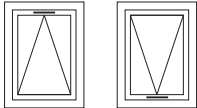
- Tilt console EKA/SKA 50 ①
- Packer SKA 50-500 ②

Range of application

For sashes made of wood, PVC, aluminium, steel and composite material.

Suitable for smoke and heat exhaust as well as ventilation systems.

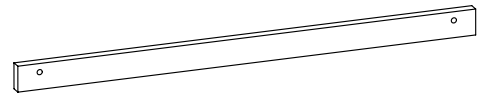
Installation examples



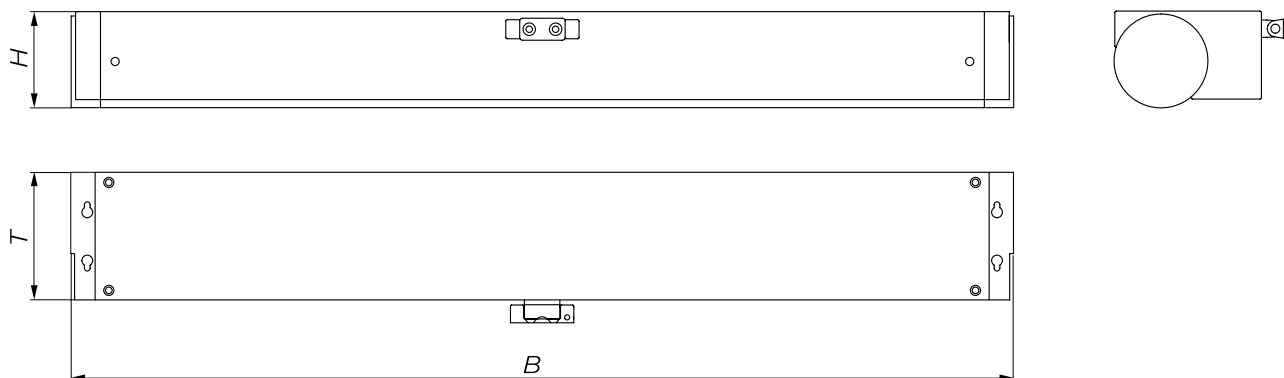
①



②



Chain drives SKA 50



Technical specifications

| | SKA 50-500 | SKA 50-600 | SKA 50-700 |
|-------------------------------|--|--------------------------|--------------------------|
| Rated voltage (V) | 24 | 24 | 24 |
| Voltage tolerance range (%) | -10 / +25 | -10 / +25 | -10 / +25 |
| Remaining ripple (%) | 45 | 45 | 45 |
| Current consumption (A) | 1,6 | 1,6 | 1,2 |
| Starting current (A) | 6,4 | 6,4 | 6,4 |
| Compressive force (N) | 500 | 500 | 300 |
| Tractive force (N) | 500 | 500 | 500 |
| Locking force (N) | 3000 | 3000 | 3000 |
| Stroke/opening width (in mm) | 501 | 600 | 700 |
| Opening mechanism | stainless steel chain | stainless steel chain | stainless steel chain |
| Running period | 10s / 100 mm | 10s / 100 mm | 10s / 100 mm |
| Duty cycle | 60s on / 180s off | 60s on / 180s off | 60s on / 180s off |
| Ambient temperature | -10 °C to +60 °C | -10 °C to +60 °C | -10 °C to +60 °C |
| Protection class | IP20 | IP20 | IP20 |
| Cutoff open | limit switch | limit switch | limit switch |
| Cutoff closed | limit switch, adjustable | limit switch, adjustable | limit switch, adjustable |
| Connection technology | plug-in screw terminal, max. 1 mm ² | | |
| Dimensions (B x H x T in mm) | 643 x 66 x 100,5 | 744 x 66 x 100,5 | 846 x 66 x 100,5 |
| Housing | aluminium | aluminium | aluminium |
| Scope of delivery | including sash bracket | including sash bracket | including sash bracket |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 |

Item code

| | | | |
|----------|--------|--------|--------|
| RAL 9006 | 148825 | 205975 | 205984 |
| RAL 9016 | 148828 | 205972 | 205981 |

other strokes on request

Item code accessories

| | |
|-----------------------------------|--------|
| Tilt console EKA/SKA 50, RAL 9006 | 158135 |
| Tilt console EKA/SKA 50, RAL 9016 | 158138 |
| Packer SKA 50-500, RAL 9006 | 151018 |
| Packer SKA 50-500, RAL 9016 | 151012 |

PRIMAT-S^{compact} 190

Device properties

- Opening width 190 mm
- Increased contact pressure thanks to additional third locking inside the stay
- Two-stay version for wide windows
- Sash suspension with security knob
- Maintenance-free stay with anti-dirt profiling inside the stay
- Integrated limit stop and overload cutoff
- Optional drive pin in combination with additional lockings
- Compact design with low space requirements on the frame

Accessories

- Sash bracket with cap ①
- Bevel window sash bracket with cap ②
- Coupling track for additional locking ZV/F ③
- Drive track, additional for 2-stay design ④

Tools

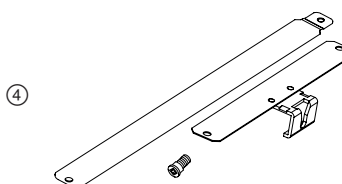
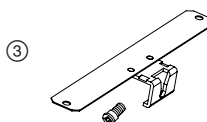
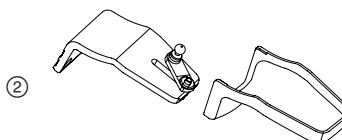
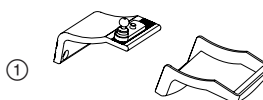
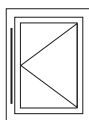
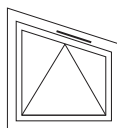
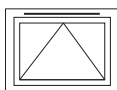
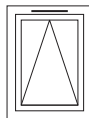
- Jig

Range of application

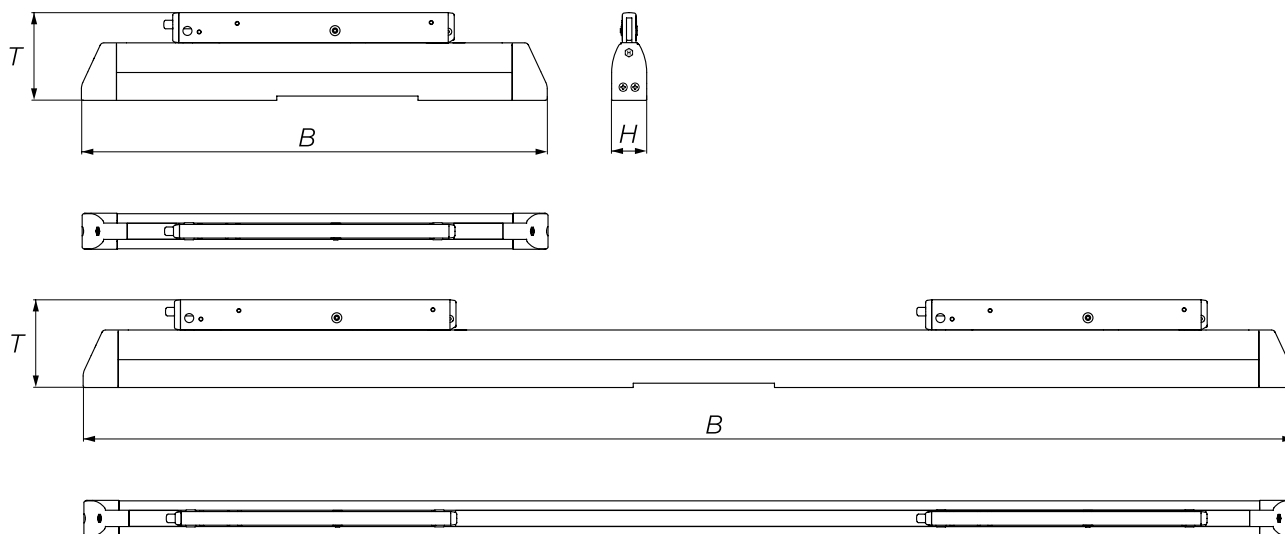
For sashes made of wood, PVC, aluminium and composite material.

Suitable for ventilation systems.

Installation examples



PRIMAT-S^{compact} 190



Technical specifications

| | PRIMAT-S ^{compact} 190, single stay | PRIMAT-S ^{compact} 190, double stay |
|-------------------------------|--|--|
| Rated voltage (V) | 24 | 24 |
| Voltage tolerance range (%) | -20 / +30 | -20 / +30 |
| Remaining ripple (%) | 10 | 10 |
| Current consumption (A) | 0,35 | 0,35 |
| Starting current (A) | 0,5 | 0,5 |
| Compressive force (N) | 100 | 100 |
| Tractive force (N) | 100 | 100 |
| Locking force (N) | 1500 | 3000 |
| Stroke/opening width (in mm) | 190 | 190 |
| Opening mechanism | stay | stay |
| Running period | 40s | 40s |
| Duty cycle | 60s on / 60s off | 60s on / 60s off |
| Ambient temperature | 0 °C to +70 °C | 0 °C to +70 °C |
| Protection class | IP50 | IP50 |
| Cutoff open | limit switch | limit switch |
| Cutoff closed | limit switch | limit switch |
| Connection technology | plug-in screw terminal, max. 1 mm ² | |
| Dimensions (B x H x T in mm) | 465 x 36 x 88 | 1210 x 36 x 88 |
| Housing | aluminium | aluminium |
| Scope of delivery | including sash bracket | including sash bracket |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 |

Item code

| | | |
|--------------------------|--------|--------|
| EV 1 | 183758 | 183767 |
| RAL 9016 | 183761 | 183770 |
| RAL 9005 | 183764 | 183773 |
| RAL 9016 with white caps | 185503 | 185506 |

other strokes on request

Item code accessories

| | RAL 7035 | RAL 9016 | RAL 9005 |
|---|----------|---------------------|----------|
| Sash bracket with cap | 195104 | 190462 | 190465 |
| Bevel window sash bracket with cap | 195107 | 184452 | 184455 |
| Coupling track for additional locking ZV/F | | Measure x = 8,3 mm | 179608 |
| | | Measure x = 9,5 mm | 179611 |
| | | Measure x = 11,5 mm | 185188 |
| Drive track, additional for ZV/F with 2-stay design | | | 179540 |

PRIMAT-S^{compact} 300

Device properties

- Opening width 300 mm
- Increased contact pressure thanks to additional third locking inside the stay
- Two-stay version for wide windows
- Sash suspension with security knob
- Maintenance-free stay with anti-dirt profiling inside the stay
- Integrated limit stop and overload cutoff
- Optional drive pin in combination with additional lockings
- Compact design with low space requirements on the frame

Accessories

- Sash bracket with cap ①
- Bevel window sash bracket with cap ②
- Coupling track for additional locking ZV/F ③
- Drive track, additional for 2-stay design ④

Tools

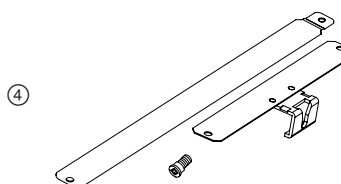
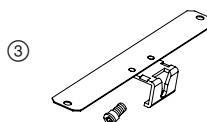
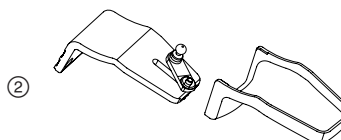
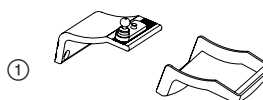
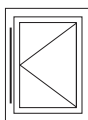
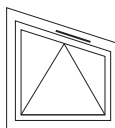
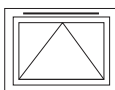
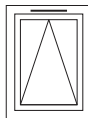
- Jig

Range of application

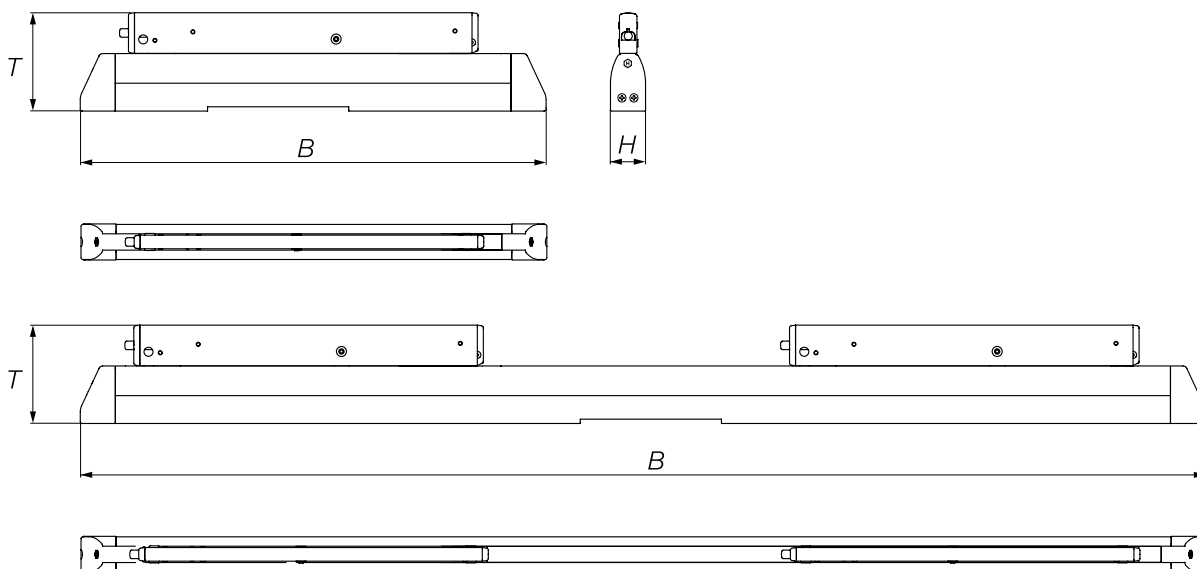
For sashes made of wood, PVC, aluminium and composite material.

Suitable for ventilation systems.

Installation examples



PRIMAT-S^{compact} 300



Technical specifications

| | PRIMAT-S ^{compact} 300, single stay | PRIMAT-S ^{compact} 300, double stay |
|-------------------------------|--|--|
| Rated voltage (V) | 24 | 24 |
| Voltage tolerance range (%) | -20 / +30 | -20 / +30 |
| Remaining ripple (%) | 10 | 10 |
| Current consumption (A) | 0,35 | 0,35 |
| Starting current (A) | 0,5 | 0,5 |
| Compressive force (N) | 80 | 80 |
| Tractive force (N) | 80 | 80 |
| Locking force (N) | 1500 | 3000 |
| Stroke/opening width (in mm) | 300 | 300 |
| Opening mechanism | stay | stay |
| Running period | 50s | 50s |
| Duty cycle | 60s on / 60s off | 60s on / 60s off |
| Ambient temperature | 0 °C to +70 °C | 0 °C to +70 °C |
| Protection class | IP50 | IP50 |
| Cutoff open | limit switch | limit switch |
| Cutoff closed | limit switch | limit switch |
| Connection technology | plug-in screw terminal, max. 1 mm ² | |
| Dimensions (B x H x T in mm) | 512 x 36 x 100 | 1210 x 36 x 100 |
| Housing | aluminium | aluminium |
| Scope of delivery | including sash bracket | including sash bracket |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 |

Item code

| | | |
|----------|--------|--------|
| EV 1 | 193980 | 193989 |
| RAL 9016 | 193983 | 193992 |
| RAL 9005 | 193986 | 193995 |

other strokes on request

| Item code accessories | RAL 7035 | RAL 9016 | RAL 9005 |
|---|----------|---------------------|----------|
| Sash bracket with cap | 195104 | 190462 | 190465 |
| Bevel window sash bracket with cap | 195107 | 184452 | 184455 |
| Coupling track for additional locking ZV/F | | Measure x = 8,3 mm | 179608 |
| | | measure x = 9,5 mm | 179611 |
| | | Measure x = 11,5 mm | 185188 |
| Drive track, additional for single stay design | | | 192904 |
| Drive track, additional for ZV/F with 2-stay design | | | 192910 |

PRIMAT-S^{compact} A

Device properties

- Opening width 95 - 190 mm adjustable
- Increased contact pressure thanks to integrated locking
- Single, double, triple version
- Integrated limit stop and overload cutoff
- Compact design with low space requirements on the frame

Accessories

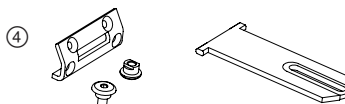
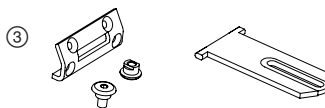
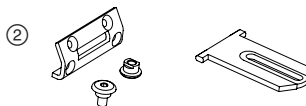
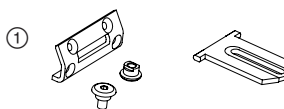
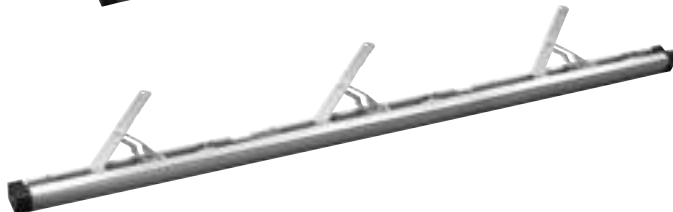
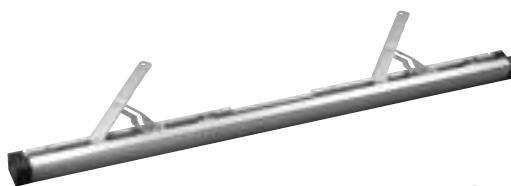
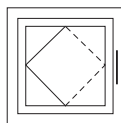
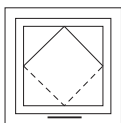
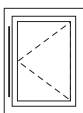
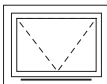
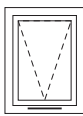
- Accessories sash bracket R 0-25 ①
- Accessories sash bracket R 26-50 ②
- Accessories sash bracket R 51-75 ③
- Accessories sash bracket R 76-100 ④

Range of application

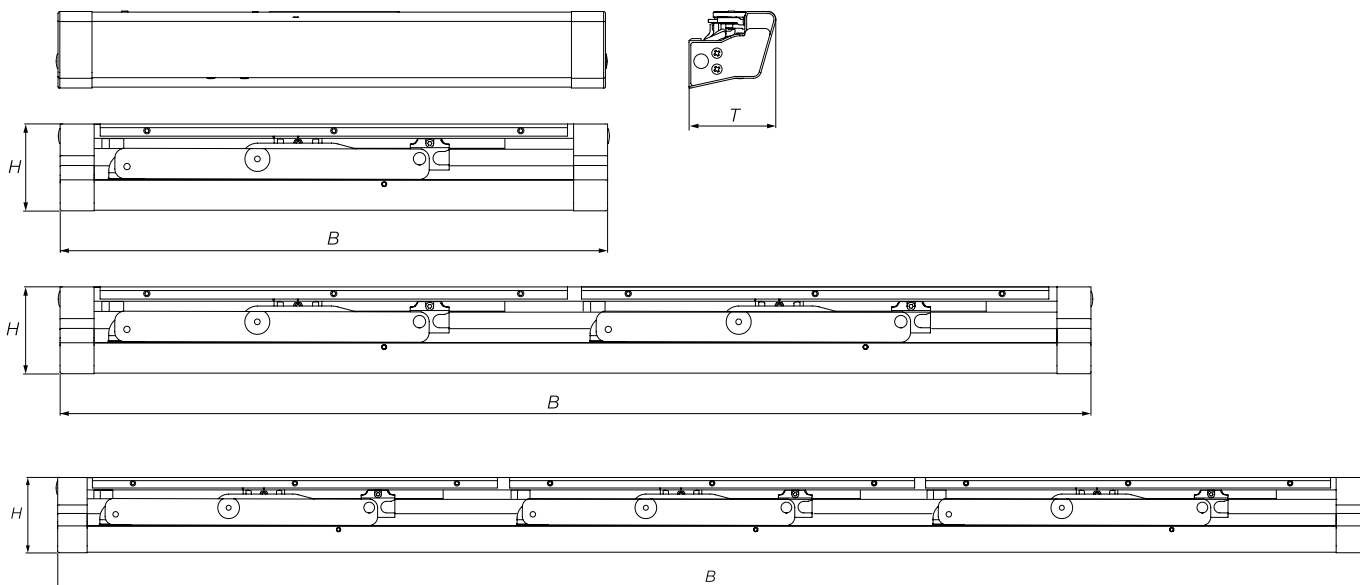
For sashes made of wood, PVC, aluminium and composite material.

Suitable for ventilation systems.

Installation examples



PRIMAT-S^{compact} A



Technical specifications

| | PRIMAT-S ^{compact} A, single stay | PRIMAT-S ^{compact} A, double stay | PRIMAT-S ^{compact} A, triple stay |
|---------------------------------|--|--|--|
| Rated voltage (V) | 24 | 24 | 24 |
| Voltage tolerance range (%) | -30 / +30 | -30 / +30 | -30 / +30 |
| Remaining ripple (%) | 10 | 10 | 10 |
| Current consumption (A) | 0,35 | 0,35 | 0,35 |
| Starting current (A) | 0,5 | 0,5 | 0,5 |
| Compressive force (N) | 80 | 80 | 80 |
| Tractive force (N) | 80 | 80 | 80 |
| Locking force (N) | 8000 | 16.000 | 24.000 |
| Stroke/opening width (in mm) | 190 | 190 | 190 |
| Opening mechanism | stay | stay | stay |
| Running period | 40s | 40s | 40s |
| Duty cycle | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off |
| Ambient temperature | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C |
| Protection class | IP50 | IP50 | IP50 |
| Cutoff open | limit switch | limit switch | limit switch |
| Cutoff closed | limit switch | limit switch | limit switch |
| Connection technology | plug-in screw terminal, max. 1 mm ² | | |
| Dimensions (B x H x T in mm) | 452 x 72 x 63 (FB 450-1000) | 1001 x 72 x 63 (FB 1001-1500) 1501 x 72 x 63 (FB 1501-2000) | 2001 x 72 x 63 (FB 2001-2500) 2501 x 72 x 63 (FB 2501-3000) |
| Housing | aluminium | aluminium | aluminium |
| Scope of delivery | without sash bracket | without sash bracket | without sash bracket |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 |

Item code

| | | | |
|----------|----------------------|--|--|
| EV 1 | 194921 (FB 450-1000) | 203001 (FB 1001-1500) 206377 (FB 1501-2000) | 203019 (FB 2001-2500) 206395 (FB 2501-3000) |
| RAL 9016 | 194924 (FB 450-1000) | 203004 (FB 1001-1500) 206380 (FB 1501-2000) | 203022 (FB 2001-2500) 206398 (FB 2501-3000) |
| RAL 9005 | 194927 (FB 450-1000) | 203007 (FB 1001-1500) 206383 (FB 1501-2000) | 203025 (FB 2001-2500) 206401 (FB 2501-3000) |

other strokes on request

Item code accessories

| | |
|-----------------------------------|--------|
| Accessories sash bracket R 0-25 | 200200 |
| Accessories sash bracket R 26-50 | 200203 |
| Accessories sash bracket R 51-75 | 200206 |
| Accessories sash bracket R 76-100 | 200209 |

Electric drive SM 100

Device properties

- Motor operation of surface-mounted and concealed fanlight fittings
- Stroke of 10 - 66 mm adjustable
- Max. compressive and tractive force 1200 N
- For single windows or window groups
- Vertical or horizontal installation

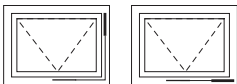
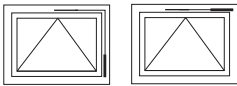


Range of application

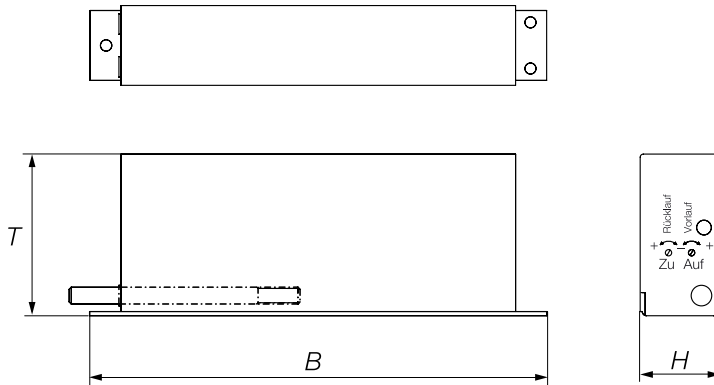
For sashes made of wood, PVC, aluminium, steel and composite material.

Suitable for ventilation systems.

Installation examples



Electric drive SM 100



Technical specifications

| | SM 100 |
|-------------------------------|--|
| Rated voltage (V) | 24 |
| Voltage tolerance range (%) | -6 / +6 |
| Remaining ripple (%) | 10 |
| Current consumption (A) | 1,2 |
| Compressive force (N) | 1200 |
| Tractive force (N) | 1200 |
| Stroke/opening width (in mm) | 10 - 66 |
| Opening mechanism | spindle |
| Ambient temperature | to +50 °C |
| Protection class | IP50 |
| Ambient temperature | up to +50 °C |
| Cutoff open | limit switch |
| Cutoff closed | limit switch |
| Connection technology | plug-in screw terminal, max. 1 mm ² |
| Dimensions (B x H x T in mm) | 218 x 38 x 77 |
| Housing | aluminium |
| Scope of delivery | with thread rod + sleeve 8 / 8 |
| Lifespan (Open/Closed cycles) | 10.000 |

Item code

| | |
|----------|--------|
| EV 1 | 163047 |
| RAL 9016 | 163050 |
| RAL 9005 | 183119 |

Additional locking ZV/R

Device properties

Electric mechanical locking systems that can be combined with an additional sequence control and other window drives.

Accessories

- Distance plate

Tools

- Jig

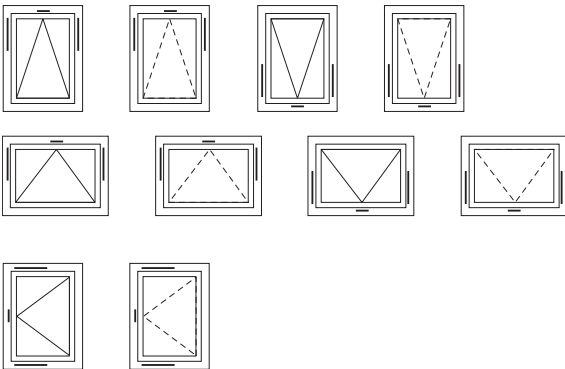
Range of application

For sashes made of wood, PVC, aluminium, steel and composite material.

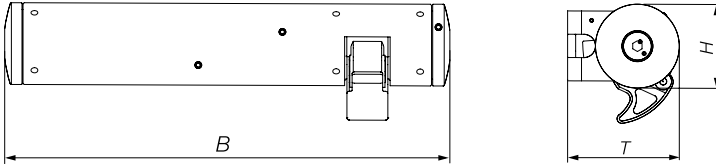
Suitable for smoke and heat exhaust as well as ventilation systems.



Installation examples



Additional locking ZV/R



Technical specifications

| | ZV/R |
|-------------------------------|--|
| Rated voltage (V) | 24 |
| Voltage tolerance range (%) | -20 / +30 |
| Remaining ripple (%) | 10 |
| Current consumption (A) | 0,5 |
| Starting current (A) | 0,75 |
| Locking force (N) | 900 |
| Locking mechanism | zinc mould locking bar |
| Running period | 4s |
| Duty cycle | 60s on / 60s off |
| Ambient temperature | 0 °C to +70 °C |
| Protection class | IP54 |
| Cutoff open | Integrated electronic overload cutoff |
| Cutoff closed | Integrated electronic overload cutoff |
| Connection technology | lead wire with plug on the motor side, 1,8 m |
| Dimensions (B x H x T in mm) | 197 x 36 x 48 |
| Housing | aluminium |
| Scope of delivery | including holder and pressure piece |
| Lifespan (Open/Closed cycles) | 10.000 |

Item code

| | | |
|----------|-------|--------|
| EV 1 | right | 167966 |
| | left | 167975 |
| RAL 9016 | right | 167969 |
| | left | 167978 |

Item code tools

| | |
|-------------------------------|--------|
| Jig ZV/R, right/left | 163518 |
| Distance plate ZV/R, RAL 9006 | 163521 |
| Distance plate ZV/R, RAL 9016 | 163524 |

Actuator SVA 18

Device properties

- Fitting locks controlled by electric motor
- Stroke 18 mm
- Integrated electronic overload cutoff
- Can be combined with other window drives (with additional sequence control)

Accessories

- Coupling track for additional locking ZV/F ①

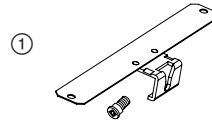
Tools

- Jig

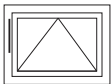
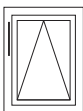
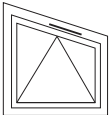
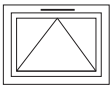
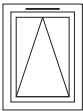
Range of application

For sashes made of timber, PVC, aluminium and composite material.

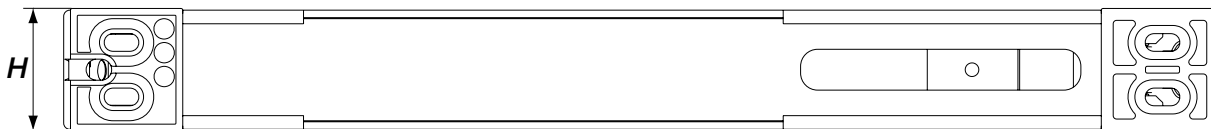
Suitable for smoke and heat exhaust as well as ventilation systems



Installation examples



Actuator SVA 18



Technical specifications

| | Actuator SVA 18 |
|--|--|
| Rated voltage (V) | 24 |
| Voltage tolerance range (%) | -20 / +30 |
| Remaining ripple (%) | 10 |
| Minimum cutoff voltage | 15 V DC |
| Maximum current consumption (A) | 0,5 |
| Current consumption (at rated force) (A) | 0,35 |
| Rated force (N) | 1000 |
| Locking stroke (in mm) | 18 |
| Running period | approx. 12s |
| Relative duty cycle | 100 % ED |
| Ambient temperature | 0 °C to +70 °C |
| Protection class | IP50 (for dry locations only) |
| Electrical cutoff | Integrated electronic overload cutoff |
| Connection technology | plug-in screw terminal, max. 1 mm ² |
| Dimensions (B x H x T in mm) | 340 x 36 x 57 |
| Housing | aluminium |
| Lifespan (Open/Closed cycles) | 10.000 |

Item code

| | |
|---------------------|----------------------|
| EV 1 | 187018 |
| RAL 9016 | 211240 |
| Special RAL varnish | available on request |

Item code accessories

| | | |
|--|---------------------|--------|
| Coupling track for additional locking ZV/F | Measure x = 8,3 mm | 179608 |
| | Measure x = 9,5 mm | 179611 |
| | Measure x = 11,5 mm | 185188 |

Spindle drives EA 80

Device properties

- Opening width of up to 1000 mm
- Max. compressive and tractive force 800 N
- Maintenance-free
- Chromed push rod
- Integrated limit stop and overload cutoff

Accessories

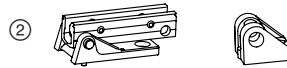
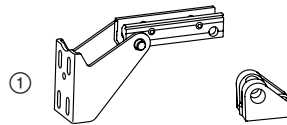
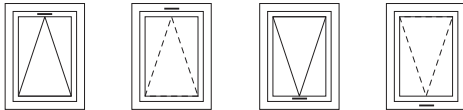
- Frame console 2 and sash bracket ①
- Sliding console 2 and sash bracket ②
- sash bracket ③

Range of application

For sashes made of wood, PVC, aluminium and composite material.

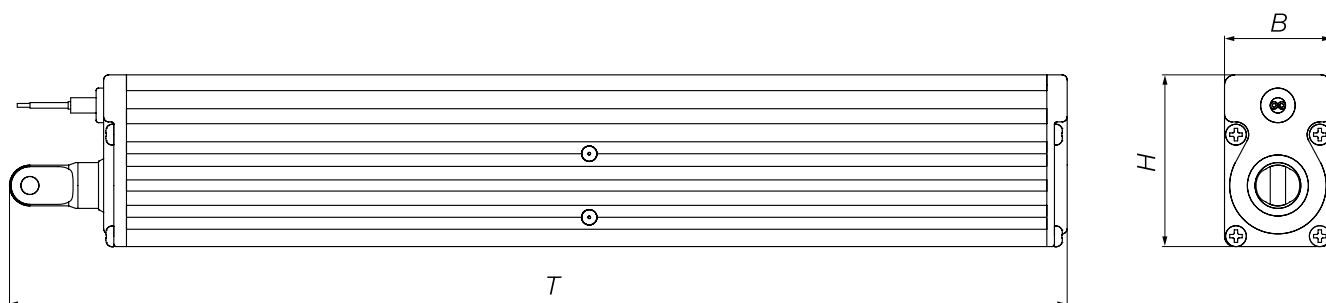
Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples





Spindle drives EA 80



Technical specifications

| | EA 80-300 | EA 80-500 | EA 80-750 | EA 80-1000 |
|-------------------------------|--|---------------------|---------------------|---------------------|
| Rated voltage (V) | 230 | 230 | 230 | 230 |
| Voltage tolerance range (%) | -10 / +10 | -10 / +10 | -10 / +10 | -10 / +10 |
| Current consumption (A) | 0,2 | 0,2 | 0,2 | 0,2 |
| Compressive force (N) | 800 | 800 | 800 | 800 |
| Tractive force (N) | 800 | 800 | 800 | 800 |
| Locking force (N) | 2000 | 2000 | 2000 | 2000 |
| Stroke/opening width (in mm) | 300 | 500 | 750 | 1000 |
| Opening mechanism | spindle | spindle | spindle | spindle |
| Running period | 24s / 100 mm | 24s / 100 mm | 24s / 100 mm | 24s / 100 mm |
| Duty cycle | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off |
| Ambient temperature | -5 °C to +50 °C | -5 °C to +50 °C | -5 °C to +50 °C | -5 °C to +50 °C |
| Protection class | IP54 | IP54 | IP54 | IP54 |
| Cutoff open | Integrated electronic overload cutoff | | | |
| Cutoff closed | Integrated electronic overload cutoff | | | |
| Connection technology | lead wire 2 x 0,75 mm ² , 1,2 m | | | |
| Dimensions (B x H x T in mm) | 42 x 67,5 x 579 | 42 x 67,5 x 779 | 42 x 67,5 x 1099 | 42 x 67,5 x 1349 |
| Housing | aluminium | aluminium | aluminium | aluminium |
| Scope of delivery | without accessories | without accessories | without accessories | without accessories |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 |

Item code

| | | | | |
|----------|--------|--------|--------|--------|
| EV 1 | 167744 | 167750 | 167756 | 167762 |
| RAL 9016 | 167747 | 167753 | 167759 | 167765 |

other strokes on request

Item code accessories

| | |
|--|--------|
| Frame console 2 and sash bracket, RAL 9006 | 163560 |
| Frame console 2 and sash bracket, RAL 9016 | 163563 |
| Sliding console 2 and sash bracket, RAL 9006 | 163569 |
| Sliding console 2 and sash bracket, RAL 9016 | 163572 |

Chain drives EKA 20

Device properties

- Opening width of up to 500 mm
- Max. compressive and tractive force 200 N
- For concealed and surface-mounted installation
- Low installation depth
- Maintenance-free stainless steel chain
- Integrated limit stop and overload cutoff
- Operation of 2 drives with additional tandem control

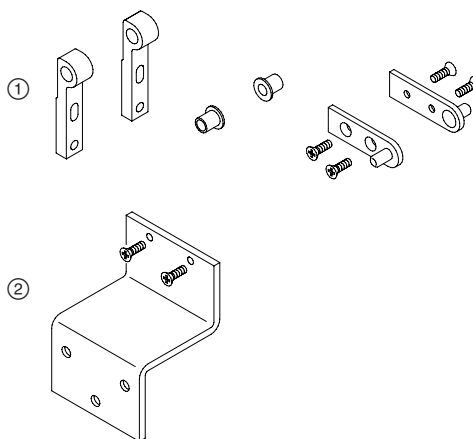
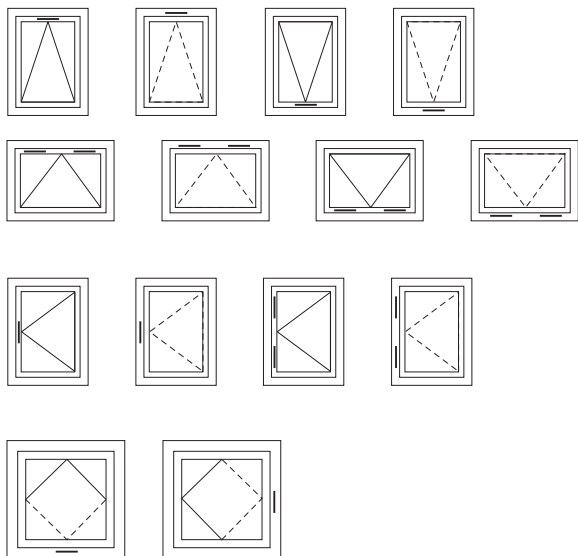
Accessories

- Tilt console SKA/EKA 20 for low sash heights ①
- Mounting angle MKA/R0 for frame installation ②
- Mounting angle MKA/R10 for frame installation
- Mounting angle MKA/R15 for frame installation

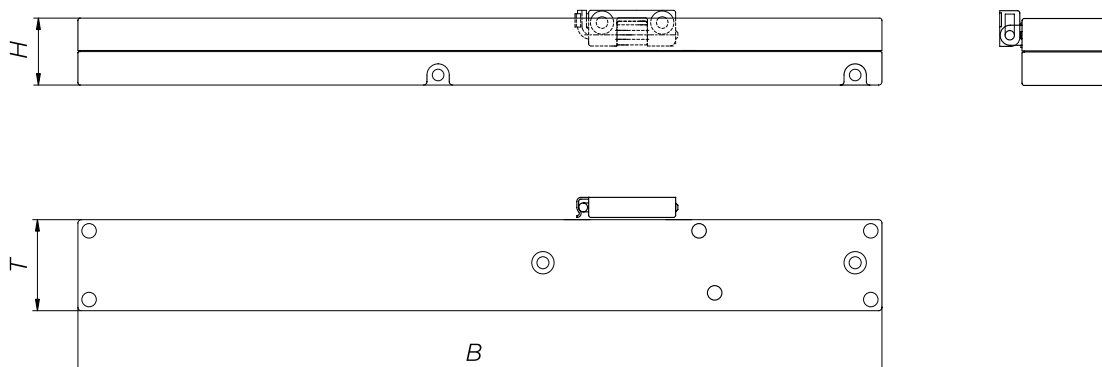
Range of application

For sashes made of wood, PVC, aluminium, steel and composite material.
Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples



Chain drives EKA 20



Technical specifications

| | EKA 20-120 | EKA 20-200 | EKA 20-300 | EKA 20-400 | EKA 20-500 |
|-------------------------------|---|------------------------|------------------------|------------------------|------------------------|
| Rated voltage (V) | 230 | 230 | 230 | 230 | 230 |
| Voltage tolerance range (%) | -10 / + 10 | -10 / + 10 | -10 / + 10 | -10 / + 10 | -10 / + 10 |
| Current consumption (A) | 0,15 | 0,15 | 0,15 | 0,15 | 0,15 |
| Compressive force (N) | 200 | 200 | 200 | 120 | 80 |
| Tractive force (N) | 200 | 200 | 200 | 200 | 200 |
| Locking force (N) | 4000 | 4000 | 4000 | 4000 | 4000 |
| Stroke/opening width (in mm) | 125 | 217 | 309 | 401 | 516 |
| Opening mechanism | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain |
| Running period | 13s / 100 mm | 13s / 100 mm | 13s / 100 mm | 13s / 100 mm | 13s / 100 mm |
| Duty cycle | 3 min on / 7 min off | 3 min on / 7 min off | 3 min on / 7 min off | 3 min on / 7 min off | 3 min on / 7 min off |
| Ambient temperature | -10 °C to +50 °C | -10 °C to +50 °C | -10 °C to +50 °C | -10 °C to +50 °C | -10 °C to +50 °C |
| Protection class | IP40 | IP40 | IP40 | IP40 | IP40 |
| Cutoff open | limit switch | limit switch | limit switch | limit switch | limit switch |
| Cutoff closed | Integrated electronic overload cutoff | | | | |
| Connection technology | lead wire 2 x 0,75 mm ² , 2m | | | | |
| Dimensions (B x H x T in mm) | 361 x 30 x 40,8 | 361 x 30 x 40,8 | 361 x 30 x 40,8 | 442 x 30 x 40,8 | 442 x 30 x 40,8 |
| Housing | zinc mould | zinc mould | zinc mould | zinc mould | zinc mould |
| Scope of delivery | including sash bracket | including sash bracket | including sash bracket | including sash bracket | including sash bracket |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 |

Item code

| | | | | | |
|----------|--------|--------|--------|--------|--------|
| RAL 9006 | 205933 | 176790 | 176796 | 205948 | 205957 |
| RAL 9016 | 205930 | 176793 | 176799 | 205945 | 205954 |

other strokes on request

Item code accessories

| | |
|-----------------------------------|--------|
| Tilt console EKA/SKA 20, RAL 9006 | 176784 |
| Tilt console SKA/EKA 20, RAL 9016 | 176787 |
| Mounting angle MKA/R0, RAL 9006 | 187234 |
| Mounting angle MKA/R0, RAL 9016 | 187237 |
| Mounting angle MKA/R10, RAL 9006 | 187240 |
| Mounting angle MKA/R10, RAL 9016 | 187243 |
| Mounting angle MKA/R15, RAL 9006 | 187246 |
| Mounting angle MKA/R15, RAL 9016 | 187249 |

Chain drives EKA 30

Device properties

- Opening width of up to 810 mm
- Max. compressive and tractive force 300 N
- Version for concealed installation available on request
- Maintenance-free stainless steel chain
- Integrated limit stop and overload cutoff

Accessories

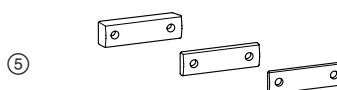
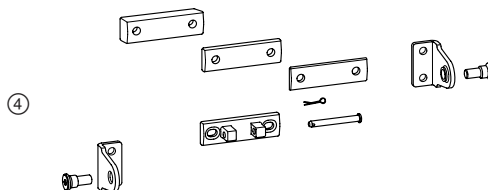
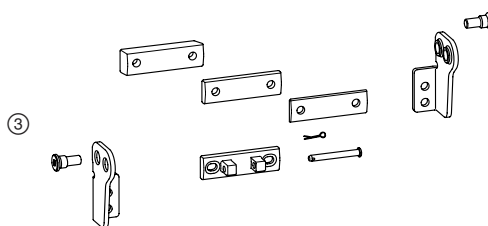
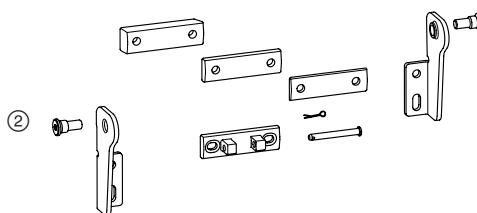
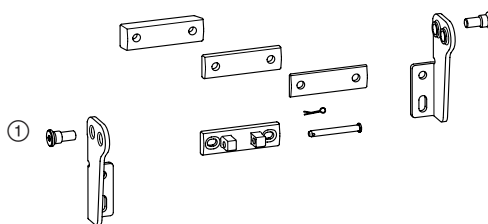
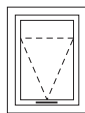
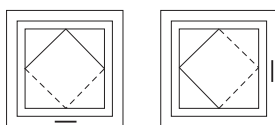
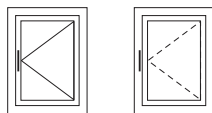
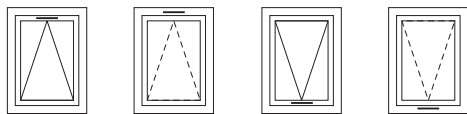
- SKA/EKA 30 tilt console KF0/15 + sash bracket ①
- SKA/EKA 30 tilt console KF7 + sash bracket ②
- SKA/EKA 30 lowering tilt console SK0/15 + sash bracket ③
- SKA/EKA 30 roof window console DF + sash bracket ④
- A support SKA 30 ⑤

Range of application

For sashes made of wood, PVC, aluminium, steel and composite material.

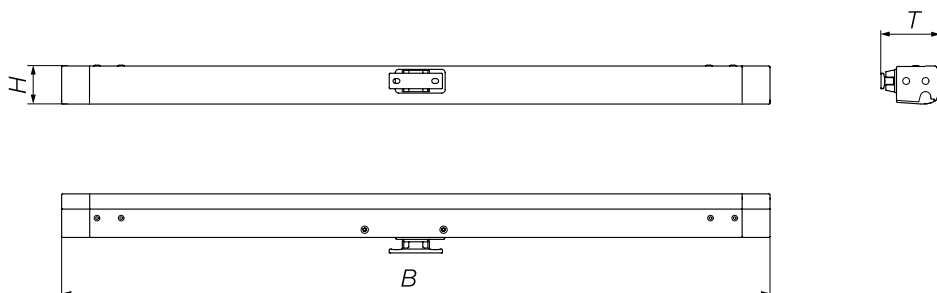
Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples





Chain drives EKA 30



Technical specifications

| | EKA 30-327 | EKA 30-419 | EKA 30-511 | EKA 30-603 | EKA 30-810 |
|-------------------------------|--|-----------------------|-----------------------|-----------------------|-----------------------|
| Rated voltage (V) | 230 | 230 | 230 | 230 | 230 230 |
| Voltage tolerance range (%) | -10 / +10 | -10 / +10 | -10 / +10 | -10 / +10 | -10 / +10 |
| Current consumption (A) | 0,23 | 0,23 | 0,23 | 0,23 | 0,23 |
| Compressive force (N) | 300 | 300 | 300 | 300 | 100 |
| Tractive force (N) | 300 | 300 | 300 | 300 | 300 |
| Locking force (N) | 3000 | 3000 | 3000 | 3000 | 3000 |
| Stroke/opening width (in mm) | 327 | 419 | 511 | 603 | 810 |
| Opening mechanism | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain |
| Running period | 11s / 100 mm | 11s / 100 mm | 11s / 100 mm | 11s / 100 mm | 11s / 100 mm |
| Duty cycle | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off |
| Ambient temperature | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C |
| Protection class | IP20 | IP20 | IP20 | IP20 | IP20 |
| Cutoff open | limit switch | limit switch | limit switch | limit switch | limit switch |
| Cutoff closed | Integrated electronic overload cutoff | | | | |
| Connection technology | plug-in screw terminal, max. 1 mm ² | | | | |
| Dimensions (B x H x T in mm) | 732 x 45 x 39 | 732 x 45 x 39 | 796 x 45 x 39 | 924 x 45 x 39 | 924 x 45 x 39 |
| Housing | aluminium | aluminium | aluminium | aluminium | aluminium |
| Scope of delivery | with accessories | with accessories | with accessories | with accessories | with accessories |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 |

Item code

| | | | | | |
|----------|--------|--------|--------|--------|--------|
| RAL 9006 | 204508 | 204514 | 204520 | 204526 | 204532 |
| RAL 9016 | 204511 | 204517 | 204523 | 204529 | 204535 |

other strokes on request

Item code accessories

| | |
|---|--------|
| SKA/EKA 30 tilt console KF0/15 + sash bracket, RAL 9006 | 204460 |
| SKA/EKA 30 tilt console KF0/15 + sash bracket, RAL 9016 | 204463 |
| SKA/EKA 30 tilt console KF7 + sash bracket, RAL 9006 | 204466 |
| SKA/EKA 30 tilt console KF7 + sash bracket, RAL 9016 | 204469 |
| SKA/EKA 30 lowering tilt console SK + sash bracket, RAL 9006 | 205843 |
| SKA/EKA 30 lowering tilt console SK + sash bracket, RAL 9016 | 205840 |
| SKA/EKA 30 roof window console DF + sash bracket, RAL 9006 | 204472 |
| SKA/EKA 30 roof window console DF + sash bracket, RAL 9016 | 204475 |
| SKA/EKA 30 mounting on frame console + sash bracket, RAL 9006 | 209783 |
| SKA/EKA 30 mounting on frame console + sash bracket, RAL 9016 | 209786 |
| Accessories support | 206740 |

Chain drives EKA 60 Twin

Device properties

- Opening width of up to 810 mm
- Max. compressive and tractive force 600 N
- Maintenance-free stainless steel chain
- Integrated limit stop and overload cutoff

Accessories

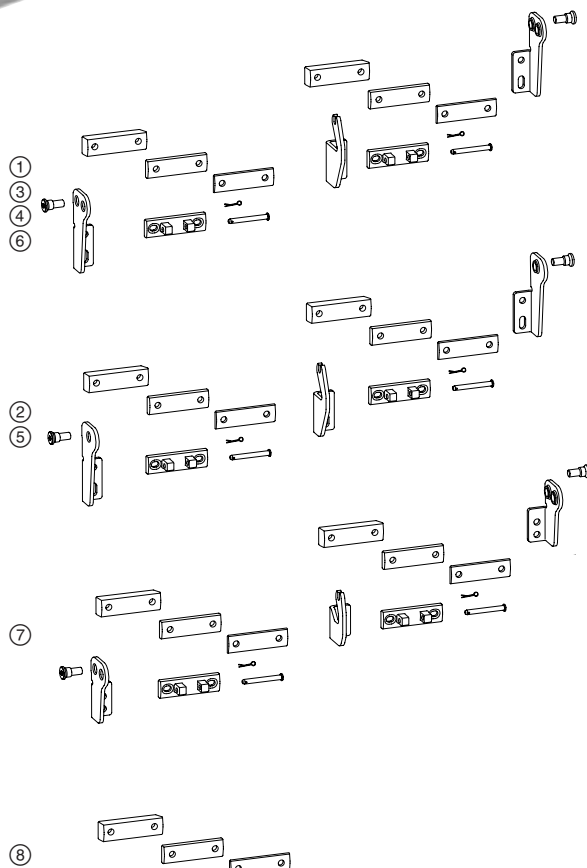
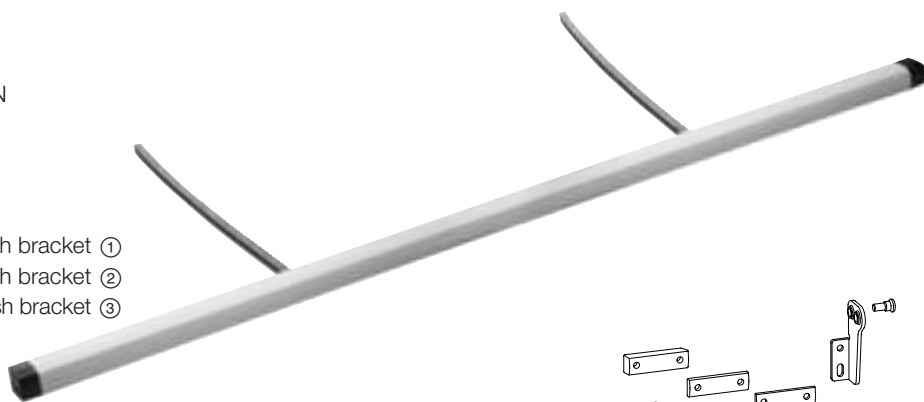
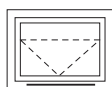
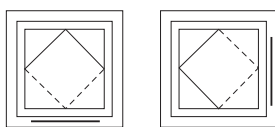
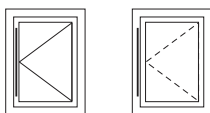
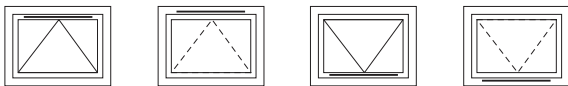
- SKA/EKA 60 tilt console KF0 inward + sash bracket ①
- SKA/EKA 60 tilt console KF7 inward + sash bracket ②
- SKA/EKA 60 tilt console KF15 inward + sash bracket ③
- SKA/EKA 60 tilt console KF0 outward + sash bracket ④
- SKA/EKA 60 tilt console KF7 outward + sash bracket ⑤
- SKA/EKA 60 tilt console KF15 outward + sash bracket ⑥
- SKA/EKA 60 lowering tilt console SK0/15 + sash bracket ⑦
- A support ⑧

Range of application

For sashes made of wood, PVC, aluminium, steel and composite material.

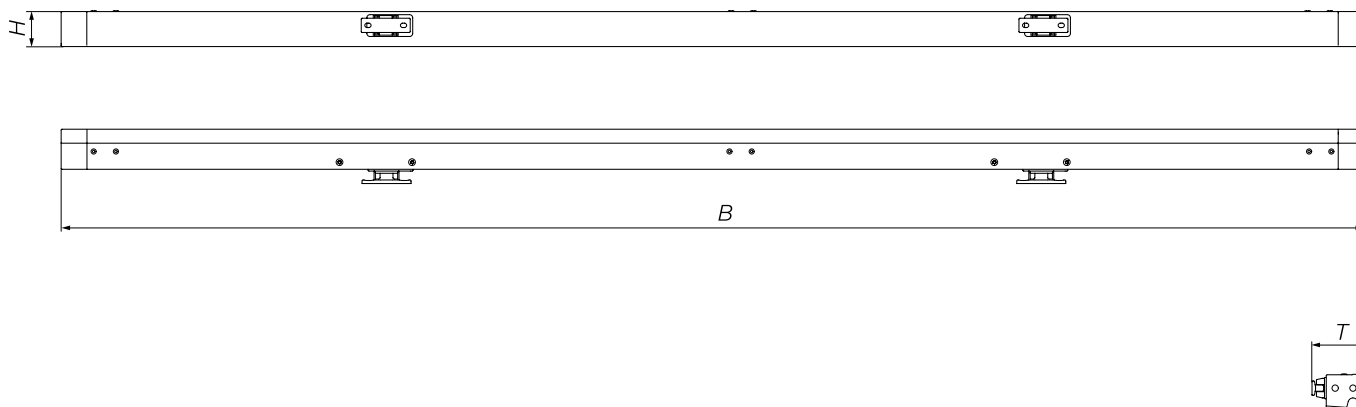
Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples





Chain drives EKA 60 Twin



Technical specifications

| | EKA 60-327 | EKA 60-419 | EKA 60-511 | EKA 60-603 | EKA 60-810 |
|-------------------------------|--|-----------------------|-----------------------|-----------------------|-----------------------|
| Rated voltage (V) | 230 | 230 | 230 | 230 | 230 |
| Voltage tolerance range (%) | -10 / +10 | -10 / +10 | -10 / +10 | -10 / +10 | -10 / +10 |
| Current consumption (A) | 0,46 | 0,46 | 0,46 | 0,46 | 0,46 |
| Compressive force (N) | 600 | 600 | 600 | 600 | 200 |
| Tractive force (N) | 600 | 600 | 600 | 600 | 600 |
| Locking force (N) | 6000 | 6000 | 6000 | 6000 | 6000 |
| Stroke/opening width (in mm) | 327 | 419 | 511 | 603 | 810 |
| Opening mechanism | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain | stainless steel chain |
| Running period | 11s / 100 mm | 11s / 100 mm | 11s / 100 mm | 11s / 100 mm | 11s / 100 mm |
| Duty cycle | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off | 60s on / 120s off |
| Ambient temperature | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C |
| Protection class | IP20 | IP20 | IP20 | IP20 | IP20 |
| Cutoff open | limit switch | limit switch | limit switch | limit switch | limit switch |
| Cutoff closed | Integrated electronic overload cutoff | | | | |
| Connection technology | plug-in screw terminal, max. 1 mm ² | | | | |
| Dimensions (B x H x T in mm) | 1660 x 45 x 39 | 1660 x 45 x 39 | 1660 x 45 x 39 | 1660 x 45 x 39 | 1842 x 45 x 39 |
| Housing | aluminium | aluminium | aluminium | aluminium | aluminium |
| Scope of delivery | with accessories | with accessories | with accessories | with accessories | with accessories |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 | 10.000 | 10.000 |

Item code

| | | | | | |
|----------|--------|--------|--------|--------|--------|
| RAL 9006 | 205618 | 205624 | 205630 | 205636 | 205642 |
| RAL 9016 | 205621 | 205627 | 205633 | 205639 | 205645 |

other strokes on request

Item code accessories

| | |
|---|--------|
| SKA/EKA 60 tilt console KF0 inward + sash bracket, RAL 9006 | 206677 |
| SKA/EKA 60 tilt console KF0 inward + sash bracket, RAL 9016 | 206680 |
| SKA/EKA 60 tilt console KF7 inward + sash bracket, RAL 9006 | 206686 |
| SKA/EKA 60 tilt console KF7 inward + sash bracket, RAL 9016 | 206689 |
| SKA/EKA 60 tilt console KF15 inward + sash bracket, RAL 9006 | 206695 |
| SKA/EKA 60 tilt console KF15 inward + sash bracket, RAL 9016 | 206698 |
| SKA/EKA 60 tilt console KF0 outward + sash bracket, RAL 9006 | 206704 |
| SKA/EKA 60 tilt console KF0 outward + sash bracket, RAL 9016 | 206707 |
| SKA/EKA 60 tilt console KF7 outward + sash bracket, RAL 9006 | 206713 |
| SKA/EKA 60 tilt console KF7 outward + sash bracket, RAL 9016 | 206716 |
| SKA/EKA 60 tilt console KF15 outward + sash bracket, RAL 9006 | 206722 |
| SKA/EKA 60 tilt console KF15 outward + sash bracket, RAL 9016 | 206725 |
| SKA/EKA 60 lowering tilt console SK + sash bracket, RAL 9006 | 206731 |
| SKA/EKA 60 lowering tilt console SK + sash bracket, RAL 9016 | 206734 |
| Accessories support | 206740 |

Chain drive EKA 45

Device properties

- Opening width 400 mm
- Max. compressive and tractive force 450 N
- Maintenance-free stainless steel double chain following the principle of alternation
- Integrated limit stop and overload cutoff
- Other opening widths available on request

Accessories

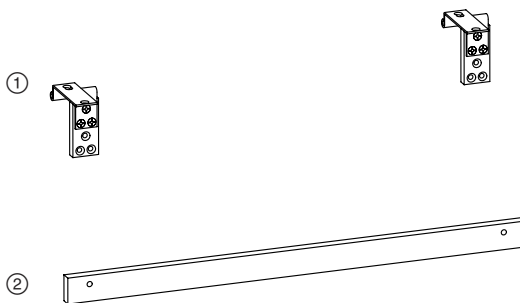
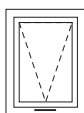
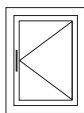
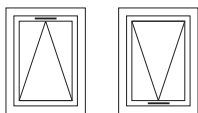
- Tilt console EKA/SKA 45 ①
- Packer SKA 45-400 ②

Range of application

For sashes made of wood, PVC, aluminium, steel and composite material.

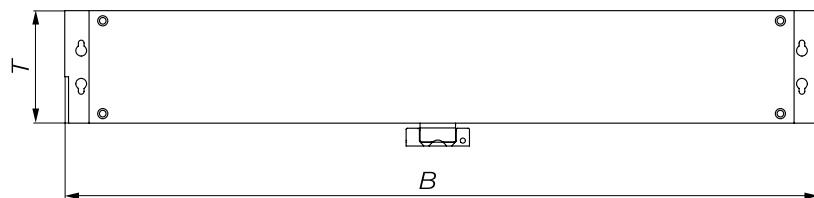
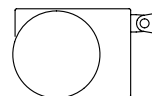
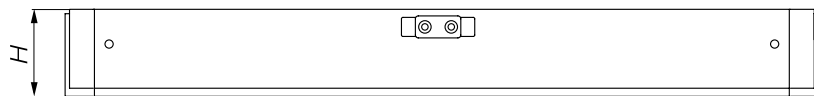
Suitable for smoke and heat exhaust as well as ventilation systems.

Installation examples





Chain drive EKA 45



Technical specifications

| | EKA 45-400 |
|-------------------------------|--|
| Rated voltage (V) | 230 |
| Voltage tolerance range (%) | -10 / +10 |
| Current consumption (A) | 0,23 |
| Compressive force (N) | 450 |
| Tractive force (N) | 450 |
| Locking force (N) | 3000 |
| Stroke/opening width (in mm) | 401 |
| Opening mechanism | stainless steel chain |
| Running period | 10s / 100 mm |
| Duty cycle | 60s on / 120s off |
| Ambient temperature | -10 °C to +60 °C |
| Protection class | IP40 |
| Cutoff open | limit switch |
| Cutoff closed | limit switch adjustable |
| Connection technology | plug-in screw terminal, max. 1 mm ² |
| Dimensions (B x H x T in mm) | 541 x 56,5 x 70 |
| Housing | aluminium |
| Scope of delivery | including sash bracket |
| Lifespan (Open/Closed cycles) | 10.000 |

Item code

| | |
|----------|--------|
| RAL 9006 | 148816 |
| RAL 9016 | 148819 |

other strokes on request

Item code accessories

| | |
|-----------------------------------|--------|
| Tilt console EKA/SKA 45, RAL 9006 | 158126 |
| Tilt console EKA/SKA 45, RAL 9016 | 158129 |
| Packer SKA 45-400, RAL 9006 | 151009 |
| Packer SKA 45-400, RAL 9016 | 151003 |

PRIMAT-E^{compact} 190

Device properties

- Opening width 190 mm
- Increased contact pressure thanks to additional third locking inside the stay
- Two-stay version for wide windows
- Sash suspension with security knob
- Maintenance-free stay with anti-dirt profiling inside the stay
- Integrated limit stop and overload cutoff
- Optional drive pin in combination with additional lockings
- Compact design with low space requirements on the frame

Accessories

- Sash bracket with cap ①
- Bevel window sash bracket with cap ②
- Coupling track for additional locking ZV/F ③
- Drive track, additional for 2-stay design ④

Tools

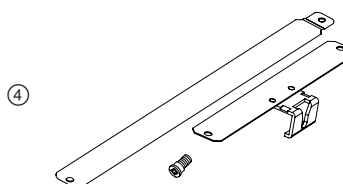
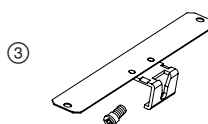
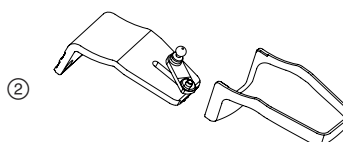
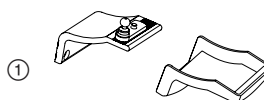
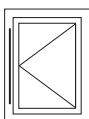
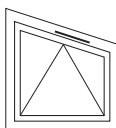
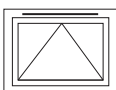
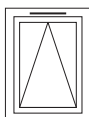
- Jig

Range of application

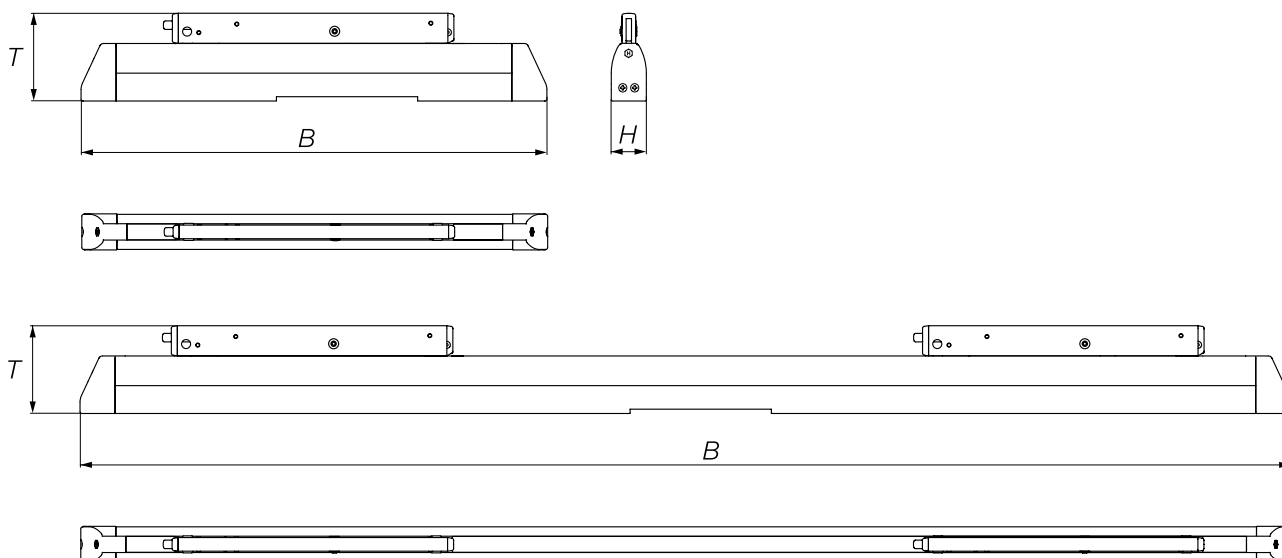
For sashes made of wood, PVC, aluminium and composite material.

Suitable for ventilation systems.

Installation examples



PRIMAT-E^{compact} 190



Technical specifications

| | PRIMAT-E ^{compact} 190, single stay | PRIMAT-E ^{compact} 190, double stay |
|-------------------------------|--|--|
| Rated voltage (V) | 230 | 230 |
| Voltage tolerance range (%) | -10 / +10 | -10 / +10 |
| Current consumption (A) | 0,06 | 0,06 |
| Compressive force (N) | 100 | 100 |
| Tractive force (N) | 100 | 100 |
| Locking force (N) | 1500 | 3000 |
| Stroke/opening width (in mm) | 190 | 190 |
| Opening mechanism | stay | stay |
| Running period | 40s | 40s |
| Duty cycle | 60s on / 60s off | 60s on / 60s off |
| Ambient temperature | 0 °C to +70 °C | 0 °C to +70 °C |
| Protection class | IP50 | IP50 |
| Cutoff open | limit switch | limit switch |
| Cutoff closed | limit switch | limit switch |
| Connection technology | plug-in screw terminal, max. 1 mm ² | |
| Dimensions (B x H x T in mm) | 465 x 36 x 88 | 1210 x 36 x 88 |
| Housing | aluminium | aluminium |
| Scope of delivery | including sash bracket | including sash bracket |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 |

Item code

| | | |
|--------------------------|--------|--------|
| EV 1 | 183740 | 183749 |
| RAL 9016 | 183743 | 183752 |
| RAL 9005 | 183746 | 183755 |
| RAL 9016 with white caps | 185497 | 185500 |

other strokes on request

| Item code accessories | RAL 7035 | RAL 9016 | RAL 9005 |
|---|----------|---------------------|----------|
| Sash bracket with cap | 195104 | 190462 | 190465 |
| Bevel window sash bracket with cap | 195107 | 184452 | 184455 |
| Coupling track for additional locking ZV/F | | Measure x = 8,3 mm | 179608 |
| | | Measure x = 9,5 mm | 179611 |
| | | Measure x = 11,5 mm | 185188 |
| Drive track, additional for ZV/F with 2-stay design | | | 179540 |

PRIMAT-E^{compact} 300

Device properties

- Opening width 300 mm
- Increased contact pressure thanks to additional third locking inside the stay
- Two-stay version for wide windows
- Sash suspension with security knob
- Maintenance-free stay with anti-dirt profiling inside the stay
- Integrated limit stop and overload cutoff
- Optional drive pin in combination with additional lockings
- Compact design with low space requirements on the frame

Accessories

- Sash bracket with cap ①
- Bevel window sash bracket with cap ②
- Coupling track for additional locking ZV/F ③
- Drive track, additional for 2-stay design ④

Tools

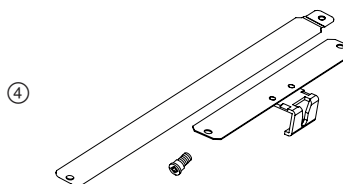
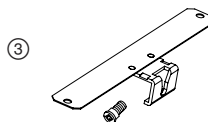
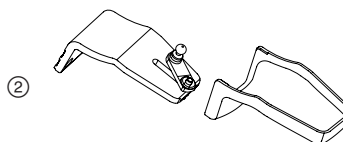
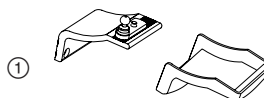
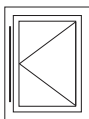
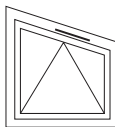
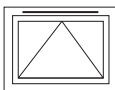
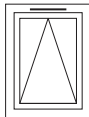
- Jig

Range of application

For sashes made of wood, PVC, aluminium and composite material.

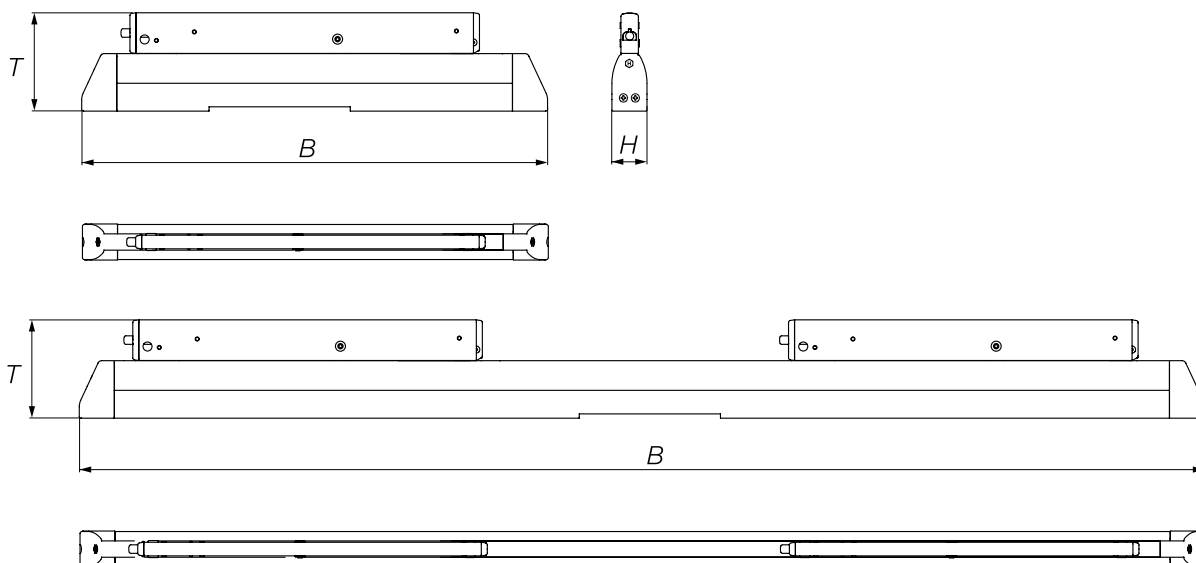
Suitable for ventilation systems.

Installation examples





PRIMAT-E^{compact} 300



Technical specifications

| | PRIMAT-E ^{compact} 300, single stay | PRIMAT-E ^{compact} 300, double stay |
|-------------------------------|--|--|
| Rated voltage (V) | 230 | 230 |
| Voltage tolerance range (%) | -10 / +10 | -10 / +10 |
| Current consumption (A) | 0,06 | 0,06 |
| Compressive force (N) | 80 | 80 |
| Tractive force (N) | 80 | 80 |
| Locking force (N) | 1500 | 3000 |
| Stroke/opening width (in mm) | 300 | 300 |
| Opening mechanism | stay | stay |
| Running period | 50s | 50s |
| Duty cycle | 60s on / 60s off | 60s on / 60s off |
| Ambient temperature | 0 °C to +70 °C | 0 °C to +70 °C |
| Protection class | IP50 | IP50 |
| Cutoff open | limit switch | limit switch |
| Cutoff closed | limit switch | limit switch |
| Connection technology | plug-in screw terminal, max. 1 mm ² | |
| Dimensions (B x H x T in mm) | 512 x 36 x 100 | 1210 x 36 x 100 |
| Housing | aluminium | aluminium |
| Scope of delivery | including sash bracket | including sash bracket |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 |

Item code

| | | |
|----------|--------|--------|
| EV 1 | 193953 | 193962 |
| RAL 9016 | 193956 | 193965 |
| RAL 9005 | 193959 | 193968 |

other strokes on request

Item code accessories

| | RAL 7035 | RAL 9016 | RAL 9005 |
|------------------------------------|----------|----------|----------|
| Sash bracket with cap | 195104 | 190462 | 190465 |
| Bevel window sash bracket with cap | 195107 | 184452 | 184455 |

| | | |
|---|---------------------|--------|
| Coupling track for additional locking ZV/F | Measure x = 8,3 mm | 179608 |
| | Measure x = 9,5 mm | 179611 |
| | Measure x = 11,5 mm | 185188 |
| Drive track, additional for single stay design | | 192904 |
| Drive track, additional for ZV/F with 2-stay design | | 192910 |

PRIMAT-E^{compact} A

Device properties

- Opening width 95 - 190 mm adjustable
- Increased contact pressure thanks to integrated locking
- Single, double, triple version
- Integrated limit stop and overload cutoff
- Compact design with low space requirements on the frame

Accessories

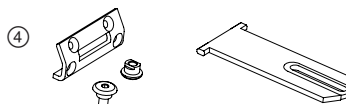
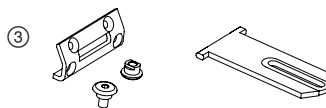
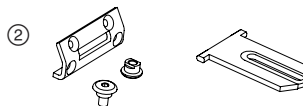
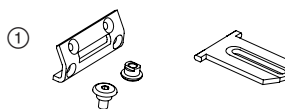
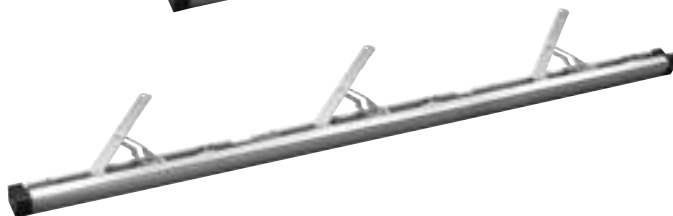
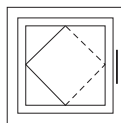
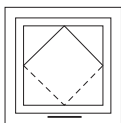
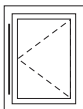
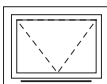
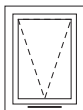
- Accessories sash bracket R 0-25 ①
- Accessories sash bracket R 26-50 ②
- Accessories sash bracket R 51-75 ③
- Accessories sash bracket R 76-100 ④

Range of application

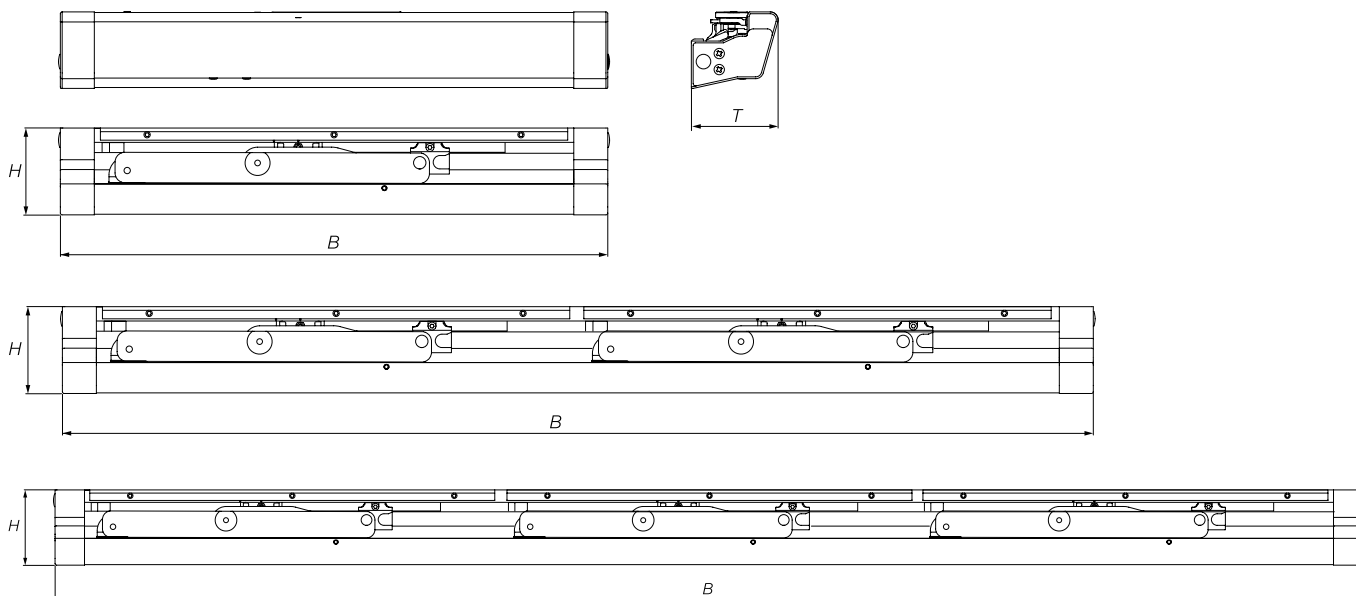
For sashes made of wood, PVC, aluminium and composite material.

Suitable for ventilation systems.

Installation examples



PRIMAT-E^{compact} A



Technical specifications

| | PRIMAT-E ^{compact} A, single stay | PRIMAT-E ^{compact} A, double stay | PRIMAT-E ^{compact} A, triple stay |
|---------------------------------|--|--|--|
| Rated voltage (V) | 230 | 230 | 230 |
| Voltage tolerance range (%) | -10 / +10 | -10 / +10 | -10 / +10 |
| Current consumption (A) | 0,06 | 0,06 | 0,06 |
| Starting current (A) | 0,1 | 0,1 | 0,1 |
| Compressive force (N) | 80 | 80 | 80 |
| Tractive force (N) | 80 | 80 | 80 |
| Locking force (N) | 8000 | 16.000 | 24.000 |
| Stroke/opening width (in mm) | 190 | 190 | 190 |
| Opening mechanism | stay | stay | stay |
| Running period | 40s | 40s | 40s |
| Duty cycle | 60s on / 60s off | 60s on / 60s off | 60s on / 60s off |
| Ambient temperature | 0 °C to +70 °C | 0 °C to +70 °C | 0 °C to +70 °C |
| Protection class | IP50 | IP50 | IP50 |
| Cutoff open | limit switch | limit switch | limit switch |
| Cutoff open | limit switch | limit switch | limit switch |
| Connection technology | plug-in screw terminal, max. 1 mm ² | | |
| Dimensions (B x H x T in mm) | 452 x 72 x 63 (FB 450-1,000) | 1001 x 72 x 63 (FB 1001-1500) 1501 x 72 x 63 (FB 1501-2000) | 2001 x 72 x 63 (FB 2001-2500) 2501 x 72 x 63 (FB 2501-3000) |
| Housing | aluminium | aluminium | aluminium |
| Scope of delivery | without sash bracket | without sash bracket | without sash bracket |
| Lifespan (Open/Closed cycles) | 10.000 | 10.000 | 10.000 |

Item code

| | | | |
|----------|----------------------|--|--|
| EV 1 | 200269 (FB 450-1000) | 203010 (FB 1001-1500) 206386 (FB 1501-2000) | 203028 (FB 2001-2500) 206404 (FB 2501-3000) |
| RAL 9016 | 200272 (FB 450-1000) | 203013 (FB 1001-1500) 206389 (FB 1501-2000) | 203031 (FB 2001-2500) 206407 (FB 2501-3000) |
| RAL 9005 | 200275 (FB 450-1000) | 203016 (FB 1001-1500) 206392 (FB 1501-2000) | 203034 (FB 2001-2500) 206410 (FB 2501-3000) |

other strokes on request

Item code accessories

| | |
|-----------------------------------|--------|
| Accessories sash bracket R 0-25 | 200200 |
| Accessories sash bracket R 26-50 | 200203 |
| Accessories sash bracket R 51-75 | 200206 |
| Accessories sash bracket R 76-100 | 200209 |

Electric drive EM 100

Device properties

- Motor operation of surface-mounted and concealed fanlight fittings
- Stroke of 10 - 66 mm adjustable
- Max. compressive and tractive force 1500 N
- For single windows or window groups
- Vertical or horizontal installation

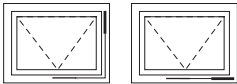
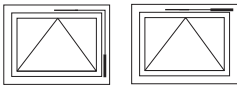


Range of application

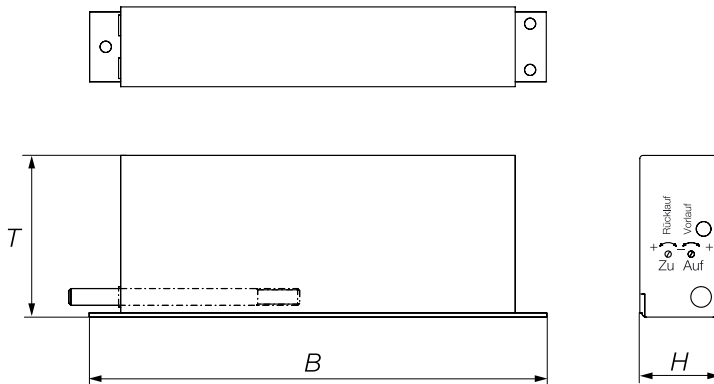
For sashes made of wood, PVC, aluminium, steel and composite material.

Suitable for ventilation systems.

Installation examples



Electric drive EM 100



Technical specifications

| | EM 100 |
|-------------------------------|--|
| Rated voltage (V) | 230 |
| Voltage tolerance range (%) | -10 / +10 |
| Current consumption (A) | 0,2 |
| Compressive force (N) | 1500 |
| Tractive force (N) | 1500 |
| Stroke/opening width (in mm) | 10 - 66 |
| operating speed | 0,9 m/s |
| Opening mechanism | spindle |
| Ambient temperature | +5 to +50 °C |
| Protection class | IP50 |
| Cutoff open | limit switch |
| Cutoff closed | limit switch |
| Connection technology | plug-in screw terminal, max. 1 mm ² |
| Dimensions (B x H x T in mm) | 218 x 38 x 77 |
| Housing | aluminium |
| Colours | RAL 9016, EV 1 |
| Scope of delivery | with thread rod + sleeve 8 / 8 |
| Lifespan (Open/Closed cycles) | 10.000 |

Item code

| | |
|----------|--------|
| EV 1 | 122720 |
| RAL 9016 | 122723 |
| RAL 9005 | 183116 |

Drive accessories

Control systems for 24-Volt DC drives

Empty housing for 1 circuit board

Housing B/H/T: 96 x 96 x 40 mm

Tandem sequence control FTA 3/N with housing

Tandem cutoff for 2 drives (no more than 2 A per drive) and sequence control for an additional locking drive with or without internal overload cutoff

Tandem sequence control FTA 3/B with special housing ① (certified according to EN12101-2)

Tandem cutoff for 2 drives (no more than 2 A per drive) and sequence control for an additional locking drive with or without internal overload cutoff

Sync control system SYN 2.1 K

for synchronising 2 electric fitting stays
SBS 300 / 500 SYN

Sync control system SYN 2 K ②

for synchronising 2 drives (no more than 1,2 A per drive), with integrated overload cutoff.

Sync control system SYN 225

for synchronising 2 drives (no more than 2,5 A per drive), with integrated overload cutoff.

Sync control system SYN 325

for synchronising 3 drives (no more than 2,5 A per drive), with integrated overload cutoff.

Sync control system SYN 425 ③

for synchronising 4 drives (no more than 2,5 A per drive), with integrated overload cutoff.

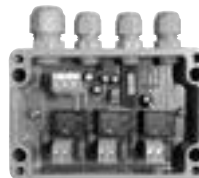
Sync and sequence control SF 225

for synchronising 2 drives and one or two additional locking systems.

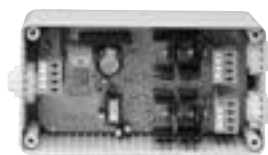
Sync control system SYN 2 + 2

for synchronising 4 drives in 2 groups, drives with integrated overload cutoff.

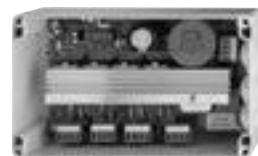
③



④



⑤



Drive accessories

Opto-acoustic detector OAM 24

Optical and acoustic signaling ①

by closing electromotive drives

Input/output voltage 24 V DC, current consumption 2A
housing B/H/T: 146 x 18 x 21 mm



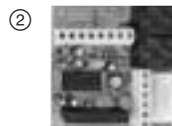
Guard strip control system

Guard strip control system SLS-2L ②

for cutting off motor drives in emergency situations,

Input/output voltage 24 V DC

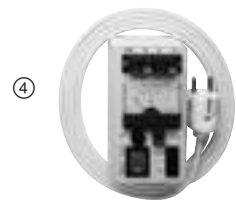
AP housing B/H/T: 100 x 100 x 37 mm



Guard strip SL

Test control units

Test control unit 24 V drives ③



Test control unit 230 V drives ④

Restrictor stays

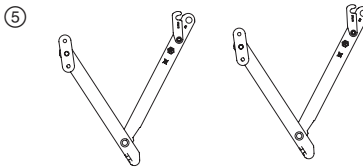
Restrictor stay, 1 pair ⑤

Stays 400 mm, wood/PVC

Stays 600 mm, wood/PVC

Stays 400 mm, aluminium

Stays 600 mm, aluminium



| | Item code |
|---|-----------|
| Empty housing for 1 circuit board | 160648 |
| Tandem sequence control FTA 3/N with housing | 207472 |
| Tandem sequence control FTA 3/B with special housing (certified according to EN12101-2) | 206998 |
| Sync control system SYN 2.1 K | 190993 |
| Sync control system SYN 2 K | 182275 |
| Sync control system SYN 225 | 181910 |
| Sync control system SYN 325 | 182215 |
| Sync control system SYN 425 | 181907 |
| Sync and sequence control SF 225 | 182242 |
| Sync control system SYN 2 + 2 | 182583 |
| Opto-acoustic detector OAM 24, EV 1 | 223833 |
| Opto-acoustic detector OAM 24, RAL 9016 | 224361 |
| Opto-acoustic detector OAM 24, RAL 9005 | 224364 |
| Guard strip control system SLS-2L | 181931 |
| Guard strip SL | 181925 |
| Test control unit 24 V drives | 182764 |
| Test control unit 230 V drives | 182710 |
| Restrictor stay 400 mm, wood/PVC, 1 pair | 162174 |
| Restrictor stay 600 mm, wood/PVC, 1 pair | 162177 |
| Restrictor stay 400 mm, aluminium, 1 pair | 174187 |
| Restrictor stay 600 mm, aluminium, 1 pair | 174190 |

Power supply units

These compact power supply units are used to power 24 V DC drives.

The maximum output current of the power supply units is indicated by the label TF The total current consumption of the connected drives must not exceed the maximum output current of the power supply units.

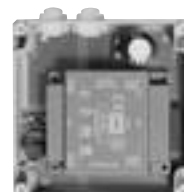
The TF 01 power supply unit has been designed as an insert element for deep concealed sockets.

The power units TF 02, TF 04 and TF 08K have been designed as compact units with a PVC housing, while the power supply units TF 08, TF 16 and TF 24 have been designed as compact units with a sheet metal housing.

The power supply units TF 04 and TF 08K feature 2 slots for additional modules (tandem cutoff / sequence control).



TF 01



TF 02



TF 08K



TF 24

Technical specifications

| Power supply unit | TF 01 |
|---------------------|--|
| Supply voltage | 230 V AC |
| Output voltage | 24 V DC ($\pm 10\%$) |
| max. output current | 0,95 A |
| Duty cycle | 50 % ED |
| Ambient temperature | -20 °C to +60 °C |
| Dimensions | insert for flush socket \varnothing 55 mm, depth 60 mm |

| Power supply unit | TF 02 | TF 04 | TF 08K | TF 08 | TF 16 | TF 24 |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Supply voltage | 230 V AC | 230 V AC | 230 V AC | 230 V AC | 230 V AC | 230 V AC |
| Output voltage | 24 V DC | 24 V DC | 24 V DC | 24 V DC | 24 V DC | 24 V DC |
| Maximum output voltage | 32 V DC | 32 V DC | 32 V DC | 32 V DC | 32 V DC | 32 V DC |
| Maximum output current | 2 A | 4 A | 8 A | 8 A | 2 x 8 A | 3 x 8 A |
| Duty cycle | 50 % ED | 50 % ED | 50 % ED | 50 % ED | 50 % ED | 50 % ED |
| Ambient temperature | +5 °C to +40 °C | +5 °C to +40 °C | +5 °C to +40 °C | +5 °C to +40 °C | +5 °C to +40 °C | +5 °C to +40 °C |
| Housing dimensions B x H x T (mm) | 120 x 122 x 55 | 200 x 120 x 96 | 200 x 120 x 96 | 200 x 300 x 155 | 200 x 300 x 155 | 200 x 300 x 155 |

| | Item code |
|---------------------------------|-----------|
| Power supply unit TF 01, 0,95 A | 223797 |
| Power supply unit TF 02, 2 A | 163200 |
| Power supply unit TF 04, 4 A | 163203 |
| Power supply unit TF 08K, 8 A | 163206 |
| Power supply unit TF 08, 8 A | 155651 |
| Power supply unit TF 16, 16 A | 155660 |
| Power supply unit TF 24, 24 A | 155669 |

ATRIUM HS® 300 E

Features

The ATRIUM HS® 300 E is a power-operated lift and slide door capable of moving sash elements of up to 300 kg in the horizontal direction. It can be used as a side entrance/exit to connect outdoor and indoor areas.

When moved to its closed position, the sash is lowered and locked by locking bolts. This allows for a secured night vent position. When set to this position, the sash cannot be moved by hand, but remains unlocked.

The lift and slide door cannot be used as a fire, smoke control or escape door.

In the event of a power failure, an insertable lever ① can be used to lift/lower the sliding sash and slowly move it by hand. This makes it possible to release/lock the door when it is closed/open.

The door is operated by a control keypad ② and, if necessary, by a key switch ③ (deadman model). The automatic mode also features a radio remote control ④. Installation always includes safety devices such as light curtains ⑤ or infrared presence detector ⑥. The ATRIUM HS® 300 E can also be connected to building control systems.



ATRIUM HS® 300 E



① Emergency release



② Control keypad



③ Key switch



④ Radio remote control



⑤ IR light curtain



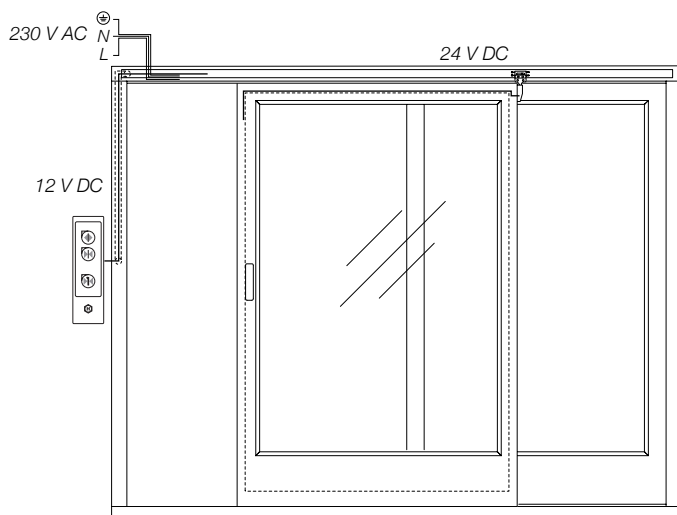
⑥ IR presence detector



ATRIUM HS® 300 E

Technical specifications

| | | | |
|---|---|----------------|----------------|
| Supply voltage | 230 V AC 50/60 Hz ($\pm 15\%$), 24 V DC -15% +30% | | |
| Current consumption | 200 mA at 230 V AC, 2A at 24 V DC | | |
| Internal operating voltage | 24 V DC (-15%, +30%) | | |
| Pushbutton voltage | 12 V DC | | |
| Duty cycle | max. 3 min | | |
| Duty cycle | 30% | | |
| Running period stroke drive | approx. 8 seconds | | |
| Stroke drive | Overall size | Sash height | |
| | 1 | 1900 - 2100 mm | |
| | 2 | 2100 - 2400 mm | |
| | 3 | 2400 - 2700 mm | |
| Travel speed of displacement drive | approx. 100 mm / s | | |
| Gear belt sliding drive/drive pin | Size | Jamb width | Sash width |
| | 1 | 2210 - 2710 mm | 1000 - 1250 mm |
| | 2 | 2711 - 3710 mm | 1251 - 1750 mm |
| | 3 | 3711 - 4710 mm | 1751 - 2250 mm |
| | 4 | 4711 - 5710 mm | 2251 - 2750 mm |
| | 5 | 5711 - 6710 mm | 2751 - 3250 mm |
| Ambient operating temperature | -5 °C to +50 °C | | |
| Protection class (according to DIN VDE 0470 / part 1) | IP20 (for dry rooms) | | |
| Electrical cutoff | Integrated electronic overload cutoff. End position and night ventilation limit switches | | |
| Cutoff force displacement drive | < 150 N | | |
| Colour design stroke drive | Housing, EV 1 or C34 anodised | | |
| Colour design displacement drive | EV 1 anodised or white powder-coated (special colours available on request) | | |
| Conformity (CE) | EMC for domicile and industrial sector | | |

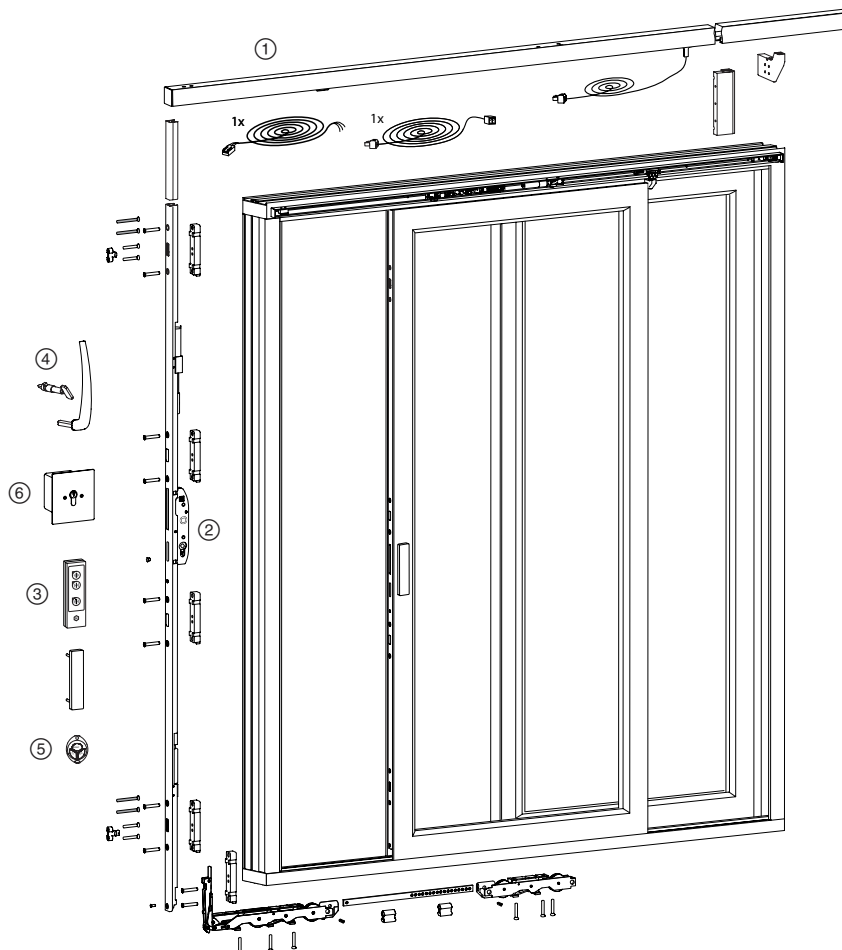


ATRIUM HS® 300 E

Possible profiles

| Aluminium | PVC | Timber (sash timber thickness/distance) |
|--------------------|----------------------------|---|
| Alcoa RT 100 | Gealan 8000 | 68 / 28 |
| Lavaal Alas 73 | LG Chemical PVC | 78 / 28 |
| Reynaers CP 155 | Profine PremiDoor | 54 / 10 |
| Reynaers TLS 110 | Rubo SZ00 | 68 / 10 |
| SAPA-C 125 | Salamander ID | |
| SAPA-ES60 | Schüco Corona CT 70 | |
| Schüco Royal S 120 | Veka Softline 70 | |
| Schüco Royal S 160 | Veka Topline, jamb 105.220 | |
| Sopena ELV 135RT | | |

additional profiles available on request





ATRIUM HS® 300 E

Order information

Linear actuator ①

| Jamb width | Sash width |
|--------------|--------------|
| 2210-2710 mm | 1000-1250 mm |
| 2711-3710 mm | 1251-1750 mm |
| 3711-4710 mm | 1751-2250 mm |
| 4711-5710 mm | 2251-2750 mm |
| 5711-6710 mm | 2751-3250 mm |

Item code

| Stroke drive ② | Sash height | Item code | |
|------------------------|-------------|--------------|--------|
| without gas spring | EV 1 | 1900-2100 mm | 198396 |
| | | 2101-2400 mm | 198402 |
| | | 2401-2700 mm | 198408 |
| C34 | | 1900-2100 mm | 198399 |
| | | 2101-2400 mm | 198405 |
| | | 2401-2700 mm | 198411 |
| with gas spring | EV 1 | 1900-2100 mm | 202222 |
| | | 2101-2400 mm | 202234 |
| | | 2401-2700 mm | 202246 |
| Sash weight 120-220 kg | C34 | 1900-2100 mm | 202228 |
| | | 2101-2400 mm | 202240 |
| | | 2401-2700 mm | 202252 |
| with gas spring | EV 1 | 1900-2100 mm | 202225 |
| | | 2101-2400 mm | 202237 |
| | | 2401-2700 mm | 202249 |
| Sash weight 221-300kg | C34 | 1900-2100 mm | 202231 |
| | | 2101-2400 mm | 202243 |
| | | 2401-2700 mm | 202255 |

Item code accessories

| | | |
|---|---------------------------------------|--------|
| Keypad ③ | EV 1 | 200008 |
| | white | 200011 |
| | C34 | 202403 |
| Emergency release set (drive handle and universal key) ④ | | 198990 |
| IR light curtain (2 units required for each automatic door) | | 201931 |
| IR presence detector (2 units required for each automatic door) | | 201934 |
| Remote control ATRIUM HS® 300 E ⑤ | Receiver module/remote control module | 204073 |
| | Handheld radio transmitter | 204298 |
| | TF02 | 163200 |
| Key switch ATRIUM HS® 300 E ⑥ | Receiver module/remote control module | 204073 |
| | Key switch, concealed | 201943 |
| | TF02 | 163200 |

When ordering one remote control **and** one key switch, you will only need **one** remote control module and **one** TF02.

Also required are the components included in the standard ATRIUM HS® 300 line and the conduction of a risk assessment.

You know when it's HAUTAU.



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