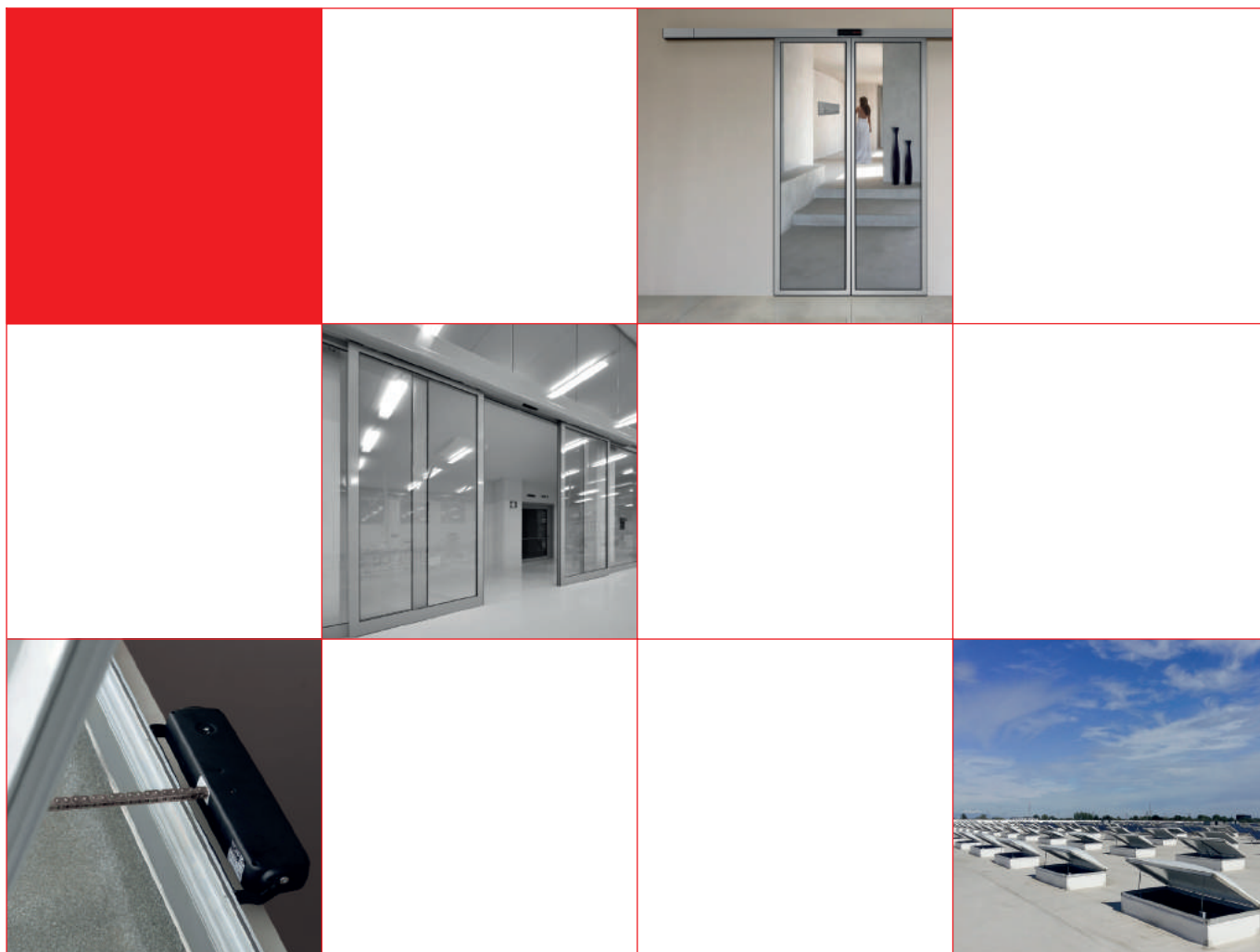
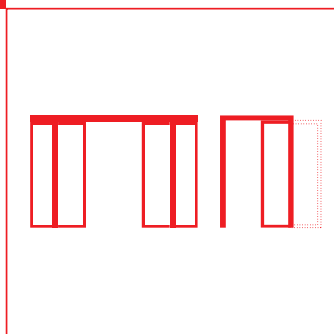


2021 CATALOGUE



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Window Automation

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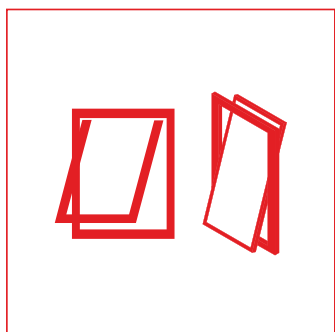
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who we are

TOPP offers a wide range of devices, simple and functional for the automation of doors and windows designed to simplify our daily movements.

Our commitment is to bring you the benefits of a smooth and clean experience with windows and doors automation.

Our key values are:

- Expertise in innovation
- Proved quality
- Customer-oriented approach



mission

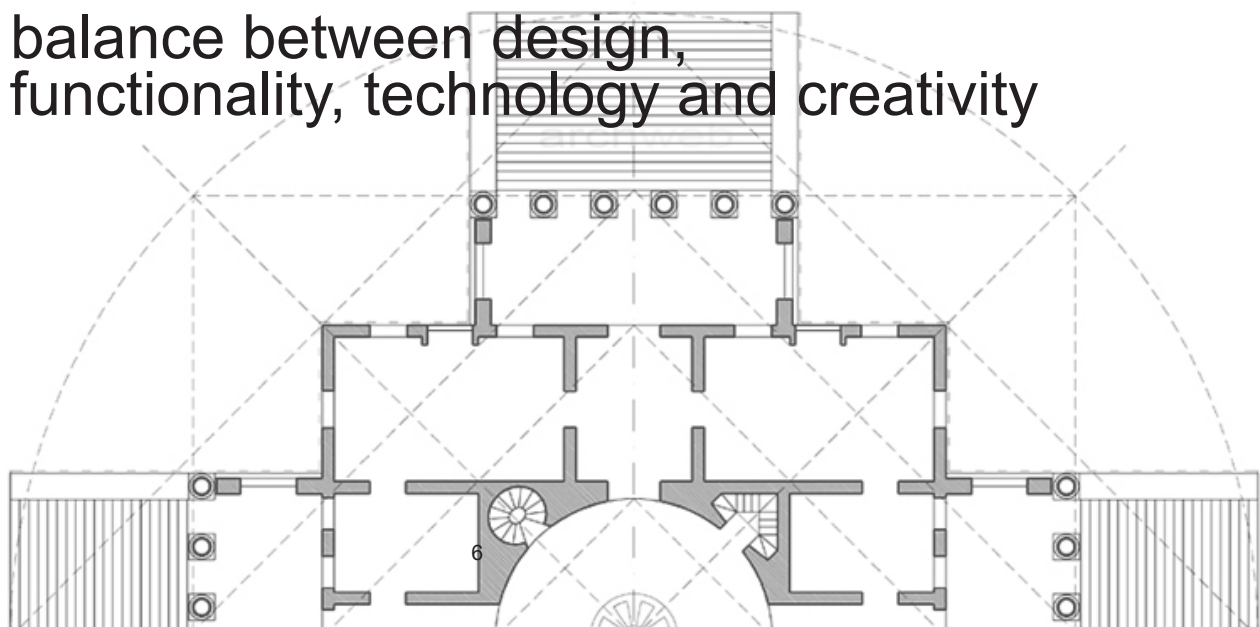
To be more than a simple manufacturer of automations for doors and windows and go beyond customer expectations. An accurate industrial design enables the development of innovative products enhanced by a complete service, from consultancy to installation through selected and reliable partners



made in italy

Countless international patents, essential for the protection of the TOPP solutions, confirm our natural vocation: a constant search for the perfect balance between design, function, technology and creativity for the development of products renowned worldwide as "Made in Italy"

balance between design,
functionality, technology and creativity

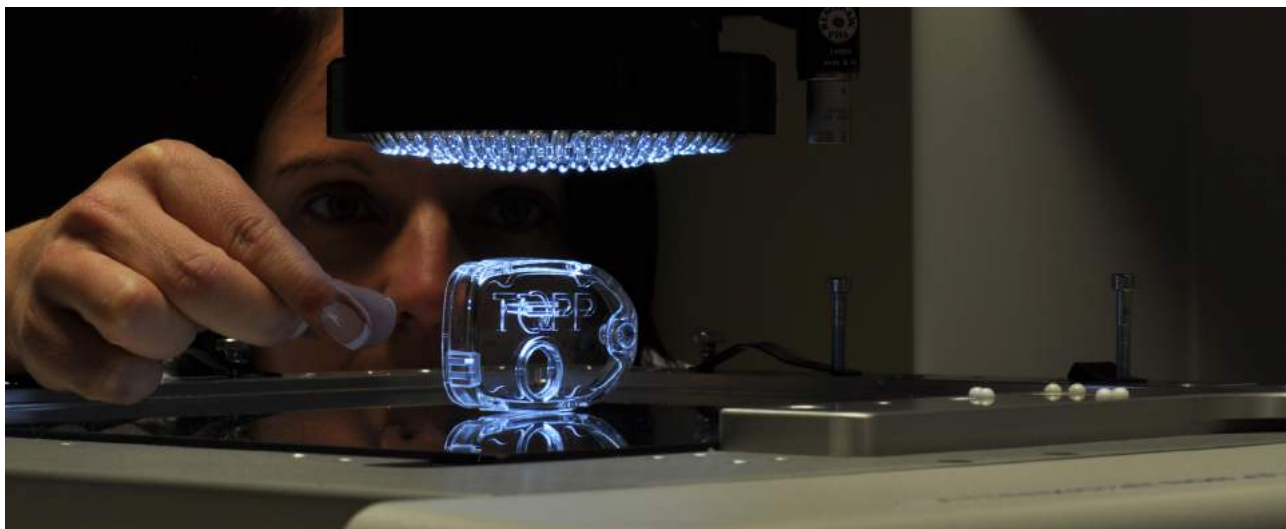




Innovation
is our tradition

We started from the very beginning, back in 1996, by offering our engineering know-how as a service bureau and high product innovation has been our focus ever since. The use of state-of-the-art 3D engineering tools and the aid of laser sintering systems for rapid prototyping accelerate the process of study and industrialization of the products and have brought Topp to the registration of over 50 international patents.

research and innovation

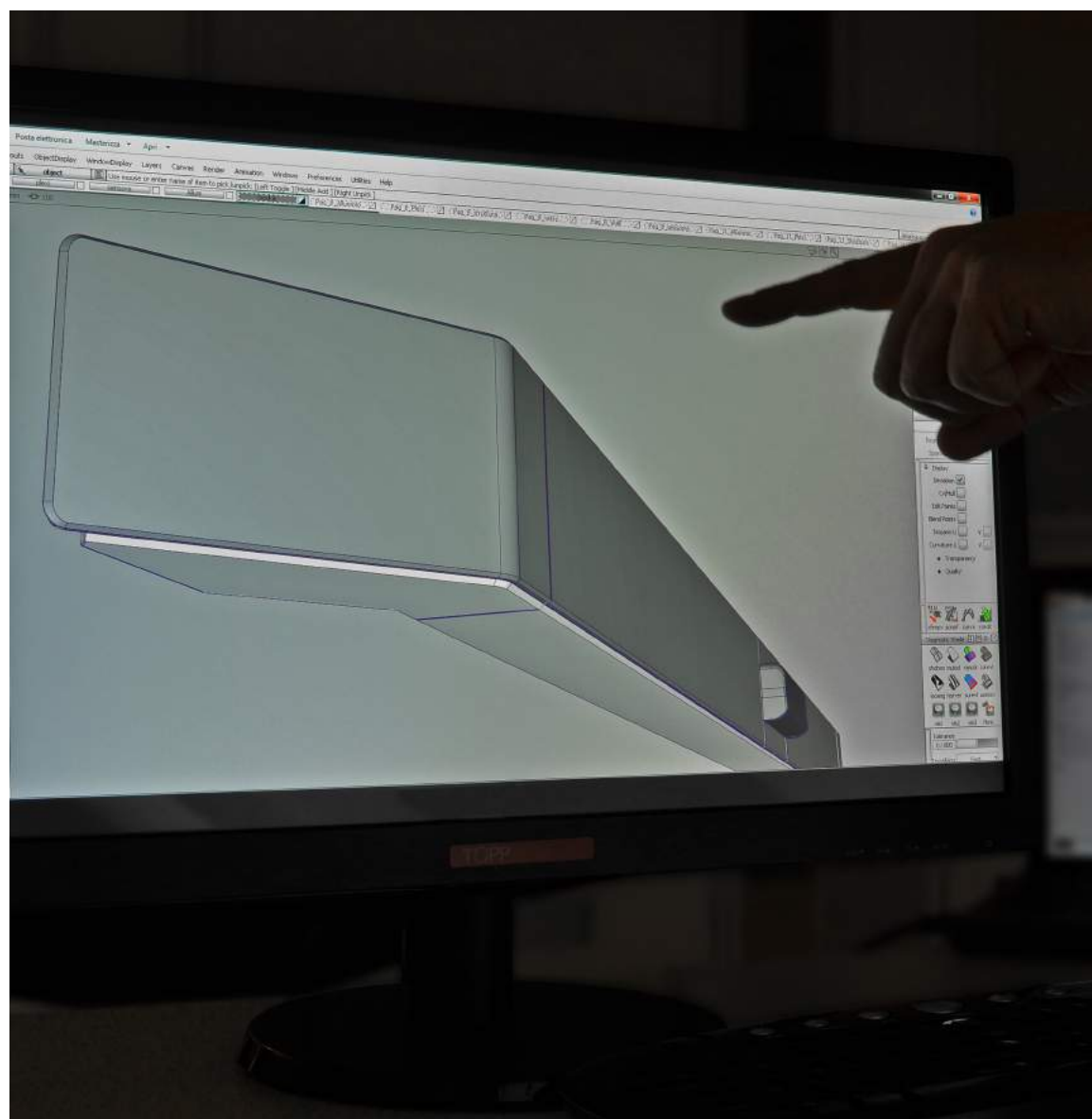


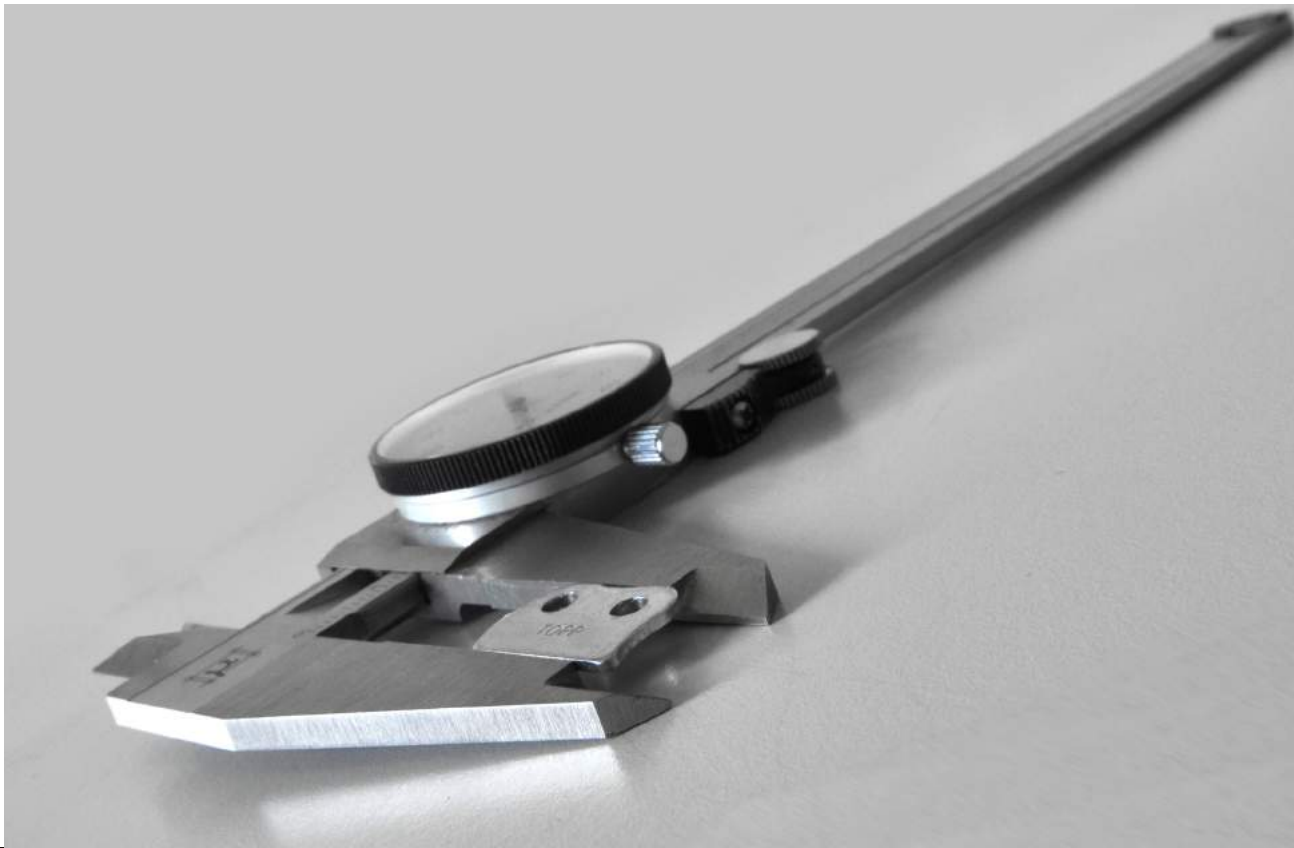
product quality

Proven quality means state of the art raw materials, technical know-how, full production process monitoring and the availability of a well-organized and efficient testing laboratory. After being produced, each device is tested individually in order to fulfill our commitment to quality. Product value is flanked by service quality, from the pre-feasibility analysis to the after-sales service.

Each device is tested individually:
Your satisfaction is our success.

TOPP
tecnologie del movimento





Long-term customer oriented approach

Customer orientation means keeping full focus on the market wants and needs: observing, feeling and listening to the customer requirements. Cooperation starts from the pre-sales activity, suggesting the most suitable product for his needs and grows up to the after-sales stage managing customers concerns and meeting them at their business environment.

Our major effort is to build long-lasting relation ships with sales partners all over the world.

DOOR AUTOMATION

A line of automatic operators for pedestrian doors, developed and produced on principles of quality, reliability and design. Innovative technological solutions, microprocessor control circuitry, maximum solidity and reliability; structural strength guaranteed by the choice of materials, suitable to withstand any effort or stress; harmonious, elegant minimalist design, appropriate for even the most demanding architectural solutions.

S200



M200



DUEVILLE



**V1
V1E**



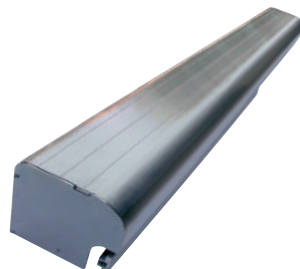
K140



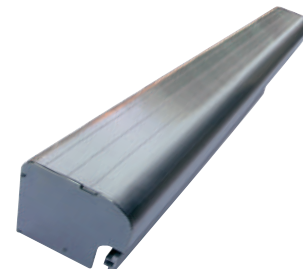
K200



K280



K500



K200R



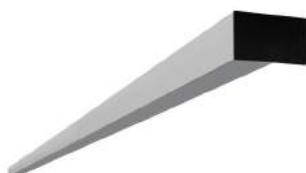
K200T



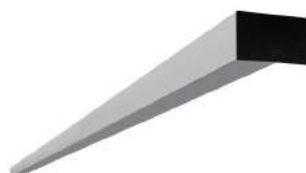
K280T



T150



T240



T240R





Automatic swing door operators

S200 M200

Max. capacity 250 Kg

Max. capacity 250 Kg

PRODUCT DESCRIPTION

Automatic door operators TOPP, model S200 and M200, for pedestrian swing doors. They may be used for doors with 700mm widths with maximum weight of 250kg and 1200 widths with maximum weight of 130kg respectively. Power supply 230V~ 50 Hz.

With a minimalist and sober design, with an elegant aluminium cover, are the ideal solution for prestigious environments, both residential and commercial: shops, offices, hotels and other situations that require an automatic swing door. Simple and easy to install due to the fitting plate, the adjustable settings on the electronic board and the side switches for the power supply, functions and reset selection. In compliance with the EN16005 Standard, the S200 and M200 work in either Full Power and Low Energy modes. The Low Energy mode does not require safety sensors due to the electronic control of force and weight. Due to the combination of 3 different types of arm - slide track arm, push arm and elbow slide track arm - with extension systems, the mechanisms are very easy to configure and can be adapted to any wall and door type. In case of a power failure, a long-life battery pack will assure the operator's functioning.

S200 tested in accordance with the EN1634-1 Standard (fire resistance test).



Fitting plate for an easy installation to the wall.



Full Power or Low Energy modes can be easily selected from the electronic board.



On-board batteries without automation changes on dimension.



TECHNICAL SPECIFICATIONS

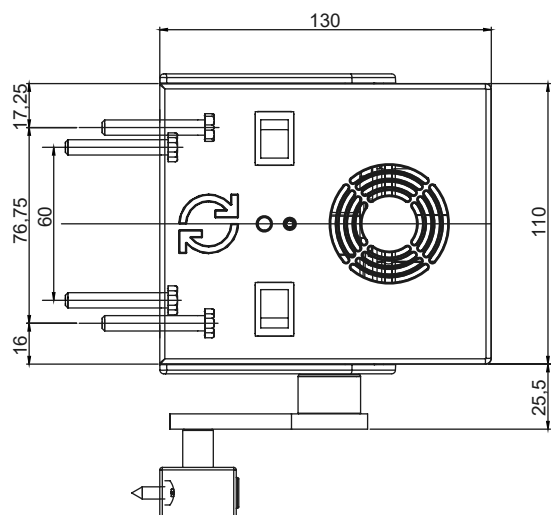
S200

M200

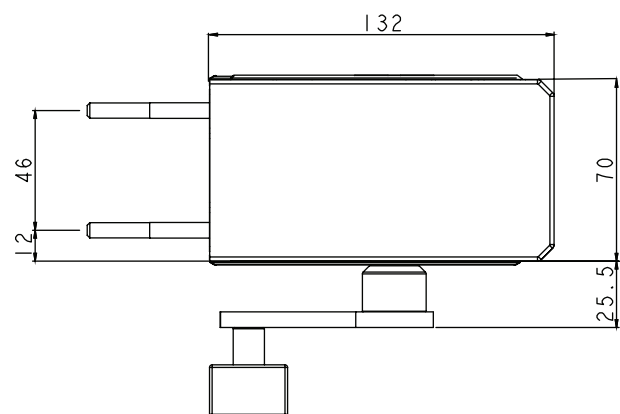
Power supply	230V ~ 50/60 Hz	230V ~ 50/60 Hz
Operation modes	Full Power or Low Energy	Full Power or Low Energy
Working system	Opening by motor – Closing by spring	Opening by motor – Closing by motor
Power supply for external accessories	24V - 500mA max	24V - 500mA max
Absorption	1 A	0,65 A
Absorbed power	230W	150W
Durability	1.000.000 cycles	1.000.000 cycles
Max. opening speed	50°/second	50°/second
Adjustment of automatic closing time	from 0 to 60s	from 0 to 60s
Max. door-panel weight	250kg for panel 700mm – 130kg for panel 1200mm	250kg for panel 700mm – 130kg for panel 1200mm
Clear passage width		
with push arm	min 600mm – max 1600mm	min 600mm – max 1600mm
with slide track arm	min 650mm – max 1600mm	min 650mm – max 1600mm
with elbow slide track arm	min 700mm – max 1600mm	min 700mm – max 1600mm
Max. opening angle of push arm:	115°	115°
Max. opening angle of slide track arm	95°	95°
Dimensions	580mm x 130mm x H110mm	643mm x 132mm x H74mm



S200

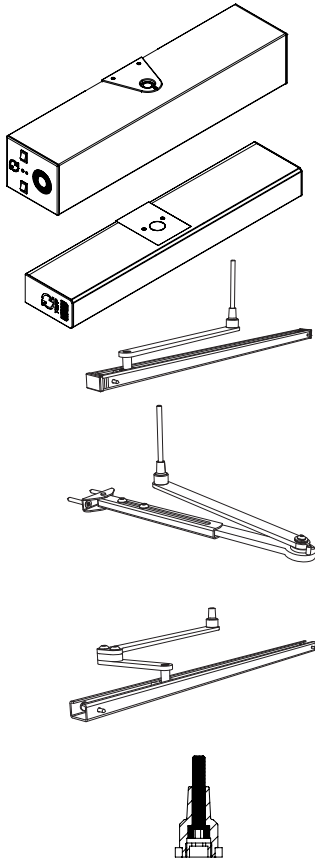


M200



S200 AND M200 AUTOMATIC SWING DOOR OPERATORS

Max. capacity from 250kg for leaf 700mm to 130kg for leaf 1200mm



3S10001 S200 - automatic swing door operator with spring and on-board battery (250kg for leaf of up to 700mm – 130kg for leaf of up to 1200mm)

3S11010 M200 - automatic swing door operator with on-board battery (250kg for leaf of up to 700mm – 130kg for leaf of up to 1200mm)

3S1020 SA1 Slide track arm (for overlap depths from 0 up to max. 30 mm)

3S1010 AA1 Push arm (for lintel depths from 0 up to max. 100mm)

3S1011 AA2 Push arm (for lintel depths from 101 up to max. 200mm)

3S1012 AA3 Push arm (for lintel depths from 201 up to max. 300mm)

3S1030 EA1 Elbow slide track arm (for lintel depths from 0 up to max. 100mm)

3S1031 EA2 Elbow slide track arm (for lintel depths from 101 up to max. 220mm)

3S1100 PS1 Arm extension 25mm

3S1101 PS2 Arm extension 50mm

3S1102 PS3 Arm extension 75mm

3S1180 KIT S200 operator junction cover for double swing door (2 m)

3S1181 KIT M200 operator junction cover for double swing door (2 m)

Note: Electronic board with on-board receiver and possibility to control through TS1S radio remote control selector (as an alternative to MS1S and KS1S selectors).



S200 AND M200 ACCESSORIES



8E1725	WS6 Microwave unidirectional activation sensor
8E1731	IS6M Master safety sensor for swing doors (length 700mm) – black. Certified according to EN16005
8E1732	IS6M Master safety sensor for swing doors (length 1200mm) – black. Certified according to EN16005
8E1734	IS6S Slave safety sensor for swing doors (length 700mm) – black. Certified according to EN16005
8E1735	IS6S Slave safety sensor for swing doors (length 1200mm) – black. Certified according to EN16005
8E1771	BF1 2 pieces Flatscan technology safety sensors – white
8E1772	BF1 2 pieces Flatscan technology safety sensors – black
8E1042	MS1S Analog functions selector for swing door automation
8E1043	KS1S Analog functions selector key operated for swing door automation
8E1083	KC1S key switch for opening/closing
8E1055	TS1S 4-functions wireless selector for swing door automation (open, close, exit onlymode, automatic mode)
8E1832	DS2S LCD digital function selector with advanced end-user/installer programming functions for swing door automation – white
8E1833	DS2S LCD digital function selector with advanced end-user/installer programming functions for swing door automation – black
8E1890	External connector kit for DS2S (with wire L=1m)
8E1094	HS3 touchless infrared activation switch
8E1143	HS4T touchless infrared activation switch wireless
8E1141	HS4R receiver for HS4T
8E1152	HS2S touchless switch for the activation/deactivation of the electric-lock with occupied/vaccant indication
8E1091	PU1 Ultra-flat activation push pad
8E1142	TP1 Fingers anti-entrapment system for automatic swing door hinges (L=1930mm)
8E1127	EB15 Magnetic electric lock for swing door
8C0477	SwitchBoxDC Wifi device for the door opening via smartphone or tablet

Modular system for automatic entrances

DUEVILLE

Max. capacity 200 Kg

PRODUCT DESCRIPTION

TOPP DUEVILLE modular system for entrances with automatic sliding doors. Includes integrated entrance lighting (LED light diffused through the length of the automation and spot side LED lights) controlled by radio control, maximum 200 kg capacity, continuous use, electronic board with microprocessor of latest generation that allows the motion self-adjustment according to the weight and dimensions of the panels. Built-in safety functions with thrust force control and obstruction detection system that automatically reverses the operation when an obstacle in the doorway is detected. Device with encoder for the automatic re-reading of stroke, position and slowdown of the panels. Base parameters setting through push buttons on the electronic board and advanced user and installer settings via digital selector. Operating modes selection with manual selector, digital selector or wireless selector. Optional accessories to be installed concealed inside the automation cover: video surveillance kit, sound diffusion kit, tubular motor kit for standard roller blind.

Available leather cover treatments and different textures and colors.

CE certified automation in compliance with the EN16005.



Architectural and aesthetic integration thanks to the elegant design fully expressed by the lighting system.



Interchangeable lateral modulus that allow the realization of corner entrances and access control vestibules.



Full glass free-standing access vestibule that guarantees the highest elegance of aesthetic transparency, releasing the entrance from any disturbing framed structures.

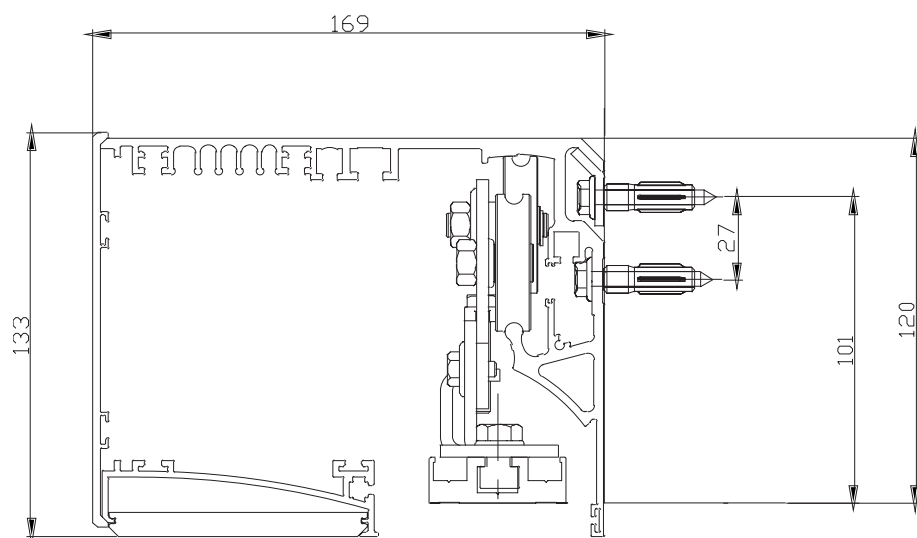


TECHNICAL SPECIFICATIONS

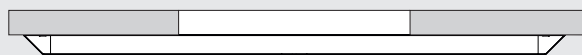
Power supply	230V ~ 50 Hz	
Peripheral power output	24 V 500mA max	
Absorption	1,31 A*	
Absorbed power	286 W*	
Durability	2.000.000 cycles	
Opening/closing speed	adjustable 100 ÷ 800 mm/s	
Opening/closing approach speed	adjustable 1 ÷ 50	
Opening/closing acceleration	adjustable 1 ÷ 12	
Automatic closing time	adjustable 0 ÷ 60 s	
Working temperature	-20°C min +50°C max	
No. of door panels	1 PANEL	2 PANELS
Maximum capacity	140 kg	100 + 100 kg
Size of opening	800 ÷ 2800 mm	1000 ÷ 2800 mm

*Data refers to a 6m length automation.

To calculate the power consumption of smaller doors the following formula can be used: $P=90+(16)+(24 \times L)$, where L is the length of the automation.

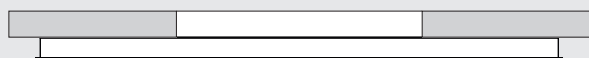


DUEVILLE SOLUTIONS



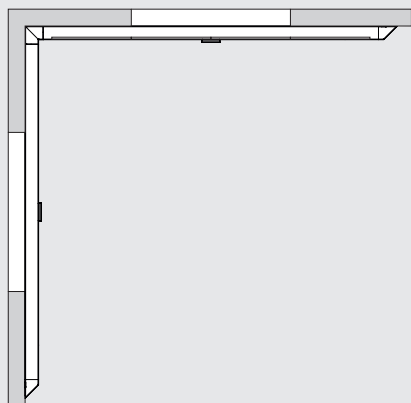
PL1

Linear automation, LED lighting located under the beam, elements with inclination of 45 degrees and side LED spot lights.



PL2

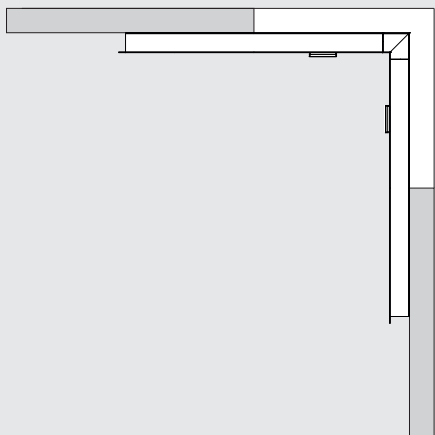
Linear automation, LED lighting located under the beam, elements with inclination of 90 degrees, without side LED spot lights.



PA1

Corner automation system for two counterposed entrances, LED lighting located under the beam, angular module and elements inclined at 45° and side LED spot lights.





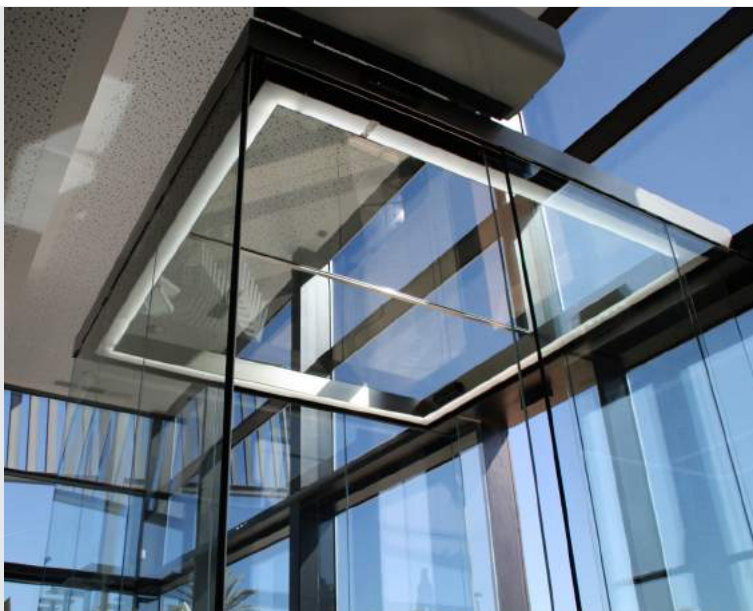
PA2

Automation system for corner entrances, LED lighting located under the beam, angular module and elements with inclination of 90 degrees and side LED spot lights.



PQ1

Automatic vestibule entrance with 2 opposing automatic doors. Perimetral diffused led light under the beam, corner modules for frame construction on all-glass supporting structure.



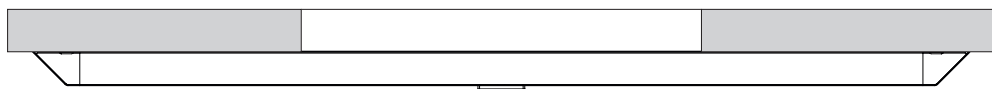
DUEVILLE FOR LINEAR SLIDING DOORS

AUTOMATION KIT WITH LIGHT ALONG THE BEAM AND 45° SIDE ELEMENTS WITH SPOT LIGHTS

Max load:

140 kg 1 panel

100 kg + 100 kg 2 panels



Motor kit

Main beam

LED lighting located under the beam

Elements with inclination of 45 degrees and side LED spot lights

On-board receiver

Remote control for lighting system

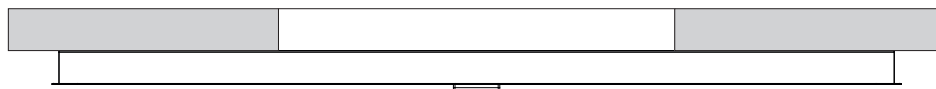
IS2 activation and safety infrared sensor

AUTOMATION KIT WITH LIGHT ALONG THE BEAM AND FLAT SIDE ELEMENTS

Max load:

140 kg 1 panel

100 kg+100 kg 2 panels



Motor kit

Main beam

LED lighting located under the beam

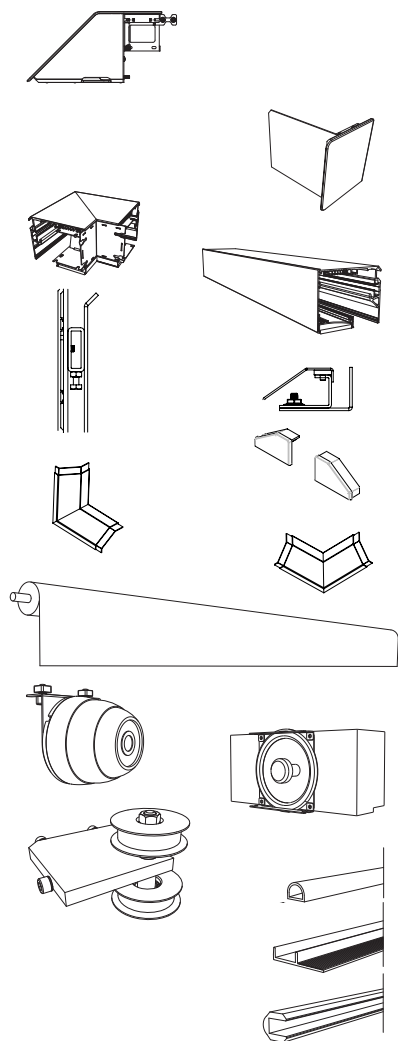
On-board receiver

Remote control for lighting system

IS2 activation and safety infrared sensor

Note: The operator's length includes elements with inclination of 45 degrees and side LED spot lights. If you use elements with inclination of 90 degrees and no LED spot lights, the crossbeam and the aluminium cover reduce by 230mm and by 195mm per each element, respectively.

DUEVILLE ACCESSORIES



8E3002 Right side kit with inclination of 45° and LED spot lights

8E3003 Left side kit with inclination of 45° and LED spot lights

8E3000 Right side kit with inclination of 90°

8E3001 Left side kit with inclination of 90°

3P6100 Corner kit with inclination of 90°
for access control vestibule

3P61# Metal cover kit with ceiling light L=1000

3P69# Automation supporting structure L=1000

3P6901 Glass edge profiles L=3000

3P6902 Glass edge profiles end caps kit (2 pcs)

3P6903 Corner kit for vertical glass edge profile (4 pcs)

3P6903 Corner kit for horizontal glass edge profile (4 pcs)

3P69# Aluminium ceiling with
fixing kit (€/square meter)

KMTU1 Tubular motor kit for standard roller blind (€/square meter)

KVIDS1 Video surveillance kit

KAUDI1 Sound diffusion kit

3P6101 Toothed transmission belt kit to realize a corner
entrance DUEVILLE

8E1190 Sealing system for glass panel L=3000

8E1191 40mm diverting seal for glass panel L=3000

8E1173 P18 Sealing system for 10mm glass panel with
flat gasket L=3000

DUEVILLE SURFACE TREATMENTS

KTPC1 Leather look finish - 1 m (refer to the below colour chart)

KTRC1 Covering kit in RAL/Coverx finish - 1 m
(refer to the below colour chart)

LEATHER LOOK FINISH



Red

Sand

Mud

RAL FINISH

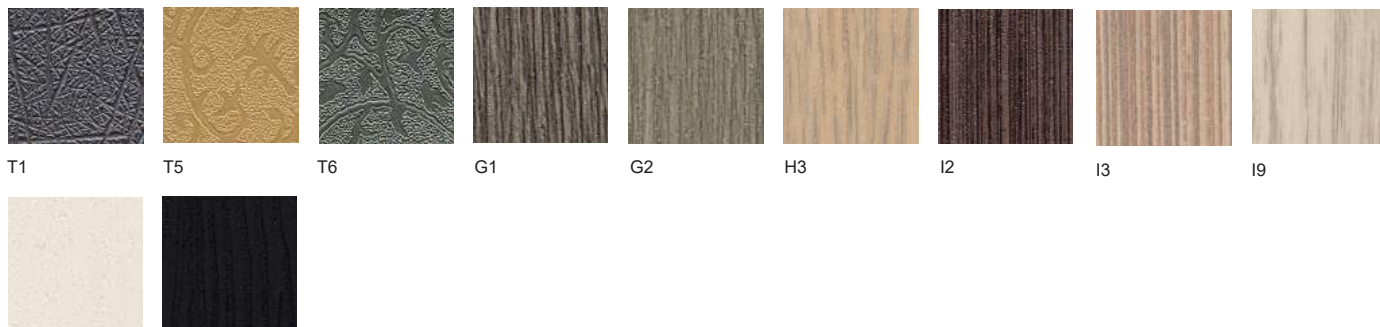


White
9016

Glossy Black
9005

Blue Navy
5003

COVERX FINISH



T1

T5

T6

G1

G2

H3

I2

I3

I9

J1

J2

Automations for interior sliding doors

V1E V1

Max. capacity 70 Kg

Max. capacity 70 Kg



PRODUCT DESCRIPTION

TOPP door operators, models V1E and V1, for interior sliding doors, max. load 70kg. Power supply 230V~ 50/60 Hz.

- easy installation
- simple adaptability to existing sliding doors
- minimal dimensions and appealing design

V1E and V1 can be easily installed on existing interior sliding doors and complies with the EN16005 standard, "Low Energy Movement" section, that manages the door speed by a sophisticated electronic control with no need of sensors or safety photocells.

V1E and V1 are equipped with an on-board infrared motion sensor.



Fast and easy installation on existing doors.



Telescopic adjustment for fitting to doors from 700 to 1200mm.



In compliance with EN16005 "standard, Low Energy Movement" section, which avoids the installation of safety sensors or photocells.



TECHNICAL SPECIFICATIONS

Power supply*	230V ~ 50/60 Hz
Peripheral power output	5 V 80mA / 24 V 110mA
Absorption	100mA a 230 V
Absorbed power	15W
Durability	200.000 cycles
Opening/closing speed	in accordance with the EN16005 about "Low Energy Movement" in reference to the panel weight
Panel weight adjustment	from 150N to 700N adjustable every 35N by the installer
Maximum thrust force	67N
Door open waiting time	adjustable from 2 sec to 60 sec
Protection against electric shocks	class II
Working temperature	- 5°C + 50°C
Number of door panels	1 PANEL
Maximum capacity	700N
Size of opening	700 ÷ 1200 mm
Overall dimensions	59x65 mm x variable length 700 - 1200 mm

*24V d.c. operator available upon request



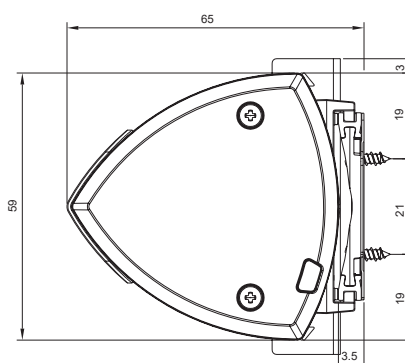
V1E AND V1 AUTOMATIONS FOR INTERIOR SLIDING DOORS

3R21001	V1E Door Operator, silver (with infrared on-board sensor) Max.1000 mm door width Not suitable for our TS8 wireless selector
3R21002	V1E Door Operator, white (with infrared on-board sensor) Max.1000 mm door width Not suitable for our TS8 wireless selector
3R20003	V1 Door Operator, silver (with infrared on-board sensor) Max.1000 mm door width
3R20004	V1 Door Operator, white (with infrared on-board sensor) Max.1000 mm door width
3R20050	V1 Door Operator, silver (with infrared on-board sensor) Max.1200 mm door width
3R20051	V1 Door Operator, white (with infrared on-board sensor) Max.1200 mm door width

V1E AND V1 ACCESSORIES



8E0313	TS8 8-functions radio wireless selector (with magnetic wall-mounting stand) Opening/Closing/Door open or close/ Slow speed mode/Entrance only mode/ Exit only mode/Reset/Automatic mode
8E1075	WS2 Microwave activation sensor
8E1150	HS1 Touchless activation switch
8E1151	HS2 Touchless activation switch for the activation/deactivation of EB1 electric lock
8E1105	EB1 Electric lock with emergency manual release (to be combined with two HS2 touchless activation switch)
3R1905	GL1 double-sided tape for installing the track on glass panels
3R2004	Glass panel stopper kit
3R1906	V1 Bracket for wall fixing



Pedestrian sliding door automations

K140 K200

Max. capacity 140 Kg

Max. capacity 200 Kg



PRODUCT DESCRIPTION

TOPP door automations, models K140 and K200, for pedestrian sliding doors, max. load 140 kg (K140), 200 kg (K200), intensive duty devices, with electronic board with microprocessor of latest generation that allows the motion selfadjustment according to the weight and dimensions of the panels.

Built-in safety functions with thrust force control and obstruction detection system that automatically reverses the operation when an obstacle in the doorway is detected. Motor with encoder for the automatic reading of stroke, position and slowdown of the panels. Basic parameter setting on the electronic board and advanced setting for user and installer via digital selector.

Selection of operating modes via manual selector, digital selector or wireless selector.

CE certified automation in compliance with the EN16005.



High quality materials and innovative technical solutions combined in a compact and strong door opener.



Electronic board with microprocessor, in compliance with the EN16005 standard, providing direct basic programming via buttons or advanced programming via digital selector.



Easy installation due to the hook system for the pre-assembly of the transom to the wall.

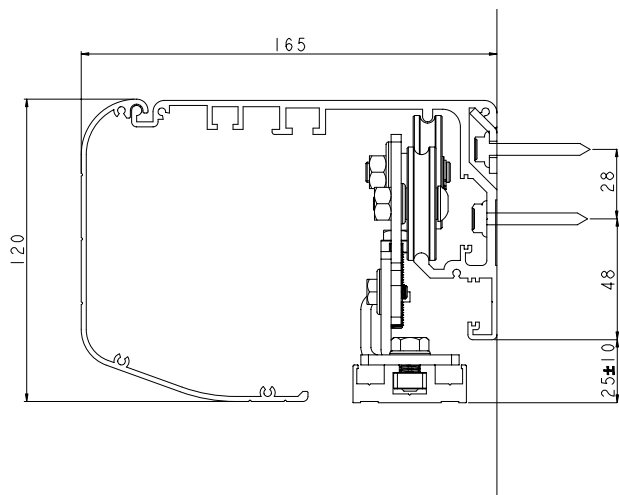


TECHNICAL SPECIFICATIONS

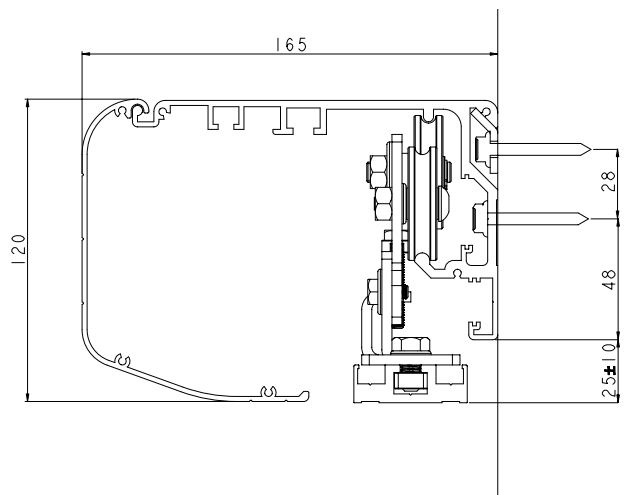
	K140		K200	
Power supply	230V ~ 50/60 Hz		230V ~ 50/60 Hz	
Peripheral power output	24V - 500mA max		24V - 500mA max	
Absorption	0,32 A		0,41 A	
Absorbed power	70W		90W	
Durability	1.000.000 cycles		2.000.000 cycles	
Type of use	semi-intensive		intensive	
Opening/closing speed	adjustable 100 ÷ 800 mm/s		adjustable 100 ÷ 800 mm/s	
Opening/closing approaching speed	adjustable 1 ÷ 50		adjustable 1 ÷ 50	
Opening/closing acceleration	adjustable 1 ÷ 12		adjustable 1 ÷ 12	
Automatic closing time	adjustable 0 ÷ 60 s		adjustable 0 ÷ 60 s	
No. of door panels	1 PANEL	2 PANELS	1 PANEL	2 PANELS
Maximum capacity	140 kg	70 + 70 kg	140 kg	100 + 100 kg
Size of opening	800 ÷ 2800 mm	1000 ÷ 2800 mm	800 ÷ 2800 mm	1000 ÷ 2800 mm



K140



K200



Pedestrian sliding door automations

K280 K500



Max. capacity 280 Kg

Max. capacity 500 Kg (only double panel)

PRODUCT DESCRIPTION

TOPP door automations, models K280 and K500, for pedestrian sliding doors, max. load 280 kg (K280), 500 kg (K500), intensive duty devices, with electronic board with microprocessor of latest generation that allows the motion selfadjustment according to the weight and dimensions of the panels.

Built-in safety functions with thrust force control and obstruction detection system that automatically reverses the operation when an obstacle in the doorway is detected. Motor with encoder for the automatic reading of stroke, position and slowdown of the panels. Basic parameter setting on the electronic board and advanced setting for user and installer via digital selector.

Selection of operating modes via manual selector, digital selector or wireless selector.

CE certified automation in compliance with the EN16005.



High quality materials and innovative technical solutions combined in a strong and high performing door opener.



Electronic board with microprocessor, in compliance with the EN16005 standard, providing direct basic programming via buttons or advanced programming via digital selector.



Easy installation due to the hook system for the pre-assembly of the transom to the wall.

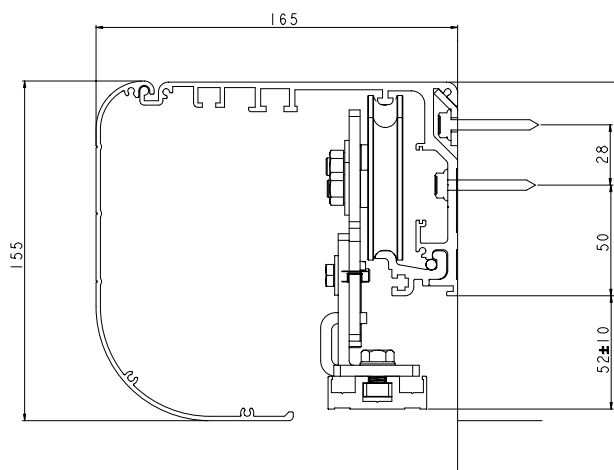


TECHNICAL SPECIFICATIONS

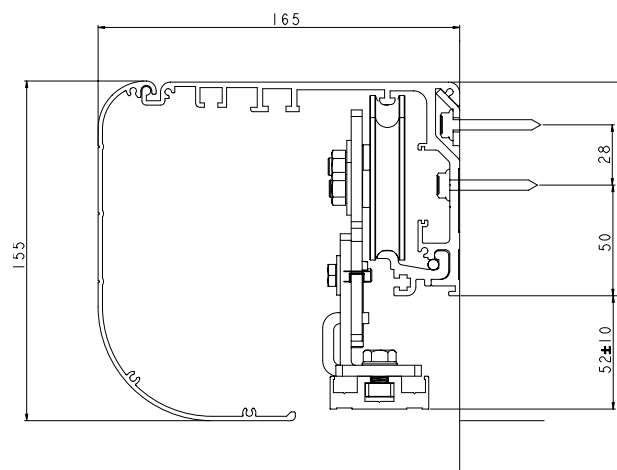
	K280	K500
Power supply	230V ~ 50/60 Hz	230V ~ 50/60 Hz
Peripheral power output	24V - 500mA max	24V - 500mA max
Absorption	0,41 A	0,8 A
Absorbed power	90W	180W
Durability	2.000.000 cycles	2.000.000 cycles
Type of use	intensive	intensive
Opening/closing speed	adjustable 100 ÷ 800 mm/s	adjustable 100 ÷ 800 mm/s
Opening/closing approaching speed	adjustable 1 ÷ 50	adjustable 1 ÷ 50
Opening/closing acceleration	adjustable 1 ÷ 12	adjustable 1 ÷ 12
Automatic closing time	adjustable 0 ÷ 60 s	adjustable 0 ÷ 60 s
No. of door panels	1 PANEL	2 PANELS
Maximum capacity	280 kg	250 + 250 kg
Size of opening	800 ÷ 3200 mm	1000 ÷ 3200 mm



K280



K500



Pedestrian sliding door automations

T150 T240

Max. capacity 150 Kg

Max. capacity 240 Kg



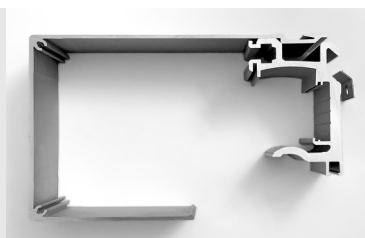
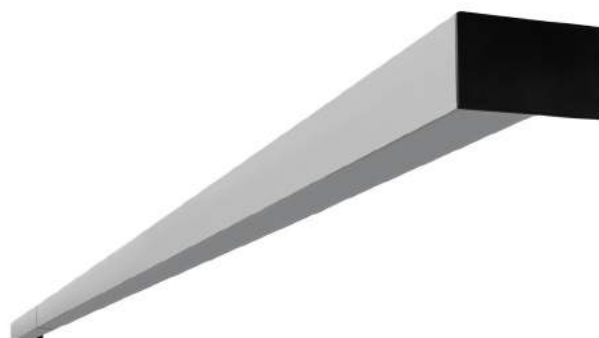
PRODUCT DESCRIPTION

TOPP door automations, models T150 and T240, for pedestrian sliding doors, max. load 150 kg (T150), 240 kg (T240), intensive duty devices, with electronic board with microprocessor of latest generation that allows the motion selfadjustment according to the weight and dimensions of the panels.

Built-in safety functions with thrust force control and obstruction detection system that automatically reverses the operation when an obstacle in the doorway is detected. Motor with encoder for the automatic reading of stroke, position and slowdown of the panels. Basic parameter setting on the electronic board and advanced setting for user and installer via digital selector.

Selection of operating modes via manual selector, digital selector or wireless selector.

CE certified automation in compliance with the EN16005.



Max capacity inside an innovative and slim profile. Door operator's dimensions: W150 mm X H100 mm. Max. capacity 240kg.



Elegant and streamline look. Absence of visible fixing and closing screws. Rapid fastening and unfastening beam cover.



Silent operation. Simplified push-in carriages with wheels that can be replaced without removing the door panel, autoaligning with anti-derailment system built integrated into the main beam, without additional wheel.

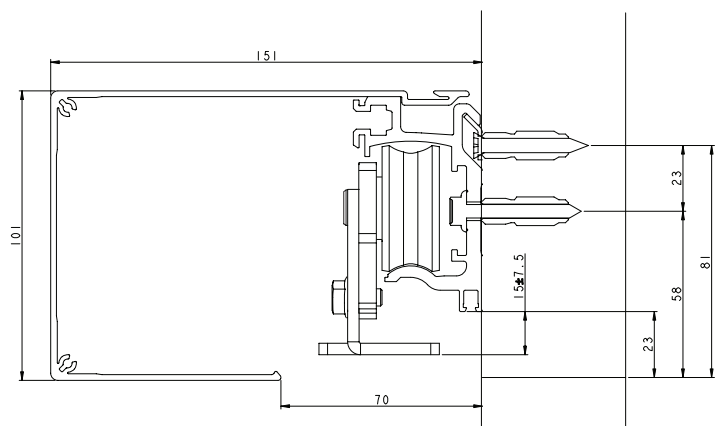


TECHNICAL SPECIFICATIONS

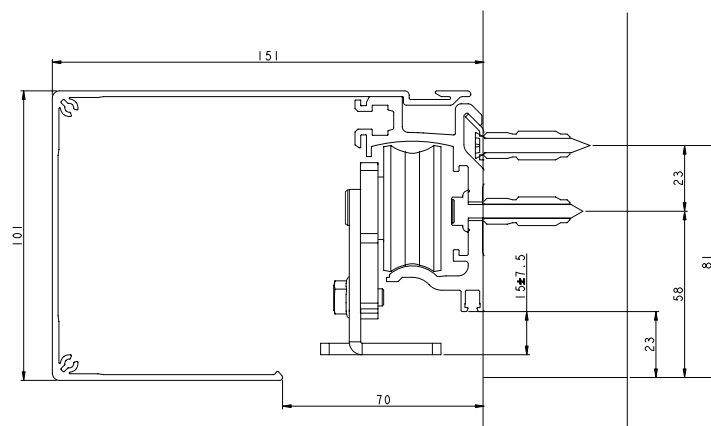
	T150		T240	
Power supply	230V ~ 50/60 Hz		230V ~ 50/60 Hz	
Peripheral power output	24V - 500mA max		24V - 500mA max	
Absorption	0,32 A		0,41 A	
Absorbed power	70W		90W	
Durability	1.000.000 cycles		2.000.000 cycles	
Type of use	semi-intensive		intensive	
Opening/closing speed	adjustable 100 ÷ 800 mm/s		adjustable 100 ÷ 800 mm/s	
Opening/closing approaching speed	adjustable 1 ÷ 50		adjustable 1 ÷ 50	
Opening/closing acceleration	adjustable 1 ÷ 12		adjustable 1 ÷ 12	
Automatic closing time	adjustable 0 ÷ 60 s		adjustable 0 ÷ 60 s	
No. of door panels	1 PANEL	2 PANELS	1 PANEL	2 PANELS
Maximum capacity	120 Kg	75 + 75 Kg	120 kg	120 + 120 kg
Size of opening	800 ÷ 2800 mm	1000 ÷ 2800 mm	800 ÷ 2800 mm	1000 ÷ 2800 mm



T150



T240



Redundant pedestrian sliding door automations

K200R T240R

Max. capacity 200 Kg

Max. capacity 240 Kg

PRODUCT DESCRIPTION

TOPP door automations, models K200R and T240R, for redundant pedestrian sliding doors, max. load 200 kg (K200R), 240 kg (T240R), intensive duty devices, with redundant electronic board with microprocessor of latest generation that allows the motion selfadjustment according to the weight and dimensions of the panels.

Built-in safety functions with thrust force control and obstruction detection system that automatically reverses the operation when an obstacle in the doorway is detected. Double motor with encoder for the automatic reading of stroke, position and slowdown of the panels. Basic parameter setting on the electronic board and advanced setting for user and installer via digital selector. Selection of operating modes via manual selector with key.

TOPP redundant automatic door systems are used for escape and emergency route solutions as an alternative to the S10 break-out system that provides a manual emergency opening.

CE certified automation in compliance with the EN16005.



High quality materials and innovative technical solutions combined in a compact and small door opener.



Double motor and double electronic board with safety system for the control of the movement during emergency opening on the escape route.



Alternative solution to break-out panic exit systems. Can be used as well on escape routes with full glass doors.

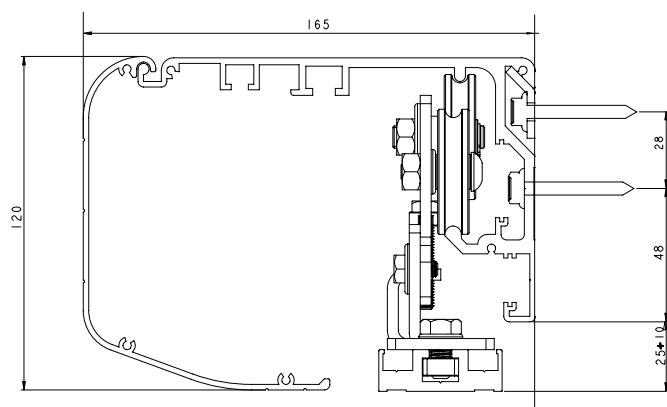


TECHNICAL SPECIFICATIONS

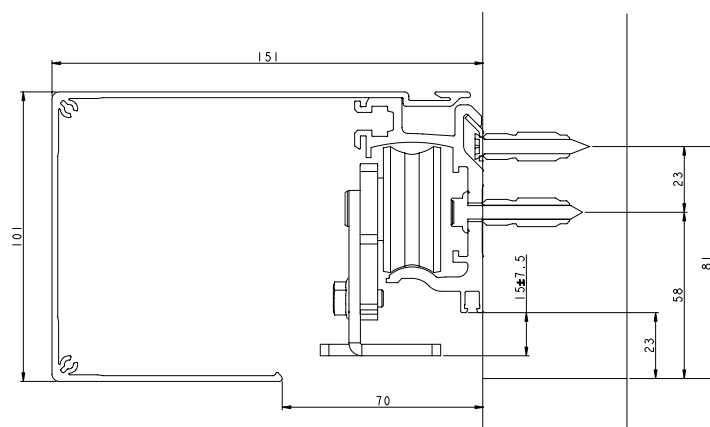
	K200R		T240R	
Power supply	230V ~ 50/60 Hz		230V ~ 50/60 Hz	
Peripheral power output	24V - 500mA max		24V - 500mA max	
Absorption	0,86 A		0,86 A	
Absorbed power	200 W		200 W	
Durability	2.000.000 cycles		2.000.000 cycles	
Type of use	intensive		intensive	
Opening/closing speed	adjustable 100 ÷ 800 mm/s		adjustable 100 ÷ 800 mm/s	
Opening/closing approaching speed	adjustable 1 ÷ 50		adjustable 1 ÷ 50	
Opening/closing acceleration	adjustable 1 ÷ 12		adjustable 1 ÷ 12	
Automatic closing time	adjustable 0 ÷ 60 s		adjustable 0 ÷ 60 s	
No. of door panels	1 PANEL	2 PANELS	1 PANEL	2 PANELS
Maximum capacity	140 kg	100 + 100 kg	120 kg	120 + 120 kg
Size of opening	800 ÷ 1900 mm	1000 ÷ 2800 mm	800 ÷ 1900 mm	1000 ÷ 2800 mm



K200R



T240R



Telescopic pedestrian sliding door automations

K200T K280T

Max. capacity 200 Kg

Max. capacity 280 Kg

PRODUCT DESCRIPTION

TOPP door automations, models K200T and K280T, for telescopic pedestrian sliding doors, max. load 200 kg (K200T), 280 kg (K280T), intensive duty devices, with electronic board with microprocessor of latest generation that allows the motion selfadjustment according to the weight and dimensions of the panels.

Built-in safety functions with thrust force control and obstruction detection system that automatically reverses the operation when an obstacle in the doorway is detected. Motor with encoder for the automatic reading of stroke, position and slowdown of the panels. Basic parameter setting on the electronic board and advanced setting for user and installer via digital selector.

Selection of operating modes via manual selector, digital selector or wireless selector. K280TR redundant version for escape and emergency route solutions available on request.

CE certified automation in compliance with the EN16005.



High quality materials and innovative technical solutions combined in a compact and small door opener.



Electronic board with microprocessor, in compliance with the EN16005 standard, providing direct basic programming via buttons or advanced programming via digital selector.



Top solidity, reliability and resistance due to high quality materials, resulting in the capacity to withstand any stress and strain.

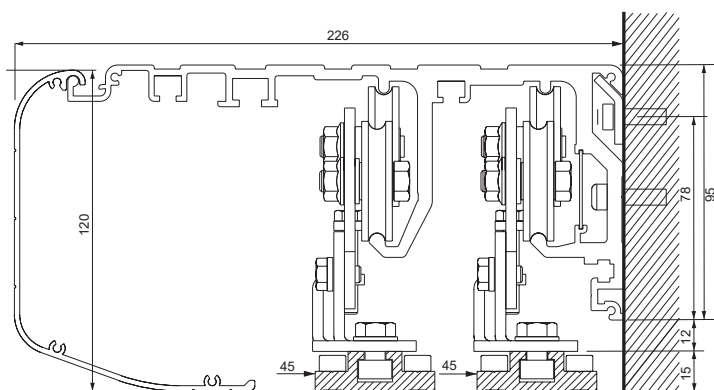


TECHNICAL SPECIFICATIONS

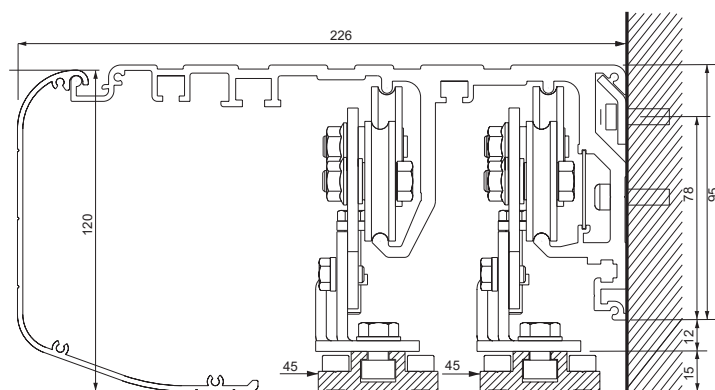
	K200T		K280T	
Power supply	230V ~ 50/60 Hz		230V ~ 50/60 Hz	
Peripheral power output:	24V - 500mA max		24V - 500mA max	
Absorption	0,32 A		0,41 A	
Absorbed power	70W		90W	
Durability	1.000.000 cycles		2.000.000 cycles	
Type of use	semi-intensive		intensive	
Opening/closing speed	adjustable 100 ÷ 800 mm/s		adjustable 100 ÷ 800 mm/s	
Opening/closing approaching speed	adjustable 1 ÷ 50		adjustable 1 ÷ 50	
Opening/closing acceleration	adjustable 1 ÷ 12		adjustable 1 ÷ 12	
Automatic closing time	adjustable 0 ÷ 60 s		adjustable 0 ÷ 60 s	
No. of door panels	2 PANELS	4 PANELS	2 PANELS	4 PANELS
Maximum capacity	2 x 100 kg	4 x 50 kg	2 x 140 kg	4 x 70 kg
Size of opening	900 ÷ 4200 mm	1800 ÷ 4200 mm	900 ÷ 4200 mm	1800 ÷ 4200 mm



K200T



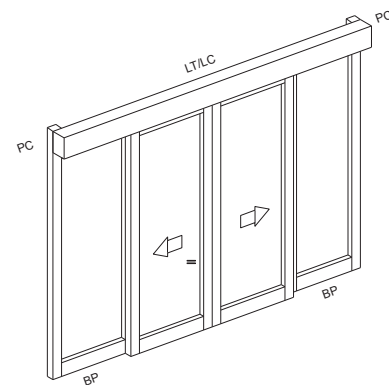
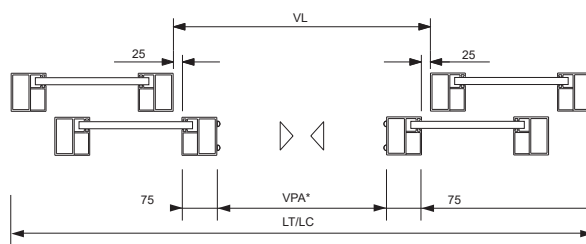
K280T



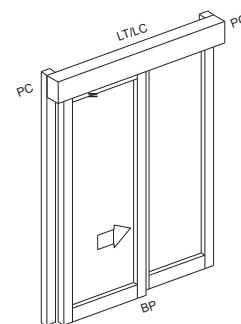
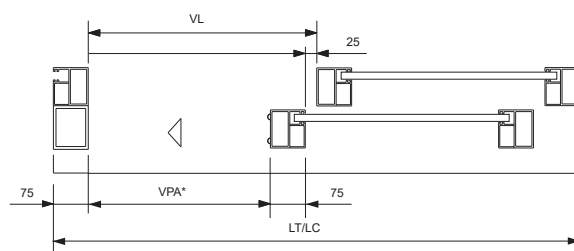


INSTALLATION TYPES – AUTOMATION FOR LINEAR SLIDING DOORS

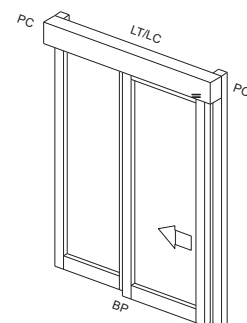
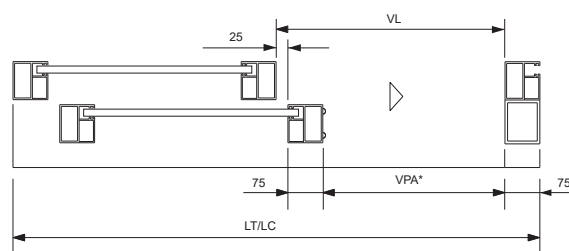
2 Panels



1 Panel opening to the right



1 Panel opening to the left



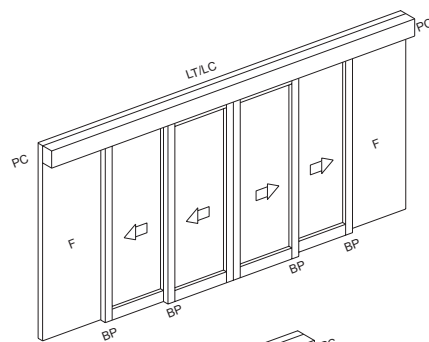
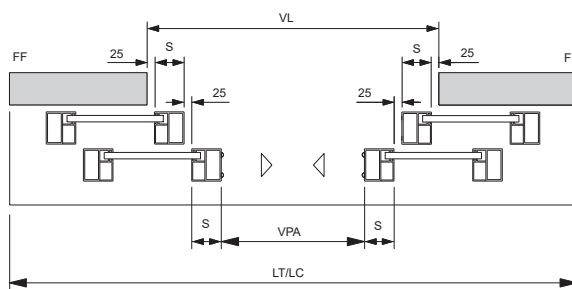
Two types of automatic door are available: Door automation with 2 panels which allows a pair of panels to slide simultaneously in the opposite direction; door automation with 1 panel which allows a single panel to slide in one direction.

VPA = net clear passage width - VL = gross clear opening width - LT/LC = door length/ mechanism box length - BP = rail + runner on floor - PC = electric wire raceway.

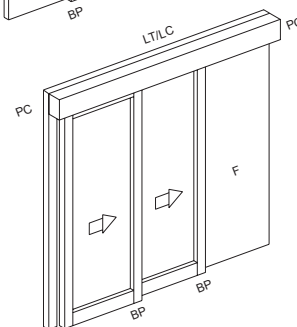
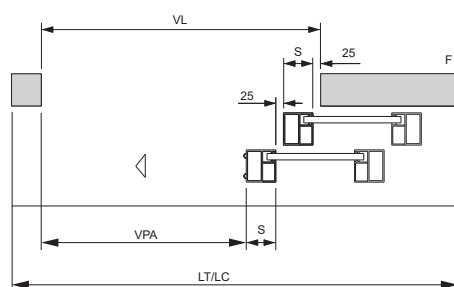


INSTALLATION TYPES – AUTOMATION FOR TELESCOPIC SLIDING DOORS

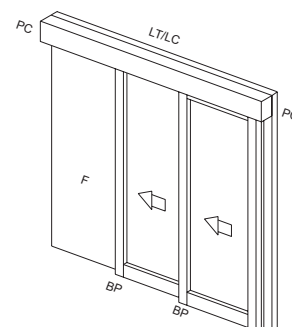
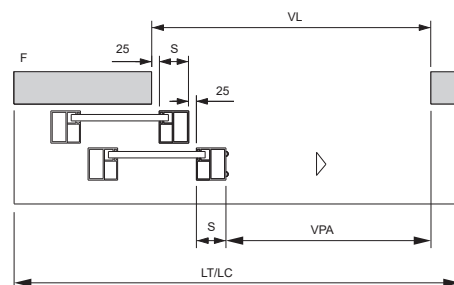
4 Panels telescopic door automation



2 Panels telescopic door automation opening to the right



2 Panels telescopic door automation opening to the left



Note: When ordering a 1-panel door automation, always indicate the panel opening direction by referring to the automation front view.

Note: To comply with the safety regulations, the net clear passage width (VPA) must be less than the gross clear passage width (VL). The net clear passage width (VPA) is equal to the gross clear passage width (VL) when the doorpost shows no blunt and/or protrusion that may cause the shearing effect.

F=fix panel - S=profile thickness - VPA=net clear passage width - VL=gross clear opening width - LT/LC=door length/ mechanism box length - BP=rail + runner on floor - PC=electric wire raceway.

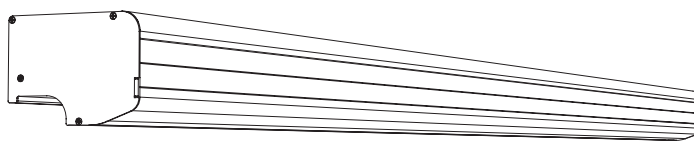
AUTOMATION FOR SLIDING DOORS K LINE

ASSEMBLED DOOR OPERATORS

Automation + main beam with cover + emergency battery + on-board receiver + carriages

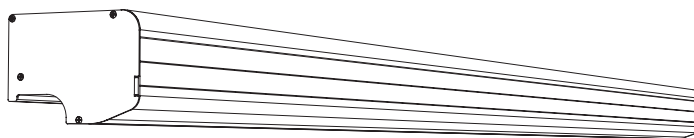
K140

Max load:
140 kg 1 panel
70 kg + 70 kg 2 panels



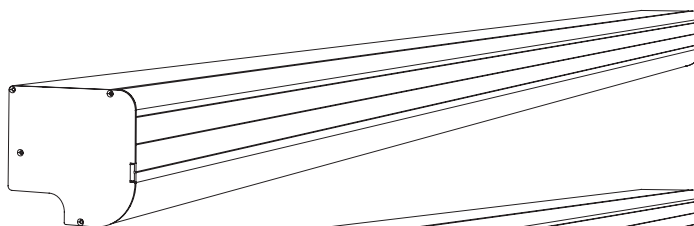
K200

Max load:
140 kg 1 panel
100 kg + 100 kg 2 panels



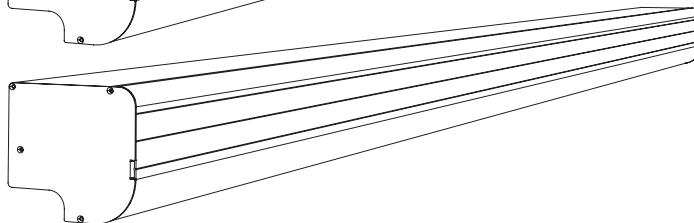
K280

Max load:
280 kg 1 panel
140 kg + 140 kg 2 panels



K500

Max load:
250 kg + 250 kg 2 panels



Note: Electronic board with onboard receiver and possibility to control through TS1 or TS2 wireless selectors (as an alternative to MS1 and KS1 selectors).

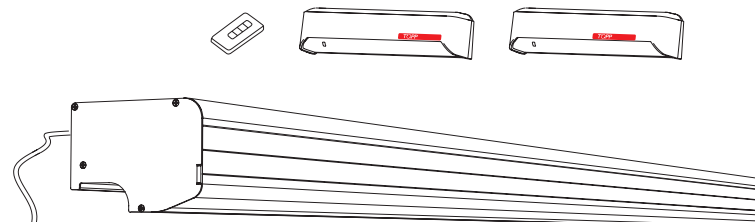
PLUG&PLAY DOOR OPERATORS

Automation + main beam with cover + emergency battery + Plug&Play power + 2 Plug&Play IS2 sensors + on-board receiver + TS1 4-functions wireless selector + carriages



K140 PLUG & PLAY

Max load:
140 kg 1 panel
70 kg + 70 kg 2 panels



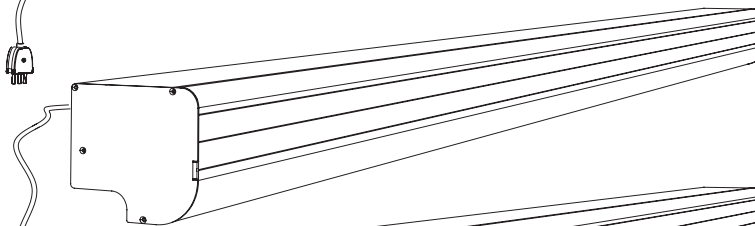
K200 PLUG & PLAY

Max load:
140 kg 1 panel
100 kg + 100 kg 2 panels



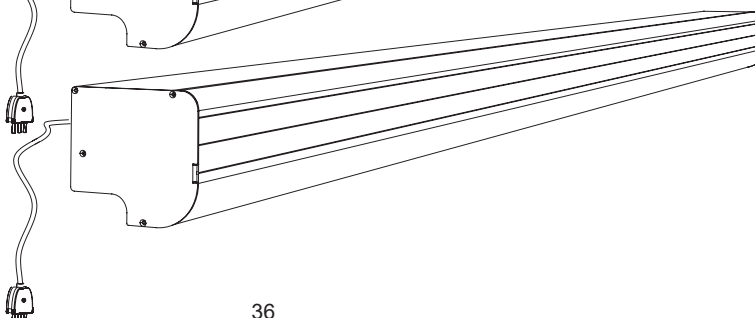
K280 PLUG & PLAY

Max load:
280 kg 1 panel
140 kg + 140 kg 2 panels



K500 PLUG & PLAY

Max load:
250 kg + 250 kg 2 panels



AUTOMATION FOR SLIDING DOORS T LINE

ASSEMBLED DOOR OPERATORS

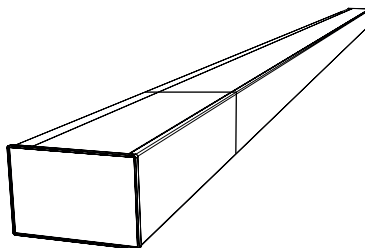
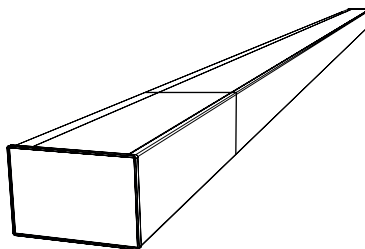
Automation + main beam with cover + emergency battery + on-board receiver + carriages

T150

Max load:

120 kg 1 panel

75 kg + 75 kg 2 panels



T240

Max load:

120 kg 1 panel

120 kg + 120 kg 2 panels

Note: Electronic board with onboard receiver and possibility to control through TS1 or TS2 wireless selectors (as an alternative to MS1 and KS1 selectors).

PLUG&PLAY DOOR OPERATORS

Automation + main beam with cover + emergency battery + Plug&Play power + 2 Plug&Play IS2 sensors + on-board receiver + TS1 4-functions wireless selector + carriages

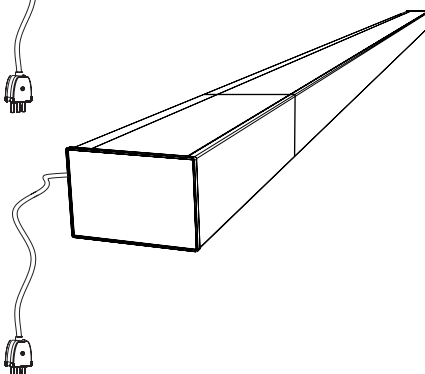
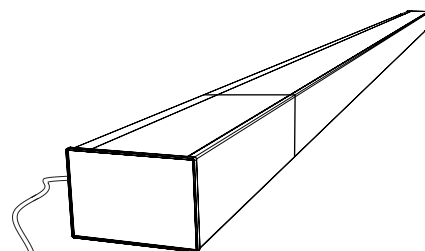


T150 PLUG & PLAY

Max load:

120 kg 1 panel

75 kg + 75 kg 2 panels



T240 PLUG & PLAY

Max load:

120 kg 1 panel

120 kg + 120 kg 2 panels

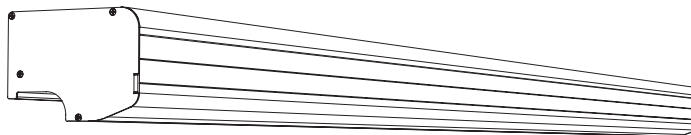
AUTOMATION FOR REDUNDANT SLIDING DOORS K AND T LINES

ASSEMBLED DOOR OPERATORS

Redundant automation + main beam with cover + emergency battery + on-board receiver + carriages

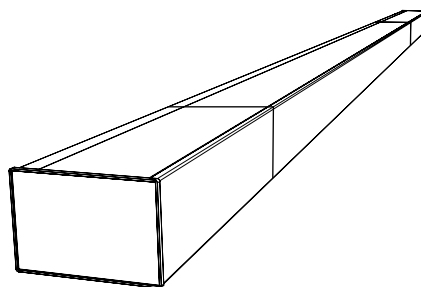
K200R

Max load:
140 kg 1 panel
100 kg + 100 kg 2 panels



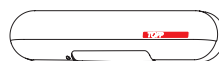
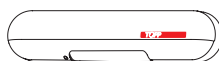
T240R

Max load:
120 kg 1 panel
120 kg + 120 kg 2 panels



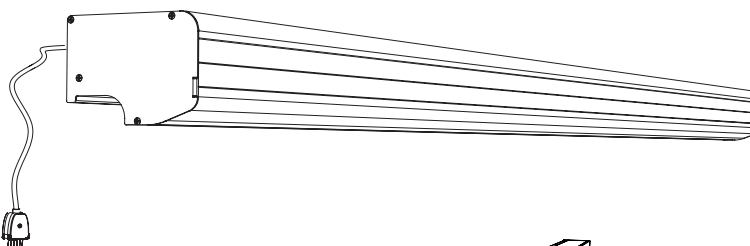
PLUG&PLAY DOOR OPERATORS

Redundant automation + main beam with cover + emergency battery + Plug&Play power + 1 Plug&Play WS3 sensor + 1 Plug&Play WS4 sensor + on-board receiver + KS1R selector with key + carriages



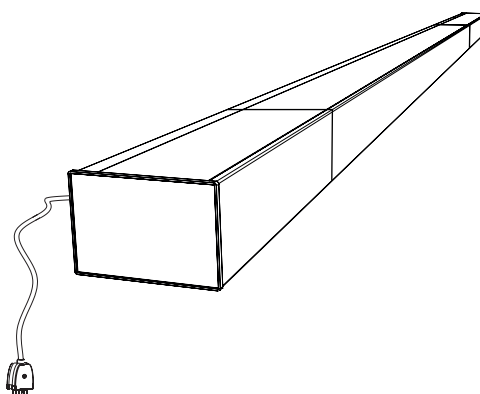
K200R PLUG & PLAY

Max load:
140 kg 1 panel
100 kg + 100 kg 2 panels



T240R PLUG & PLAY

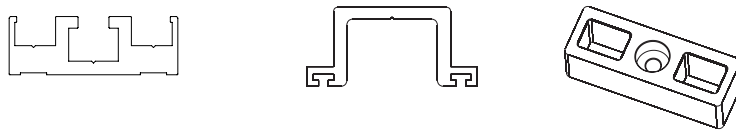
Max load:
120 kg 1 panel
120 kg + 120 kg 2 panels



PANEL ADAPTER KITS FOR LINEAR SLIDING DOOR OPERATORS

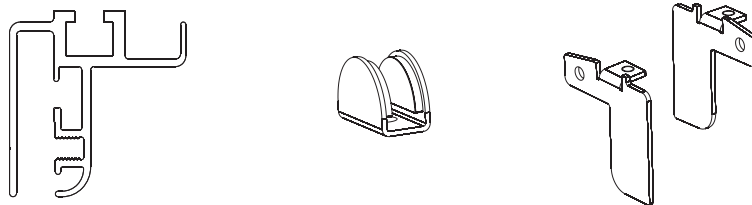
T10 - for framed panels

Adapter kit includes:
Adapter
Track
Floor guide
Accessories



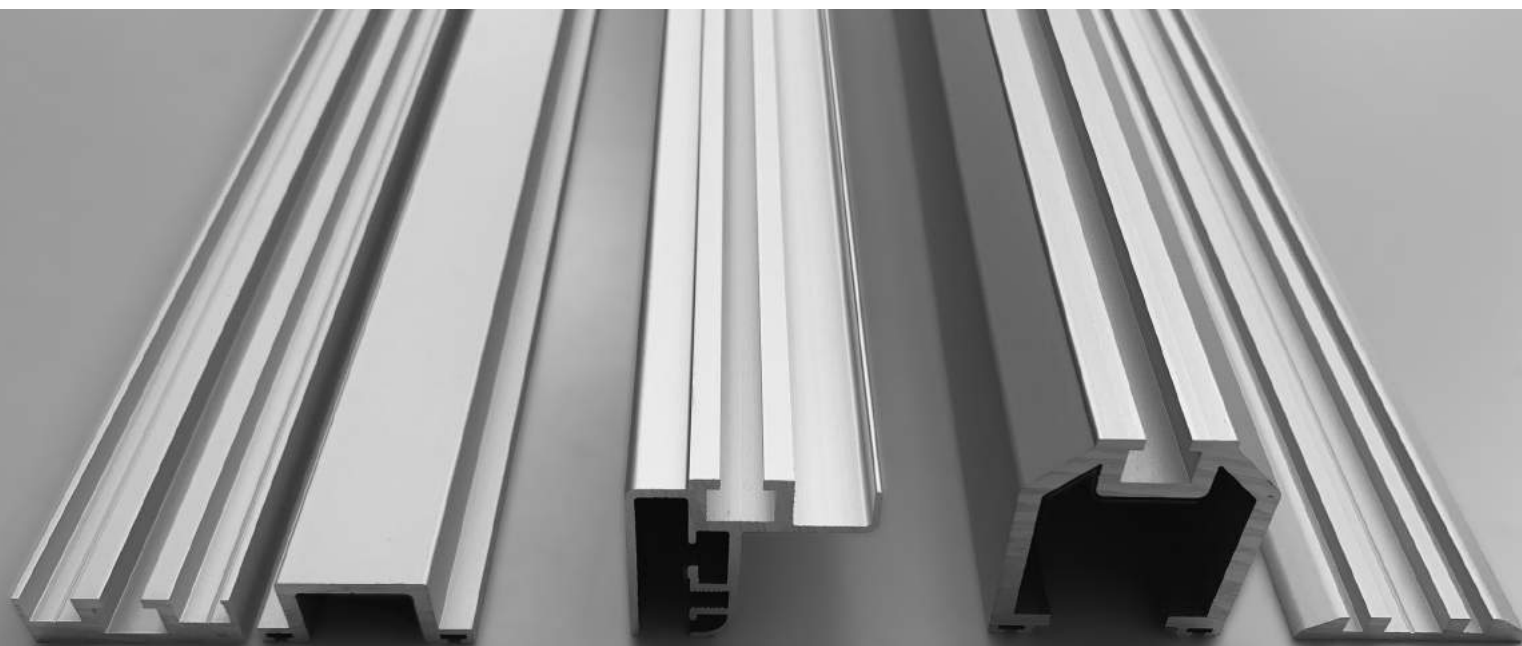
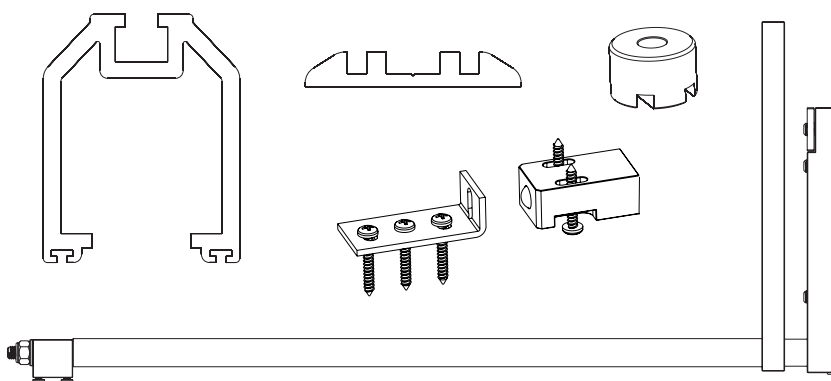
A10/A12- for glass panels

Adapter kit includes:
Adapter for 10/12mm glass panels
Floor guide
End-caps
Accessories



S10 - for panels with break-out

Adapter kit includes:
Adapter
Track
Runner on floor
Simple break-out system
Accessories



AUTOMATION FOR TELESCOPIC SLIDING DOORS K200T - K280T - K280TR

ASSEMBLED DOOR OPERATORS

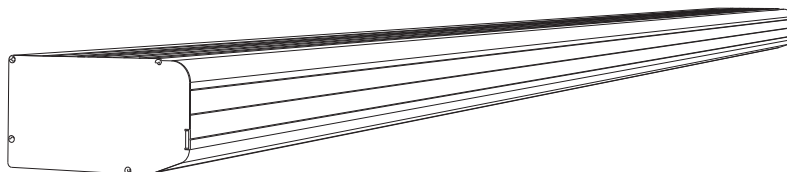
Automation + main beam with cover + emergency battery + on-board receiver + carriages

K200T

Max load:

100 kg +100 kg 2 panels

50 kg + 50 kg + 50 kg + 50 kg 4 panels

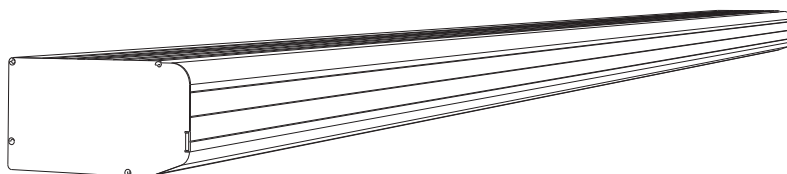


K280T

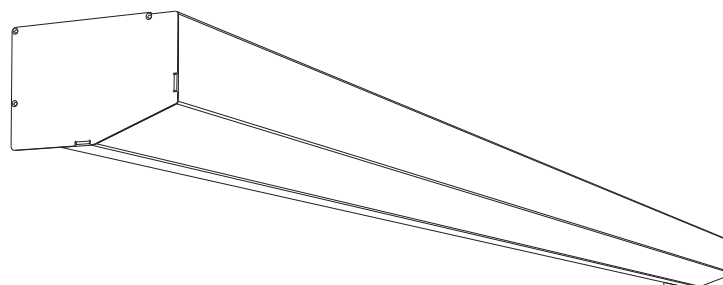
Max load:

140 kg+140 kg 2 panels

70 kg + 70 kg + 70 kg + 70 kg 4 panels

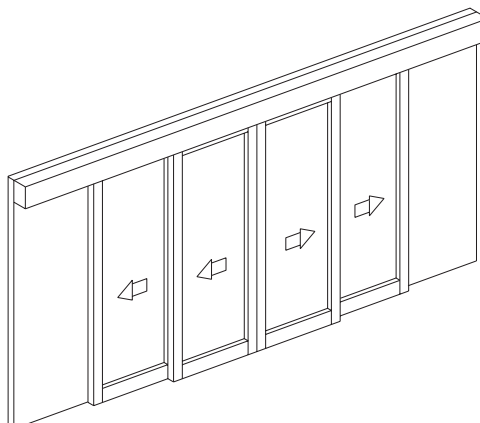


Special cover for glass door
(max. 3m length)



Note: Electronic board with onboard receiver and possibility to control through TS1 or TS2 wireless selectors (as an alternative to MS1 and KS1 selectors).

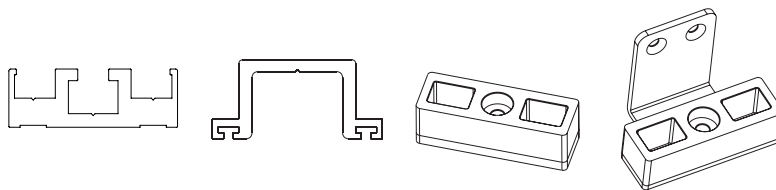
Note: Redundant version **K280TR** available on request (max. capacity 280 kg).



PANEL ADAPTER KITS FOR TELESCOPIC AUTOMATIONS K200T - K280T - K280TR

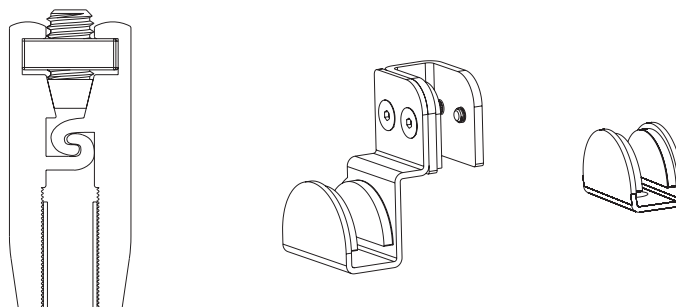
T10 - for framed panels

Adapter kit includes:
Adapter
Runner on floor
Accessories



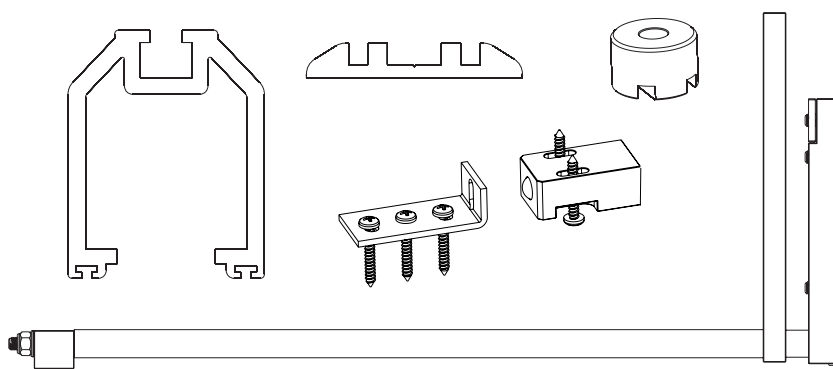
G60 - for glass panels

Adapter kit includes:
Clamp adapter for 10/12mm glass panels
Guide for fast panel
Floor guide for slow panel
Accessories

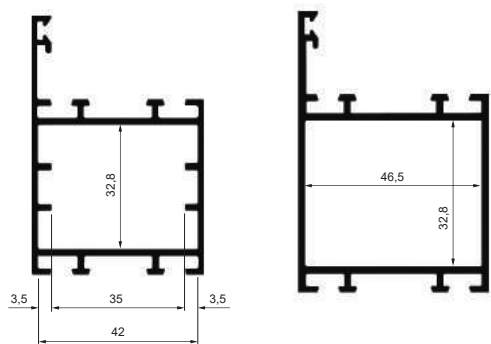


S10 - for panels with break-out

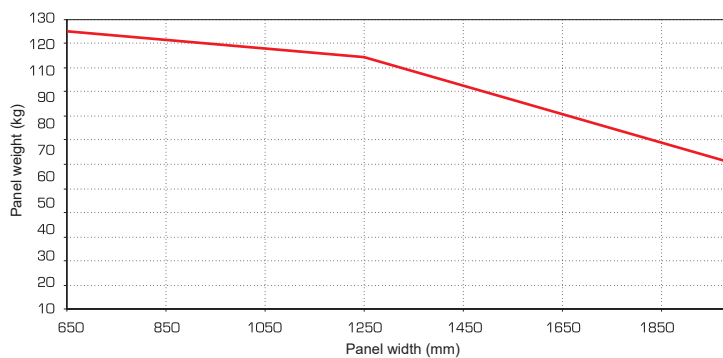
Adapter kit includes:
Adapter
Track
Runner on floor
Full break-out system
Accessories



S10 break-out kit - profiles section and capacity



profile's minimum internal dimensions for the break-out kit installation



Note: The mechanical break-out anti-panic system can be used with panels that are max 2000 mm wide and that weigh max 70 kg each (for narrower panels, please refer to the relevant diagrams).

Note: The break-out kit weight (15 kg) needs to be added to the total panel weight.

Note: The images of the shown profiles are indicative only for the analysis of space for the assembly of the TOPP break-out system.

Assembly kits for sliding door automations

K140 K200 K200R K200F K280 K500



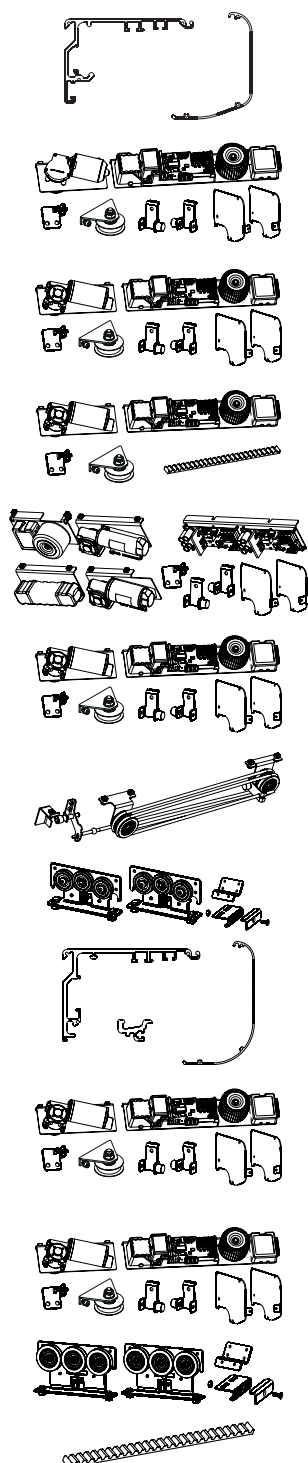
Aluminium profiles KIT



Motor & Electronics KIT



Carriages KIT



3P1004
3P1005
3P1006

K140 - K200 Profiles Kit - Silver L= 3100
K140 - K200 Profiles Kit - Silver L= 4400
K140 - K200 Profiles Kit - Silver L= 6500
Includes: main beam, mechanism cover, felt pads, raceway, spare parts.

3P1236

K140 Motor & Electronics Kit
Includes: motor with encoder, control board, transformer, battery, pulley, tension adjustment belt kit, safety door limit stop switches, black side end-caps, onboard receiver for radio control selector, spare parts.

3P5236

K200 Motor & Electronics Kit
Includes: motor with encoder, control board, transformer, battery, pulley, tension adjustment belt kit, safety door limit stop switches, black side end-caps, onboard receiver for radio control selector, spare parts.

3P5271

K200 Retrofit Kit
Includes: motor with encoder, control board, transformer, battery, pulley, tension adjustment belt kit, onboard receiver for radio control selector, 10m toothed transmission belt

3P5431

K200R Motor & Electronics Kit (redundant)
Includes: double motor with encoder, double control board, transformer, battery, tension adjustment belt kit, safety door limit stop switches, black side end-caps, spare parts.

3P3031

K200F Motor & Electronics Kit for elastic band anti-panic system
Includes: motor with encoder, control board, transformer, battery, pulley, tension adjustment belt kit, safety door limit stop switches, black side end-caps, onboard receiver for radio control selector, spare parts.

3P3060
3P3061
3P3062
3P3090

K200F – K280TF Elastic band anti-panic system 2 panels
K200F – K280TF Elastic band anti-panic system 1 panel right
K200F – K280TF Elastic band anti-panic system 1 panel left
K200F – K280TF Elastic band L=100 m

3P1070

K140 -K200 Carriages Kit
Includes: carriages; belt fixing brackets (for 1 panel)

3P2004
3P2005
3P2006

K280 - K500 Profiles Kit - Silver L=3100
K280 - K500 Profiles Kit - Silver L=4400
K280 - K500 Profiles Kit - Silver L=6500
Includes: main beam, track profile, mechanism cover, felt pads, raceway, spare parts.

3P2236

K280 Motor & Electronics Kit
Includes: motor with encoder, control board, transformer, battery, pulley, tension adjustment belt kit, safety door limit stop switches, black side end-caps, onboard receiver for radio control selector, spare parts.

3P7031

K500 Motor & Electronics Kit (double panel only)
Includes: 2 motors with encoder, 2 control boards, 2 transformers, 2 battery, 2 pulleys, 2 tension adjustment belt kits, safety door limit stop switches, black side end-caps, spare parts.

3P2070

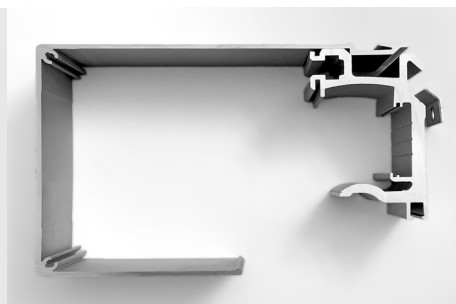
K280 – K500 Carriages Kit
Includes: carriages; belt fixing brackets (for 1 panel)

0C3100
8E1181

Toothed transmission belt - 1 m
Toothed transmission belt kit - 100 m

Assembly kits for sliding door automations

T150 - T240 - T240R



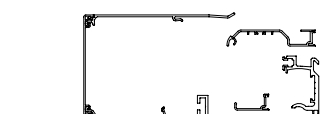
Aluminium and aluminium-PVC profiles KIT



Motor & Electronics KIT

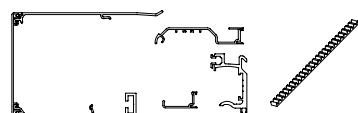


Carriages KIT



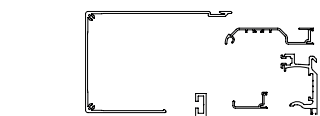
3T3001
3T3002
3T3003

T150 - T240 Aluminium/PVC profiles Kit - Silver L= 3200
T150 - T240 Aluminium/PVC profiles Kit - Silver L= 4400
T150 - T240 Aluminium/PVC profiles Kit - Silver L= 6500
Includes: main beam, aluminium/pvc cover, carriage junction bar, raceway, spare parts.



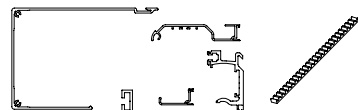
3T3010
3T3011
3T3012

T150 - T240 Aluminium/PVC profiles Kit - Silver L= 2900 + belt
T150 - T240 Aluminium/PVC profiles Kit - Silver L= 4400 + belt
T150 - T240 Aluminium/PVC profiles Kit - Silver L= 6500 + belt
Includes: main beam, aluminium/pvc cover, carriage junction bar, raceway, spare parts, belt.



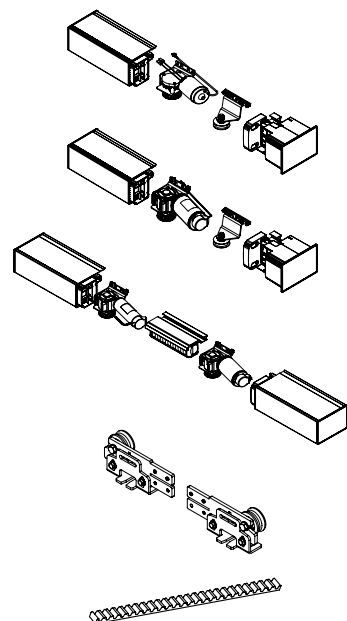
3T4001
3T4002
3T4003

T150 - T240 Aluminium profiles Kit - Silver L= 3200
T150 - T240 Aluminium profiles Kit - Silver L= 4400
T150 - T240 Aluminium profiles Kit - Silver L= 6500
Includes: main beam, aluminium cover, carriage junction bar, raceway, spare parts.



3T4011
3T4012
3T4013

T150 - T240 Aluminium profiles Kit - Silver L= 3200 + belt
T150 - T240 Aluminium profiles Kit - Silver L= 4400 + belt
T150 - T240 Aluminium profiles Kit - Silver L= 6500 + belt
Includes: main beam, aluminium/pvc cover, carriage junction bar, raceway, spare parts, belt.



3T3031
3T3231

T150 Motor & Electronics Kit for automations with Aluminium/PVC profiles
T150 Motor & Electronics Kit for automations with Aluminium profiles
Includes: motor with encoder, control board, transformer, battery, pulley, tension adjustment belt kit, safety door limit stop switches, black side terminals, onboard receiver for radio control selector, spare parts.

3T4031
3T4231

T240 Motor & Electronics Kit for automations with Aluminium/PVC profiles
T240 Motor & Electronics Kit for automations with Aluminium profiles
Includes: motor with encoder, control board, transformer, battery, pulley, tension adjustment belt kit, safety door limit stop switches, black side terminals, onboard receiver for radio control selector, spare parts.

3T4130
3T4431

T240R Motor & Electronics Kit (redundant) for automations with Aluminium/PVC profiles
T240R Motor & Electronics Kit (redundant) for automations with Aluminium profiles
Includes: double motor with encoder, double control board, transformer, battery, tension adjustment belt kit, safety door limit stop switches, black side terminals, spare parts.

3T3070

T150 - T240 Carriages Kit
Includes: carriages; belt fixing brackets (for 1 panel)

0C3100
8E1181

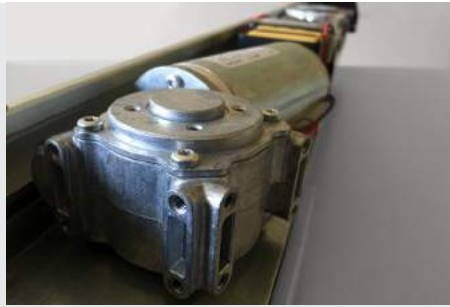
Toothed transmission belt - 1 m
Toothed transmission belt kit - 100 m

Assembly kits for sliding door automations

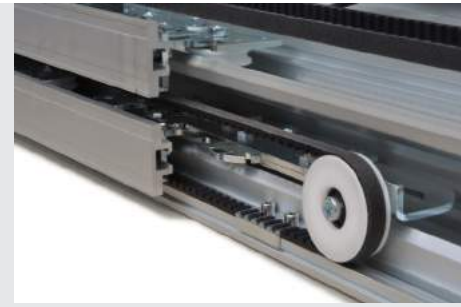
K200T K280T K280TF



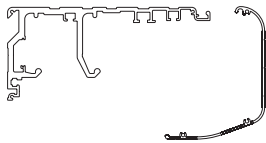
Aluminium profiles KIT



Motor & Electronics KIT



Carriages KIT

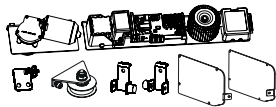


3T1004 K200T - K280T Profiles Kit - Silver L=3100

3T1005 K200T - K280T Profiles Kit - Silver L=4400

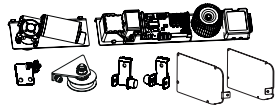
3T1006 K200T - K280T Profiles Kit - Silver L=6500

Includes: main beam, mechanism cover, felt pads, raceway, spare parts.



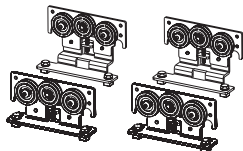
3T1035 K200T Motor & Electronics Kit

Includes: motor with encoder, control board, transformer, battery, pulley, tension adjustment belt kit, safety door limit stop switches, silver side end-caps, onboard receiver for radio control selector, spare parts.



3T2035 K280T Motor & Electronics Kit

Includes: motor with encoder, control board, transformer, battery, pulley, tension adjustment belt kit, safety door limit stop switches, silver side end-caps, onboard receiver for radio control selector, spare parts.



3T1070 Carriage kit and belt connection for 1 fast panel + 1 slow panel - 40-45 mm - right opening

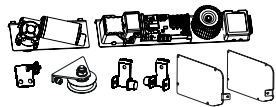
3T1071 Carriage kit and belt connection for 1 fast panel + 1 slow panel - 40-45 mm - left opening

3T1072 Carriage kit and belt connection for 1 fast panel + 1 slow panel - 30-35 mm - right opening

3T1073 Carriage kit and belt connection for 1 fast panel + 1 slow panel - 30-35 mm - left opening

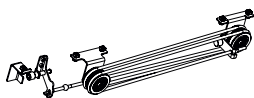
3T1074 Carriage kit and belt connection for 1 fast panel + 1 slow panel - 20-25 mm - right opening

3T1075 Carriage kit and belt connection for 1 fast panel + 1 slow panel - 20-25 mm - left opening



3T2230 K280TF Motor & Electronics Kit for elastic band anti-panic system

Includes: motor with encoder, control board, transformer, battery, pulley, tension adjustment belt kit, safety door limit stop switches, silver side end-caps, onboard receiver for radio control selector, spare parts.



3P3060 K200F - K280TF Elastic band anti-panic system 2 panels

3P3061 K200F - K280TF Elastic band anti-panic system 1 panel right

3P3062 K200F - K280TF Elastic band anti-panic system 1 panel left

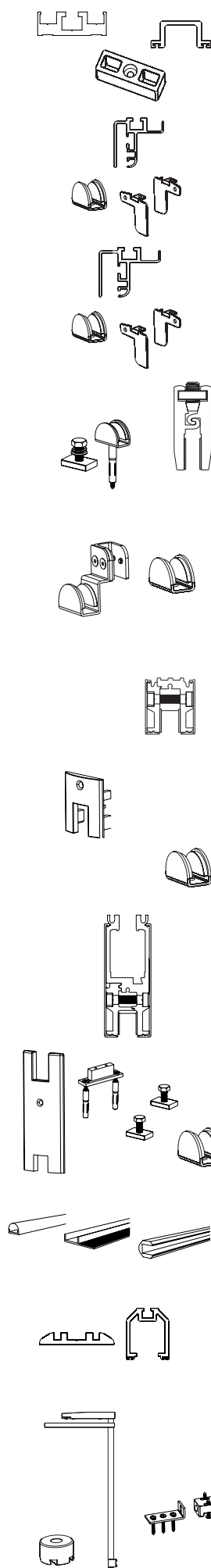
3P3090 K200F - K280TF Elastic band L=100 m



0C3100 Toothed transmission belt - 1 m

8E1181 Toothed transmission belt kit - 100 m

Accessories for automation assembly kits



3Q1004 T10 Adapter and track kit - Silver L=1900
 3Q1005 T10 Adapter and track kit - Silver L=3200
 3Q1006 T10 Adapter and track kit - Silver L=6500
 Adapter + track for framed panel
 3Q1030 T10 Floor guide kit for framed panel (for 1 panel)

3Q2004 A10 Glass door adapter kit Silver L= 1900
 3Q2005 A10 Glass door adapter kit Silver L= 3200
 3Q2006 A10 Glass door adapter kit Silver L= 6500
 Adapter kit for glass panels (glass 10-10,40mm)
 3Q2030 A10 Floor guide kit for glass panel
 Floor guide + end caps + components (for 1 panel)

3Q2104 A12 Glass door adapter kit Silver L=1900
 3Q2105 A12 Glass door adapter kit Silver L=3200
 3Q2106 A12 Glass door adapter kit Silver L=6500
 Adapter kit for glass panels (glass 10,50-13,50mm)
 3Q2130 A12 Floor guide kit for glass panel
 Floor guide + end caps + components (for 1 panel)

3Q5001 G60 Glass door adapter kit (glass 10 mm) L=1700
 3Q5002 G60 Glass door adapter kit (glass 10 mm) L=3400
 3Q5003 G60 Glass door adapter kit (glass 12 mm) L=1700
 3Q5004 G60 Glass door adapter kit (glass 12 mm) L=3400
 3Q5030 G60 Floor guide kit for glass panel (glass 10 mm)
 3Q5031 G60 Floor guide kit for glass panel (glass 12 mm)
 Floor guide + carriage fixing blocks (for 1 panel)

3Q5034 G60 Glass guide for double telescopic panel (glass 10mm) - right
 3Q5035 G60 Glass guide for double telescopic panel (glass 12mm) - right
 3Q5036 G60 Glass guide for double telescopic panel (glass 10mm) - left
 3Q5037 G60 Glass guide for double telescopic panel (glass 12mm) - left
 Floor guide + carriage fixing blocks
 (for 1 slow panel + 1 fast panel)

3Q6003 G38 Glass door adapter kit (glass 10 mm) L=1500
 3Q6004 G38 Glass door adapter kit (glass 10 mm) L=3000
 3Q6005 G38 Glass door adapter kit (glass 12 mm) L=1500
 3Q6006 G38 Glass door adapter kit (glass 12 mm) L=3000
 Adapter + screws for glass fixing + gaskets
 + carriage fixing blocks

3Q6030 G38 End caps kit
 End caps + screws
 (for 1 panel)
 3Q6031 G38 Floor guide kit for glass panel (glass 10 mm)
 3Q6032 G38 Floor guide kit for glass panel (glass 12 mm)
 Floor guide (for 1 panel)

3Q7003 G82 / Z82 Glass door adapter kit (glass 10 mm) L=1500
 3Q7004 G82 / Z82 Glass door adapter kit (glass 10 mm) L=3000
 3Q7005 G82 / Z82 Glass door adapter kit (glass 12 mm) L=1500
 3Q7006 G82 / Z82 Glass door adapter kit (glass 12 mm) L=3000
 Adapters + screws
 + gaskets

3Q7030 G82 End caps kit
 End caps + screws (for 1 panel)
 3Q7031 G38/G82_Z82 Floor guide kit
 Floor guide + carriage fixing blocks (for 1 panel)
 3Q7032 Kit G82 Floor guide kit for glass panel (glass 10 mm)
 3Q7033 Kit G82 Floor guide kit for glass panel (glass 12 mm)
 Floor guide + carriage fixing blocks (for 1 panel)

8E1190 Jamb gasket for glass panels L=3000
 8E1191 Diverting gasket 40mm for glass panel L=3000
 8E1173 P18 Jamb gasket for 10mm glass panels with
 flat gasket L=3000

3Q3004 S10 Adapter and track kit - Silver L= 1900
 3Q3005 S10 Adapter and track kit - Silver L= 3200
 3Q3006 S10 Adapter and track kit - Silver L= 6500
 Adapter + track for break-out system

3Q8050 S10 Simple break-out system kit for P45 and R40 profiles
 Simple break-out system + sticker (for 1 active panel)
 3Q8052 S10 Full break-out system kit for telescopic doors for P45 and R40
 profiles - Full break-out system + sticker (for 2 active panels)
 3Q3030 S10 Simple break-out system kit for R50 profiles
 Simple break-out system + sticker (for 1 active panel)
 3Q3032 S10 Full break-out system kit for telescopic doors for R50 profiles
 Full break-out system + sticker (for 2 active panels)
 3Q3040 S10 Full break-out system kit
 Full break-out system (for 1 semi-fixed panel)

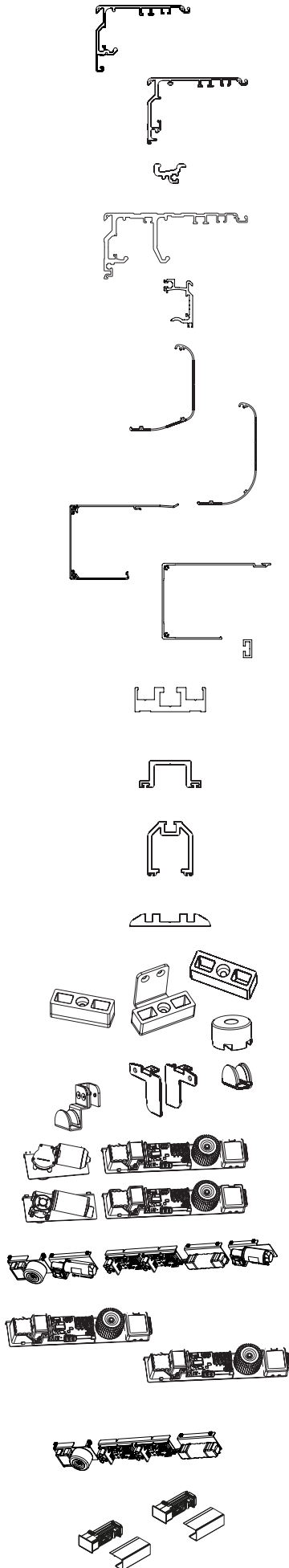
ACCESSORIES



8E1011	IS1 Infrared active sensor - Black
8E1013	IS1 Infrared active sensor - Silver
8E1704	IS2 Activation and safety infrared sensor (in compliance with EN16005 and DIN 18650) - Black
8E1705	IS2 Activation and safety infrared sensor (in compliance with EN16005 and DIN 18650) - Grey
8E1702	IS5 Infrared sensor for lateral safety (in compliance with EN16005 and DIN 18650) - Black
8E1703	IS5 Infrared sensor for lateral safety (in compliance with EN16005 and DIN 18650) - Grey
8E1009	IS3 Concealed infrared activation sensor
8E1711	IS7 Activation and safety infrared sensor - Black
8E1727	IS8 Activation and safety infrared sensor (in compliance with EN16005 and DIN 18650) - Black
8E1075	WS2 microwave sensor for V1E and V1 - White
8E1720	WS3 Dual technology, automatic door activation and safety sensor (in compliance with EN16005) – Black
8E1721	WS3 Dual technology, automatic door activation and safety sensor (in compliance with EN16005) – Silver
8E1722	WS4 Dual technology, activation and safety sensor for redundant automatic doors (in compliance with EN16005) - Black
8E1724	WS5 microwave activation sensor – Black
8E1725	WS6 microwave unidirectional activation sensor – Black
8E1790	Universal rain protection cover for sensors
8E1791	Device for concealed fitting for WS3-WS4 sensors
8E1792	Bracket for roof fitting for IS2-WS3-WS4 sensors
8E1793	Device for concealed fitting for IS2 sensors
8E1034	DS2 LCD digital function selector with advanced end-user/installer programming functions - White
8E1035	DS2 LCD digital function selector with advanced end-user/installer programming functions - Black
8E1831	DS2R LCD digital device with advanced programming functions for redundant door automation – Black (only for programming)
8E1030	MS1 Analog functions selector
8E1040	KS1 Analog functions selector key operated
8E1041	KS1R Analog functions selector key operated for redundant door automation
8E1050	TS1 4-functions wireless selector (open, close, exit only mode, automatic mode)
8E1052	TS2 8-functions wireless selector (open, close, entry only, exit only, partial, partial with lock, automatic mode - reset)

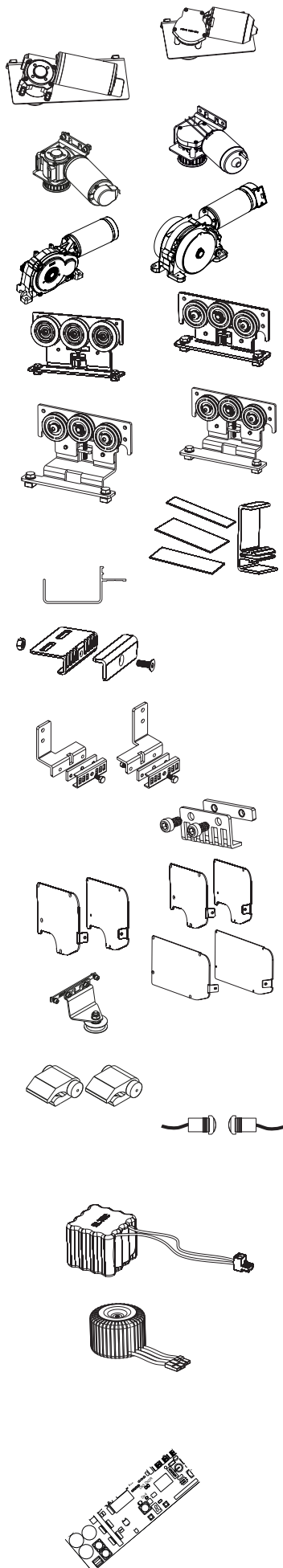
[illegible]47

SPARE PARTS



8E1306	K140 - K200 Main beam L=3100
8E1307	K140 - K200 Main beam L=4400
8E1308	K140 - K200 Main beam L=6500
8E1316	K280 - K500 Main beam L=3100
8E1317	K280 - K500 Main beam L=4400
8E1318	K280 - K500 Main beam L=6500
8E1319	K280 - K500 Wheel glide profile L=3100
8E1320	K280 - K500 Wheel glide profile L=4400
8E1321	K280 - K500 Wheel glide profile L=6500
8E1325	K200T - K280T Main beam Kit L=3100
8E1327	K200T - K280T Main beam Kit L=6500
8E3370	T150-T240 Main beam L=3200
8E3371	T150-T240 Main beam L=4400
8E3372	T150-T240 Main beam L=6500
8E1300	K140-K200-K200T-K280T Mechanism cover L=3100 Silver
8E1301	K140-K200-K200T-K280T Mechanism cover L=4400 Silver
8E1302	K140-K200-K200T-K280T Mechanism cover L=6500 Silver
8E1310	K280 - K500 Mechanism cover L=3100 Silver
8E1311	K280 - K500 Mechanism cover L=4400 Silver
8E1312	K280 - K500 Mechanism cover L=6500 Silver
8E3311	T150-T240 Mechanism cover Aluminium/PVC L=3200 Silver
8E3312	T150-T240 Mechanism cover Aluminium/PVC L=4400 Silver
8E3313	T150-T240 Mechanism cover Aluminium/PVC L=6500 Silver
8E3385	T150-T240 Mechanism cover Aluminium L=3200 Silver
8E3386	T150-T240 Mechanism cover Aluminium L=4400 Silver
8E3387	T150-T240 Mechanism cover Aluminium L=6500 Silver
8E3378	T150-T240 Carriage junction bar L=2000
8E1365	T10 Adapter for framed panels L=1900 Silver
8E1369	T10 Adapter for framed panels L=3200 Silver
8E1361	T10 Adapter for framed panels L=6500 Silver
8E1366	T10 Track for framed panels L=1900 Silver
8E1370	T10 Track for framed panels L=3200 Silver
8E1362	T10 Track for framed panels L=6500 Silver
8E1294	S10 Adapter for break-out system L=1900 Silver
8E1286	S10 Adapter for break-out system L=3200 Silver
8E1290	S10 Adapter for break-out system L=6500 Silver
8E1295	S10 Track for break-out system L=1900 Silver
8E1287	S10 Track for break-out system L=3200 Silver
8E1291	S10 Track for break-out system L=6500 Silver
3Q1030	T10 Floor guide kit for framed panel
8E1373	K200T-K280T Floor guide kit for fast and slow framed panels
0B4507	Runner on floor for break-out system
8E1234	Lower pivot with spring for break-out door operator
1T6004	Floor guide kit for glass panels (1 panel)
1T6003	End caps kit with components for glass panels (1 panel)
1T6005	End caps kit with components for glass panels VPA>2000 (1 panel)
1T6075	K200T-K280T Floor guide kit for fast glass panel
8E3800	K140 - K200T Motor & Electronics unit *
8E3801	K200 - K280- K280T Motor & Electronics unit *
* motor with encoder, control board with on-board radio receiver, transformer, battery	
8E1615	K200R Motor & Electronics unit 2 panels *
8E1616	K200R Motor & Electronics unit 1 panel *
* double motor with encoder, double control board, transformer, battery	
8E3850	K140 - K200T Electronics unit to be combined with encoder *
8E3851	K200 - K280 - K280T Electronics unit to be combined with encoder *
8E3852	K200F-K280TF Electronics unit to be combined with encoder *
* control board with on-board radio receiver, transformer, battery	
8E1660	K200R Electronics unit
double control board, transformer, battery	
8E3600	T150 Electronics unit for Aluminum/PVC profiles*
8E3601	T240 Electronics unit for Aluminum/PVC profiles*
8E3602	T150 Electronics unit for Aluminum profiles*
8E3603	T240 Electronics unit for Aluminum profiles*
* control board with on-board radio receiver, transformer, battery	

SPARE PARTS

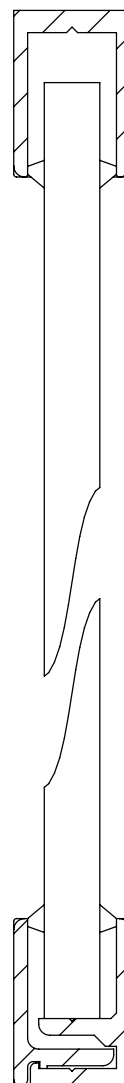
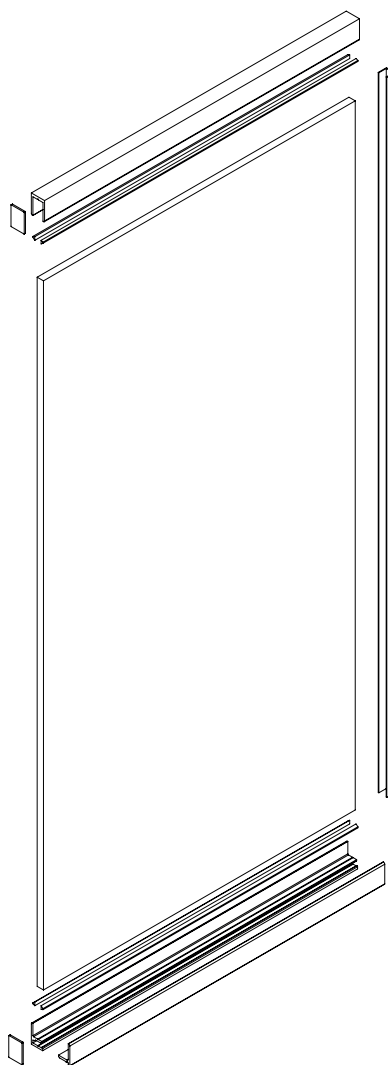
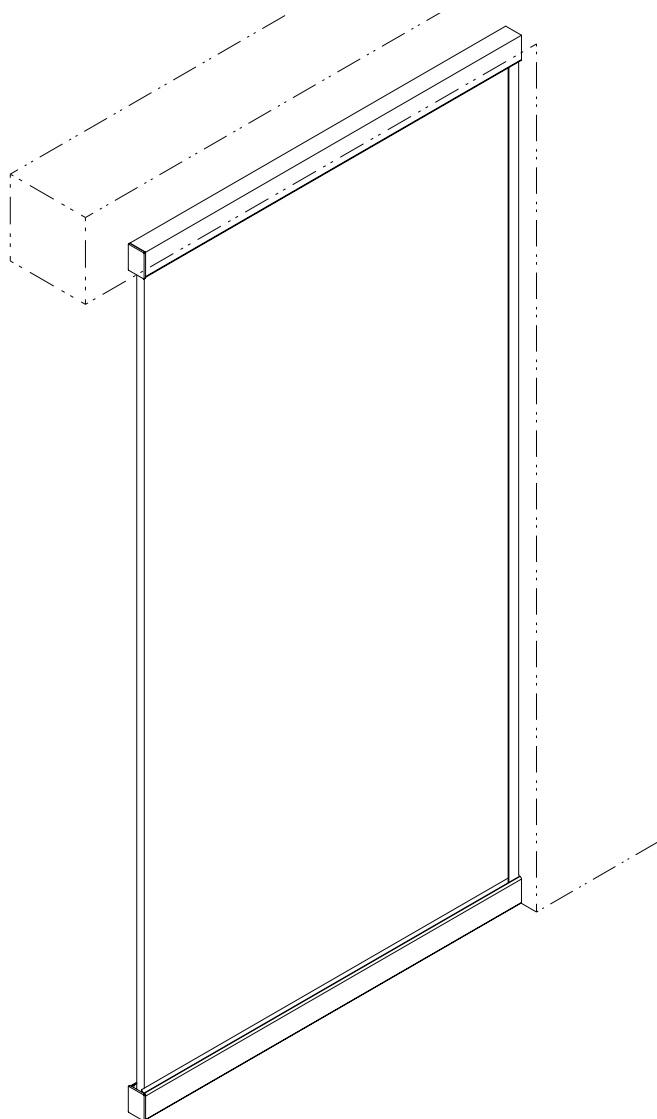


8E3820	Kit K140-K200T Motor with gearbox and encoder 24V
8E3821	Kit K200-K280-K280T Motor with gearbox and encoder 24V
8E1665	Kit K200R Master motor with gearbox and encoder 24V
8E1666	Kit K200R Slave motor with gearbox and encoder 24V
8E3822	Kit K200F-K280TF Motor with gearbox and encoder 24V
8E3620	Kit T150 Motor with gearbox and encoder 24V
8E3621	Kit T240-T240R Motor with gearbox and encoder 24V
8E3622	Kit T240R Slave motor with gearbox and encoder 24V
3S1800	Kit S200 Motor with gearbox, springs and encoder 24V
3S1900	Kit M200 Motor with gearbox and encoder 24V
8E1500	K140-K200 e K200T-K280T Carriage kit for fast panel - 40÷45 profiles
8E1501	K280 Carriage kit
8E1502	K200T-K280T Carriage kit for slow panel - 40÷45 profiles
8E1503	K200T-K280T Carriage kit for fast panel - 30÷35 profiles
8E1504	K200T-K280T Carriage kit for slow panel - 30÷35 profiles
8E1505	K200T-K280T Carriage kit for fast panel - 20÷25 profiles
8E1506	K200T-K280T Carriage kit for slow panel - 20÷25 profiles
8E1474	K140 - K200 Main beam raceway kit
8E1475	K280 Main beam raceway kit
8E1477	K Line Main beam spare parts
8E1186	K Line Main beam aluminium raceway kit L=2 meter
8E1476	K Line Belt/carriage transmission bracket kit
8E1471	K Line Belt connector kit
8E1472	K Line Belt tension adjustment kit
8E1478	K200T-K280T Belt connector kit for 1 slow panel (right)
8E1479	K200T-K280T Belt connector kit for 1 slow panel (left)
8E1480	K200T-K280T Belt connector to the main beam kit (for 1 slow panel)
1T5300	K200T/K280T Hanging kit right slow panel - 40 ÷ 45 profiles
1T5301	K200T/K280T Hanging kit left slow panel - 40 ÷ 45 profiles
1T5202	K200T/K280T Hanging kit right slow panel - 20 ÷ 25/30 ÷ 35 profiles
1T5203	K200T/K280T Hanging kit left slow panel - 20 ÷ 25/30 ÷ 35 profiles
8E1381	K140 - K200 Black end-caps kit (2pcs)
8E1384	K280 Black end-caps kit (2pcs)
8E1388	K200T-K280T Silver end-caps set (2pcs)
8C5003	K140-K200-K280-K200T-K280T encoder for the pulley
8E3840	K Line Belt transmission pulley kit
8E3640	T Line Belt transmission pulley and tension adjustment kit
8E1470	K Line - Safety mechanical panel stoppers (2pcs)
8E3330	T Line - Safety mechanical panel stoppers (2pcs)
8E1458	K Line F1-F2 Photocells kit (without electronic board)
8E1459	K Line Electronic board for F1-F2 photocells
8E1640	K Line Anti-interference filter PCB
8E1645	K140-K200-K280-K200T-K280T Back-up battery pack 19,2V 600mA
8E1647	K200R Back-up battery pack 19,2V 3000mA
8E3681	T240R Back-up battery pack 19,2V 3000mA
8E1648	S200 Back-up battery pack 19,2V 3000mA
8E3680	T150-T240-M200 Back-up battery pack 19,2V 600mA
8E0224	K Line Toroidal transformer 150VA
8E1632	K140-K200T Electronic board with on-board receiver (for motor without on-board encoder)
8E1633	K200-K280-K280T Electronic board with on-board receiver (for motor without on-board encoder)
8E3650	T150-K140-K200T Electronic board with on-board receiver
8E3651	T240-K200-K280-K500-K280T Electronic board with on-board receiver
8E1637	K200R-T240R Master electronic board for redundant automation
8E1638	K200R-T240R Slave electronic board for redundant automation
8E3652	Kit K200F-K280TF Electronic board with on-board receiver
3S1810	S200 Electronic board with on-board receiver
3S1911	M200 Electronic board with on-board receiver

F30

Profile for fixed glass panels for automatic sliding doors

The profile is 21mm thick, the bottom and upper base is 30 mm high and the side profiles are 13mm wide.
It is supplied with gaskets and accessories to fit laminated 10,76mm glass or tempered 10mm, 12mm glasses.

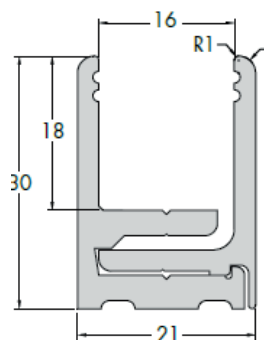


F30 PROFILE FOR FIXED GLASS PANELS FOR SLIDING AUTOMATIC DOORS

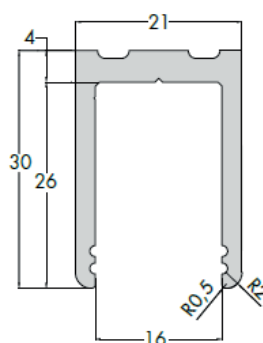
PANEL KIT

3Q8201	F30 Kit for 1 fixed panel L 1500 - H 3000 10,76 mm laminated glass
3Q8202	F30 Kit for 1 fixed panel L 1500 - H 3000 10 mm temperd glass
3Q8203	F30 Kit for 1 fixed panel L 1500 - H 3000 12 mm temperd glass

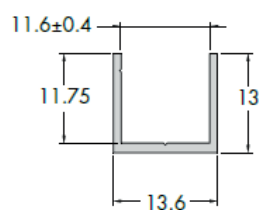
8E2300	F30 Bottom clamp profile	L=3000
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8E2301	F30 Top U profile	L=3000
--------	-------------------	--------



8E2302	F30 Vertical U profile	L=3000
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8E2320	F30 Gasket for 10 mm glass	L=1000
8E2321	F30 Gasket for 12 mm glass	L=1000
8E2340	F30 End cap	1 pc

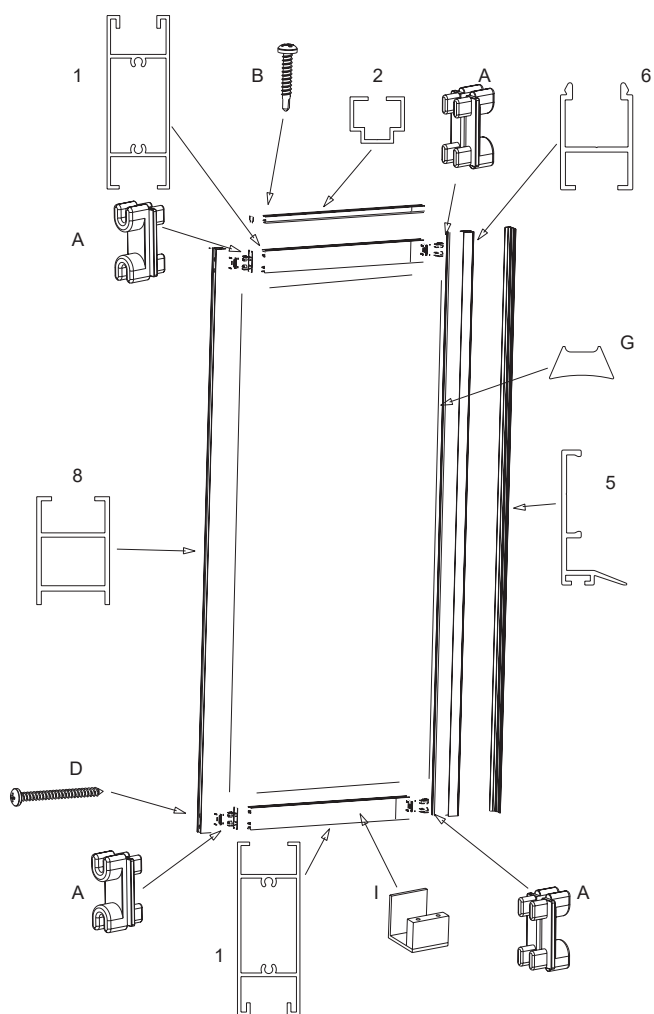
P27

Profile for automatic sliding doors

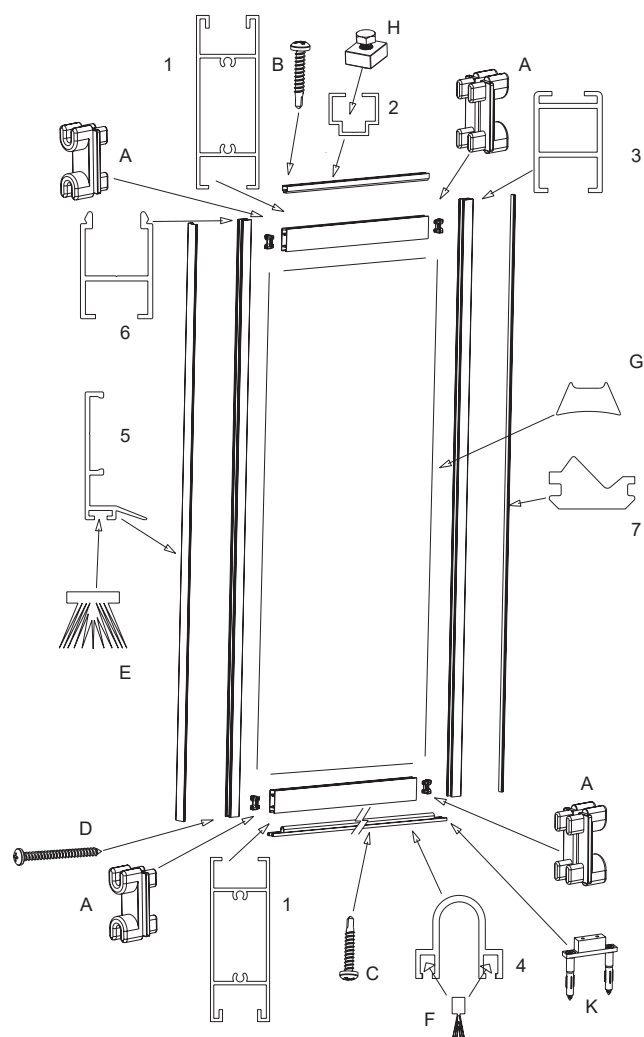
The profile is 27mm thick, the bottom and upper base is 75mm high and the side profiles are 40mm wide.
It is supplied with gaskets and accessories to fit laminated 3+3/4+4/5+5 or tempered 6/8/10 glasses.



Fixed panel



Active panel



P27 PROFILE FOR AUTOMATIC SLIDING DOORS

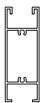


















LINEAR PANEL KITS

3Q4#000002744	P27 Kit for 1 active panel L 1000 - H 2600
3Q4#000002711	P27 Kit for 1 active panel L 1500 - H 2600
3Q4#000003004	P27 Kit 1 fixed panel + 1 active panel L 1000 - H 2600
3Q4#000003662	P27 Kit 1 fixed panel + 1 active panel L 1500 - H 2600
3Q4#000002870	P27 Kit 2 active panels L 1000/H 2600
3Q4#000003663	P27 Kit 2 active panels L 1500/H 2600
3Q4#000002856	P27 Kit 2 fixed panels + 2 active panels L 1000 - H 2600
3Q4#000003664	P27 Kit 2 fixed panels + 2 active panels L 1500 - H 2600

TELESCOPIC PANEL KITS

3Q4#000005092	P27 Kit 2 active panels L 1000 – H 2600
3Q4#000004689	P27 Kit 2 active panels L 1500 – H 2600
3Q4#000007662	P27 Kit 1 fixed panel + 2 active panels L 1000 – H 2600
3Q4#000007057	P27 Kit 1 fixed panel + 2 active panels L 1500 – H 2600
3Q4#000008098	P27 Kit 4 active panels L 1000 – H 2600
3Q4#000008099	P27 Kit 4 active panels L 1500 – H 2600
3Q4#000008100	P27 Kit 4 active panels + 2 fixed panels L 1000 – H 2600
3Q4#000008101	P27 Kit 4 active panels + 2 fixed panels L 1500 – H 2600

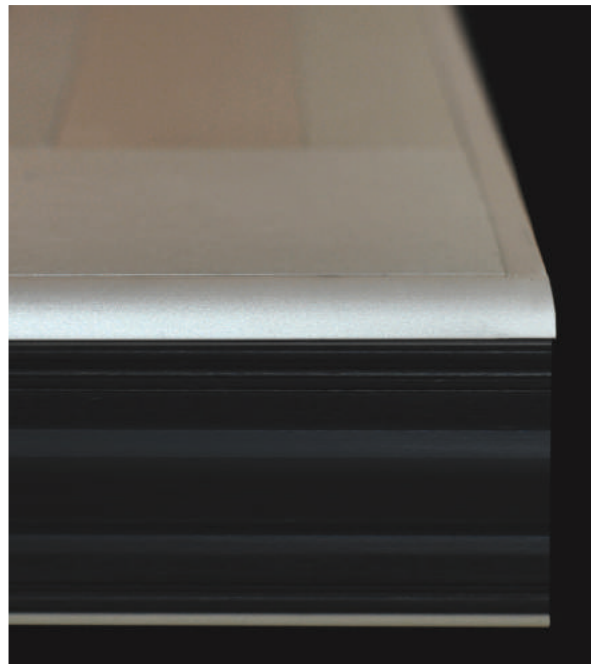
COMPONENTS

	1	8E2001	P27 Horizontal profile for active/fixed panel	6 m bar
	2	8E2002	P27 Horizontal upper profile for Active/Fixed panel	6 m bar
	4	8E2003	P27 Horizontal guide profile for active panel	3 m bar
	8	8E2004	P27 Vertical profile for fixed panel	5,2 m bar
	6	8E2005	P27 Vertical profile for active/fixed panel	5,2 m bar
	3	8E2006	P27 Vertical connection profile for active panel	2,6 m bar
	5	8E2007	P27 Clamp profile for active/fixed panel	5,2 m bar
	I	8E2031	P27 Floor guide for 1 active/fixed panel	for 1 panel
	K	8E2032	P27 Floor guide for 1 active panel	for 1 panel
	K+L	8E2033	P27 Kit floor guide for 1 telescopic panel	for 1 panel
	A+B+D	8E2040	P27 Spare parts kit for 1 fixed panel	for 1 panel
	A+B+C+D+H	8E2041	P27 Spare parts kit for 1 active panel	for 1 panel
	A+B+C+D+J	8E2042	P27 Spare parts kit for 1 active Teles. panel	for 1 panel
	G	8E2070	P27 Gasket (6mm thick) for glass active/fixed panel	60 m
	G	8E2071	P27 Gasket (8mm thick) for glass active/fixed panel	60 m
	G	8E2072	P27 Gasket (10mm thick) for glass active/fixed panel	60 m
	7	8E2073	P27 Connection gasket for active panel	12 m
	E	8E2074	P27 Connection brush for active panel	12 m
	F	8E2075	P27 Base brush for active panel	2 m bar

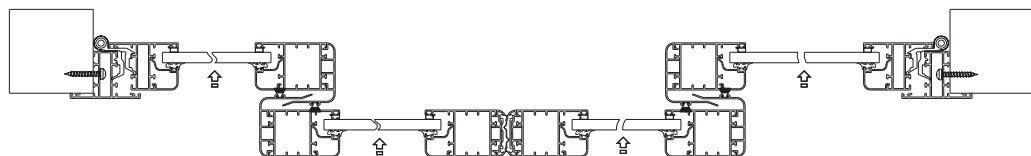
P45

Profile for automatic sliding doors

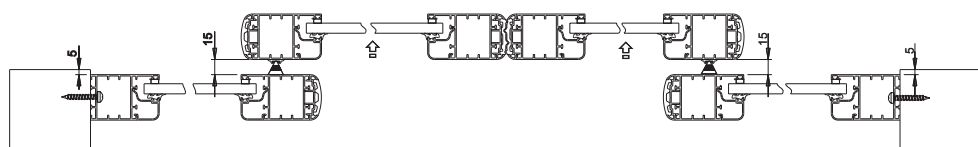
The P45 profile is an adjustment profile for the common R40 system with rounded anti-crushing, anti-cutting and anti-grazing corners complying with the EN 16005 standard about safety for motorized pedestrian doors. Custom-cut panel kit supplied with brushes, gaskets and glass-holders for 10 to 12mm glass or, alternatively, with the necessary components to complete the panel assembly with the R40 system.



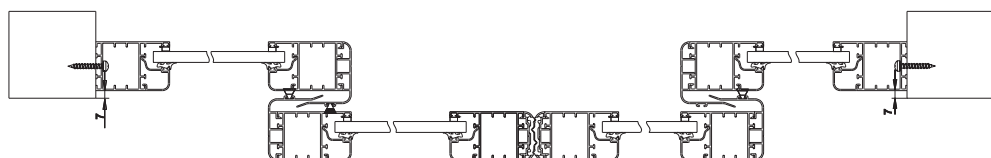
Double panel door with full break-out system



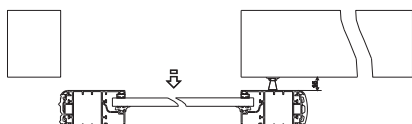
Double panel door with simple break-out system



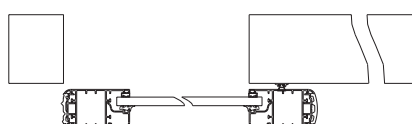
Double panel door without break-out system



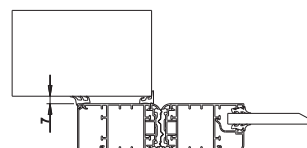
Moving panel with simple break-out system



Moving panel with simple break-out system



Door stop



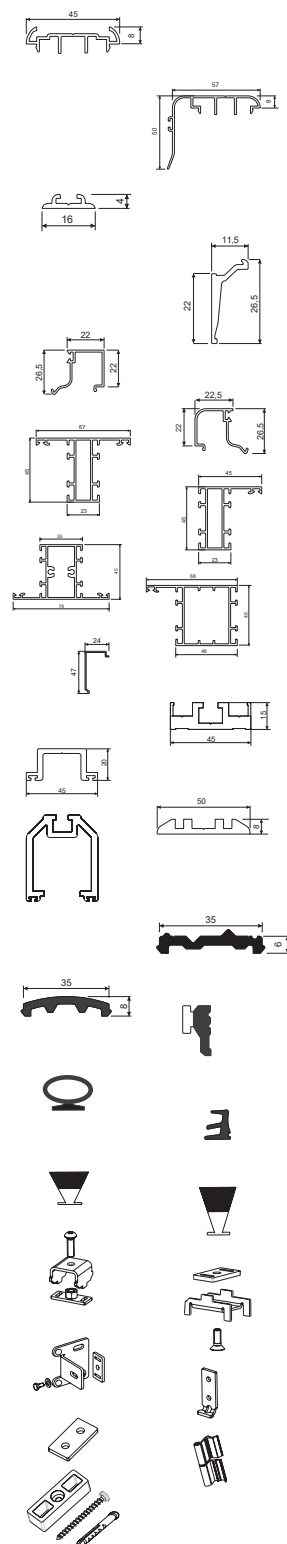
P45 PROFILES FOR AUTOMATIC SLIDING DOORS

PANEL KIT

3Q8001	P45 kit active panel S10 full break-out L 1500 - H3000*
3Q8002	P45 kit semi-fixed panel S10 full break-out L 1500 - H 3000*
3Q8003	P45 kit active panel S10 simple break-out L 1500 - H 3000*
3Q8004	P45 kit fixed panel S10 simple break-out L 1500 - H 3000*
3Q8005	P45 kit active panel L 1500 - H 3000
3Q8006	P45 kit fixed panel L 1500 - H 3000
3Q8007	P45 kit single active panel 1500 - H 3000
3Q8008	P45 kit vertical frame for matching with single active panel H 3000

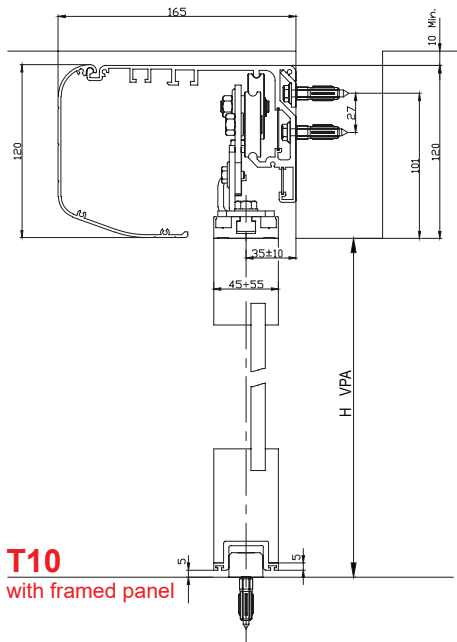
* Codes 8E2206 and 8E2210 must also be ordered to complete the frame of the wall opening for break-out systems.

COMPONENTS

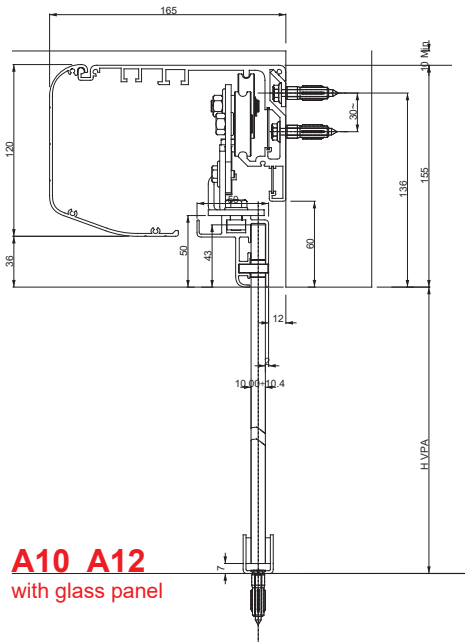


8E2230	Vertical profile, frame and matching part	3 m bar
8E2200	Vertical profile, frame and matching part	6 m bar
8E2231	P45 Maze Vertical profile	3 m bar
8E2201	P45 Maze Vertical profile	6 m bar
8E2232	P45 Brush profile-holder	3 m bar
8E2202	P45 Brush profile-holder	6 m bar
8E2203	P45 Glass holder 2mm (profile to complete the assembly of panel adapter and track)	6,5 m bar
8E2234	P45 Glass holder 22mm	3 m bar
8E2204	P45 Glass holder 22mm (profile to complete of active and fixed panel track)	6 m bar
8E2205	P45 Rounded glass holder 22,5mm	6 m bar
8E2206	P45 T shaped frame fixed/active	6 m bar
8E2207	P45 L shaped frame fixed/active	6 m bar
8E2208	P45 Vertical/horizontal frame profile	6,5 m bar
8E2239	P45 Reinforced L shaped frame profile fixed	3 m bar
8E2240	P45 Covering profile for break-out frame	3 m bar
8E2210	P45 Covering profile for break-out frame	6 m bar
8E2215	P45 Panel adapter profile silver	6,5 m bar
8E2216	P45 Panel track profile silver	6,5 m bar
8E2217	P45 Break-out floor track profile	6,5 m bar
8E1290	P45 Break-out adapter kit	6,5 m bar
0E0047	P45 Screw TCAF d4,8x32 UNI6954 Zn	1 panel kit (12 pcs)
8E2250	P45 Panel connection seal	1 m
8E2255	P45 Panel connection seal (1 break-out panel)	1 m
8E2251	P45 Connection seal for panels matching part	1 m
8E2252	P45 External glass gasket	1 m
8E2253	P45 Internal Panel connection seal	1 m
8E2254	P45 Seal 7mm for 10mm glass	1 m
8E2260	P45 Brush	1 m
8E2261	P45 Increased brush	1 m
8E2270	P45 Adapter bracket kit	1 panel kit (4 pcs)
8E2271	P45 Track bracket kit	1 panel kit (3 pcs)
8E2272	P45 L shaped bracket for wall fixing	1 panel kit (3 pcs)
8E2280	Base fixing bracket kit	1 panel kit (2 pcs)
8E2281	R40 Profiles reinforcement plate kit	1 panel kit (4 pcs)
8E2282	Semi-fixed panel opening hinge kit	1 panel kit (2 pcs)
3Q1030	T10 Floor guide for linear door	1 panel kit

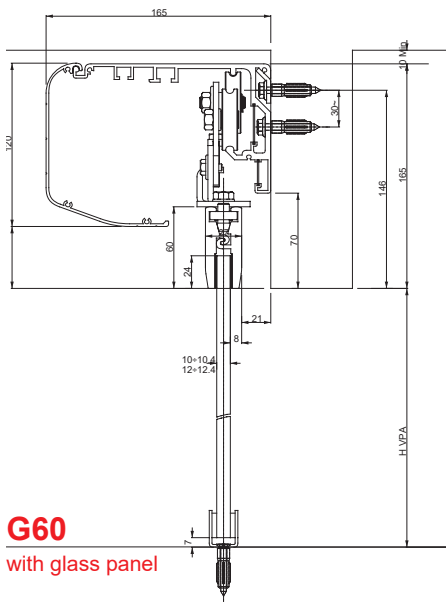
K140 - K200 - K200R DIMENSIONS



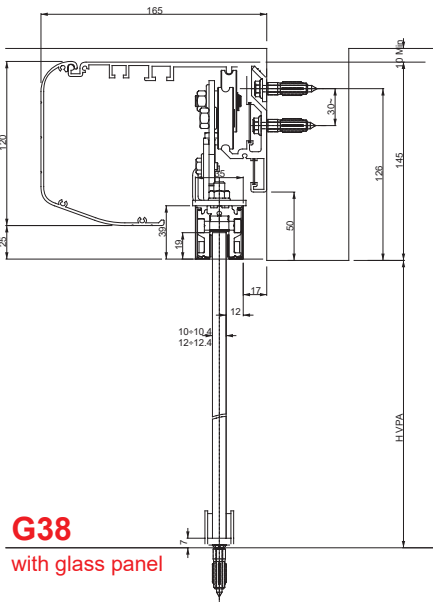
with framed panel



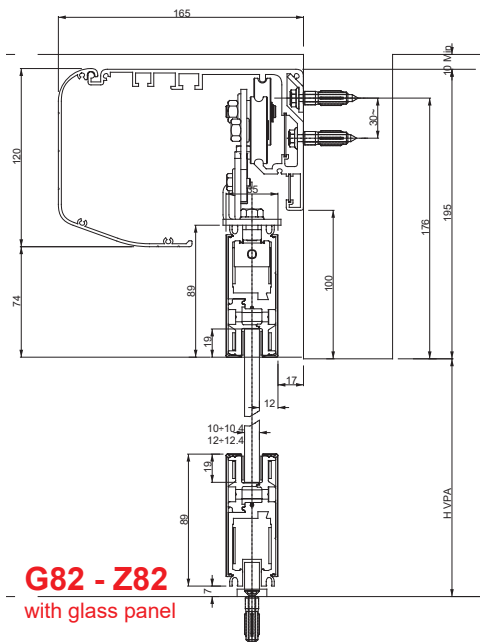
with glass panel



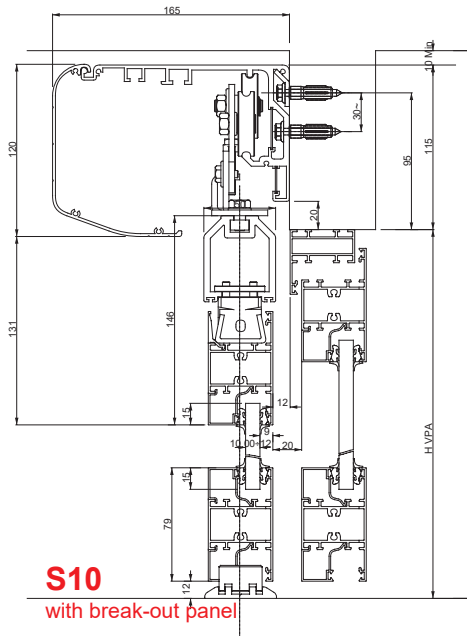
with glass panel



with glass panel

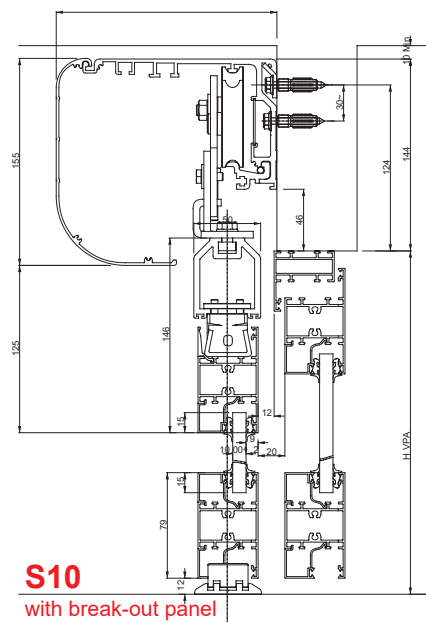
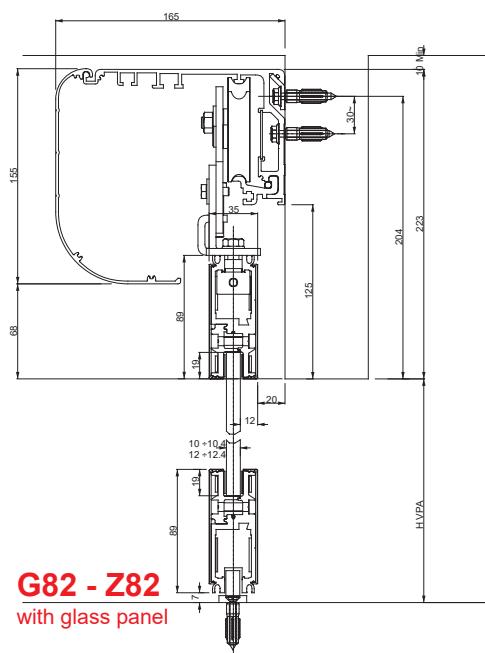
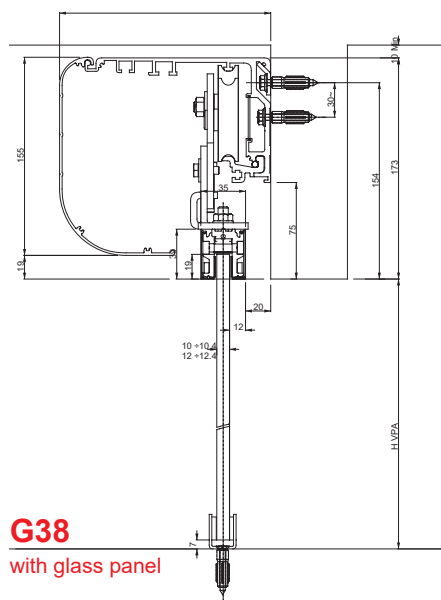
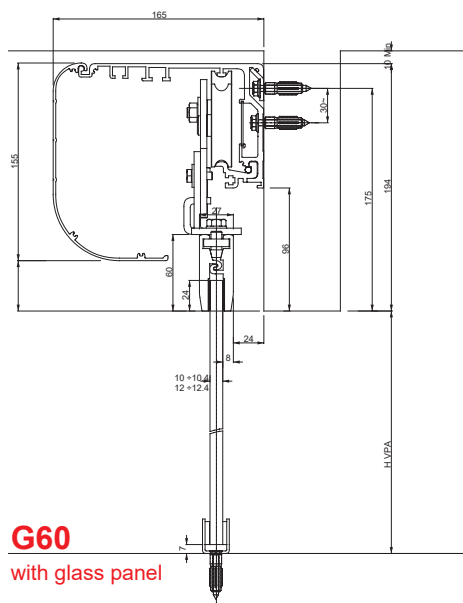
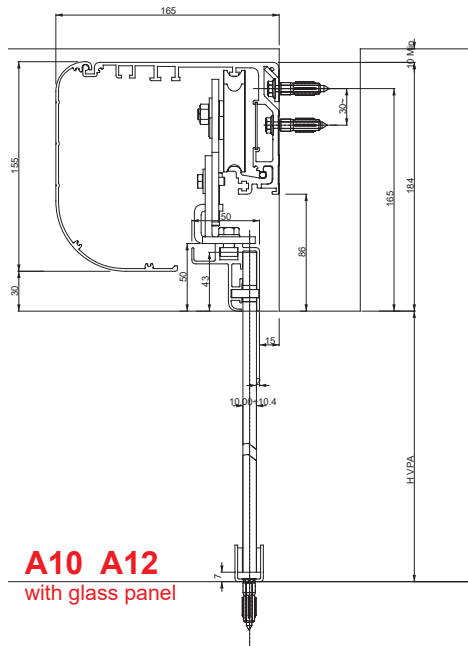
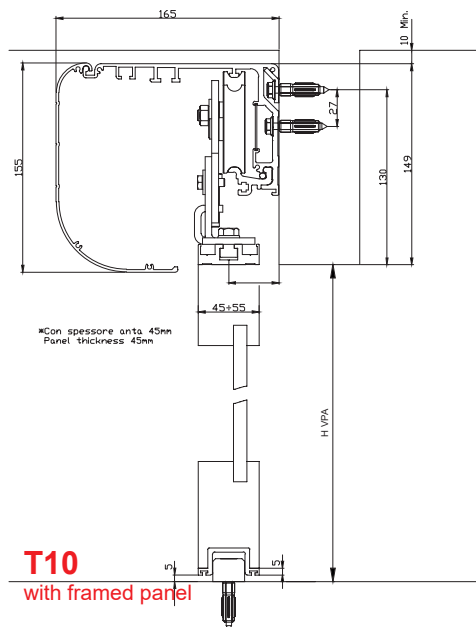


with glass panel

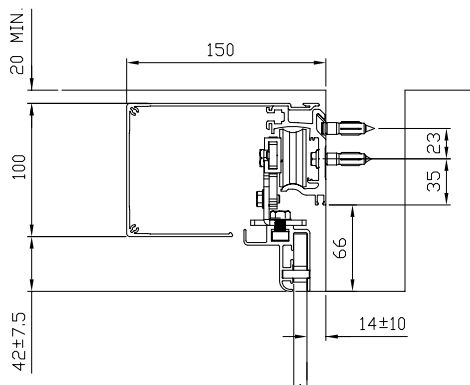


with break-out panel

K280 - K500 DIMENSIONS



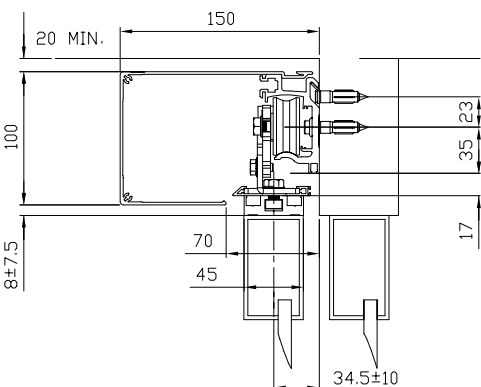
T150 - T240 - T240R DIMENSIONS



A10 glass/vetro
min. 8 max. 10.4

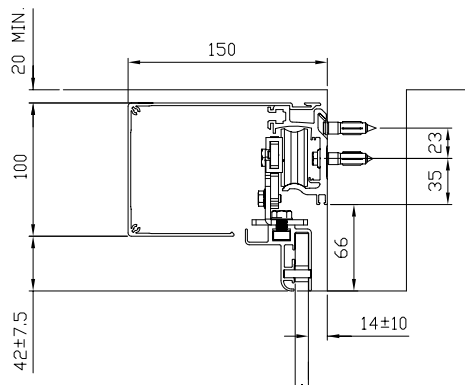
A10

with glass panel



T10

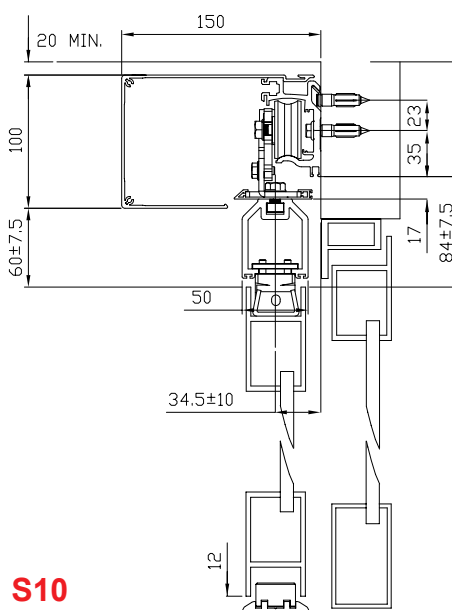
with framed panel



A12 glass/vetro
min. 10,4 max. 13.8

A12

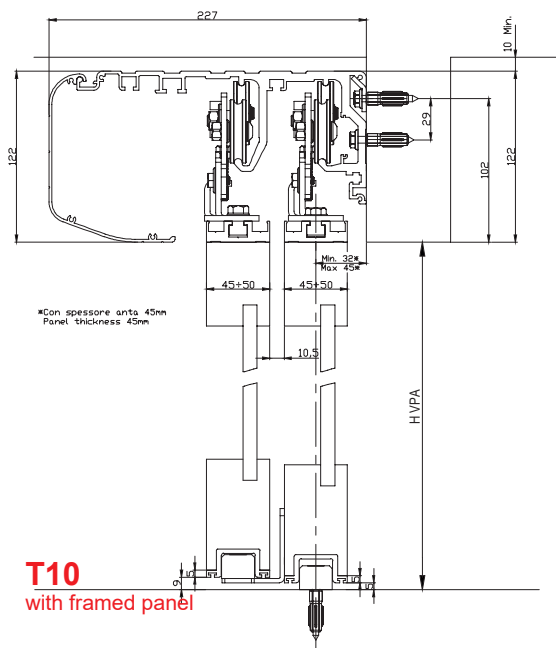
with glass panel



S10

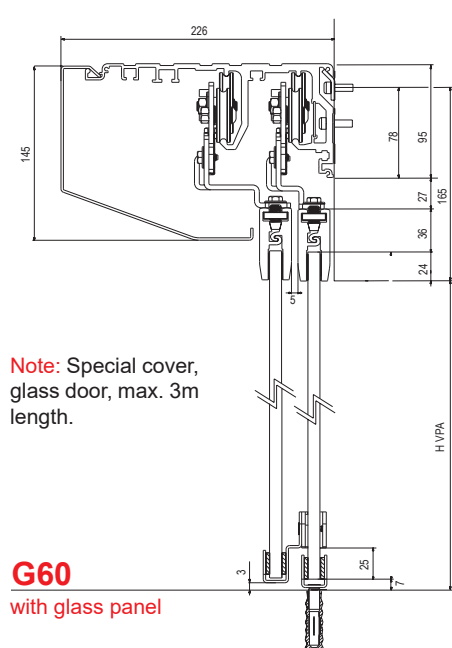
with break-out panel

K200T - K280T DIMENSIONS



T10

with framed panel

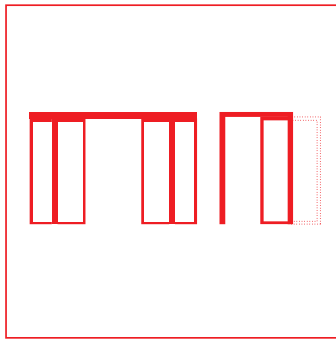


Note: Special cover, glass door, max. 3m length.

G60

with glass panel





DOOR AUTOMATION

	V1	V1E	K140	K200	K200R	K280	K500	T150	T240	T240R	K200T	K280T	DUEVILLE	S200	M200
Single panel max Kg	70	70	140	140	140	280	-	120	120	120	100x2	140x2	140	250	250
Double panel max Kg	-	-	70x2	100x2	100x2	140x2	250x2	75x2	120x2	120x2	50x4	70x4	100x2	0	0
Telescopic	-	-	-	-	-	-	-	-	-	-	●	●	-	-	-
EN16005	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Low energy	●	●	-	-	-	-	-	-	-	-	-	-	-	●	●
Full energy	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●
Intensive use	-	-	-	●	●	●	●	-	●	●	-	●	●	-	-
1.000.000 cycles	-	-	●	-	-	-	-	●	-	-	●	-	-	●	●
2.000.000 cycles	-	-	-	●	●	●	●	-	●	●	-	●	●	-	-
Redundant	-	-	-	-	●	-	-	-	-	●	-	○	-	-	-
Plug & Play	●	●	○	○	○	○	○	○	○	○	-	-	-	-	-
Compliant with CO48	-	-	-	○	-	-	-	-	-	-	-	○	-	-	-
Fail secure electriclock	-	-	○	○	-	○	○	○	○	-	○	○	○	○	○
Fail safe electriclock	-	-	○	○	-	○	○	-	-	-	○	○	○	○	○
Bi-stable electric-lock	○	○	-	-	○	-	-	-	-	○	-	-	-	○	○
Built in receiver	●	-	●	●	-	●	●	●	●	-	●	●	●	●	●
Wireless selector	○	-	○	○	-	○	○	○	○	-	○	○	○	○	○
Analog selector	-	-	○	○	○	○	○	○	○	○	○	○	○	○	○
Digital selector	-	-	○	○	-	○	○	○	○	-	○	○	○	○	○
Fire alarm input	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●
Battery backup	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●
Breakout system	-	-	○	○	-	○	○	○	○	-	○	○	○	○	○
Quick access to electronic board	●	●	-	-	-	-	-	●	●	●	-	-	-	-	-
Min. VPA mm	700	700	800	800	800	800	800	800	800	800	900	900	800	600	600
Max. VPA mm	1200	1200	2800	2800	2800	3200	3200	2800	2800	2800	4200	4200	2800	1600	1600
Automation height (mm)	59	59	120	120	120	155	155	100	100	100	120	120	133	110	74
Automation depth (mm)	65	65	165	165	165	165	165	150	150	150	225	225	169	130	132
Automation width (mm)	1200	1200	6500	6500	6500	6500	6500	6500	6500	6500	6500	6500	6800	580	643

Legend

- Included
- Optional
- Not Available



WINDOW AUTOMATION

A full range of chain, stem and rack actuators designed to operate any kind of windows, domes and louvers in natural ventilation and in smoke evacuation systems.

NATURAL VENTILATION

C20



C30



C40



C60



C130



C160



**C240
C260**



ACK4



S80



T50



SMOKE EVACUATION

ACK4 RWA



C160 RWA



S80 RWA



TOPP
tecnologie del movimento



C20

Chain actuator
Thrust force 300 N
Max stroke 360 mm

TANDEM

PRODUCT DESCRIPTION

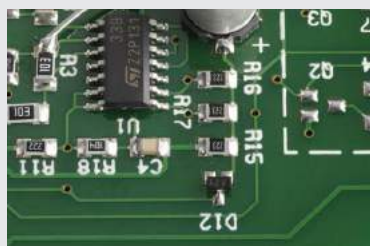
Electric C20 actuator with double link articulated chain, enclosed in a suitable casing, with different mounting accessories for top and bottom hung windows. Operation at 230V 50Hz or, as an alternative, at 24V DC. Maximum applicable load 300N. Fast hooking and unhooking system of the chain to the window. Adjustment of the force and of the stroke at 240 or 360mm by external knobs. Electronic end of stroke in closing by current absorption control. CE marked device.



Double link chain with very high resistance on heavy loads.



Long stroke, together with a slim and attractive housing, to allow applications that require minimum size (International patent on the chain path).



Stroke-end by amperometric absorption in closing to avoid chain adjustments in closing and any possible installation mistake.

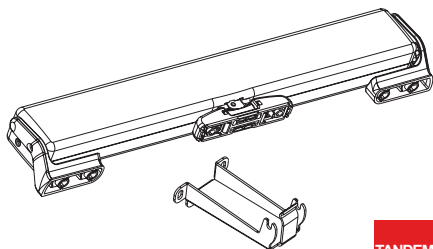


TECHNICAL SPECIFICATIONS

C20 230V

C20 24V

Power supply voltage	230V ~ 50Hz	min 21V ~ max 28V d.c.
Max applicable load in thrust	300 N	300 N
Max applicable load in traction	200N	200 N
Stroke	240 and 360 mm	240 and 360 mm
Absorbed current	0,12 A	0,43 A
Idle translation speed	8 mm/s	7,5 mm/s
Duration of the idle stroke	46 s	48s
Double insulated	YES	YES
Service type	S2 of 4 min	S2 of 4 min
Operating temperature	- 5°C + 50°C	- 5°C + 50°C
Protection Class	IP 30	IP 30
Stroke end regulation in closing	not necessary	not necessary
Parallel connection option	YES	YES
Stroke end	Electronic in opening, by amperometric absorption in closing	
Dimensions	362x48x34 mm	362x48x34 mm
Weight	0,970 kg	0,940 kg



C20 standard 1 push point

3A3#	C20 chain actuator 230V - black
3A3#	C20 chain actuator 230V - grey
3A3#	C20 chain actuator 230V - white
3A3#	C20 chain actuator 24V - black
3A3#	C20 chain actuator 24V - grey
3A3#	C20 chain actuator 24V - white

TANDEM

C20 Tandem standard 2 push points on the same window frame

3A7#	Kit C20 chain actuator - tandem version - 230V black
3A7#	Kit C20 chain actuator - tandem version - 230V grey
3A7#	Kit C20 chain actuator - tandem version - 230V white
3A7#	Kit C20 chain actuator - tandem version - 24V black
3A7#	Kit C20 chain actuator - tandem version - 24V grey
3A7#	Kit C20 chain actuator - tandem version - 24V white

Min. inter axis between the 2 actuators: 1000mm

Description of the standard pattern for 1 push point

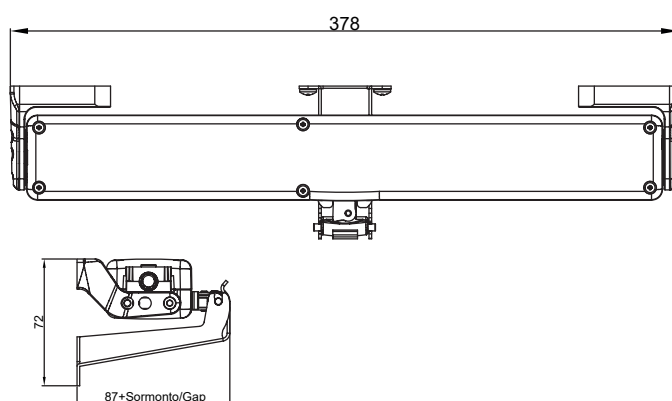
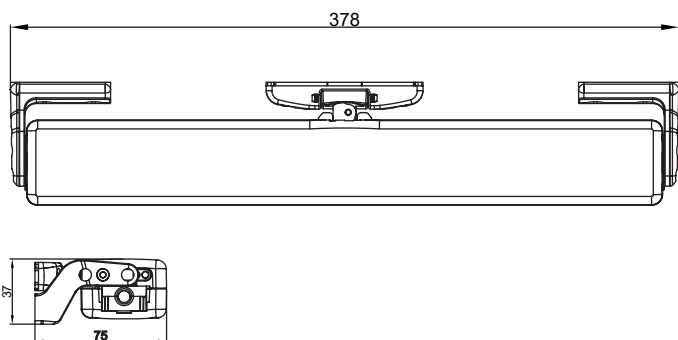
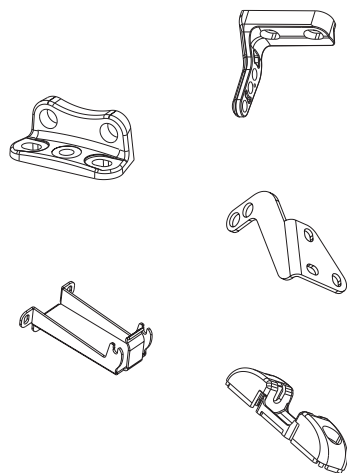
3A3#	C20 chain actuator 230V 1,5mt lead
	Frontal swivel brackets set for top/bottom hung windows
	Upper bracket for bottom hung windows
	ARS Rapid hooking device to the frame
	Spare parts

Description of the standard pattern for 2 push points

3A7#	C20 chain actuator - tandem version - 24V (2 pcs) 6mt lead
	AL2/SW 230V to 24V transformer unit
	Frontal swivel brackets set for top/bottom hung windows (2 pcs)
	Upper bracket for bottom hung windows (2 pcs)
	ARS Rapid hooking device to the frame (2 pcs)
	Spare parts (2 pcs)

Accessories and spare parts

3A3200	Frontal swivel brackets set for top/bottom hung windows - black
3A3202	Frontal swivel brackets set for top/bottom hung windows - grey
3A3201	Frontal swivel brackets set for top/bottom hung windows - white
3A3210	Swivel brackets set for vertical mounting - black
3A3212	Swivel brackets set for vertical mounting - grey
3A3211	Swivel brackets set for vertical mounting - white
3A3501	Brackets set for installation on the moving part of the window - black
3A3503	Brackets set for installation on the moving part of the window - grey
3A3502	Brackets set for installation on the moving part of the window - white
1A3640	Upper bracket for bottom hung windows - black
1A3642	Upper bracket for bottom hung windows - grey
1A3641	Upper bracket for bottom hung windows - white
1UA001	ARS Rapid hooking device to the frame - black
1UA003	ARS Rapid hooking device to the frame - grey
1UA002	ARS Rapid hooking device to the frame - white
3A3000	Standard spare parts



C30

Chain actuator
Thrust force 300 N
Max stroke 380 mm



PRODUCT DESCRIPTION

Electric C30 actuator with double link articulated chain, enclosed in a suitable casing, with different mounting accessories for top and bottom hung windows. Operation at 230V 50Hz or, as an alternative, at 24V DC. Maximum applicable load 300N. Fast hooking and unhooking system of the chain to the window. Adjustment of the stroke at 200 or 380mm by an external knob. Electronic device with acoustic warning to signal erroneous installation to the user. Upon request, a preset "S" version for the synchronous operation of two actuators on the same window is available. CE marked device.



Telescopic chain-end providing a rapid adjustment from 0 to 15mm, even with chain completely retracted into the actuator housing, that allows easy application on windows with overlap.



Easy fixing system, fit for windows of any type and size.

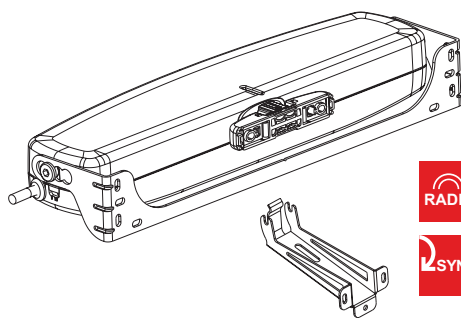


Double link chain with very high resistance on heavy loads.



TECHNICAL SPECIFICATIONS

	C30 230V	C30 24V
Power supply voltage	230V ~ 50Hz	24V d.c.
Maximum applicable load in thrust	300 N	300 N
Maximum applicable load in traction	300 N	300 N
Strokes	200 and 380 mm	200 and 380 mm
Absorbed current	0,26 A	1,3 A
Idle translation speed	37 mm/s	17 mm/s
Duration of the idle stroke	11 s	22 s
Double insulated	YES	YES
Service Type	S2 of 4 min	S2 of 4 min
Operating temperature	- 5°C + 50°C	- 5°C + 50°C
Protection Class	IP 30	IP 30
Adjustment of the window frame connection	15 mm	15 mm
Adjustment of pins for the swivel brackets	15 mm	15 mm
Parallel connection option	YES	YES
Synchronous operation of 2 C30s on the same window	with S version	with S version
Chain position control	encoder	encoder
Acoustic warning for wrong installation (Buzzer)	YES	YES
Dimensions	337,2x80x49 mm	337,2x80x49 mm
Weight	1,1 kg	1,1 kg



C30 standard 1 push point

3A4#	C30 chain actuator 230V - black
3A4#	C30 chain actuator 230V - grey
3A4#	C30 chain actuator 230V - white

3A4#	C30 chain actuator 24V - black
3A4#	C30 chain actuator 24V - grey
3A4#	C30 chain actuator 24V - white

C30 230V with on-board radio receiver and TR4 remote control available upon request.

C30S synchronised for 2 push points on the same window frame

3A42#	C30S Chain actuator 230V black
3A42#	C30S Chain actuator 230V grey
3A42#	C30S Chain actuator 230V white

3A42#	C30S Chain actuator 24V black
3A42#	C30S Chain actuator 24V grey
3A42#	C30S Chain actuator 24V white

Description of the standard pattern for 1 push point

3A4#	C30 chain actuator 230V (spare parts included)
	Swivel frontal bracket for top/bottom hung windows
	Upper bracket for bottom hung windows
	ARS Rapid hooking device to the frame

Description of the standard pattern for 2 push points

3A42#	C30S chain actuator 230V black 5mt cable
3A42#	C30S chain actuator 230V black 5mt cable

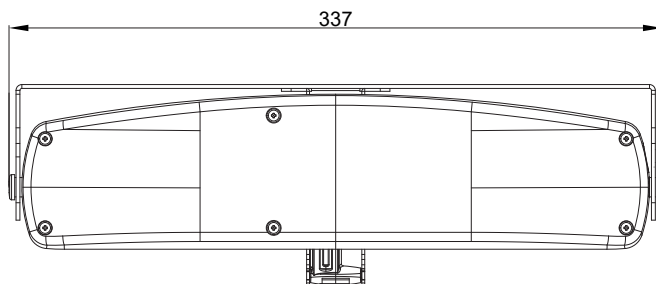
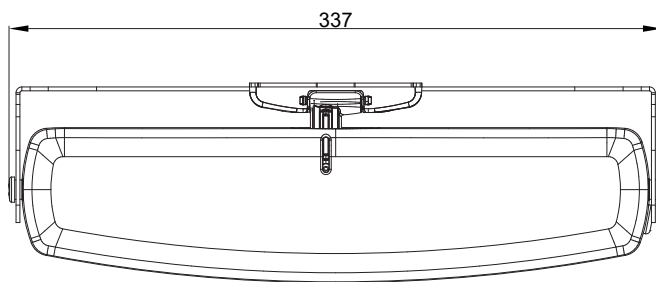
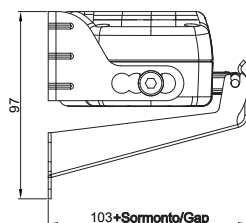
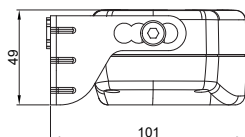
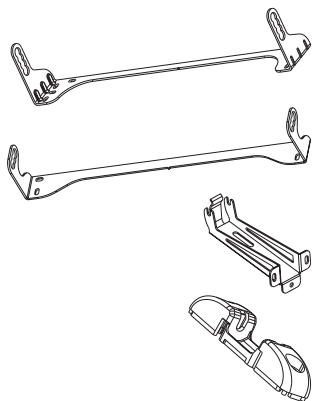
Accessories and spare parts

1A4810	Swivel frontal bracket for top/bottom hung windows - black
1A4812	Swivel frontal bracket for top/bottom hung windows - grey
1A4811	Swivel frontal bracket for top/bottom hung windows - white

1A4815	Swivel brackets set for vertical mounting - black
1A4817	Swivel brackets set for vertical mounting - grey
1A4816	Swivel brackets set for vertical mounting - white

1A4615	Upper bracket for bottom hung windows - black
1A4617	Upper bracket for bottom hung windows- grey
1A4616	Upper bracket for bottom hung windows - white

1UA001	ARS Rapid hooking device to the frame - black
1UA003	ARS Rapid hooking device to the frame - grey
1UA002	ARS Rapid hooking device to the frame - white
3UM000	C30/C40 spare parts



C40

Chain actuator
Thrust force 400 N
Adjustable stroke max.500 mm

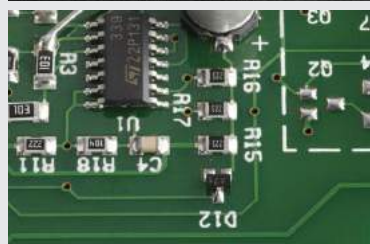


PRODUCT DESCRIPTION

Electric C40 actuator with double link articulated chain, enclosed in a suitable casing, with different mounting accessories for top and bottom hung windows. Operation at 230V 50Hz or, as an alternative, at 24V DC. Maximum applicable load 400N. Fast hooking and unhooking system of the chain to the window. Max. stroke 500mm, end of stroke adjustable at 100, 150, 200, 250, 300, 350, 400 mm by an external knob located on both sides of the actuator. Electronic device with acoustic warning to signal erroneous installation to the user. Electronic traction control with speed reduction, during the last 100mm of closing action. High protection IP 55 rated. Upon request, a preset "S" version for the synchronous operation of two actuators on the same window is available. CE marked device.



Easy stroke adjustment (7 positions from 100 to 500mm).



Electronic traction control with speed reduction to avoid chain adjustments in closing and avoid any possible installation mistake.



High protection IP 55 rated.

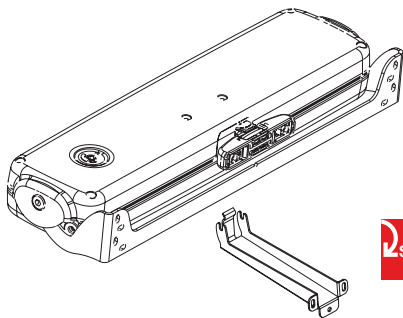


TECHNICAL SPECIFICATIONS

C40 230V

C40 24V

Power supply voltage	230V ~ 50Hz	24V d.c.
Maximum applicable load in thrust	400 N	400 N
Maximum applicable load in traction	400 N	400 N
Strokes	100 - 150 - 200 - 250 - 300 - 400 - 500 mm	
Absorbed current	0,24 A	1,1 A
Idle translation speed	18,5 mm/s	10,5 mm/s
Duration of the idle stroke	27 s	48 s
Double insulated	YES	-
Service Type	S2 of 5 min	S2 of 8 min
Operating temperature	- 5°C + 50°C	- 5°C + 50°C
Protection Class	IP 55	IP 55
Adjustment of the window frame connection	not necessary	not necessary
Adjustment of pins for the swivel brackets	YES	YES
Parallel connection option	with S version	with S version
Synchronous operation of 2 C40s on the same window	YES	YES
Chain position control	Electronic in opening, by amperometric absorption in closing	
Acoustic warning for wrong installation (Buzzer)	YES	YES
Dimensions	387,6x95x50 mm	387,6x95x50 mm
Weight	1,9 kg	1,9 kg



C40 standard 1 push point

3A2#	C40 chain actuator 230V - black
3A2#	C40 chain actuator 230V - grey
3A2#	C40 chain actuator 230V - white
3A2#	C40 chain actuator 24V - black
3A2#	C40 chain actuator 24V - grey
3A2#	C40 chain actuator 24V - white



C40S synchronised for 2 push points on the same window frame

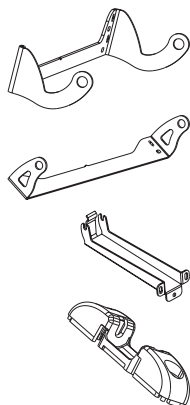
3A22#	C40S Chain actuator 230V black
3A22#	C40S Chain actuator 230V grey
3A22#	C40S Chain actuator 230V white
3A22#	C40S Chain actuator 24V black
3A22#	C40S Chain actuator 24V grey
3A22#	C40S Chain actuator 24V white

Description of the standard pattern for 1 push point

3A2#	C40 chain actuator C40 230V (spare parts included)- black
	Swivel frontal bracket for top/bottom hung windows - black
	Upper bracket for bottom hung windows - black
	ARS Rapid hooking device to the frame - black

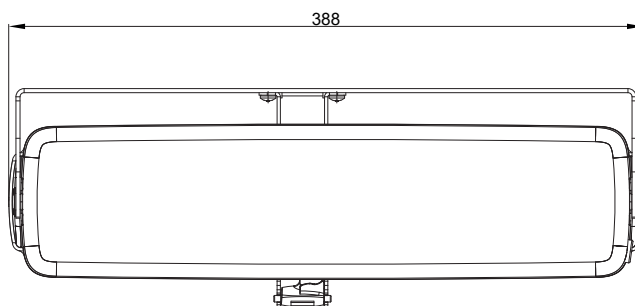
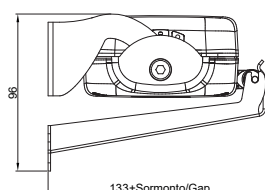
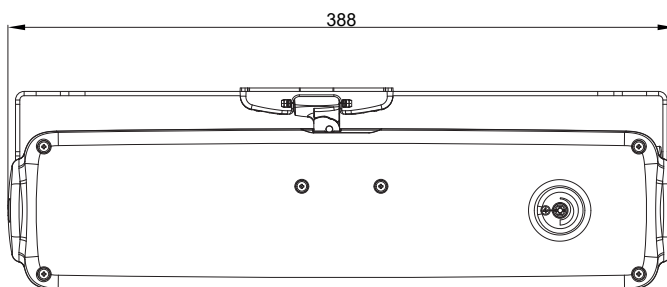
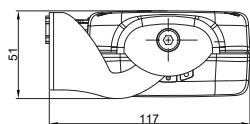
Description of the standard pattern for 2 push points

3A22#	C40S chain actuator 230V black 5mt cable
3A22#	C40S chain actuator 230V black 5mt cable



Accessories and spare parts

1A2600	Swivel frontal bracket for top/bottom hung windows - black
1A2602	Swivel frontal bracket for top/bottom hung windows - grey
1A2601	Swivel frontal bracket for top/bottom hung windows - white
1A2610	Swivel bracket for vertical mounting - black
1A2612	Swivel bracket for vertical mounting - grey
1A2611	Swivel bracket for vertical mounting - white
1A2620	Upper bracket for bottom hung windows - black
1A2622	Upper bracket for bottom hung windows- grey
1A2621	Upper bracket for bottom hung windows - white
1UA001	ARS Rapid hooking device to the frame - black
1UA003	ARS Rapid hooking device to the frame - grey
1UA002	ARS Rapid hooking device to the frame - white
3UM000	C30/C40 spare parts



C60

Chain actuator
Thrust force 300 N
Max stroke 600 mm

PRODUCT DESCRIPTION

Electric C60 actuator with double link articulated chain, enclosed in a suitable casing, with different mounting accessories for top or bottom hung windows. Operation at 230V 50Hz or, as an alternative, at 24V DC. Maximum applicable load 300N. Adjustment of the force and of the stroke at 510 or 600mm by external knobs. Electronic end of stroke in closing by current absorption control. CE marked device.



Long stroke, together with a slim and attractive housing, to allow applications that require minimum size.



Special hooking of chain to window to guarantee very high resistance with a long stroke even on top hung windows.

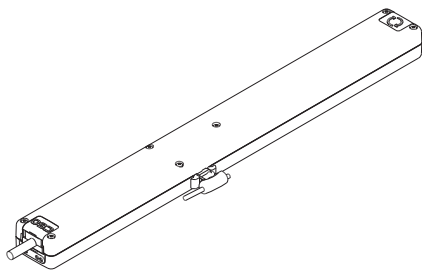


Simple swivel bracket for fast installation.



TECHNICAL SPECIFICATIONS

	C60 230V	C60 24V
Power supply voltage	230V ~ 50Hz	24V d.c.
Max applicable load in thrust	300N (max. stroke 510) - 250N (max. stroke 600)	
Max applicable load in traction	200 N	200 N
Stroke	510 mm and 600 mm	510 mm and 600 mm
Absorbed current	0,14 A	0,49 A
Idle translation speed	8 mm/s	7,5 mm/s
Duration of the idle stroke	75 s	80 s
Service type	S2 of 4 min	S2 of 4 min
Operating temperature	- 5°C + 50°C	- 5°C + 50°C
Protection Class	IP 30	IP 30
Parallel connection option	YES	YES
Stroke end	Electronic in opening, by amperometric absorption in closing	
Dimensions	470x48x34 mm	470x48x34 mm
Weight	1,5 kg	1,5 kg



C60 chain actuator with accessories for application on top hung windows

3E30#	C60 chain actuator 230V - black
3E30#	C60 chain actuator 230V - grey
3E30#	C60 chain actuator 230V - white
3E30#	C60 chain actuator 24V - black
3E30#	C60 chain actuator 24V - grey
3E30#	C60 chain actuator 24V - white

C60 chain actuator with accessories for application on bottom hung windows

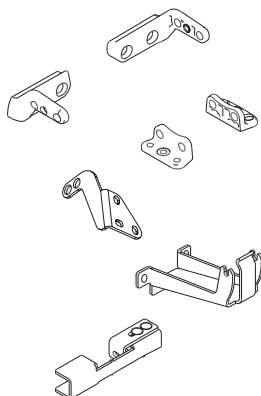
3E30#	C60 chain actuator 230V - black
3E30#	C60 chain actuator 230V - grey
3E30#	C60 chain actuator 230V - white
3E30#	C60 chain actuator 24V - black
3E30#	C60 chain actuator 24V - grey
3E30#	C60 chain actuator 24V - white

C60 chain actuator with accessories for application on vertical mounting windows

3E30#	C60 chain actuator 230V - black
3E30#	C60 chain actuator 230V - grey
3E30#	C60 chain actuator 230V - white
3E30#	C60 chain actuator 24V - black
3E30#	C60 chain actuator 24V - grey
3E30#	C60 chain actuator 24V - white

Description of the standard pattern for application on top hung windows

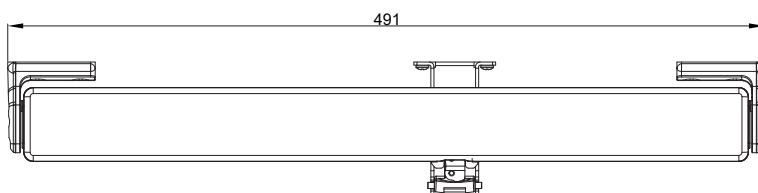
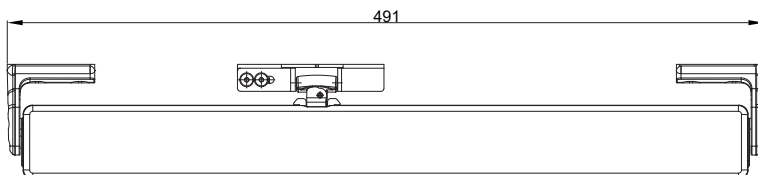
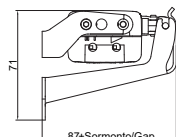
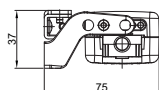
3E30#	C60 chain actuator 230V with sash bracket for top hung windows
	Frontal swivel brackets set for top/bottom hung windows
	Hooking device to the frame for top hung windows – black



Accessories and spare parts

3A3200	Frontal swivel brackets set for top/bottom hung windows - black
3A3202	Frontal swivel brackets set for top/bottom hung windows - grey
3A3201	Frontal swivel brackets set for top/bottom hung windows - white
3A3210	Swivel brackets set for vertical mounting - black
3A3212	Swivel brackets set for vertical mounting - grey
3A3211	Swivel brackets set for vertical mounting - white
3E3130	Brackets set for installation on the moving part of the window - black
3E3132	Brackets set for installation on the moving part of the window - grey
3E3131	Brackets set for installation on the moving part of the window - white
1E3400	Upper bracket for bottom hung windows - black
1E3402	Upper bracket for bottom hung windows - grey
1E3401	Upper bracket for bottom hung windows - white
3E3100	Hooking device to the frame for top hung windows – black
3E3105	Hooking device to the frame for app. on vertical mounting windows - black

3A3000 Standard spare parts



ACK4

Chain actuator
Thrust force 300 N
Adjustable stroke max.400 mm



PRODUCT DESCRIPTION

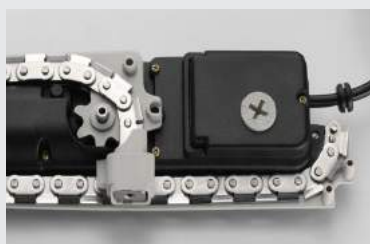
Electric actuator model ACK4 with a double link articulated stainless steel chain, enclosed in a special diecast aluminum casing, painted with epoxy powders, with different mounting accessories for top and bottom hung windows. Operation at 230V 50Hz. or, as an alternative, at 24V DC. Max. traction and thrust force 300N. End of stroke adjustable at 100, 150, 200, 250, 300, 350, 400 mm by an external knob located on both sides of the actuator. Electronic device with acoustic warning to signal erroneous installation (buzzer). Upon request, a preset "S" version for the synchronous operation of two actuators on the same window is available. High protection IP 55 rated. Available IP66 version (fixed stroke). CE marked device.



Easy stroke adjustment in 7 positions from 100 to 400mm. (International patent)



Double link articulated stainless steel chain.

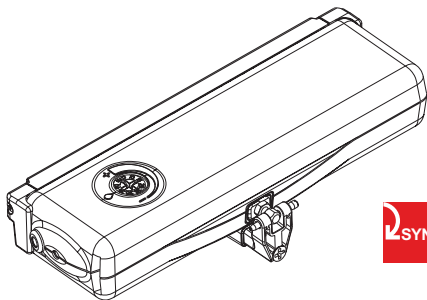


High protection IP 55 rated (available special IP66 version).



TECHNICAL SPECIFICATIONS

	ACK4 230V	ACK4 24V
Power supply voltage	230V ~ 50Hz	24V d.c.
Maximum applicable load in thrust	300 N	300 N
Maximum applicable load in traction	300 N	300 N
Strokes	100 - 150 - 200 - 250 - 300 - 350 - 400 mm	
Absorbed current	0,32 A	1,35 A
Idle translation speed	27 mm/s	17 mm/s
Duration of the idle stroke	15 s	23 s
Double insulated	YES	-
Service Type	S2 of 2 min	S2 of 3 min
Operating temperature	- 5°C + 50°C	- 5°C + 50°C
Protection Class	IP 55 (available special IP66 version)	
Adjustment of the window frame connection	10 mm	10 mm
Adjustment of pins for the swivel brackets	YES	YES
Parallel connection option	with S version	with S version
Synchronous operation of 2 ACK4s on the same window	YES	YES
Chain position control	encoder	encoder
Acoustic warning for wrong installation (Buzzer)	YES	YES
Dimensions	288,5x83x47,8 mm	288,5x83x47,8 mm
Weight	1,9 kg	1,9 kg



ACK4 standard 1 push point

3A1#	ACK4 chain actuator 230V - black RAL 9005
3A1#	ACK4 chain actuator 230V - grey RAL 9006
3A1#	ACK4 chain actuator 230V - white Euro-White
3A1#	ACK4 chain actuator 24V - black RAL 9005
3A1#	ACK4 chain actuator 24V - grey RAL 9006
3A1#	ACK4 chain actuator 24V - white Euro-White



ACK4S synchronised for 2 push points on the same window frame

3A12#	ACK4S chain actuator 230V - black RAL 9005
3A12#	ACK4S chain actuator 230V - grey RAL 9006
3A12#	ACK4S chain actuator 230V - white Euro-White
3A12#	ACK4S chain actuator 24V - black RAL 9005
3A12#	ACK4S chain actuator 24V - grey RAL 9006
3A12#	ACK4S chain actuator 24V - white Euro-White



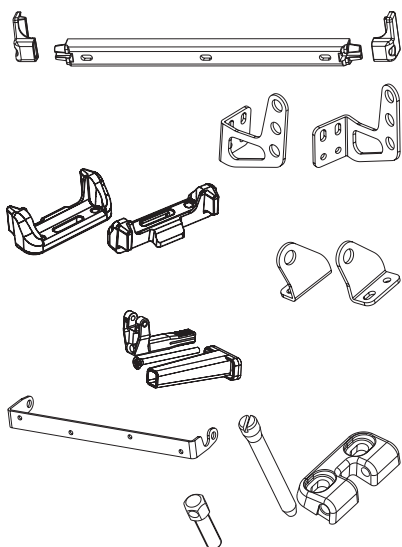
ACK4 IP66 version (fixed stroke) available upon request

Description of the standard pattern for 1 push point

3A1#	ACK4 chain actuator 230V
	Frontal bracket for top/bottom hung windows
	Upper bracket for bottom hung windows
	Hooking device to the frame and spare parts

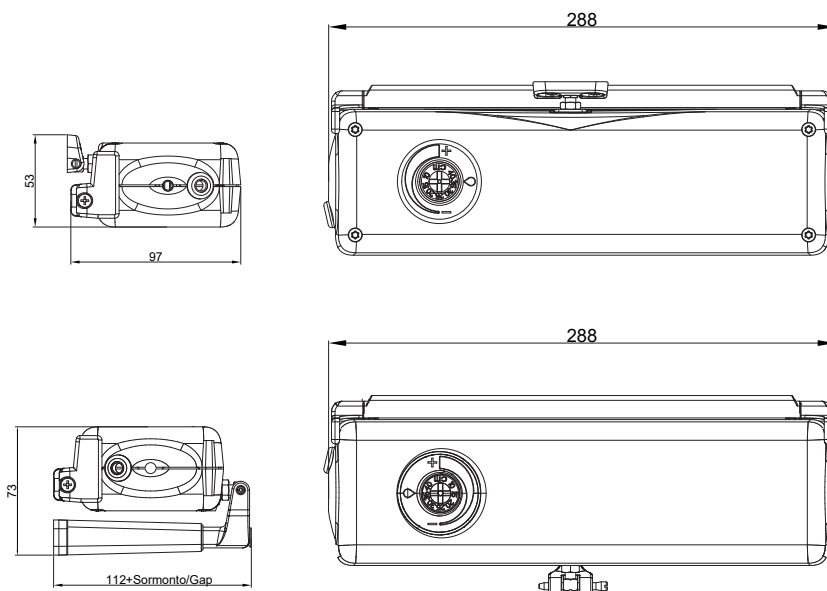
Description of the standard pattern for 2 push points

3A12#	ACK4S chain actuator 230V - black
3A12#	ACK4S chain actuator 230V - black



Accessories and spare parts

3A1360	Frontal bracket for top/bottom hung windows - black
3A1362	Frontal bracket for top/bottom hung windows - silver
3A1361	Frontal bracket for top/bottom hung windows - white
3A1391	Large swivel brackets set frontal mounting - black
3A1393	Large swivel brackets set frontal mounting - silver
3A1392	Large swivel brackets set frontal mounting - white
3A1380	Fixed vertical mounting brackets set - black
3A1382	Fixed vertical mounting brackets set - silver
3A1381	Fixed vertical mounting brackets set - white
3A1396	Small vertical mounting brackets set - black
3A1398	Small vertical mounting brackets set - silver
3A1397	Small vertical mounting brackets set - white
3A1355	Upper bracket for bottom hung windows - black
3A1375	Single swivel bracket for bottom hung windows - black
3A1377	Single swivel bracket for bottom hung windows - silver
3A1376	Single swivel bracket for bottom hung windows - white
3A1001	Hooking device to the frame with pin and spare parts
0B0005	Extension pin h 37,5 (overlap 10-20mm)
0B0007	Extension pin h 47,5 (overlap 20-30mm)
0B0006	Extension pin h 57,5 (overlap 30-40mm)



C130

Chain actuator
Thrust force 300N
Max stroke 360mm

PRODUCT DESCRIPTION

Electric actuator Topp model C130 with double-link chain, in an elegant die-cast aluminium profile, with custom-made length from 600 mm to 1200 mm, complete with brackets and accessories for top or bottom hung windows. Operation at 230V ~ 50Hz or, as an alternative, at 24V d.c. Max. thrust force 300N. Fast hooking and unhooking system to the window frame. Max. stroke 360 mm. Electronic end of stroke in closing by current absorption control. CE marked device.



Tailored profile lengths according to the window frame width.



Cable exit on both sides of the profile.



Innovative and original design.



TECHNICAL SPECIFICATIONS

	C130 230V	C130 24V
Power supply voltage	230V ~ 50Hz	min 21V ~ max 28V d.c.
Max applicable load in thrust	300 N	300 N
Max applicable load in traction	200 N	200 N
Stroke	360 mm	360 mm
Absorbed current	0,12 A	0,43 A
Idle translation speed	8 mm/s	7,5 mm/s
Duration of the idle stroke	46 s	48 s
Double insulated	YES	-
Service type	S2 of 4 min	S2 of 4 min
Operating temperature	- 5°C + 50°C	- 5°C + 50°C
Protection Class	IP 30	IP 30
Stroke end regulation in closure	not necessary	not necessary
Connection of two or more actuators in parallel	YES	YES
Stroke end	Electronic in opening, by amperometric absorption in closing	



**C130 chain actuator (profile's length: 600 mm - 900 mm), stroke 360 mm
application for top hung windows**

3A6#	C130 chain actuator 230V
3A6#	C130 chain actuator 24V

**C130 chain actuator (profile's length: 910 mm - 1200 mm), stroke 360 mm
application for top hung windows**

3A6#	C130 chain actuator 230V
3A6#	C130 chain actuator 24V

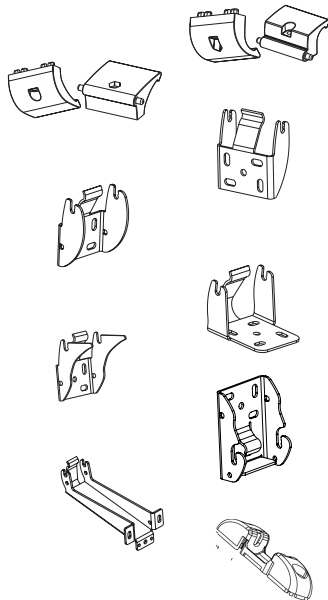
C130 chain actuator with on-board receiver

3A6#	C130 chain actuator 230V RR (profile's length: 600 mm - 900 mm)
3A6#	C130 chain actuator 230V RR (profile's length: 910 mm - 1200 mm)

**Description of the standard pattern (profile's length: 600 mm - 900 mm)
application for top hung windows**

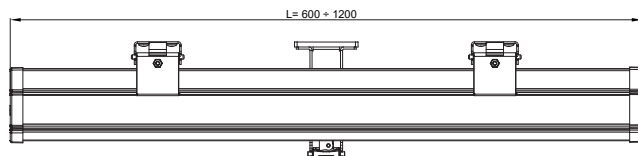
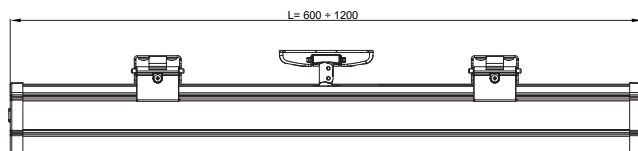
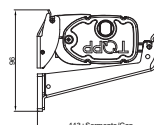
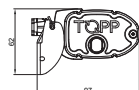
3A6#	C130 chain actuator 230V
	Frontal bracket for top hung windows (2 pcs)
	Clamps set for top hung brackets (2 pcs)
	ARS fast hooking device to the frame

Note: Part Numbers will be assigned according to the required profile's length.



Accessories and spare parts

3A5005	Clamps for top hung windows
3A5006	Clamps for bottom hung windows
1A5822	Slim frontal bracket for top hung windows (window opening min 400mm)
1A5827	Frontal bracket for top hung windows (window opening min 700mm)
1A5823	Bracket for vertical mounting (window opening >350mm)
1A5832	Bracket for installation on bottom hung windows
1A5829	Bracket for bottom-hung outward opening application (window opening min 250mm)
1A5828	Fallback bracket for bottom hung windows
1UA003	ARS Rapid hooking device to the frame - grey

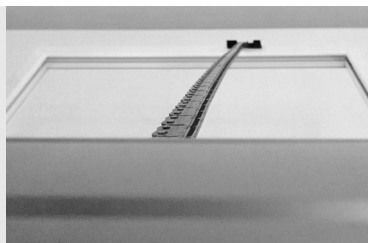


C160

Chain actuator
Thrust force max. 300N
Stroke 360mm - 600mm - 1000mm

PRODUCT DESCRIPTION

Electric actuator Topp model C160 with double-link chain, in an elegant die-cast aluminium profile, complete with brackets and accessories for top or bottom hung windows. Operation at 230V ~ 50Hz. Max. thrust force 300N. Stroke 360 - 600 - 1000 mm. Electronic end of stroke in closing by current absorption control. CE marked device.



Elegant and attractive aluminium profile with swivel brackets versatile and easy to install.



Available also for installation on side hung windows.



Long chain up to 1 meter enclosed in a slim housing.



TECHNICAL SPECIFICATIONS

C160 stroke 360 mm

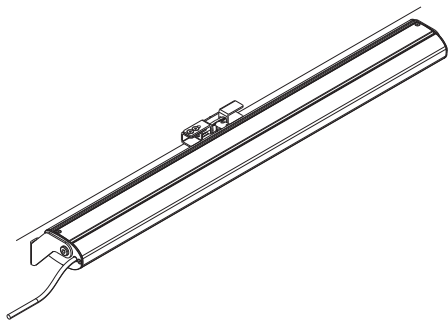
C160 stroke 600 mm

C160 stroke 1000 mm

Power voltage:	230V ~ 50Hz		
Max applicable load in thrust	300 N	250 N	50 N
Max applicable load in traction	200 N	200 N	185 N
Stroke for top-hung application	360 mm	600 mm	1000 mm
Stroke for bottom-hung application	322 mm	562 mm	962 mm
Absorbed current	0,12 A	0,14 A	0,14 A
Idle translation speed	8 mm/s	8 mm/s	8 mm/s
Duration of the idle stroke *	45 s	75 s	125 s
Double insulated	YES	YES	YES
Service type	S2 of 4 min	S2 of 4 min	S2 of 4 min
Operating temperature	-5°C + 50°C	-5°C + 50°C	-5°C + 50°C
Protection Class	IP30	IP30	IP30
Stroke end regulation in closure	not necessary	not necessary	not necessary
Parallel connection option	YES	YES	YES
Possibility of installing double push point on the same window	YES	NO	NO

Stroke end

Electronic in opening, by amperometric absorption in closing

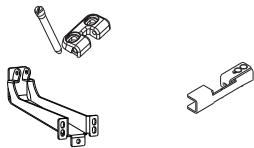


C160 standard 1 push point

3E26#	C160 chain actuator 230V stroke 360mm top-hung application
3E26#	C160 chain actuator 230V stroke 360mm bottom-hung application
3E25#	C160 chain actuator 230V stroke 600mm top-hung application
3E25#	C160 chain actuator 230V stroke 600mm bottom-hung application
3E27#	C160 chain actuator 230V stroke 1000mm bottom-hung application

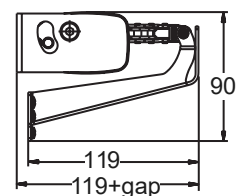
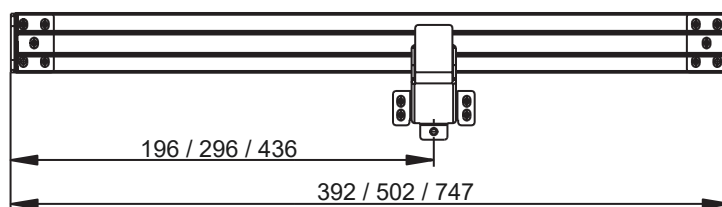
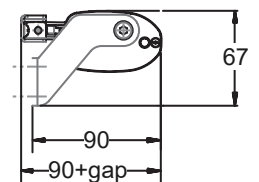
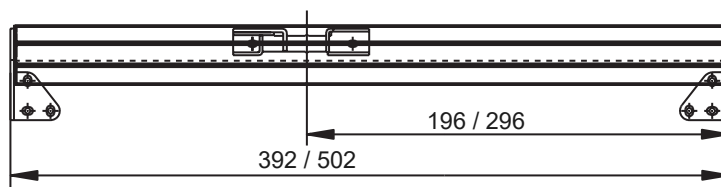
Description of the standard pattern, 1 push point Application on top hung windows

3E25#	C160 chain actuator 230V stroke 600mm Iron hooking device for top-hung and bottom hung (outwards opening) for C160 600/1000 stroke Couple of swivel frontal brackets C160
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Accessories and spare parts

3A3050	Hooking device for top-hung and bottom hung (outwards opening) for C160 360 stroke
3E3100	Iron hooking device for top-hung and bottom hung (outwards opening) for C160 600/1000 stroke
1E2804	C160 bottom-hung bracket for single push point
3E2100	Brackets for top-hung/bottom-hung outwards opening application
3E2101	Brackets for bottom-hung fallback application



C240

Dual push points chain actuator
Thrust force 400N
Max stroke 360mm

PRODUCT DESCRIPTION

Electric actuator Topp model C240 with 2 double-link chains, in an elegant die-cast aluminium profile, with custom-made length from 1200 mm to 4000 mm, complete with brackets and accessories for top or bottom hung windows. Operation at 230V~50Hz or, as an alternative, at 24V DC. Max. thrust force 400N. Fast hooking and unhooking system to the window frame. Max. stroke 360 mm. Electronic end of stroke in closing by current absorption control. CE marked device.



Tailored profile lengths according to the window frame width (International patent).



Cable exit on both sides of the profile.



Innovatory and original design.

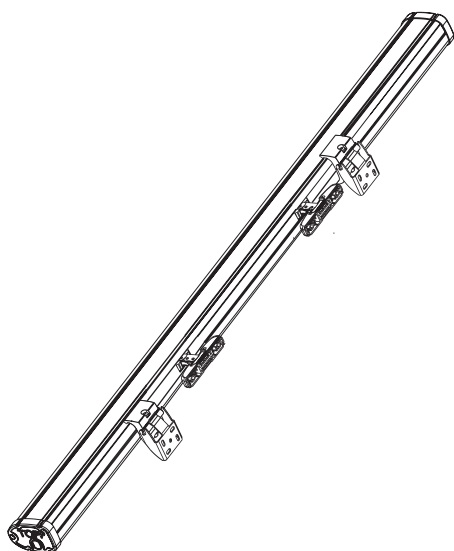


TECHNICAL SPECIFICATIONS

C240 230V

C240 24V

Power supply voltage	230V ~ 50Hz	min 21V ~ max 28V d.c.
Max applicable load in thrust	400 N	400 N
Max applicable load in traction	300 N	300 N
Stroke	360 mm	360 mm
Absorbed current	0,22 A	0,75 A
Idle translation speed	8 mm/s	7,5 mm/s
Duration of the idle stroke	46 s	48 s
Double insulated	YES	-
Service type	S2 of 4 min	S2 of 4 min
Operating temperature	- 5°C + 50°C	- 5°C + 50°C
Protection Class	IP 30	IP 30
Stroke end regulation in closure	not necessary	not necessary
Parallel connection option	YES	YES
Stroke end	Electronic in opening, by amperometric absorption in closing	



C240 dual push points actuator (profile's length: 1200 - 1500 mm), stroke 360 mm application on top hung windows

3A5#	Dual push points actuator C240 230V
3A5#	Dual push points actuator C240 24V

C240 dual push points actuator (profile's length: 1510 - 2000 mm), stroke 360 mm application on top hung windows

3A5#	Dual push points actuator C240 230 V
3A5#	Dual push points actuator C240 24 V

C240 dual push points actuator (profile's length: 2010 - 2500 mm), stroke 360 mm application on top hung windows

3A5#	Dual push points actuator C240 230 V
3A5#	Dual push points actuator C240 24 V

C240 dual push points actuator (profile's length: 2510 - 3000 mm), stroke 360 mm application on top hung windows

3A5#	Dual push points actuator C240 230 V
3A5#	Dual push points actuator C240 24 V

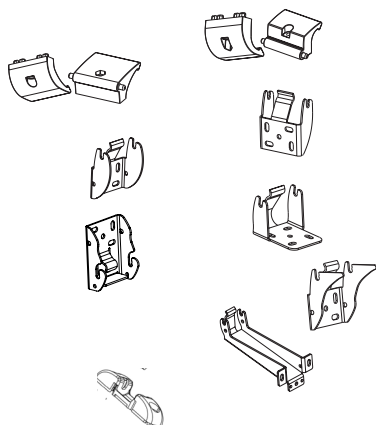
C240 dual push points actuator (profile's length: 3010 - 4000 mm), stroke 360 mm application on top hung windows

3A5#	Dual push points actuator C240 230 V
3A5#	Dual push points actuator C240 24 V

Description of the standard pattern (profile's length: 1200 - 1500 mm) application on top hung windows

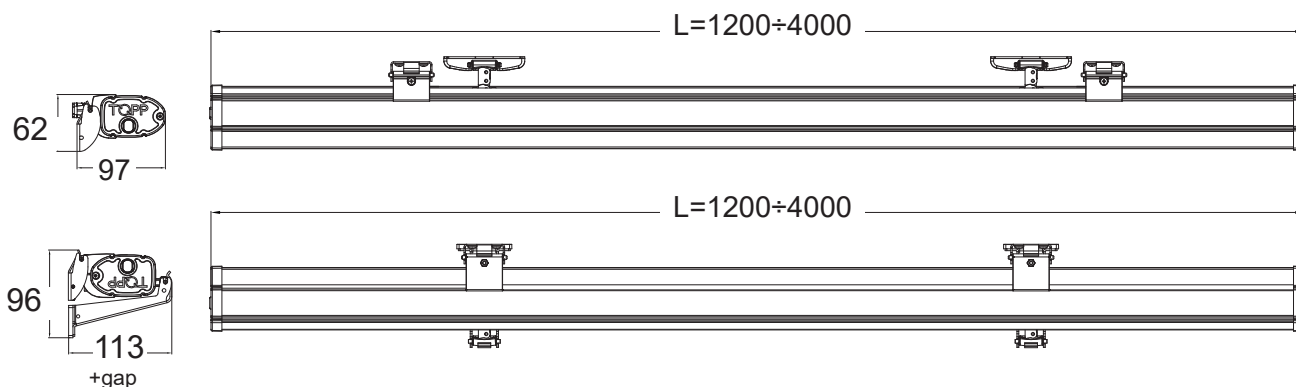
3A5#	Dual push points actuator C240 230 V
	Frontal bracket for top hung windows (2 pcs)
	Clamps set for top hung brackets (2 pcs)
	ARS Fast hooking device to the frame (2 pcs)

Note: Part Numbers will be assigned according to the required profile's length.



Accessories and spare parts

3A5005	Clamps for top hung windows
3A5006	Clamps for bottom hung windows
1A5822	Slim frontal bracket for top hung windows (window opening min. 400mm)
1A5827	Frontal bracket for top hung windows (window opening min. 700mm)
1A5823	Bracket for vertical mounting (window opening >350mm)
1A5831	Bracket for bottom-hung outward opening application (window opening 550mm)
1A5832	Bracket for installation on bottom hung windows
1A5828	Fallback bracket for bottom hung windows
1UA003	ARS Rapid hooking device to the frame - grey



C260

Dual push points chain actuator
Thrust force 600N
Max stroke 600mm

PRODUCT DESCRIPTION

Electric actuator Topp model C260 with 2 double-link chains, in an elegant die-cast aluminium profile, with custom-made length from 1530 mm to 4000 mm, complete with brackets and accessories for top and bottom hung windows. Operation at 230V~50Hz. Max. thrust force 600N. Max. stroke 600 mm. Electronic end of stroke in closing by current absorption control. CE marked device.



Tailored profile lengths according to the window frame width (International patent).



Special hooking of chain to window to guarantee very high resistance with a long stroke even on top hung windows.



Innovatory and original design.



TECHNICAL SPECIFICATIONS

C260 230V

Power supply voltage	230V ~ 50Hz
Max applicable load in thrust	600 N
Max applicable load in traction	600 N
Stroke	600 mm
Absorbed current	0,4A
Idle translation speed	13 mm/s
Duration of the idle stroke	46 s
Double insulated	YES
Service type	S2 of 4 min
Operating temperature	- 5°C + 50°C
Protection Class	IP 30
Stroke end regulation in closure	not necessary
Parallel connection option	YES
Stroke end	Electronic in opening, by amperometric absorption in closing

**C260 dual push points actuator (profile's length: 1530 - 2000 mm), stroke 600 mm
application on top hung windows**

3E15# Dual push points actuator C260 230 V

**C260 dual push points actuator (profile's length: 2010 - 2500 mm), stroke 600 mm
application on top hung windows**

3E15# Dual push points actuator C260 230 V

**C260 dual push points actuator (profile's length: 2510 - 3000 mm), stroke 600 mm
application on top hung windows**

3E15# Dual push points actuator C260 230 V

**C260 dual push points actuator (profile's length: 3010 - 4000 mm), stroke 600 mm
application on top hung windows**

3E15# Dual push points actuator C260 230 V

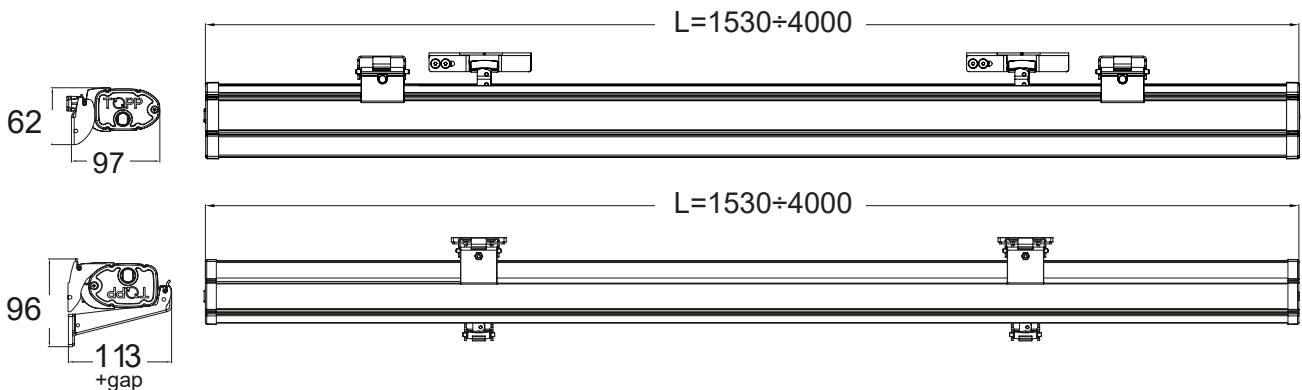
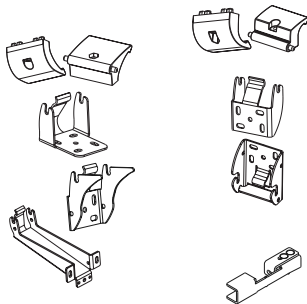
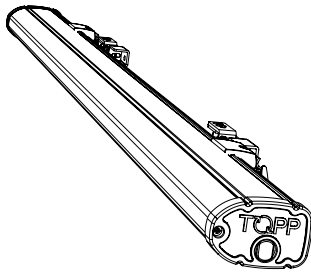
**Description of the standard pattern (profile's length: 1500 - 2000 mm), stroke 600 mm
application on top hung windows**

3E15# Dual push points actuator C260 230 V
Frontal bracket for top hung windows (2 pcs)
Clamps set for top hung brackets (2 pcs)
Hooking device to the frame for top-hung application - black (2 pcs)

Note: Part Numbers will be assigned according to the required profile's length.

Accessories and spare parts

3A5005	Clamps for top hung windows
3A5006	Clamps for bottom hung windows
1A5822	Slim frontal bracket for top hung windows (window opening min. 400mm)
1A5823	Bracket for vertical mounting (window opening >350mm)
1A5831	Bracket for bottom-hung outward opening application (window opening 550mm)
1A5832	Bracket for installation on bottom hung windows
1A5800	Fallback bracket for bottom hung windows
3E3100	Hooking device to the frame for top-hung application - black



S80

Linear stem actuator
Thrust force 800N
Adjustable stroke max. 1000 mm



PRODUCT DESCRIPTION

Linear electric actuator Topp model S80 with self-aligning tilting movement, complete with support and fitting accessory for top hung windows or sun blades and louvers. Operation at 230V 50Hz, or, as an alternative, at 24V DC. Max. traction and thrust force 800N. Preset for the synchronous operation of two actuators on the same window. Available strokes: 200 - 400 - 600 - 800 - 1000mm. Worm screw in stainless steel and IP68 protection degree for 200 and 400mm strokes. IP65 for 600, 800 and 1000mm strokes. CE marked device.



High degree of protection against dust and water IP68.



Stainless steel drive.



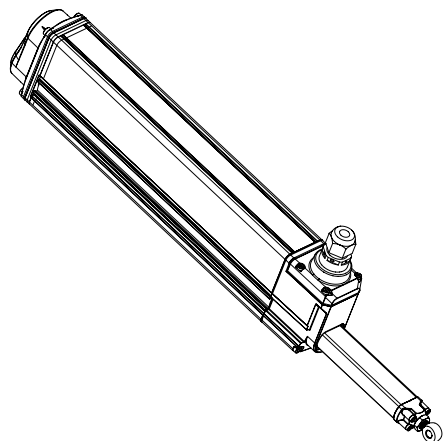
Millimetrically adjustable stroke.



TECHNICAL SPECIFICATIONS

	S80 230V	S80 24V
Power Supply voltage *	230V ~ 50Hz	24V d.c.
Maximum load applicable in thrust	800 N	800 N
Maximum applicable load in traction	800 N	800 N
Strokes	200 - 400 - 600 - 800 - 1000 mm	
Absorbed current	0,2 A	1A
Idle translation speed	6,5 mm/s	6,5 mm/s
Duration of the idle stroke	(stroke/idle translation speed)	
Double insulated	YES	YES
Service type	S2 of 3 min	S2 of 3 min
Operating temperature	-20°C + 60°C	-20°C + 60°C
Protection class	IP 68 (200-400strokes) IP65 (600-800-1000 strokes)	
Parallel connection	YES	YES
Synchronous operation of more actuators on the same window	YES	YES
Stroke end	mechanical / electronic	mechanical / electronic

* power supply cable not included



S80 standard 1 push point

3B20#	S80 linear stem actuator 230V stroke 200mm
3B20#	S80 linear stem actuator 230V stroke 200mm (louvers)
3B20#	S80 linear stem actuator 230V stroke 400mm
3B20#	S80 linear stem actuator 230V stroke 400mm (louvers)
3B20#	S80 linear stem actuator 230V stroke 600mm
3B20#	S80 linear stem actuator 230V stroke 800mm
3B20#	S80 linear stem actuator 230V stroke 1000mm

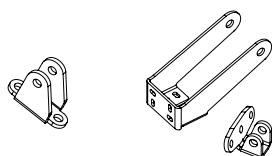
3B20#	S80 linear stem actuator 24V stroke 200mm
3B20#	S80 linear stem actuator 24V stroke 200mm (louvers)
3B20#	S80 linear stem actuator 24V stroke 400mm
3B20#	S80 linear stem actuator 24V stroke 400mm (louvers)
3B20#	S80 linear stem actuator 24V stroke 600mm
3B20#	S80 linear stem actuator 24V stroke 800mm
3B20#	S80 linear stem actuator 24V stroke 1000mm

Description of the standard 1 push point pattern for top-hung windows

3B20#	S80 linear stem actuator 230V stroke 200mm
	Actuator supporting bracket
	Fitting bracket to the frame
	Spare parts

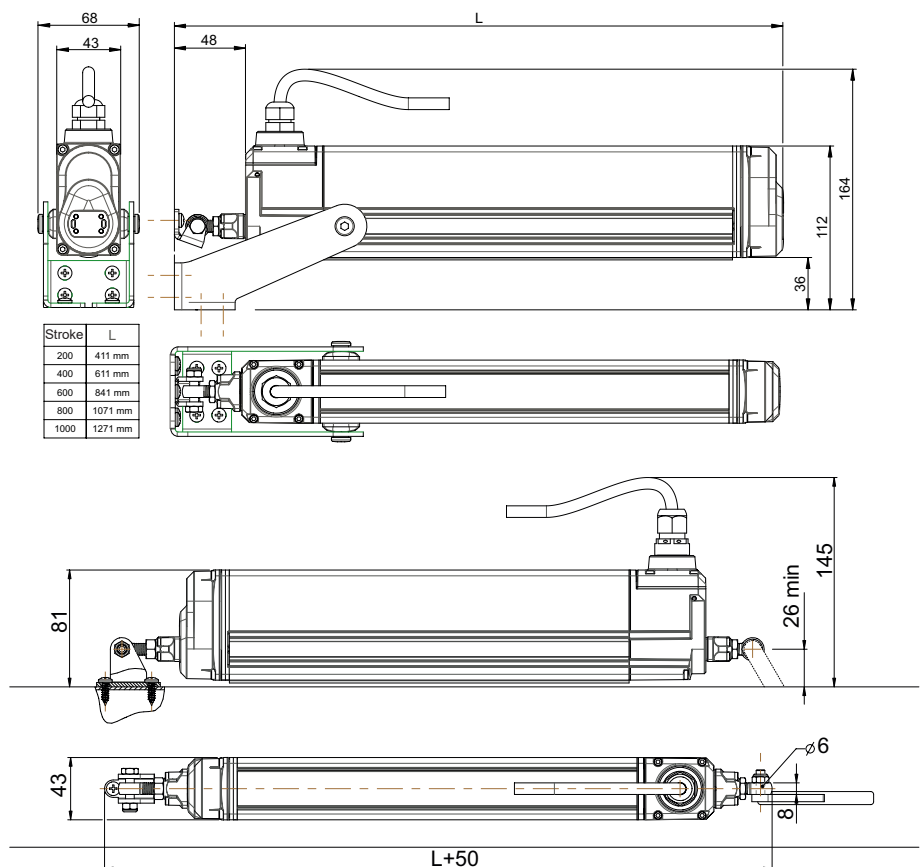
Description of the standard 1 push point pattern for louvers

3B20#	S80 linear stem actuator 230V stroke 200mm
	Actuator supporting bracket for louvers
	Spare parts for louvers



Accessories and spare parts

1B2801	Actuator supporting bracket
1B2800	Actuator supporting bracket for louvers
1S1604	Fitting bracket to the frame
3B2001	Spare parts for top hung windows
3B2002	Spare parts for louvers
1B2120	Feeding cable for synchronization (2m)



T50

Rack actuator
Thrust force 500N
Adjustable stroke max.1000 mm



PRODUCT DESCRIPTION

Linear electrical actuator, model T50, with rack, with self-aligning swivel movement, complete with brackets and fitting accessories for top hung windows. Available at 230V 50Hz or at 24V DC. Max. applicable force 500N, max. stroke 1000mm +/- 20mm. Stroke adjustable about every 50mm by external adjusting selector. Preset for the mechanical connection of 2 or more push points by transmission rod. S version for simultaneous synchronization and operation of two actuators installed on a single window (without connecting bar) available on demand . CE marked device.



Connection of several drives by adding connecting rods and rack groups for the installation in large windows.



Fast installation without the need of power, thanks to the self-aligning sliding bracket with easy adjustment in 2mm steps along the body of the actuator.



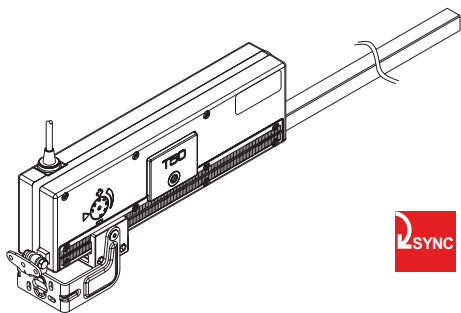
High protection IP 55 rated.



TECHNICAL SPECIFICATIONS

	T50 230V	T50 24V
Power supply voltage	230V ~ 50Hz	24 V d.c.
Max. applicable load	500 N	
2 push points (1 master + 1 slave)	500 N	
2 push points (1 master + 1 master)	700 N	
3 push points (1 master + 2 slave)*	450 N	
Distance between 2 push points	max 2,4m - min 1m (1,5m between 2 masters)	
Available strokes (+/- 20mm) T50 mod. 320	150 - 200 - 250 - 320 mm	
Available strokes (+/- 20mm) T50 mod. 500	150 - 200 - 250 - 320 - 400 - 450 - 500 mm	
Available strokes (+/- 20mm) T50 mod. 750	180 - 280 - 370 - 470 - 560 - 650 - 750 mm	
Available strokes (+/- 20mm) T50 mod. 1000	Millimetrically adjustable on demand	
Absorbed current at max. load	0,3 A	1,4 A
Idle translation speed	18 mm/s	10 mm/s
Duration of the idle stroke	(stroke/idle translation speed)	
Double insulated	YES	-
Service type	S2 of 4 min	
Operating temperature	- 5°C +55°C	
Protection class	IP 55	
Parallel connection option	YES	
Stroke end	encoder	

* Operation up to 6 drives on the same window frame is possible by transmission rod. Ask our technical dept. for the placement of the pushing points and the calculation of the thrust force.



T50 Actuator Kit (master)

3C20001	T50 Rack actuator 230V stroke 320 mm (adjustable)
3C20002	T50 Rack actuator 230V stroke 500 mm (adjustable)
3C20013	T50 Rack actuator 230V stroke 750 mm (adjustable)
3C22004	T50S Rack actuator 230V stroke 1000 mm (adjustable) *
3C20003	T50 Rack actuator 24V stroke 320 mm (adjustable)
3C20004	T50 Rack actuator 24V stroke 500 mm (adjustable)
3C20014	T50 Rack actuator 24V stroke 750 mm (adjustable)
3C22008	T50S Rack actuator 24V stroke 1000 mm (adjustable) *



T50S version for the synchronous operation of two T50 on the same window frame without connection rod available upon request.

* T50S with stroke 1000mm is equipped with electronic board for the synchronized operation of 2 actuators on the same window. Thrust force 400N.



T50 Rack assembly kit (slave)

3C2100	T50 Rack assembly stroke 320 mm (connection and fitting accessories included)
3C2101	T50 Rack assembly stroke 500 mm (connection and fitting accessories included)
3C2104	T50 Rack assembly stroke 750 mm (connection and fitting accessories included)
3C2105	T50 Rack assembly stroke 1000mm (connection and fitting accessories included)

T50 connection rod

1C2505	T50 connecting rod - Length 1500 mm (interaxis max. 1400 mm)
1C2509	T50 connecting rod - Length 3000 mm (interaxis max. 2400 mm)

Description of the standard pattern for 2 push points

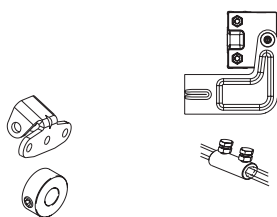
3C20001	T50 Rack actuator 230V stroke 320 mm (adjustable)
3C2100	T50 Rack assembly stroke 320 mm
1C2505	T50 connecting rod - Length 1500 mm

Description of the standard pattern for 3 push points

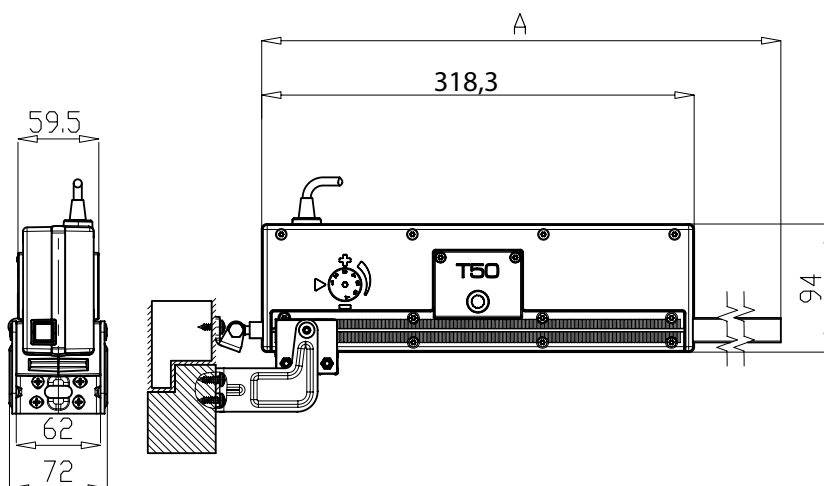
3C20001	T50 Rack actuator 230V stroke 320 mm (adjustable)
3C2100	T50 Rack assembly stroke 320 mm
	T50 Rack assembly stroke 320 mm
1C2509	T50 connecting rod - Length 3000 mm

Accessories and spare parts

8C0016	CC1 control unit for simultaneous stop max 3 T50 230V stroke 320mm
3C2010	Actuator support brackets
3C2001	Spare parts and sash bracket
1C2804	Junction ring between the connecting rods for 3 push point
0A0483	connecting rod stop



	A
T50 320 mm	576.5mm
T50 500 mm	746.5mm
T50 750 mm	983.5mm
T50 1000mm	1246.5mm



TF23R TF33R TF24R TF44R RR MEM/AL RW RDC TR8 TR4

Control and power units Detectors and remote controls



PRODUCT DESCRIPTION

TF33R - Control and feeding unit with 2 outputs at 24V and 1 output at 230V, max. 1,5A each. Provided with remote control receiver, either at 433,92 MHz or infra-red. Input for one RW wind sensor with adjustable speed threshold via trimmer. Possibility to operate two RDC 12V rain sensors simultaneously. A blue LED indicates the control unit and the remote control status. All functions (rain sensor exclusion, manual operation, thermostat connection, etc.) can be set out via dipswitch. CE marked device.

TF23R_TF24R_TF44R_RR - The TF23R, TF24R, TF44R and RR control units feed and control 24V or 230V TOPP actuators. Built-in radio receiver at 433,92 MHz. Pre-set for RW wind sensor and RDC 12V rain sensor. CE marked device.

MEM/AL - Power supply system for connecting 24V actuators, max 16A, to an existing detection control unit. In the temporary absence of main voltage, the MEM/AL module guarantees, by the use of back-up batteries (to be requested separately) a limited number of activations of the actuators connected to it. The existing detection control unit must be equipped with a 24V dc alarm signal or, alternatively, a N.O. contact. The MEM/AL module is designed to be connected to a double N.O. switch to control the actuators as well for ventilation (limited number of daily operations) or for closing the windows in the event of an opening command from the existing control unit. CE marked.

TECHNICAL SPECIFICATIONS	TF23R_TF33R	TF24R	TF44R	RR
Power supply voltage	230 V~50 Hz.			
Output voltage	24 V - 230 V	24 V c.c.	230 V~50 Hz.	230 V~50 Hz.
Max power consumption	32 W	62 W	300 W	300 W
Max absorbed current	0,5 A	1,35 A	1,3 A	1,3 A
Service type	S1 – continuous			depending on the connected motors
Pre-set for	wind sensor, rain detector, push button			rain detector or cabled push button
Operating temperature	- 5 + 50 °C			
Dimensions	150x80x55 mm 150x80x28 mm	160x120x75 mm	160x120x75 mm	87x53x32 mm
Connectable C20 actuators	3	4*	16*	6
Connectable C20 tandem actuators	-	4*	8*	3
Connectable C30 actuators	-	4*	16*	4
Connectable C40 actuators	-	4*	20*	5
Connectable C60 actuators	3	2	6*	6
Connectable ACK4 actuators	-	-	16*	4
Connectable C130 actuators	3	8*	16*	6
Connectable C160 actuators	-	2	6**	6**
Connectable C240 actuators	-	4*	8*	3
Connectable C260 actuators	-	-	16*	3
Connectable S80 actuators	-	4 * ***	16 * ***	4
Connectable T50 actuators	-	1	16*	4

* Motors must be equally located on the four feeding unit outputs, which implies a 1 minute delay between 2 consecutive commands.

** Except 1000 mm stroke. *** Max. 400 mm stroke.

TECHNICAL SPECIFICATIONS

	MEM/AL
Power supply voltage	230 V~50 Hz.
Output voltage	24 V
Max power consumption	0,30W
Max absorbed current	16 A
Service type	S1 – continuous
Operating temperature	-5 °C +50 °C
Dimensions	234x315x190 mm
Connectable C20 actuators	30
Connectable C20 tandem actuators	15
Connectable C30 actuators	12
Connectable C40 actuators	12
Connectable C60 actuators	26
Connectable ACK4 actuators	10
Connectable C130 actuators	30
Connectable C160 actuators	15
Connectable C240 actuators	15
Connectable S80 actuators	12
Connectable T50 actuators	10

Control and power units for actuators at 230V and 24V

8C0070	TF23R Control and power pack, 3 outputs for 24V DC actuators, with 433 MHz on-board receiver and infra-red LED for remote control. Box for wall fixing with sliding opening to programm the remote control and the emergency closure. Can be paired with TR8 remote control.
8C0071	TF33R Control and power pack, 2 outputs for 24V DC actuators and 1 output for 230V DC actuators , with 433 MHz on-board receiver and infra-red LED for remote control. Box for wall fixing with sliding opening to programm remote control and emergency closure. Can be paired with TR8 remote control.
8C0072	TF33R Control and power pack, 2 exits at 24V and 1 exit at 24V with adjustable power, with 433 MHz remote control receiver and infra-red LED. Box for wall fixing with sliding opening to programm remote control and emergency closure. Can be paired with TR8 remote control.
8C0054	TF24R Control and power unit 24V (4 outputs) with 433MHz receiver. Can be paired with TR8 remote control.
8C0066	TF44R Control and power unit 230V (4 outputs) with 433MHz receiver. Can be paired with TR8 remote control.
8C0123	RR Control and feeding unit 230V (1 outputs) with 433 MHz on-board receiver. Can be paired with TR4 and TR8 remote controls.
8C0016	CC1 control unit for simultaneous stop max 3 T50 230V stroke 320 mm
8D0008	AL/TF power pack 230/24V (for TF24R) battery backup not included
8K0001	Battery set for AL/TF feeder unit (2x12V 7Ah)
8D0004	AL2/SW electronic feeder board for 24V DC actuators, max 1,6A (max. 2 C20)
8C0091	MEM/AL Expanding module for 24V motors (max. 16A)
8K0001	Battery set for MEM/AL (2x12V 7Ah)
8C0090	MEM module for local operation
8E0030	RW wind sensor
8E0054	RDC/12 12V Rain sensor, incl. roof fixing adhesive tape
0B0020	Special adjustable bracket for RDC/12 roof installation
8E0314	TR8 8 chanel remote control with wall mount holder
8E0330	TR4 4 chanel remote control (for C30R and RR)

WiFi Box

WiFi devices
for window actuators control
via smartphones and tablets

ShutterBox



WiFi device for the control of 230V window actuators via smartphone or tablet.

RwBox



WiFi device for the connection to wind and rain sensors and control of window actuators connected to the WiFi.

µRemotePro



Remote control with rechargeable batteries for the control of window actuators connected to the WiFi.

InBox



WiFi switches connection for the control of window actuators connected to the WiFi.

TempSensor



WiFi detector, equipped with waterproof measurement probe, for temperature indication and control of window actuators connected to the WiFi, based on detection and temperature changes.

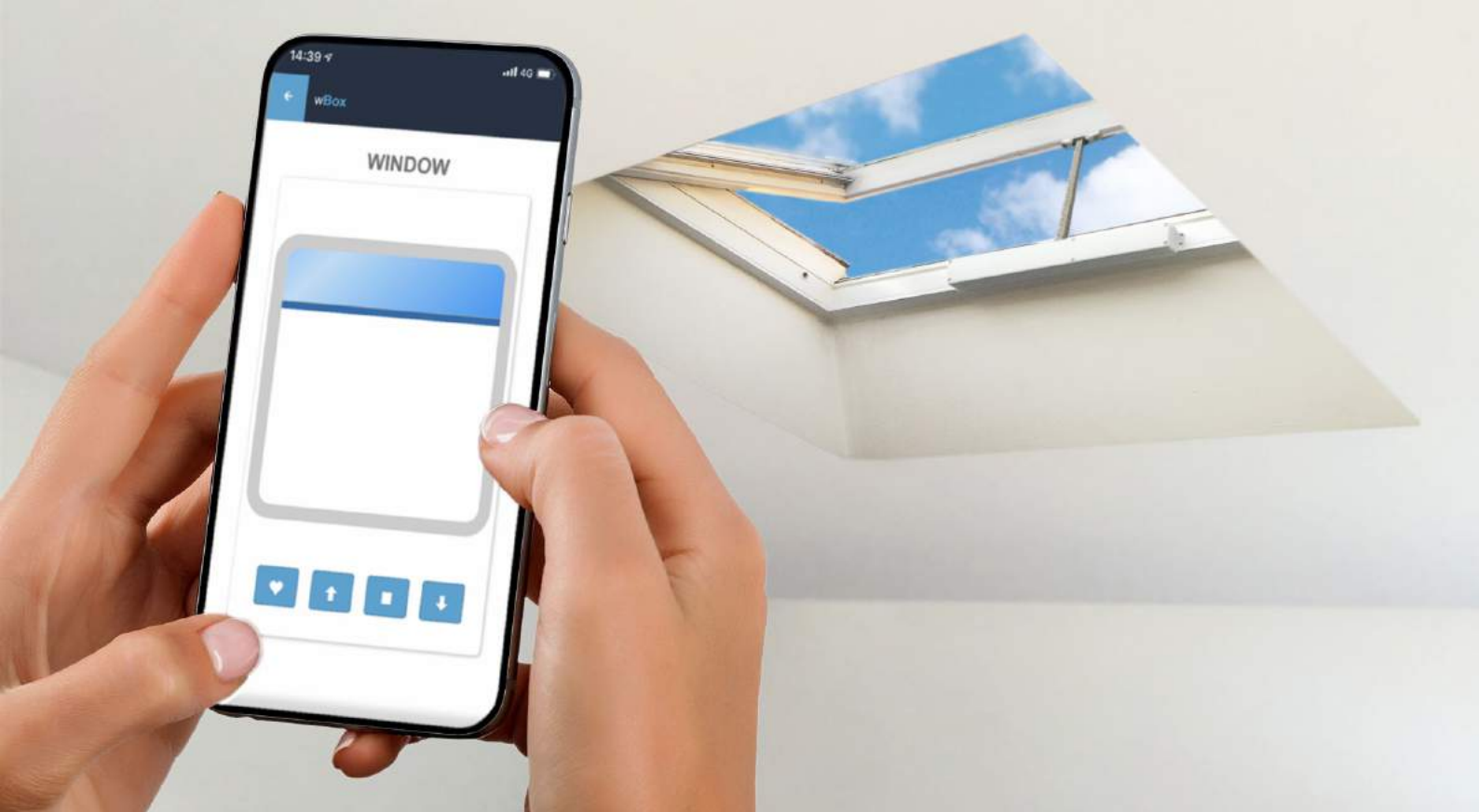
AirSensor



WiFi detector for measuring the presence of polluting dust and display via smartphone or tablet with control of window actuators connected to the WiFi.

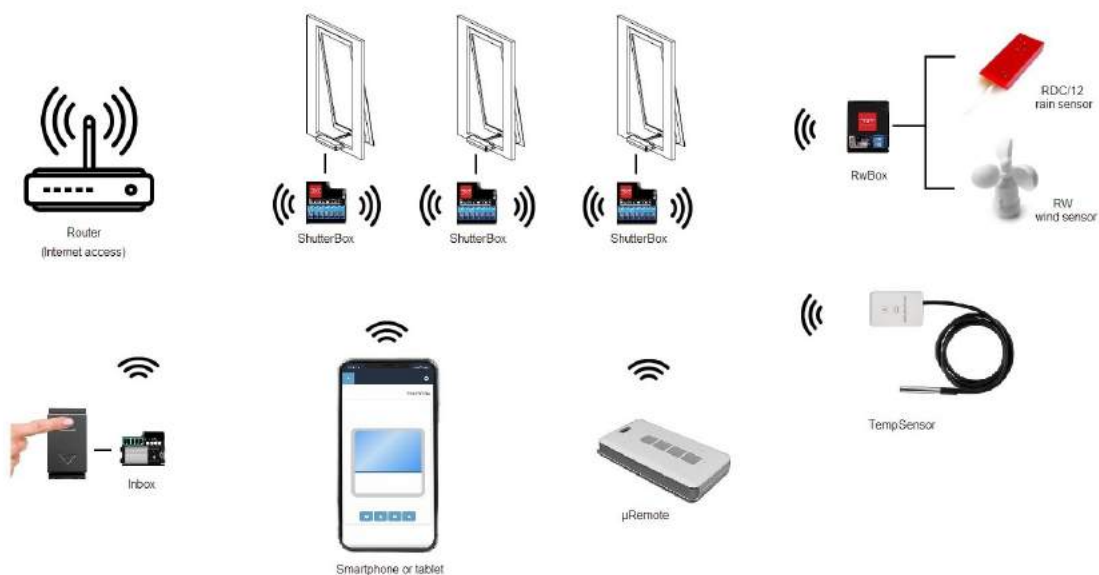
Compatible with IOS, Android,
Alexa and Google assistant





WiFi devices for the control of window actuators via smartphones and tablets

8C0470	ShutterBox WiFi device for the control of 230V window actuators via smartphone or tablet.
8C0472	RwBox WiFi device for the connection to wind or rain sensors and control of window actuators connected to the WiFi.
8C0480	µRemotePro remote control with rechargeable batteries for the control of window actuators connected to the WiFi.
8C0485	InBox WiFi switches connection for the control of window actuators connected to the WiFi.
8C0474	TempSensor WiFi detector, equipped with waterproof measurement probe, for temperature indication and control of window actuators connected to the WiFi, based on detection and temperature changes.
8C0475	AirSensor WiFi detector for measuring the presence of polluting dust and display via smartphone or tablet.



ACK4 RWA

Chain actuator thrust force 300 N
Adjustable stroke max.400 mm

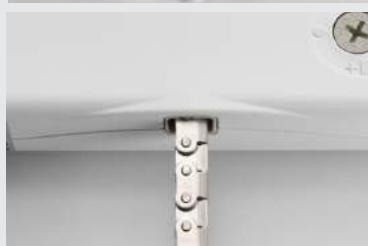


PRODUCT DESCRIPTION

Electric actuator Topp model ACK4 with a double link articulated stainless steel chain, enclosed in a special diecast aluminum casing, painted with epoxy powders, complete with brackets and accessories for bottom hung windows outward opening for smoke evacuation application. Operation at 24V DC Max. traction and thrust force 300N. End of stroke adjustable at 100, 150, 200, 205, 300, 350, 400 mm by an external knob located on both sides of the actuator. Electronic device with acoustic warning to signal erroneous installation (buzzer) Upon request, a preset "S" version for the synchronous operation of two actuators on the same window is available. High protection IP 55 rated. Available IP66 version (fixed stroke). CE marked device, tested in accordance with the EN12101-2 Standard for smoke ventilation applications.



Easy stroke adjustment with 7 positions
from 100 to 400mm.
(International patent)



Double link articulated stainless steel
chain.

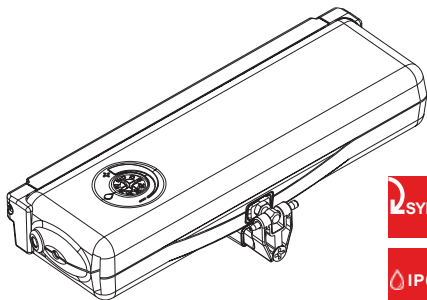


High protection IP 55 rated.
(available special IP66 version)



TECHNICAL SPECIFICATIONS

	ACK4 RWA
Power supply voltage	24V d.c.
Maximum applicable load in thrust	300 N
Maximum applicable load in traction	300 N
Strokes	100 - 150 - 200 - 250 - 300 - 350 - 400 mm
Absorbed current	1,35 A
Idle translation speed	17 mm/s
Duration of the idle stroke	23 s
Double insulated	YES
Service Type	S2 of 3 min
Operating temperature	- 5°C + 50°C
Protection Class	IP 55 (available special IP66 version)
Adjustment of the window frame hooking system	10 mm
Parallel connection option	YES
Synchronous operation of more actuators on the same window	with S version
Chain position control	YES
Stroke end	encoder
Acoustic device that warns of any eventual incorrect installations (buzzer)	YES
Dimensions	288,5x83x47,8 mm
Weight	1,9 kg



ACK4 RWA version 1 push point

3A11#	ACK4 chain actuator 24V RWA version - black RAL 9005 bottom-hung outwards opening application (without fallback bracket)
3A11#	ACK4 chain actuator 24V RWA version - silver RAL 9006 bottom-hung outwards opening application (without fallback bracket)
3A11#	ACK4 chain actuator 24V RWA version - white Euro-White bottom-hung outwards opening application (without fallback bracket)



ACK4S version for the synchronous operation of two ACK4 on the same window frame available upon request



ACK4 IP66 version (fixed stroke) available upon request

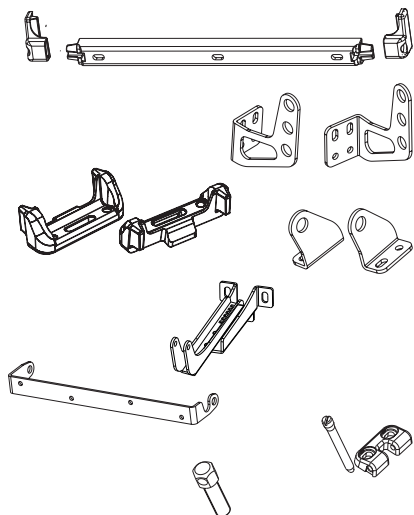
CS1 chain anti-closing accessory for top-hung application available upon request

Description for 1 push point solution for bottom-hung outward opening application

3A11#	ACK4 chain actuator 24 V Frontal bracket for top/bottom hung windows (outwards opening) Hooking device to the frame and spare parts
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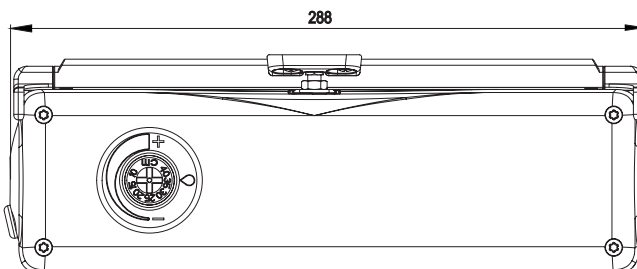
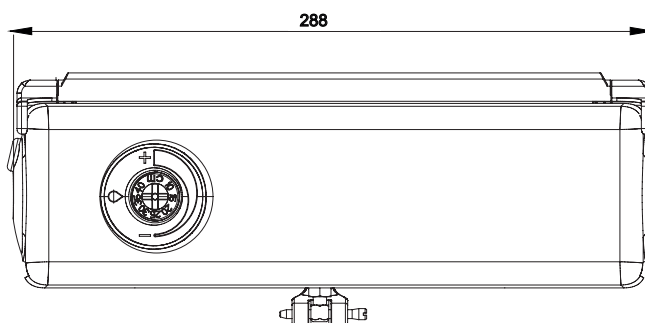
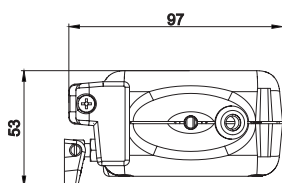
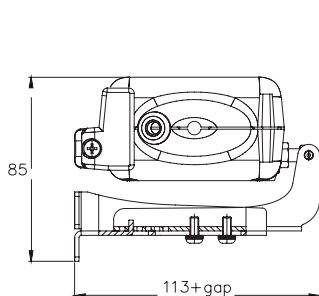
Description for 2 push points solution for bottom-hung outward opening application

3A13#	ACK4S 24V RWA actuator (silicon red cable)
3A13#	ACK4S 24V RWA actuator (silicon red cable)



Accessories and spare parts

3A1360	Frontal bracket for top/bottom hung windows - black
3A1362	Frontal bracket for top/bottom hung windows - silver
3A1361	Frontal bracket for top/bottom hung windows - white
3A1391	Large swivel brackets set frontal mounting - black
3A1393	Large swivel brackets set frontal mounting - silver
3A1392	Large swivel brackets set frontal mounting - white
3A1380	Fixed vertical mounting brackets set - black
3A1382	Fixed vertical mounting brackets set - silver
3A1381	Fixed vertical mounting brackets set - white
3A1396	Small vertical mounting brackets set - black
3A1398	Small vertical mounting brackets set - silver
3A1397	Small vertical mounting brackets set - white
3A1356	Upper bracket for bottom hung windows (RWA version) - black
3A1375	Single swivel bracket for bottom hung windows - black
3A1377	Single swivel bracket for bottom hung windows - silver
3A1376	Single swivel bracket for bottom hung windows - white
3A1001	Hooking device to the frame with pin and spare parts
0B0005	Extension pin h 37,5 (overlap 10-20mm)
0B0007	Extension pin h 47,5 (overlap 20-30mm)
0B0006	Extension pin h 57,5 (overlap 30-40mm)



C160 RWA

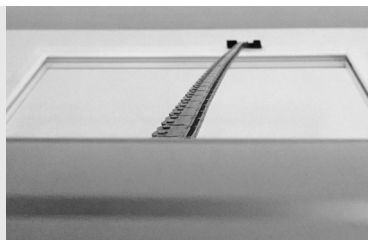


Chain actuator
Thrust force 300N
Stroke 360mm - 600mm - 1000mm

PRODUCT DESCRIPTION

Electric actuator Topp model C160 RWA with double-link chain, in an elegant die-cast aluminium profile, complete with brackets and accessories for bottom hung windows outward opening for smoke evacuation application. Operation at 24V DC. Max. thrust force 300N. Stroke 360 - 600 - 1000 mm. Electronic end of stroke in closing by current absorption control.

CE marked device, tested in accordance with the EN12101-2 Standard for smoke ventilation applications.



Elegant and attractive aluminium profile with swivel brackets for large openings.



Available also for installation on side hung windows.



Long chain up to 1 meter enclosed in a slim housing.



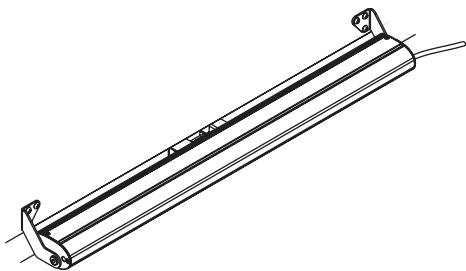
TECHNICAL SPECIFICATIONS

C160 RWA stroke 360 mm C160 RWA stroke 600 mm C160 stroke 1000 mm

Power voltage	24V d.c.	24V d.c.	24V d.c.
Max applicable load in thrust	300 N	250 N	50 N
Max applicable load in traction	200 N	200 N	200 N
Stroke for top-hung application	360 mm	600 mm	1000 mm
Stroke for bottom-hung application	322 mm	562 mm	962 mm
Absorbed current	0,43 A	0,60 A	0,60 A
Idle translation speed	7,5 mm/s	10 mm/s	10 mm/s
Duration of the idle stroke *	48 s	60 s	100 s
Service type	S2 of 4 min	S2 of 4 min	S2 of 4 min
Operating temperature	-15°C + 50°C	-15°C + 50°C	-15°C + 50°C
Protection Class	IP 30	IP 30	IP 30
Stroke end regulation in closure	not necessary	not necessary	not necessary
Parallel connection option	YES	YES	YES
Possibility of installing double push point on the same window	YES	NO	NO

Electronic in opening, by amperometric absorption in closing

* For RWA application: max opening time required 60s.



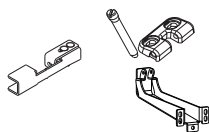
C160 standard 1 push point

3E22#	C160 24V RWA stroke 360mm Bottom-hung (outwards opening)
3E22#	C160 24V RWA stroke 360mm Bottom-hung
3E21#	C160 24V RWA stroke 600mm Bottom-hung (outwards opening)
3E21#	C160 24V RWA stroke 600mm Bottom-hung
3E23#	C160 24V stroke 1000mm Bottom-hung (outwards opening)
3E23#	C160 24V stroke 1000mm Bottom-hung

Description of the standard pattern for 1 push point.

Bottom-hung outward opening application

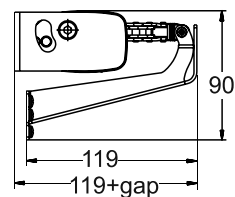
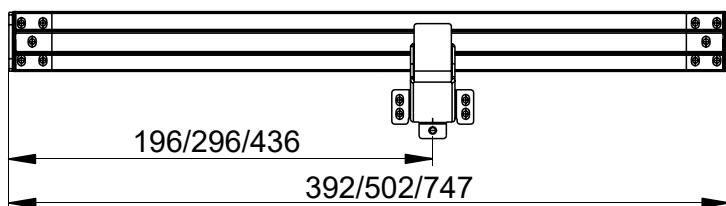
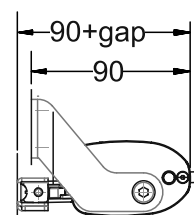
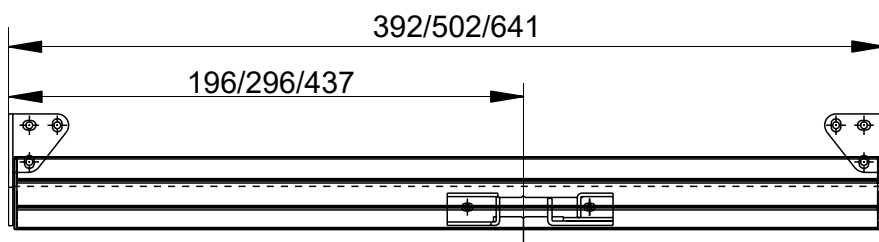
3E21#	C160 chain actuator 24V - RWA version stroke 600mm
	Iron hooking device for top-hung and bottom hung
	(outwards opening) for C160 600/1000 stroke
	Brackets for top-hung/bottom-hung outwards opening application



Accessories and spare parts

3A3050	Hooking device for top-hung and bottom hung
	(outwards opening) for C160 360 stroke
3E3100	Iron hooking device for top-hung and bottom hung
	(outwards opening) for C160 600/1000 stroke
1E2804	C160 bottom-hung bracket for single push point
3E2100	Brackets for top-hung/bottom-hung outwards opening application
3E2101	Brackets for bottom-hung fallback application

CS1 chain anti-closing accessory for top-hung application available upon request



C160 RWA DOUBLE CHAIN



Dual push points chain actuator

Thrust force max. 600N

Stroke 360mm - 600mm

PRODUCT DESCRIPTION

Electric actuator Topp model C160 RWA with 2 double-link chains, in an elegant die-cast aluminium profile, complete with brackets and accessories for bottom hung windows outward opening for smoke evacuation application. Operation at 24V DC. Max. thrust force 300N. Stroke 360 - 600 mm. Electronic end of stroke in closing by current absorption control.

CE marked device, tested in accordance with the EN12101-2 Standard for smoke ventilation applications.



Tailored profile lengths according to the window frame width.
(International patent)



Special hooking of chain to window to guarantee very high resistance with a long stroke even on top hung windows.



Innovatory and original design.



TECHNICAL SPECIFICATIONS

	C160 RWA double chain stroke 360 mm	C160 RWA double chain stroke 600 mm
Power supply voltage	24V d.c.	24V d.c.
Max applicable load in thrust	400N	600N
Max applicable load in traction	300N	600N
Stroke	360mm	600mm
Absorbed current	0,43A	2,10A
Idle translation speed	7,5 mm/sec	13 mm/sec
Duration of the idle stroke	48s	45s
Service type	S2 of 4 min	S2 of 4 min
Operating temperature	-15°C + 50°C	-15°C + 50°C
Protection Class	IP30	IP30
Stroke end regulation in closure	not necessary	not necessary
Parallel connection option	YES	YES
Stroke end	Electronic in opening, by amperometric absorption in closing	



C160 RWA dual push point (from 1200mm to 1500mm)

3E12#	C160 24V RWA dual push point stroke 360mm for bottom-hung
3E12#	C160 24V RWA dual push point stroke 360mm for bottom-hung (outwards opening)

C160 RWA dual push point (from 1510mm to 2000mm)

3E12#	C160 24V RWA dual push point stroke 360mm bottom-hung
3E11#	C160 24V RWA dual push point stroke 600mm bottom-hung
3E12#	C160 24V RWA dual push point stroke 360mm Bottom-hung (outwards opening)
3E11#	C160 24V RWA dual push point stroke 600mm Bottom-hung (outwards opening)

C160 RWA dual push point (from 2010mm to 2500mm)

3E12#	C160 24V RWA dual push point stroke 360mm bottom-hung
3E11#	C160 24V RWA dual push point stroke 600mm bottom-hung
3E12#	C160 24V RWA dual push point stroke 360mm Bottom-hung (outwards opening)
3E11#	C160 24V RWA dual push point stroke 600mm Bottom-hung (outwards opening)

C160 RWA dual push point (from 2510mm to 3000mm)

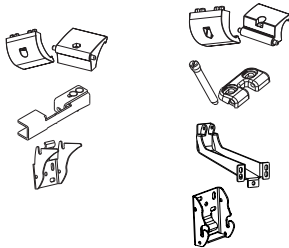
3E12#	C160 24V RWA dual push point stroke 360mm bottom-hung
3E11#	C160 24V RWA dual push point stroke 600mm bottom-hung
3E12#	C160 24V RWA dual push point stroke 360mm Bottom-hung (outwards opening)
3E11#	C160 24V RWA dual push point stroke 600mm Bottom-hung (outwards opening)

C160 RWA dual push point (from 3010mm to 4000mm)

3E12#	C160 24V RWA dual push point stroke 360mm bottom-hung
3E11#	C160 24V RWA dual push point stroke 600mm bottom-hung
3E12#	C160 24V RWA dual push point stroke 360mm Bottom-hung (outwards opening)
3E11#	C160 24V RWA dual push point stroke 600mm Bottom-hung (outwards opening)

Description for dual push point solution bottom-hung outward opening application (from 1510mm to 2000mm)

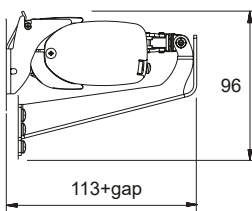
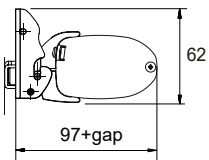
3E11#	C160 24V RWA dual push point chain actuator stroke 600mm
	Bracket for bottom-hung outward opening application (window opening min 1500mm)
	for C160 dual push point (2pz)
	Clamps for top hung and bottom hung outwards opening windows for C160 dual push point (2pz)
	Iron hooking device for top-hung and bottom hung outwards opening for C160 stroke 600 and 1000 mm (2pz)



Accessories and spare parts

3A5005	Clamps for top hung and bottom hung outwards opening windows
3A5006	Clamps for bottom hung windows
3A3050	Hooking device for top-hung and bottom hung outwards opening for C160 stroke 360mm
3E3100	Iron hooking device for top-hung and bottom hung outwards opening for C160 stroke 600 mm
1A5800	Bottom-hung bracket
1A5832	Bracket for bottom hung application for C160 dual push point
1A5831	Bracket for bottom-hung outward opening application for C160 dual push point

CS1 chain anti-closing accessory for top-hung application available upon request



L=1200+4000 stroke 360mm
L=1510+4000 stroke 600mm



S80 RWA

Linear stem actuator

Thrust force 800N

Adjustable stroke max. 400 mm

PRODUCT DESCRIPTION

Linear electric actuator Topp model S80 with self-aligning tilting movement, complete with support and fitting accessory for top hung windows or sun blades and louvers. Operation at 24V DC. Max. traction and thrust force 800N. Preset for the synchronous operation of two actuators on the same window. Available strokes: 200 - 400 mm. IP65 protection degree. CE marked device, tested in accordance with the EN12101-2 Standard for smoke ventilation applications.



High degree of protection against dust and water IP65.



Stem highly resistant to heavy loads.



Millimetrically adjustable stroke.

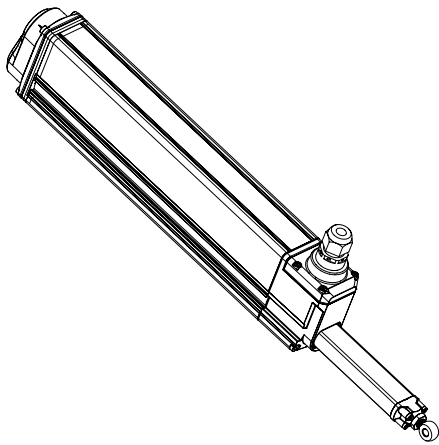


TECHNICAL SPECIFICATIONS

S80 RWA

Power Supply voltage *	24V d.c.
Maximum load applicable in thrust	800 N
Maximum applicable load in traction	800 N
Strokes	200 - 400 mm
Absorbed current	1A
Idle translation speed	6,5 mm/s
Duration of the idle stroke	(stroke/idle translation speed)
Double insulated	YES
Service type	S2 of 3 min
Operating temperature	-20°C + 60°C
Protection class	IP 65
Parallel connection	YES
Synchronous operation of more actuators on the same window	YES
Stroke end	mechanical / electronic

* power supply cable not included



S80 standard 1 push point

3B20020	S80 linear stem actuator 24V RWA stroke 200mm
3B20022	S80 linear stem actuator 24V RWA stroke 200mm (louvers)
3B20021	S80 linear stem actuator 24V RWA stroke 400mm
3B20023	S80 linear stem actuator 24V RWA stroke 400mm (louvers)

Description of the standard 1 push point pattern for top-hung windows

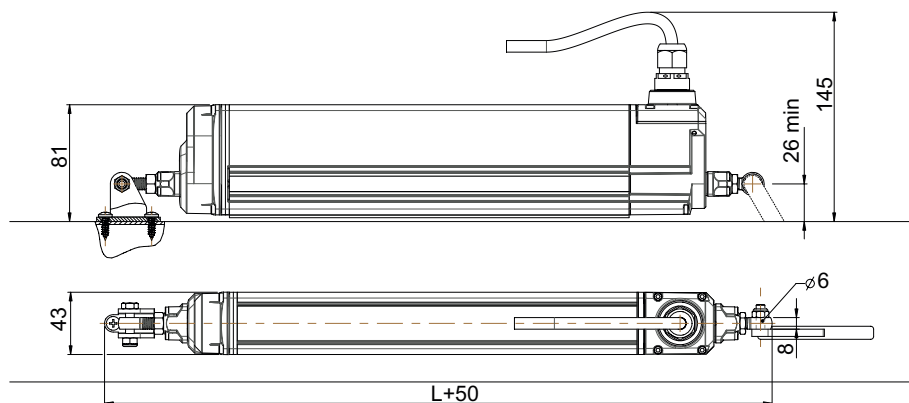
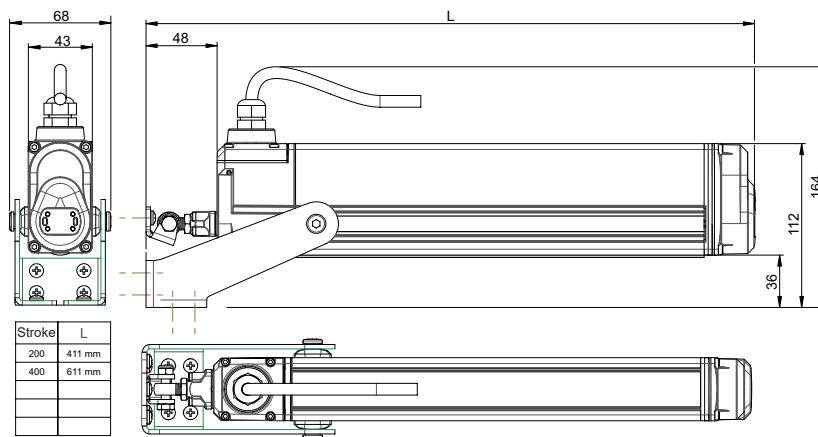
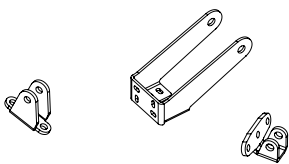
3B20021	S80 linear stem actuator 24V RWA stroke 400mm
	Actuator supporting bracket for top hung windows
	Fitting bracket to the frame
	Spare parts for top hung windows

Description of the standard 1 push point pattern for louvers

3B20022	S80 linear stem actuator 24V RWA stroke 200mm
	Actuator supporting bracket for louvers
	Spare parts for louvers

Accessories and spare parts

1B2801	Actuator supporting bracket for top hung windows
1B2800	Actuator supporting bracket for louvers
1S1604	Fitting bracket to the frame
3B2001	Spare parts for top hung windows
3B2002	Spare parts for louvers
1B2121	Feeding cable for synchronization (2m)



RWA Control units

RWZ control units for smoke and heat evacuation systems.



PRODUCT DESCRIPTION

The control units for smoke and heat evacuation have the following specifications and meet the following requirements (some technical characteristics may vary according to the RWZ control unit model):

- Output for the connection of 24V actuators.
- VdS approved according to the VdS 2581 and VdS 2593 directives.
- Internal power supply certified according to DIN EN 12101-10.
- Control unit tested according to prEN 12101-9.
- 3 signal lines:
 - Automatic fire detector
 - RT2 manual emergency push button with indicators for operation, alarm, malfunction and reset button
 - Connection to a fire alarm control panel or additional automation fire detectors
- Alarm Reset using the RT2 button or in the control centre.
- Selectable functions:
 - "Auto-close" (automatic closure after resetting an alarm)
 - "Malfunction = Alarm" (alarm upon malfunction of a signal line)
 - "Automatic OFF" (the automatic commands - apart from the alarm - are disabled)
 - "Thermal alarm" (alarm on exceeding temperature of 70 °C inside the enclosure)
- Possibility of connecting ventilation buttons
- Adjustable ventilation and time positions
- Possibility of connecting an external wind and rain control
- Normal operation, alarm and malfunction displayed on the emergency push button
- Internal service display showing detailed status information for installation and maintenance.
- Plug-in connection terminals (apart from actuator output).
- Upon direct reverse of travel, actuators are briefly stopped before changing the sense.
- Sheet steel enclosure, light grey (RAL 7035).

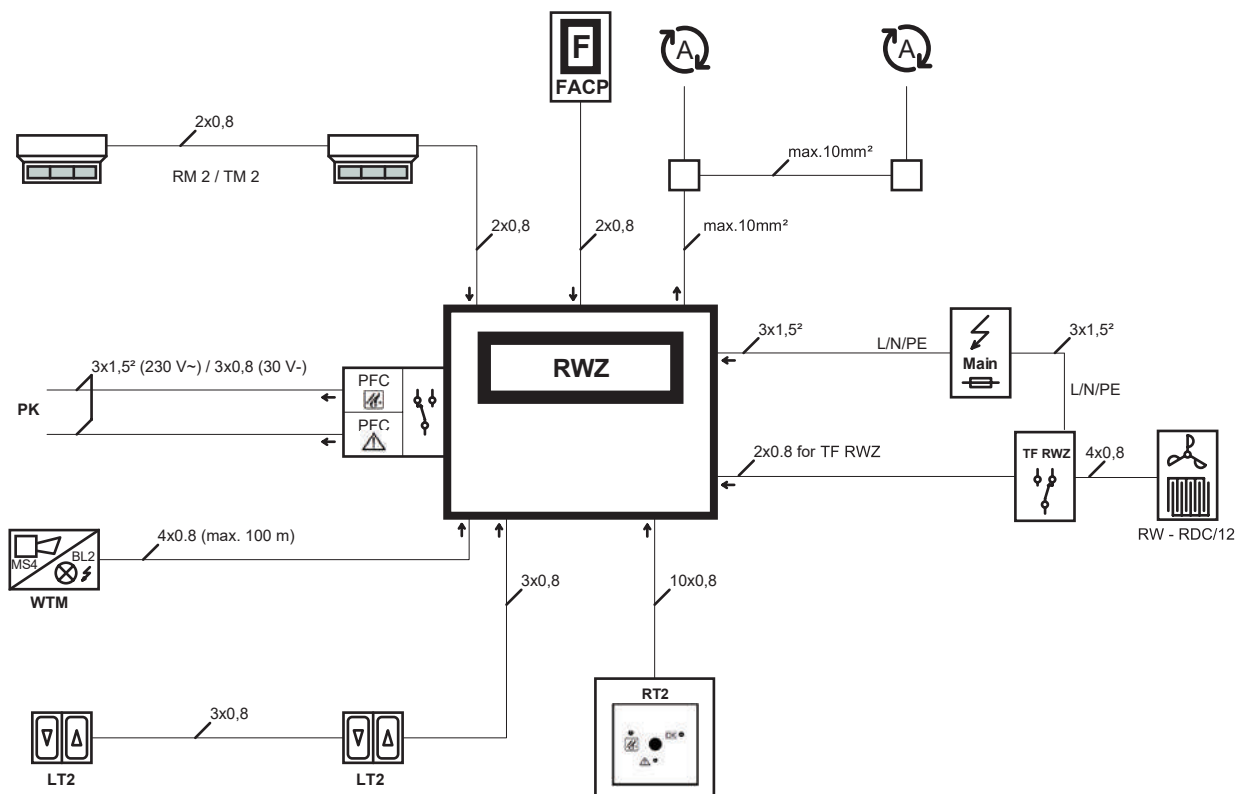


TECHNICAL SPECIFICATIONS	RWZ 1-4b	RWZ 4-8d	RWZ 5-16e	RWZ 5-24e	RWZ 5-32e
Power supply voltage			230V~50Hz.		
Output voltage			24 V d.c.		
Max power consumption	0,7 A	1,1 A	2,2 A	3,3 A	4,4 A
Max absorbed current	4 A	8 A	16 A	24 A	32 A
Battery	2 x 2Ah/12V	2 x 7Ah/12V	2 x 12Ah/12V	2 x 17Ah/12V	2 x 17Ah/12V
Service type			S1 - continuous		
Pre-set for			wind sensor, rain detector, push button		
Operating temperature			- 5°C + 40°C		
Dimensions (mm)	330x330x110	400x400x135	500x500x210	600x600x210	600x600x210
Connectable number of actuators:					
C160 RWA stroke 360mm	9	19	38	57	76
C160 RWA stroke 600mm	6	13	26	39	52
C160 RWA double chain stroke 360mm	4	9	18	27	36
C160 RWA double chain stroke 600mm	1	3	6	9	12
ACK4 RWA	2	4	10	12	20
ACK4S RWA	3	6	12	18	24
S80 RWA	4	8	16	24	32



Rwa control units

8C0040	RWZ 1-4b Control and power unit for the connection of 24V actuators max 4A - 2,0Ah Batteries included EN 12101-10 / prEN 12101-9 certified
8C0041	RWZ 4-8d Control and power unit for the connection of 24V actuators max 8A - 7,0Ah Batteries included EN 12101-10 / prEN 12101-9 certified
8C0042	RWZ 5-16e Control and power unit for the connection of 24V actuators max 16A - 12,0Ah Batteries included EN 12101-10 / prEN 12101-9 certified
8C0043	RWZ 5-24e Control and power unit for the connection of 24V actuators max 24A - 17,0Ah Batteries included EN 12101-10 / prEN 12101-9 certified
8C0046	RWZ 5-32e Control and power unit for the connection of 24V actuators max 32A - 17,0Ah Batteries included EN 12101-10 / prEN 12101-9 certified
8C0044	TF RWZ connection unit for wind and rain detectors
8C0255	PK dry contact for alarm / malfunction forwarding (for RWZ control units)
8C0045	WTM Output for controlling external warning devices in case of alarm or malfunction (i.e. MS4 multi-tone sound alarm and BL4 strobe) (for RWZ control units except 1-4b)
8C0256	PK-SA dry contact for open status forwarding (for RWZ control units except 1-4b and 4-8d)



RW RDC RM2 TM2 RT2 MS4 BL4

Detectors and emergency devices

RW Wind sensor

The wind sensor, connected to TOPP control units, closes the windows when the wind speed exceeds a preset value. Contained in weatherproof plastic housing, with rotating blade system sensing wind speed.



RDC/12 Rain sensor

The RDC/12 rain sensor, like the wind sensor, must be placed outside, exposed to rainfalls. It can be connected to the TOPP control units TF23R, TF33R, TF24R, TF44R, RR and TF RWZ to operate the windows automatic closure when the sensor is wet. Insensitive to dew and humidity.



RM2 Smoke detectors

The RM2 optical smoke detectors, for the connection to the RWZ control panels, are devices for indoor smoke detection complying with the UNI 54 standard.



TM2 Thermovelocimetric detectors

The TM2 thermovelocimetric detectors, for the connection to the RWZ control panels, are made of a static element set at 75° and provides an immediate response to rapid increases in temperature. Certified according to UNI EN 54 standard.



RT2 Emergency push button

The RT2 emergency push button, for the connection to the RWZ control panels, is an emergency push button that displays normal operation, alarm and malfunction.

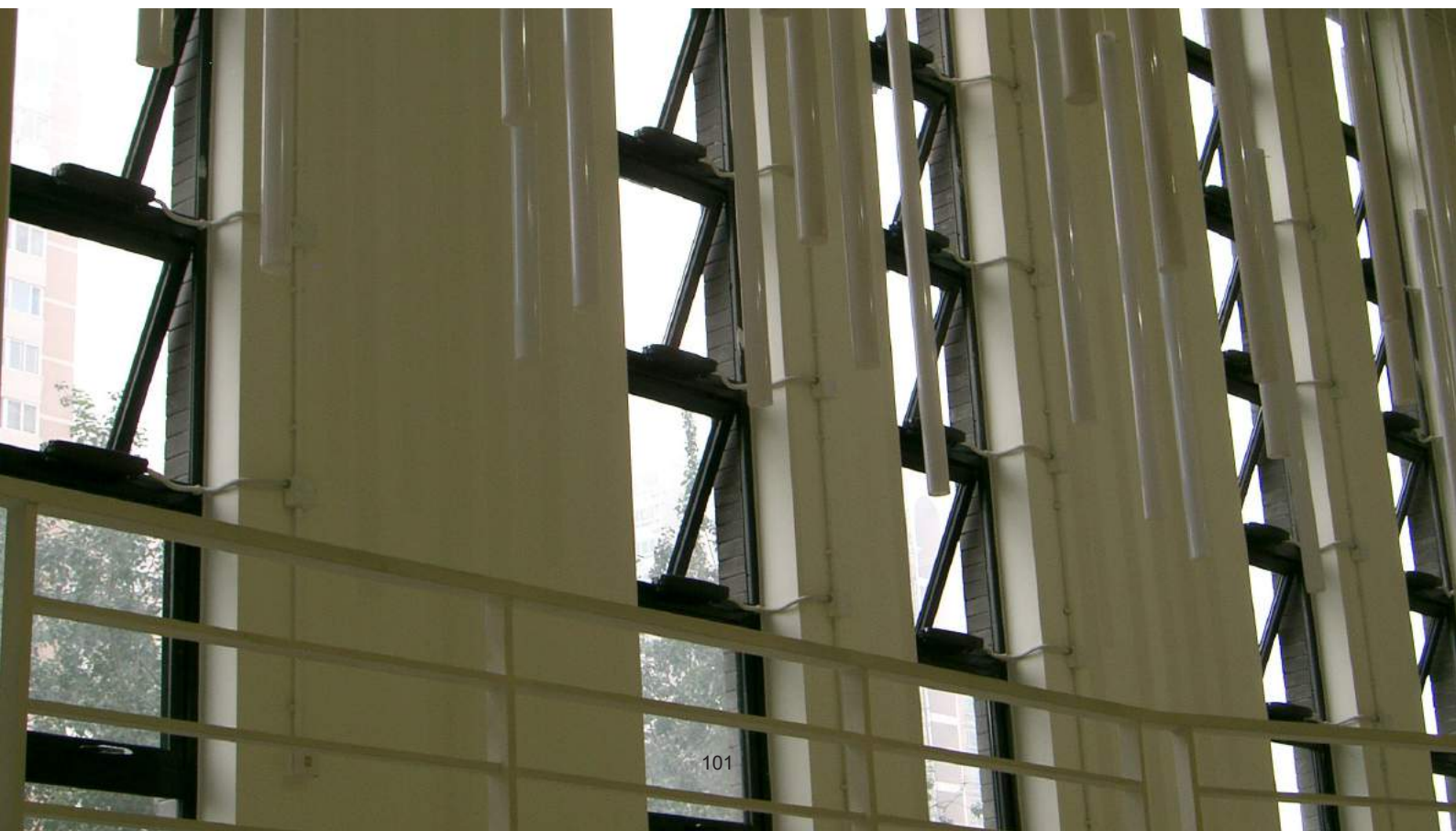


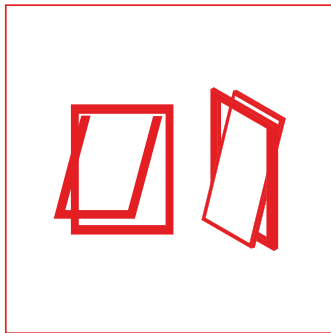
MS4_BL4 Sound alarm and strobe

MS4 is a multiple-tone sounder (for RWZ control panels) and BL4 is a strobe light (for RWZ control panels)

Detectors and emergency devices

8E0030	RW Wind sensor
8E0054	RDC/12 12V Rain sensor, incl. roof fixing adhesive tape (for TF23R/TF33R/TF24R/TF44R/RR/TFRWZ)
0B0020	Special adjustable bracket RDC/12
8C0240	RT2 Emergency push button with indication of working, alarm and malfunction (for RWZ control panels)
8C0242	RT2-K Emergency push button with indication of working, alarm, open status and malfunction (for RWZ control panels)
8C0249	LT2-A Ventilation push button with indication open status (for RWZ control panels)
8C0257	KE-2a Contact for command extension (for RWZ control panels)
8C0248	RM2 Optical smoke detector (for RWZ control panels)
8C0247	TM2 75° Thermovelocimetric detector (for RWZ control panels)
8E0500	MS4 Multiple-tone sounder (for RWZ control panels)
8E0510	BL2 Strobe light (for RWZ control panels)





WINDOW AUTOMATION

	C20	C30	C40	C60	ACK4-ACK4 RWA	C130	C160-C160 RWA	C240	C280-C160 RWA DOUBLE CHAIN	S80-S80 RWA	T50
Max. load in thrust (N)	300	300	400	300	300	300	300	400	600	800	500
Max. load in traction (N)	200	300	400	200	300	200	200	300	600	800	500
Max. stroke (mm)	360	380	500	600	400	360	1000	360	600	1000	1000
Stroke selection (positions)	2	2	7	2	7	-	-	-	-	●	7
Frame adjustment range (mm)	>100	30	100	>100	10 (+30)	>100	>100	>100	>100	>100	>100
Self-learning adjustment in closing	●	○	●	●	○	●	●	●	●	-	○
2 push points on same window	○	○	○	-	○	○	○	●	●	○	○
Synchronization by microprocessor	-	○	○	-	○	-	-	-	-	○	○
Quick hooking to the window frame	●	●	●	-	-	●	-	●	-	-	-
Central chain	●	●	●	-	●	●	○	○	○	-	-
Swivel brackets	●	●	●	●	○	●	●	●	●	●	●
Brackets for top hinged windows	●	●	●	●	●	●	●	●	●	●	●
Brackets for bottom hinged windows	●	●	●	●	●	○	○	○	○	-	-
Brackets for roof windows/skylights	○	○	○	○	○	○	○	○	○	●	●
Brackets for swing windows	○	-	-	○	-	○	○	○	○	●	●
Brackets for louvers	-	-	-	-	-	-	-	-	-	○	-
Wrong installation warning device	-	●	●	-	●	-	-	-	-	-	●
Double insulation	●	●	●	●	●	●	●	●	●	●	●
0.5 meter power cable	-	-	-	-	-	-	-	-	-	-	-
1.5 meter power cable	●	●	●	●	●	●	●	●	●	○	●
Above 1.5 meter power cable	○	○	○	○	○	○	○	○	○	○	○
RWA	-	-	-	-	○	-	○	-	○	○	-
On board receiver	-	○	-	-	-	○	○	○	○	-	-
IP 55 or higher	-	-	●	-	●	-	-	-	-	●	●
Stainless steel chain	-	-	-	-	●	-	-	-	-	-	-
Customizable width of the actuator	-	-	-	-	-	●	○	●	●	-	-
Automation height (mm)	34	49	50	34	48	46	46	46	46	128	94
Automation depth (mm)	48	80	95	48	83	80	80	80	80	43	62
Automation max. width (mm)	362	337	388	470	288	1200	735	4000	4000	1271	1030

Legend

- Included
- Optional
- Not available



TECHNICAL REMARKS

How to choose the right actuator

The selection of the right window actuator is very important and should allow to get maximum results.

The following technical details are to guide you in your final choice of actuator and should be considered before any decision is made.

There are mainly two types of actuators: linear / rack actuators (rigid rod) and chain actuators (flexible chain).

The linear / rack actuator can offer great performance and push high loads, but has a requirement both physical and aesthetic which is not always acceptable. The actuator body has to move in a pivoting motion from its brackets, therefore it is necessary to verify that there are no obstacles to its rotational movement. If a rod actuator is unsuitable, a chain actuator must be used, subject to weight restrictions.

The chain actuator operates generally at lower thrust power and requires a limited space, as well as being aesthetically pleasing.

For windows having a width larger than 1500-2000 mm, a single actuator is not enough.

With this size the window and the safety of the installation require the application of more than one actuator, usually linked to a synchronization device.

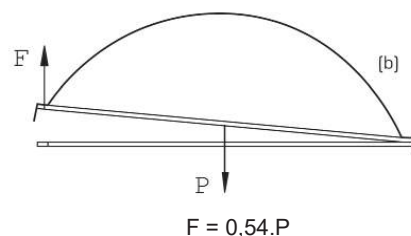




FORMULAS TO CALCULATE TRACTION AND THRUST FORCE (kg)

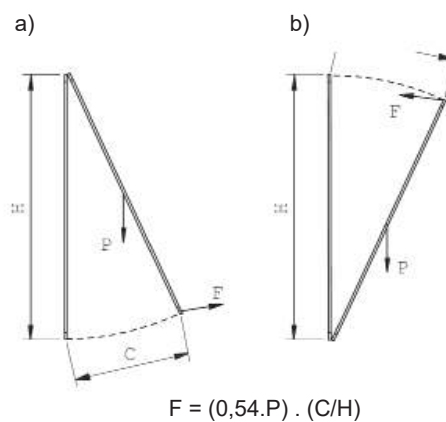
Horizontal windows

F = Required force for opening and closing (kg)
P = Window sash weight (kg)



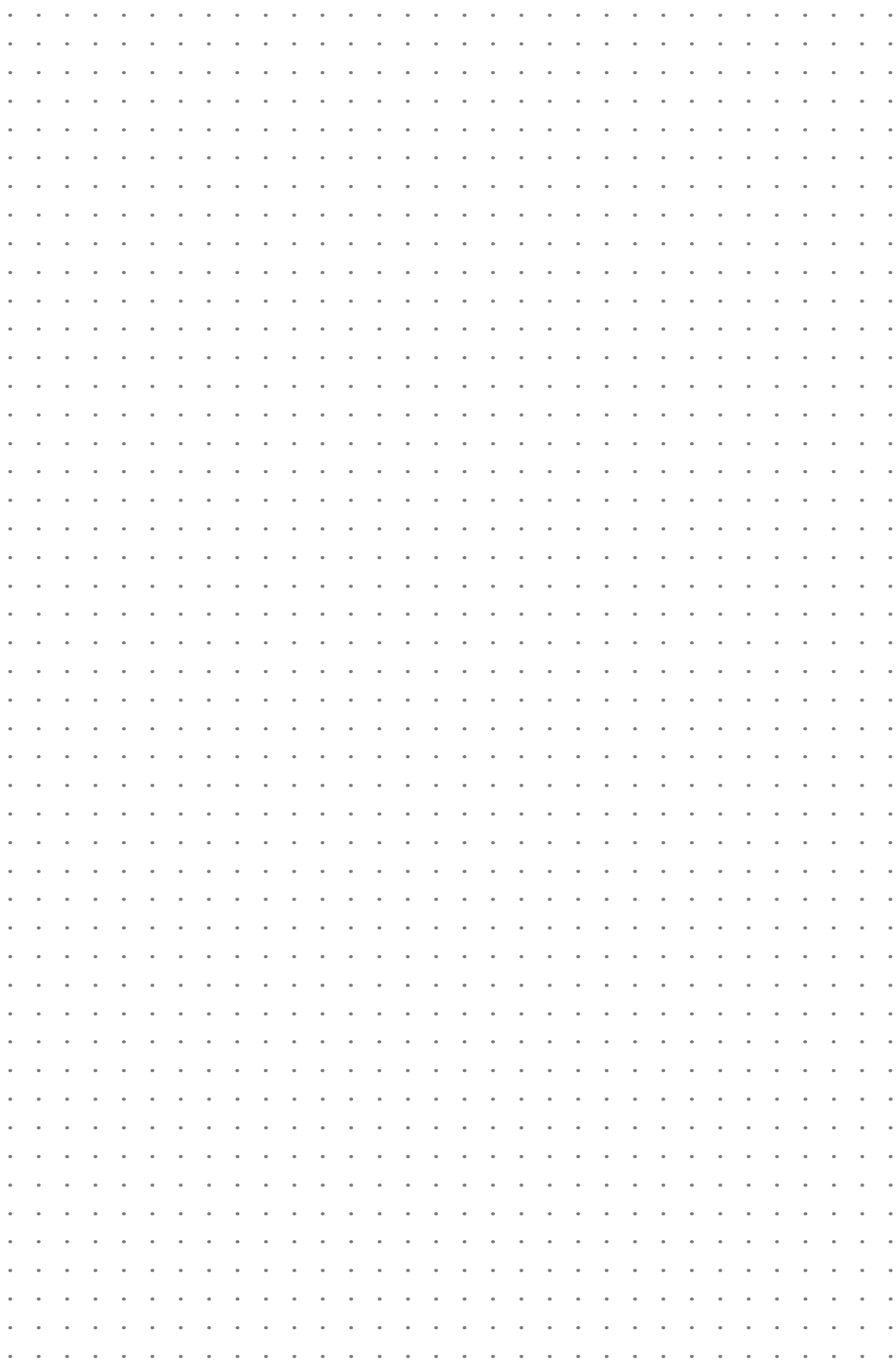
Top hug windows (a) or bottom hung windows (b)

F = Required force for opening and closing (kg)
P = Window sash weight (kg)
C = Window opening stroke (mm)
H = Window height (mm)

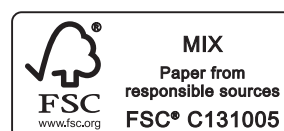


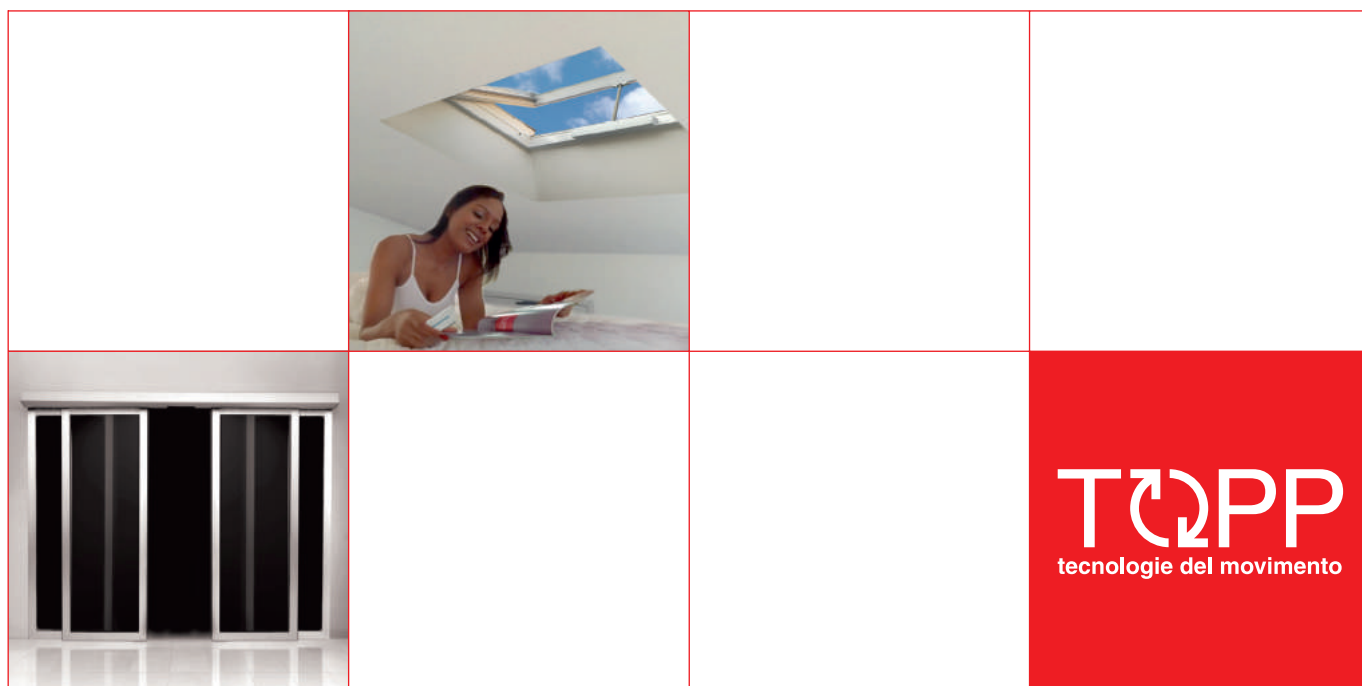
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