dormakaba

ST PRO Green RC2 / RC3

Energy-saving automatic sliding door

Technical Product Brochure

ST PRO Green
Elegant and sustainable. Safety first.

With the ST PRO Green automatic sliding door, dormakaba underlines its contribution to increased energy efficiency and sustainability.
The anti-intruder protection, which has been tested and certified by the ift Rosenheim, also takes into account the increasing need for security.

ST PRO Green
A solution for efficiency and security.

The ST PRO Green combines many functions – and is elegant and attractive thanks to the slim-line profiles. It therefore perfectly matches sliding doors of the dormakaba ST FLEX series.
The slim profile system can be equipped with double and triple glazing, which makes it possible to achieve particularly low U_D values.*

Powerful drive unit
Thanks to the new drive system ES PROLINE, door leaf weights of up to 400 kg can be moved particularly quickly and quietly.
The low energy demand of the sliding door drive also contributes to the positive energy balance of the door. The drive unit is suitable for almost any application area, as well as use in emergency exit doors.

Thermally separated profile
With thermal partition by the profile and the option of using triple glazing, U_D values (heat transfer coefficient) of up to 1.0 are achieved, which corresponds to the current requirements of the EnEV energy-saving regulation*.
The ST PRO Green enables significant savings of perpetual energy and heating costs and the reduction of CO_2 emissions.

* Each ST PRO Green receives individual evidence of the U_D-value

ST PRO Green – comprehensive energy efficiency.

- Thermally isolated profile system
- Ultra-low UD values of up to 1.0 (depending on the glazing used)
- 1-leaf and 2-leaf sliding doors
- For use in escape routes and emergency exits
- Energy-efficient sliding door drive ES PROLINE
- Double and triple glazing
- Minimises any temperature-influenced door deformation by using torsion-resistant struts
- Certified by independent testing institutes

ST PRO Green RC2/RC3 – convincingly secure.

- Reinforced profile system
- RC2 tested and certified by the ift Rosenheim
- Particularly high burglary protection class RC3, tested and certified by PIV Velbert
- A continuous floor guide rail in the door leaf area and tamper protection in the drive unit prevent the door leaves being lifted out
- Additional security by means of a multi-point hook lock in the area of the main closing edge
- Hook on the secondary closing edge
- Burglar-proof glazing (RC2: P4A, RC3: P5A)
- RC3 variant with specially reinforced profiles

NEW

Profile system
Build-up of the ST PRO Green sliding door set

01 ES PROLINE sliding door operator, in RC versions with pry-out protection over the entire passage width

02 Centre sealing profile, in RC versions with multipoint locking system

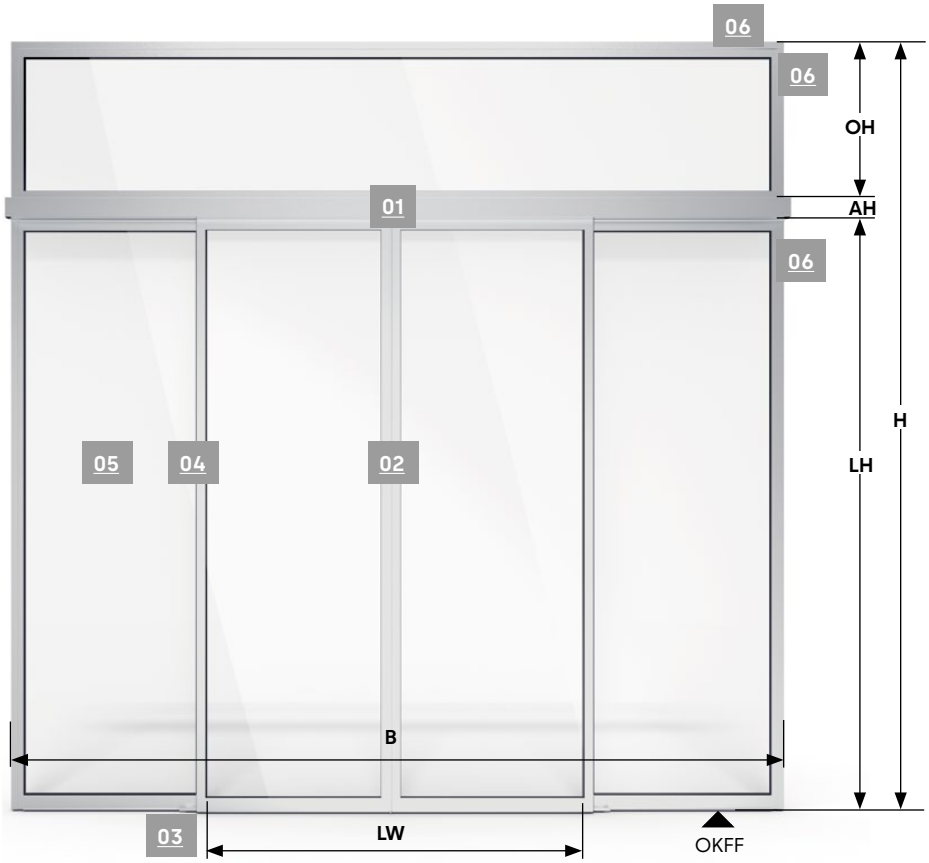
03 Floor guide, in RC versions with floor guide rail over the entire door width

04 Secondary closing edge, in RC versions with hook

05 Triple type glazing, in RC versions with break-in-resistant P4A (RC2) and P4A (RC3)

06 Structural connection, in RC versions with reinforcing elements

LW: Clearance width
LH: Clearance height
B: Width
OH: Skylight hight
H: Total system height
AH: Drive height 100 or 150 mm dependent on version
OKFF: Upper edge of finished floor prefabricated floor



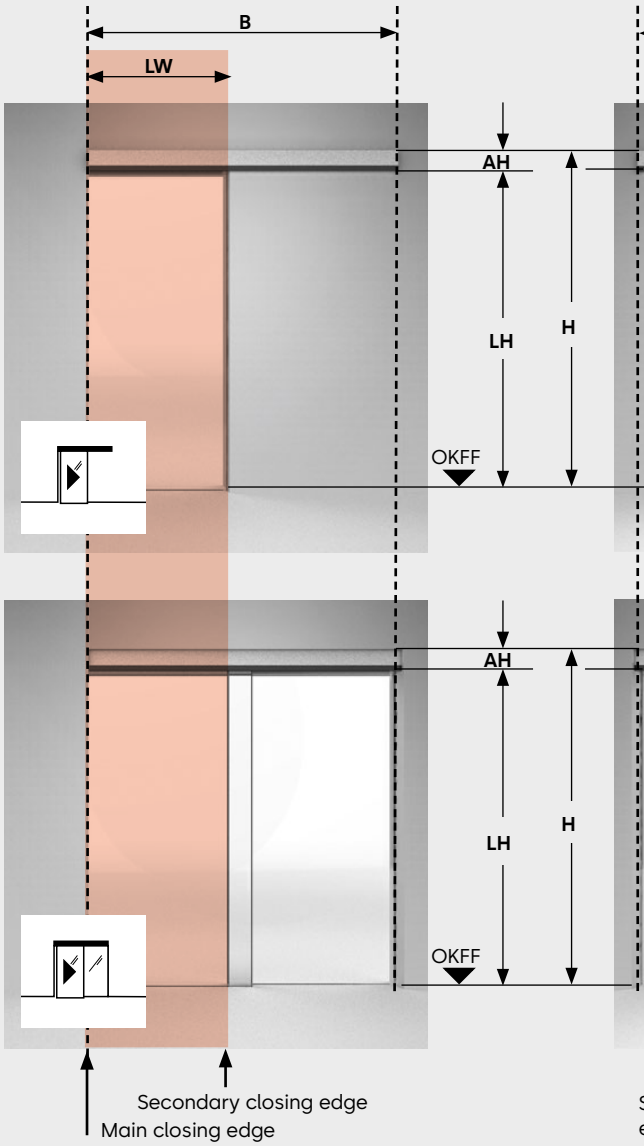
Customised sliding door systems as standard
Each system is individually planned and produced. The modular approach of our systems ensures a cost-efficient realisation. Each system can be easily extended with further automatic and access functions from the dormakaba range but also with third-party manufacturer components.

Freedom of choice of size and design
You are free to choose the dimensions of the sliding door systems. Depending on the sliding door system the selected glazing and the door leaf weight, passageway widths of up to 3,000 mm are possible. The profile surfaces are as standard anodised or powder-coated in custom colours from established powder manufacturers. For special requirements, e.g. in swimming pool construction or near the cost, more resistant coatings are also possible.

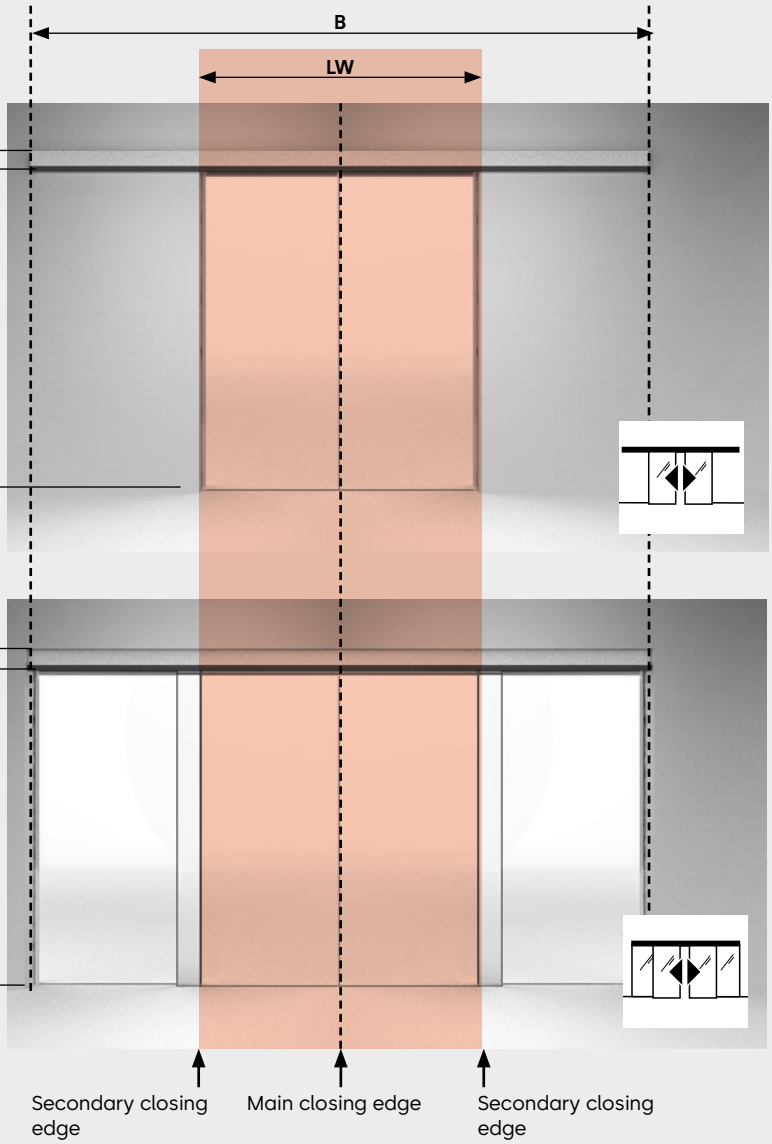
Service right from the planning stage
We support every project right from the planning stage. In this, architectural and functional requirements are always the starting point. Each sliding door system is delivered ready for installation. The systems are installed, put into use and serviced by companies certified by us. Extensive documentation in the local language is supplied with each system. For the exact planning details, please refer to our CAD drawing documents. The dormakaba sales department will be happy to advise.

System planning
These dimensions you should know

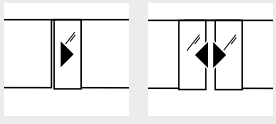
Opening to one side



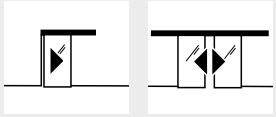
Opening to both sides



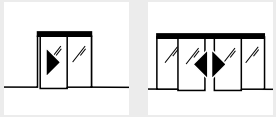
LW: Clearance width
LH: Clearance height
B: Width
OH: Skylight hight
H: Total system height
AH: Drive height 100 or 150 mm dependent on version
OKFF: Upper edge of finished floor prefabricated floor



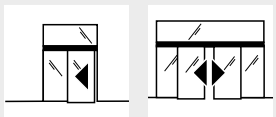
Drive in the suspended ceiling (integral casing)



Wall or lintel installation of drive



Passageway installation of drive with light metal beam (LM beam) and side panels



Passageway installation of drive with light metal beam (LM beam), side panels and skylight

ST PRO Green
Thermally separated profile system

Properties
- Complies with the current German Building Energy ACT GEG (formerly EnEV)
- Particularly low U_D values up to 1.0 W/m²K calculated individually for each door system
- Minimised profile face widths
- Above-floor and underfloor routing possible
- Drive height 100 mm or 150 mm
- Certified thermal conductivity values to EN ISO 10077
- Environmental Product Declaration (EPD) included

Glazings
- Double glazing ISO 34 with warm edge
- Triple glazing ISO 50 with warm edge
- Special glazing

Possible additions
- Protective leaf in front of the moving leaf or in the façade
- Georgian bar profile (Availability on request)
- Underfloor routing
- Main closing edge with multi-point locking system (see variant RC2/RC3) (Availability on request)

Approximate determination of door leaf weight

$$TG = \frac{LH\ [m] \times LW\ [m] \times glass\ weight\ [kg/m^2]}{Number\ of\ door\ leaves} + 7.5\ kg$$

Common glass weight for triple glazing: 45 kg/m²

			Version	ST PRO Green
Drive type			Standard	ES 250 PRO/ES 400 PRO
			Escape route	ES 250 PRO FST/ES 400 PRO FST
Door parameters*				
System width (B) min. =	1-leaf	Passageway installation (without safety clearance)		2 x LW + 153 mm
		Wall mounting		2 x LW + 115 mm
	2-leaf	Passageway installation (without safety clearance)		2 x LW + 180 mm
		Wall mounting		2 x LW + 120 mm
Clearance width LW*²	1-leaf		Standard	700 – 3,000 mm
			Escape route	700 – 3,000 mm
	2-leaf		Standard	800 – 3,000 mm
			Escape route	800 – 3,000 mm
Max. door leaf weight	1-leaf	ES 250 PRO/ES 250 PRO FST		1 x 125 kg
		ES 400 PRO/ES 400 PRO FST		1 x 250 kg
	2-leaf	ES 250 PRO/ES 250 PRO FST		2 x 125 kg
		ES 400 PRO/ES 400 PRO FST		2 x 200 kg
Clear passage height LH*				2,050 – 3,100 mm

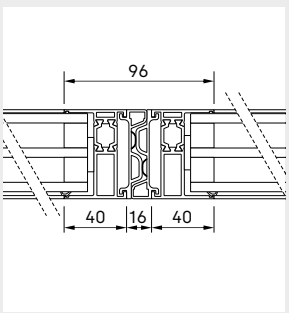
* The maximum practicable dimensions are subject to the respective door plans and door requirements and also depend on the profile system selected. For doors with tested anti-intruder protection, increased requirements are placed on the structural tolerances as well as the careful design of the structure

*² The minimum clearance width for escape route sliding doors is laid down in the respective regional building codes and may vary in certain circumstances.

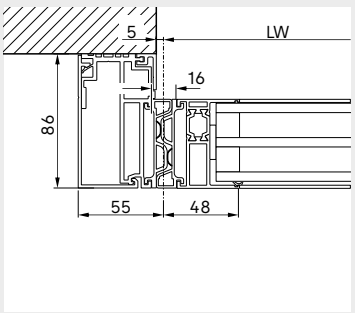
The requirements in escape routes are met by all systems that are equipped with an operator from the ES PROLINE FST series.

LW: Clearance width
LH: Clearance height
B: Total system width
OH: Skylight height (option)
H: Total system height
AH: Drive height 100 or 150 mm dependent on version
OKFF: Upper edge of finished floor prefabricated floor

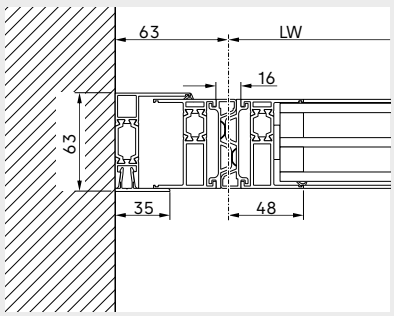
Main closing edge variants



Opening to both sides



Lintel installation, opening to one side



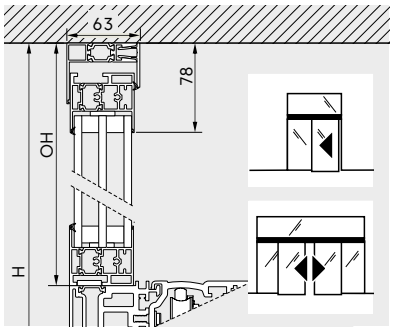
Passageway installation, opening to one side

Installation variations and drive casings

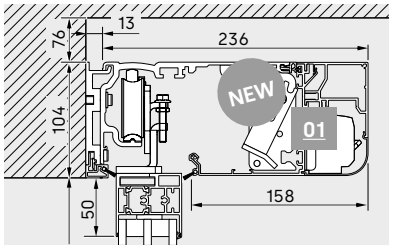
01 Sensor casing 100 mm
02 Integral casing overall height 100 mm
03 Standard casing 100 mm
04 Integral casing overall height 150 mm
05 Standard casing 150 mm

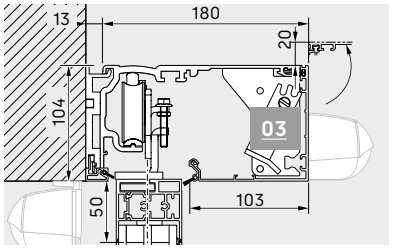
Note on installation with light metal beam

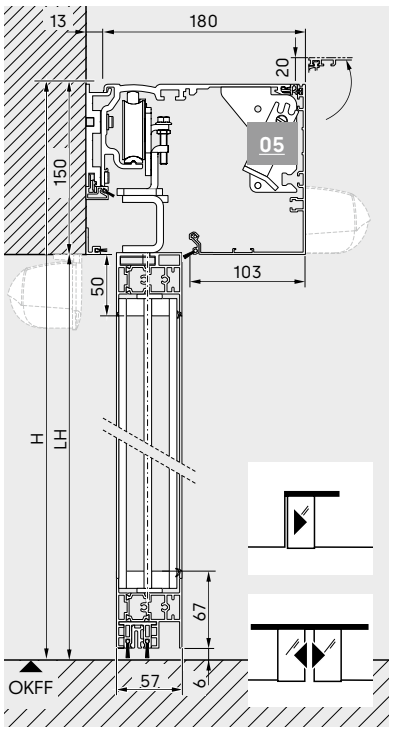
For doors with side panels and light metal beam, the drive must either be suspended or the 150 mm drive type is required for door leaf weights of approx. 125 kg or more – depending on the clearance width.



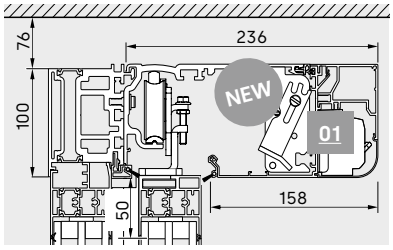
Wall/lintel installation

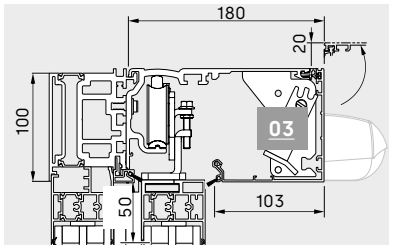


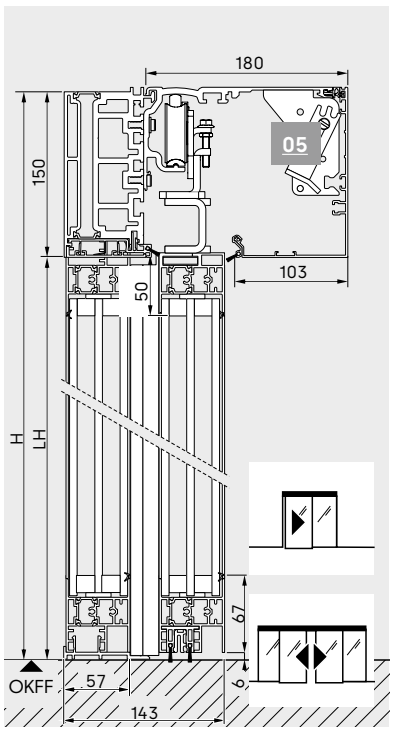




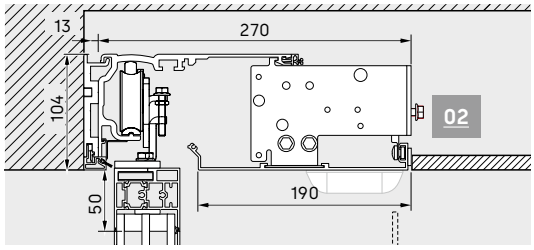
Installation with light metal beam

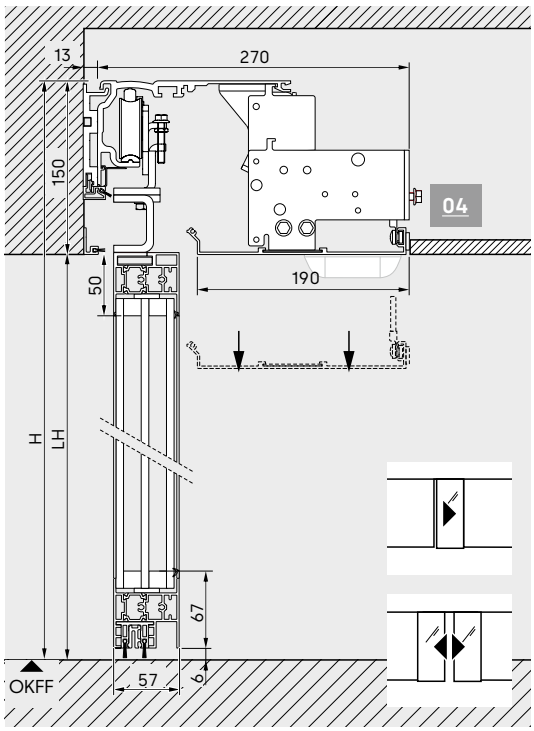




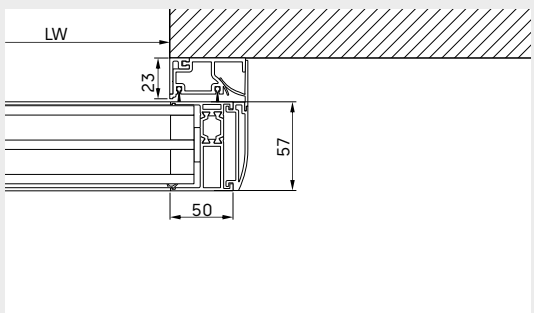


Installation in suspended ceiling

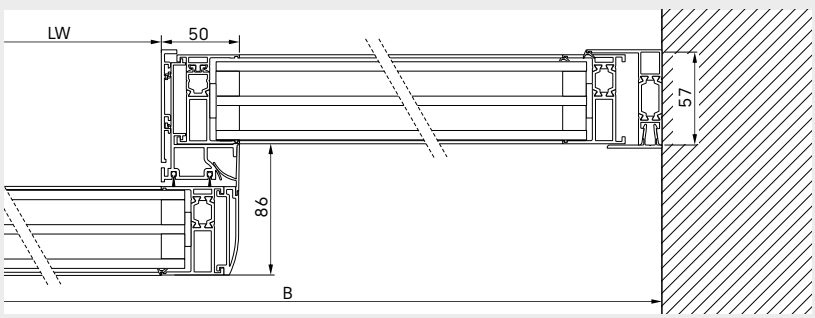




Secondary closing edge variants



Lintel installation variant



Variants with side panels

ST PRO Green RC2 with above-floor routing

Thermally separated profile system with certified burglary protection

Properties
- Complies with the current German Building Energy ACT GEG (formerly EnEV)
- Particularly low U_D values up to 1.0 W/m²K calculated individually for each door system
- Minimised profile face widths
- Certified burglary protection RC2 despite above-floor routing
- Multi-point locking system in the door leaf
- Overhead guidance for RC2 doors on request
- Drive height 100 mm
- Certified thermal conductivity values to EN ISO 10077
- Environmental Product Declaration (EPD) included

Glazings
- For resistance class RC2: P4A glazing
- Double glazing ISO 34 with warm edge
- Triple glazing ISO 50 with warm edge
- Special glazing

Possible additions
- Protective leaf in front of the moving leaf or in the façade
- Manual release (with manual release and optional protective leaf, the clearance width LW is reduced by 166 mm for 2-leaf systems and 83 mm for 1-leaf systems)
- For Switzerland: Manual, external hand release via Bowden cable to meet country-specific requirements

Approximate determination of door leaf weight

$$TG = \frac{LH\ [m] \times LW\ [m] \times \text{glass weight}\ [kg/m^2]}{\text{Number of door leaves}} + 21.5\ kg$$

Common glass weight for burglar-resistant glazing (RC2/RC3): Up to 59 kg/m²

			Version	ST PRO Green RC2
Drive type			Standard	ES 400 PRO
			Escape route	ES 250 PRO FST/ES 400 PRO FST
Door parameters*				
System width (B) min. =	1-leaf	Passageway installation (without safety clearance)		2 x LW + 233 mm
		Wall mounting		2 x LW + 227 mm
	2-leaf	Passageway installation (without safety clearance)		2 x LW + 207 mm
		Wall mounting		2 x LW + 207 mm
Clearance width LW*2	1-leaf		Standard	800 – 1,100 mm
			Escape route	800 – 1,100 mm
	2-leaf		Standard	1,000 – 1,900 mm
			Escape route	1,000 – 1,900 mm
Max. door leaf weight	1-leaf	ES 400 PRO/ES 400 PRO FST		1 x 250 kg
	2-leaf	ES 400 PRO/ES 400 PRO FST		2 x 200 kg
Clear passage height LH*				2,050 – 3,100 mm

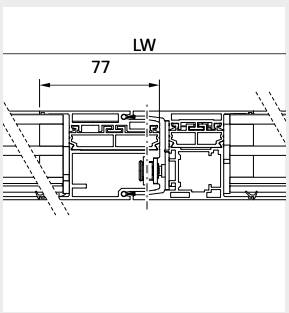
* The maximum practicable dimensions are subject to the respective door plans and door requirements and also depend on the profile system selected. For doors with tested anti-intruder protection, increased requirements are placed on the structural tolerances as well as the careful design of the structure.

*2 The minimum clearance width for escape route sliding doors is laid down in the respective regional building codes and may vary in certain circumstances.

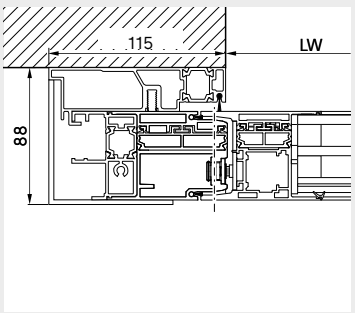
The requirements in escape routes are met by all systems that are equipped with an operator from the ES PROLINE FST series.

LW: Clearance width
LH: Clearance height
B: Total system width
OH: Skylight height (option)
H: Total system height
AH: Drive height 100 or 150 mm dependent on version
OKFF: Upper edge of finished floor prefabricated floor

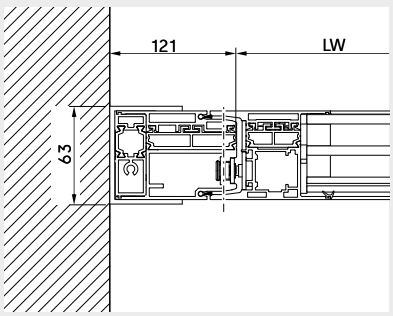
Main closing edge variants with multi-point locking system



Opening to both sides

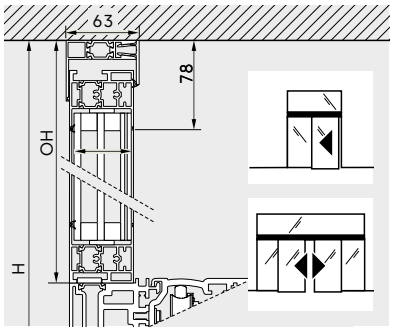


Lintel installation, opening to one side



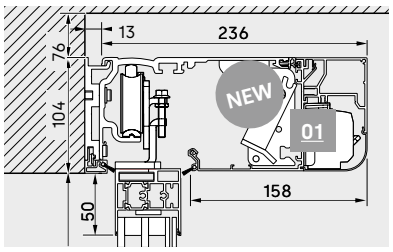
Passageway installation, opening to one side

Note on installation with light metal beam
For a total leaf weight over 2 x 125 kg, an additional suspension and/or the 150 mm drive type is required.

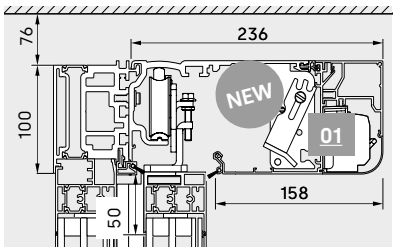


Installation variations and drive casings
01 Sensor casing 100 mm
02 Integral casing overall height 100 mm
03 Standard casing 100 mm
04 Integral casing overall height 150 mm
05 Standard casing 150 mm
06 Optional manual release

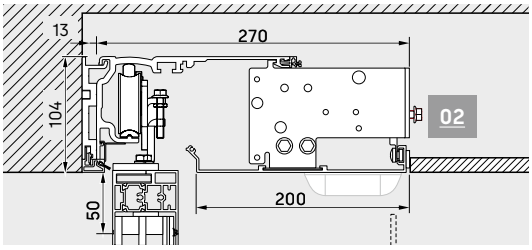
Wall/lintel installation

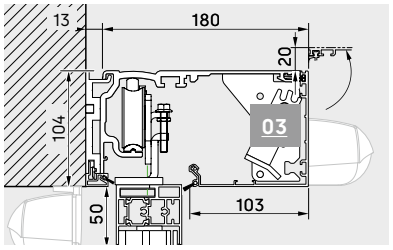


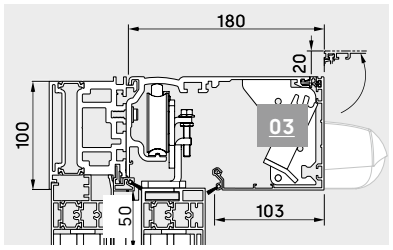
Installation with light metal beam

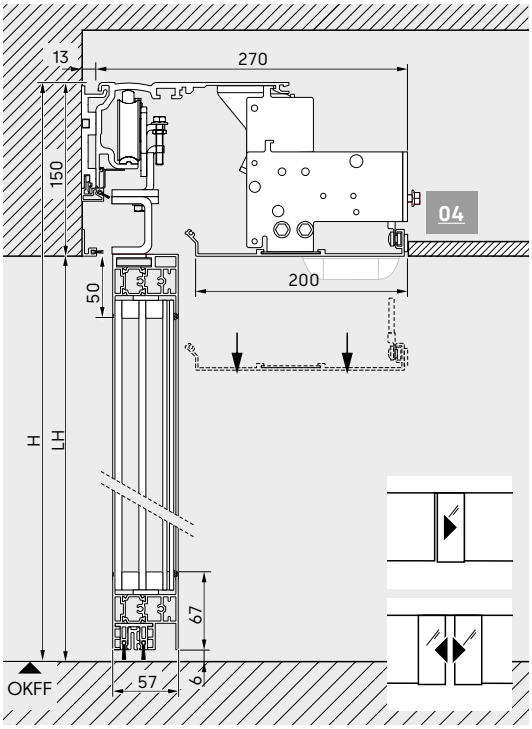


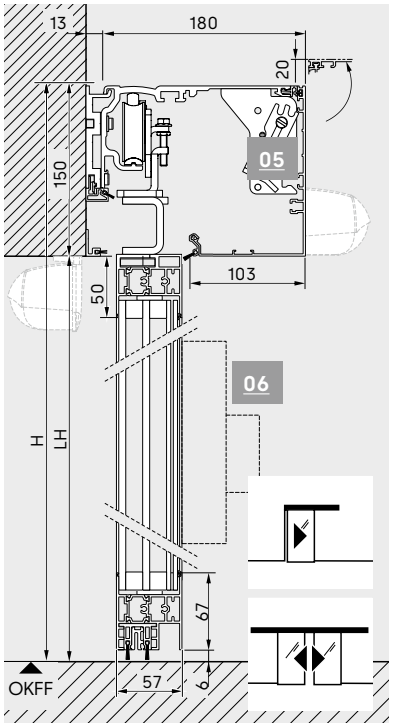
Installation in suspended ceiling

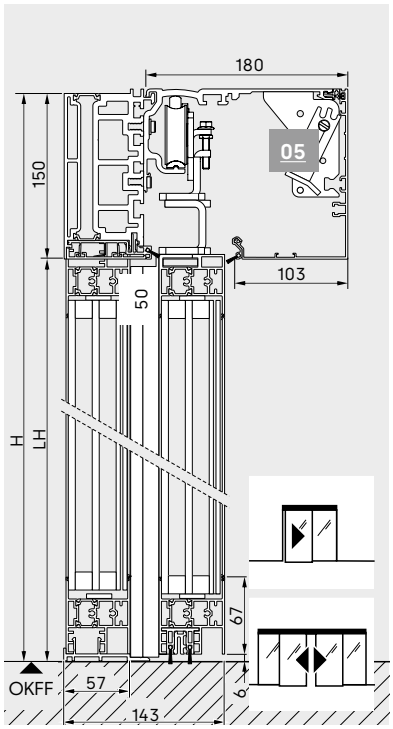




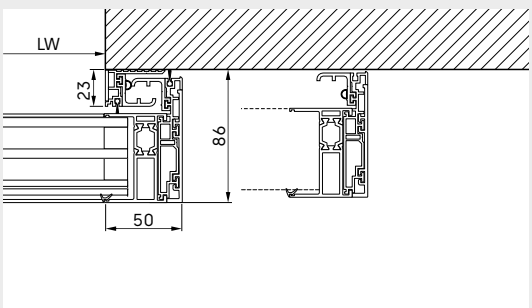




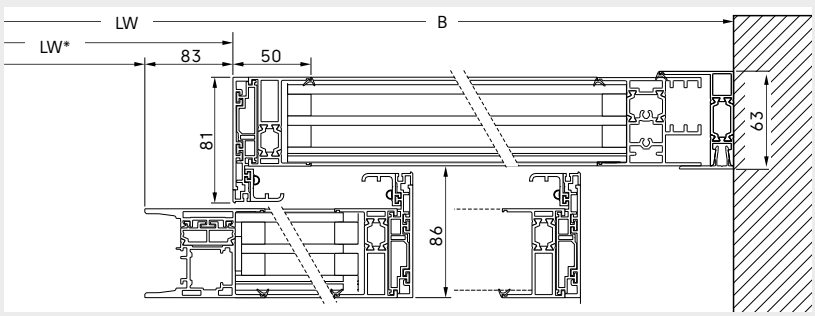




Secondary closing edge variants



Lintel installation variant



Variants with side panels *with manual release (p. 17) and protective leaf (s. 15)

ST PRO Green RC2 / RC3

Thermally separated profile system with certified burglary protection

Properties
- Complies with the current German Building Energy ACT GEG (formerly EnEV)
- Particularly low U_D values up to 1.0 W/m²K calculated individually for each door system
- Minimised profile face widths
- Underfloor routing and pry-out protection as standard
- Multi-point locking system in the door leaf
- Drive height 100 mm
- Certified thermal conductivity values to EN ISO 10077
- Environmental Product Declaration (EPD) included

Glazings
- For resistance class RC2: P4A glazing
- For resistance class RC3: P5A glazing
- Double glazing ISO 34 with warm edge
- Triple glazing ISO 50 with warm edge
- Special glazing

Possible additions
- Protective leaf in front of the moving leaf or in the façade
- Manual release (with manual release and optional protective leaf, the clearance width LW is reduced by 166 mm for 2-leaf systems and 83 mm for 1-leaf systems)
- For Switzerland: Manual, external hand release via Bowden cable to meet country-specific requirements

Approximate determination of door leaf weight

$$TG = \frac{LH\ [m] \times LW\ [m] \times \text{glass weight}\ [kg/m^2]}{\text{Number of door leaves}} + 21.5\ kg$$

Common glass weight for burglar-resistant glazing (RC2/RC3): Up to 59 kg/m²

			Version	ST PRO Green RC2/RC3
Drive type			Standard	ES 400 PRO
			Escape route	ES 250 PRO FST/ES 400 PRO FST
Door parameters*				
System width (B) min. =	1-leaf	Passageway installation (without safety clearance)		2 x LW + 233 mm
		Wall mounting		2 x LW + 227 mm
	2-leaf	Passageway installation (without safety clearance)		2 x LW + 207 mm
		Wall mounting		2 x LW + 207 mm
Clearance width LW*2	1-leaf		Standard	800 – 3,000 mm
			Escape route	800 – 3,000 mm
	2-leaf		Standard	1,000 – 3,000 mm
			Escape route	1,000 – 3,000 mm
Max. door leaf weight	1-leaf	ES 400 PRO/ES 400 PRO FST		1 x 250 kg
	2-leaf	ES 400 PRO/ES 400 PRO FST		2 x 200 kg
Clear passage height LH*				2,050 – 3,100 mm

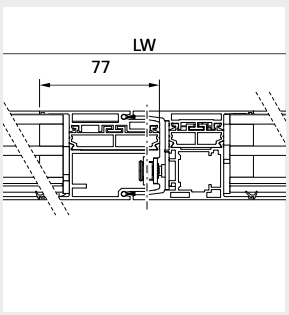
* The maximum practicable dimensions are subject to the respective door plans and door requirements and also depend on the profile system selected. For doors with tested anti-intruder protection, increased requirements are placed on the structural tolerances as well as the careful design of the structure

*2 The minimum clearance width for escape route sliding doors is laid down in the respective regional building codes and may vary in certain circumstances.

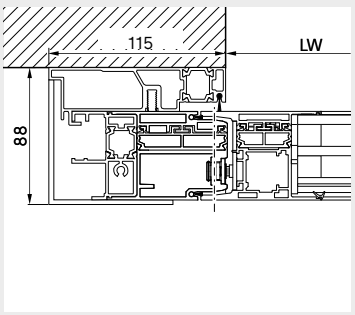
The requirements in escape routes are met by all systems that are equipped with an operator from the ES PROLINE FST series.

LW: Clearance width
LH: Clearance height
B: Total system width
OH: Skylight height (option)
H: Total system height
AH: Drive height 100 or 150 mm dependent on version
OKFF: Upper edge of finished floor prefabricated floor

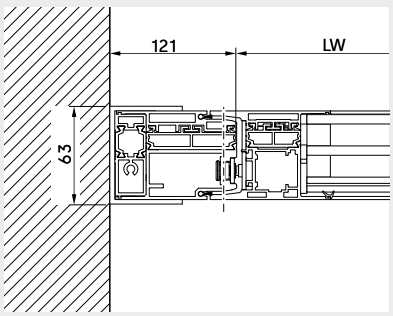
Main closing edge variants with multi-point locking system



Opening to both sides

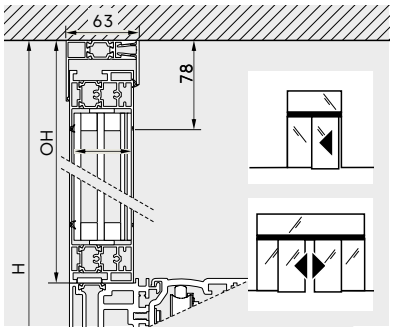


Lintel installation, opening to one side



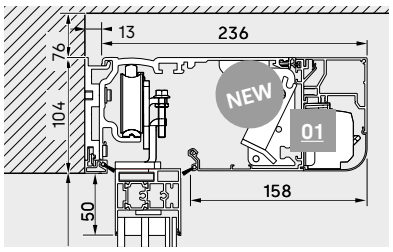
Passageway installation, opening to one side

Note on installation with light metal beam
For a total leaf weight over 2 x 125 kg, an additional suspension and/or the 150 mm drive type is required.

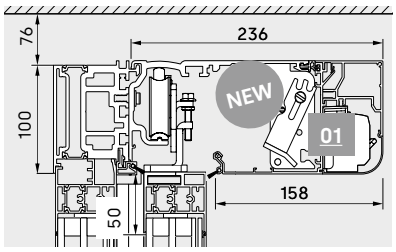


Installation variations and drive casings
01 Sensor casing 100 mm
02 Integral casing overall height 100 mm
03 Standard casing 100 mm
04 Integral casing overall height 150 mm
05 Standard casing 150 mm
06 Optional manual release
07 Underfloor routing

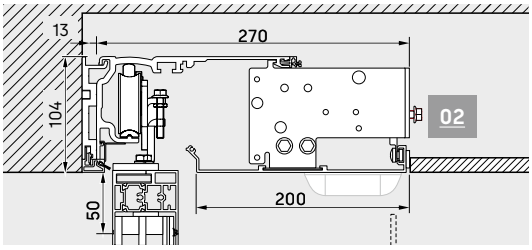
Wall/lintel installation

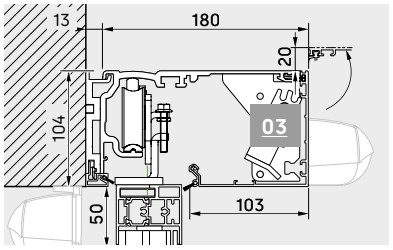


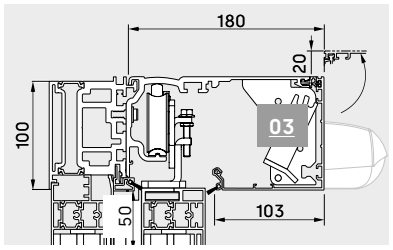
Installation with light metal beam

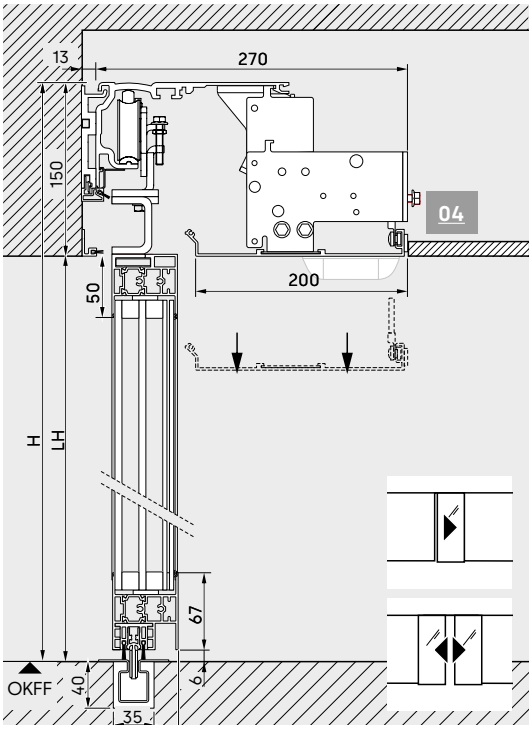


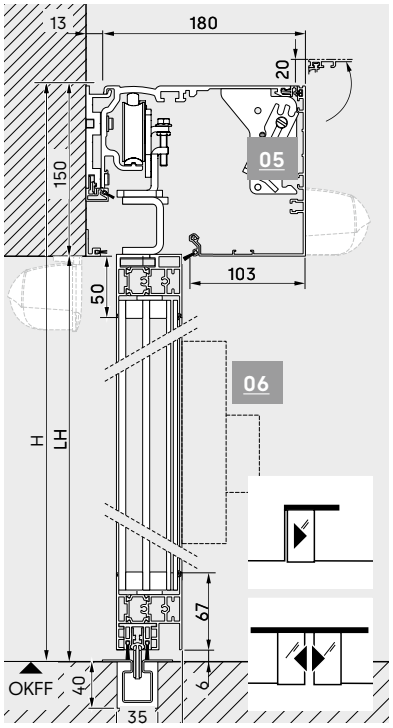
Installation in suspended ceiling

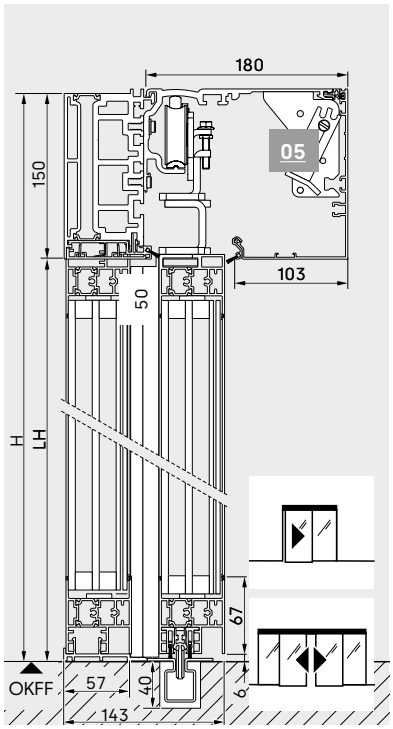




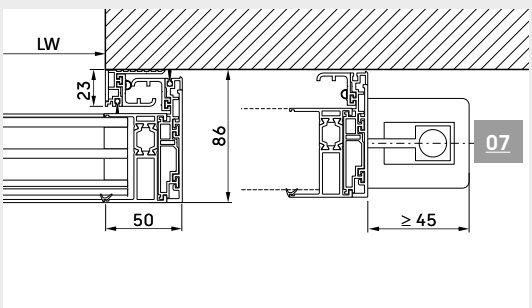




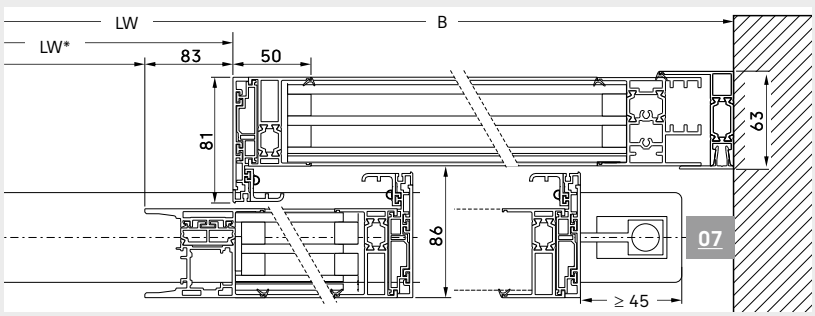




Secondary closing edge variants



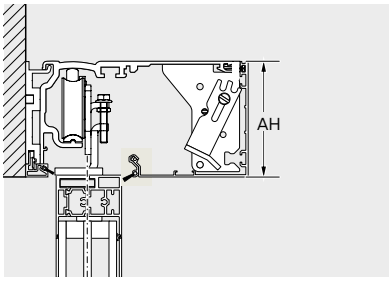
Lintel installation variant



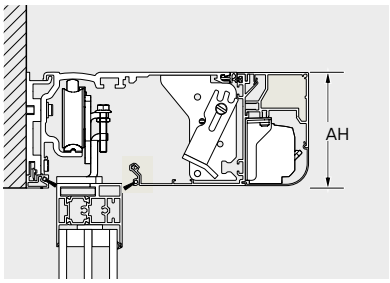
Variants with side panels *with manual release (p. 15) and protective leaf (s. 13)

Casing variants

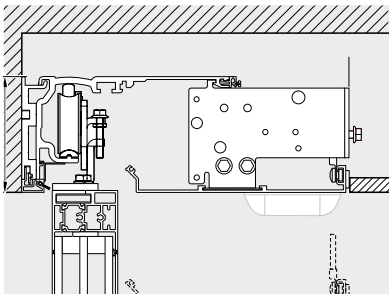
Standard casing
The standard casing for ES PROLINE operators is available in two different versions (height 100 mm, 150 mm). A cover bracket is supplied as standard and allows the casing to be opened in three different positions.



Sensor casing
Sensor casing is the right solution when it comes to premium design requirements. It creates a sleek look for doors with 100 mm drive heights. Activation and safety sensors are integrated into the drive system. There is no need for disruptive additional units and visible components. The sensor casing is approved for doors with a clear passage height of max. 3,000 mm.



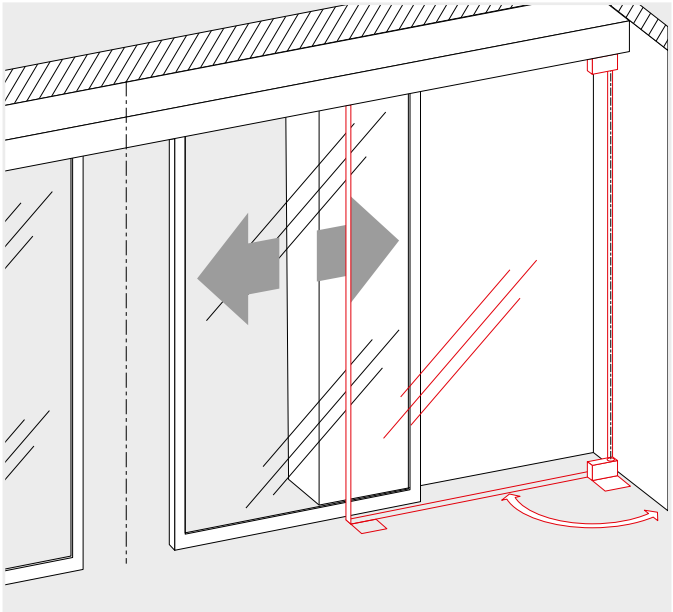
Integrated casing
Integrated casing allows the ES PROLINE operator to be elegantly concealed in suspended ceilings. The operator cover can be detached from below to allow easy access to all the components when carrying out maintenance tasks. Special accessories sets make it possible to integrate the safety sensors in the cover so that the entire height of the passage area can be used.



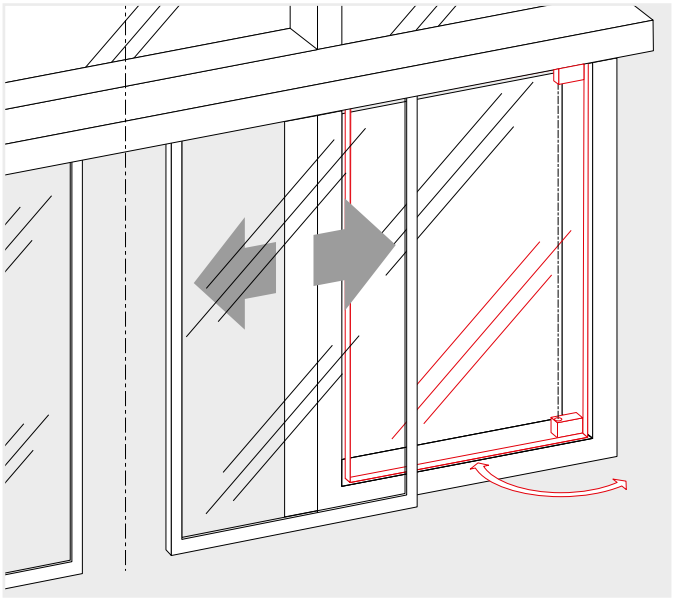
Additional track rail suspension
Optionally available, for instance, for particularly heavy skylight weights.

Additions sliding door system

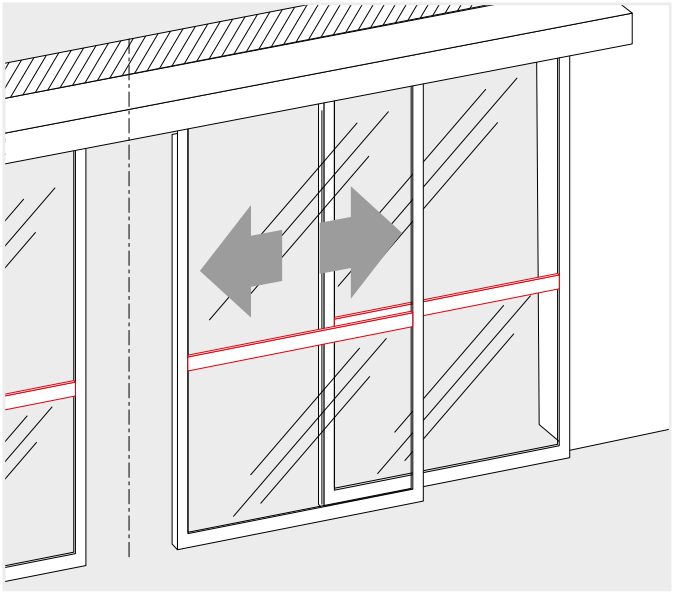
Protective leaf to safeguard the travel path
A protective leaf safeguards the sliding door's travel path. The protective leaf can be opened as required, e.g. to clean the glass.

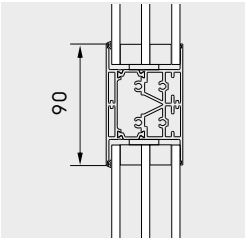


Protective leaf in mullion-transom façades
In mullion-transom façades a protective leaf can safeguard the "clear" space of the façade construction. The protective leaf can be opened as required, e.g. to clean the glass.



Georgian bar profiles
The door leaves, side panels and skylights can be partitioned as desired with Georgian bars. The Georgian bars serve as a decorative element or even a simple "shock protection". The exposed width of the Georgian bars is 90 mm (Availability on request).



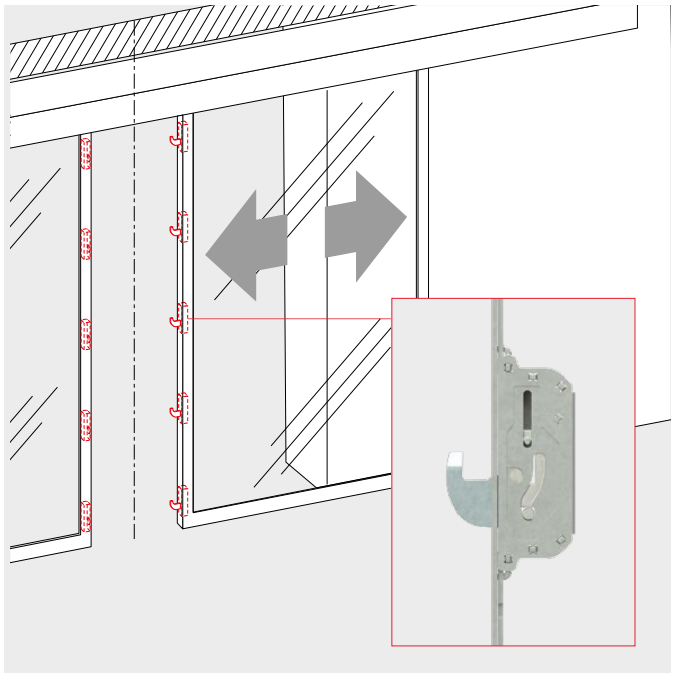


Locking devices

dormakaba offers a range of locking device variants for the ES PROLINE to prevent unauthorised access to buildings by opening the sliding door.

Electro-mechanical belt locking device
The self-adjusting locking device is attached directly to the drive unit of the operator. The standard lock status signal contacts increase the operational safety of the door.
The locking device function is configured ex works to be bistable; this means that the locking device status is maintained in the event of a power failure. Versions with other functions (monostable with Failsafe: opens the locking device in the event of a power failure and Failsecure: closes the locking device in the event of a power failure) are also available.

Magnetic locking device (FIA) for escape route and emergency exit doors
When using the magnetic locking device and the ES PROLINE control variant, you can lock an escape route sliding door in all automatic program switch positions, even when persons are present in the building.
The locking device system has been type-approved by the German Technical Inspectorate and does not require approval in each individual case.
This variant is suitable for all properties that are used 24 hours a day, such as self-service areas in banks, hotels, hospitals, schools, etc. Any person can leave the building safely in case of an emergency and the door provides protection against uninvited guests.

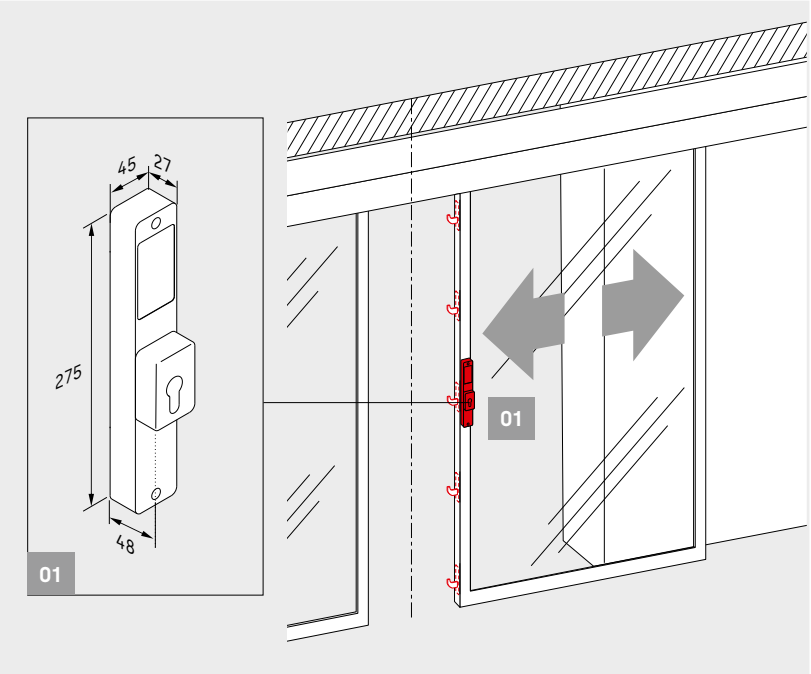


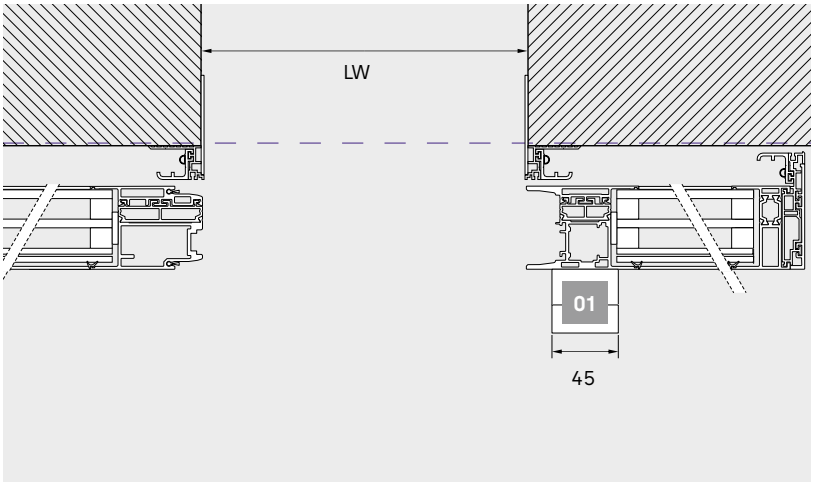
Electromotive hook locking device
This particularly robust multipoint locking device provides a very high level of break-in protection for standard sliding doors and doors of resistance classes RC2/RC3 (doors with increased anti-intruder protection are equipped with these five locking devices as standard). Five solid swing bolts are extended by a motor to lock the door. Mechanical unlocking devices for opening doors manually are optionally available.

Standard ST PRO Green RC2/RC3 design. Optional for ST PRO Green, ST FLEX Green, ST FLEX.
The following applies to all types of mechanical locks for doors used in escape routes and emergency exits: locking is only permitted if there are no persons in the building.

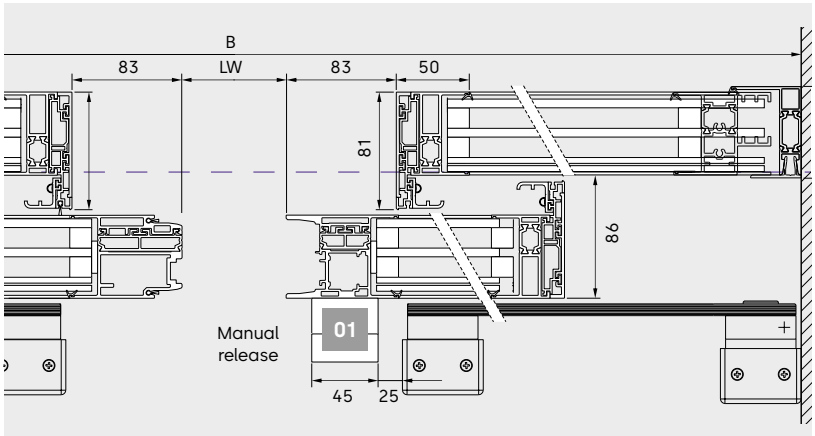
Manual release

Manual release on the door leaf
With electromotive hook locking, a door can be manually locked and unlocked on the sliding door leaf. For 1-leaf doors, the release it is always located on the door leaf. For 2-leaf doors, the release is located on the right-hand door leaf.





If the sliding door system is equipped with a manual release and a protective leaf, the clearance width LW is reduced by 83 mm for 1-leaf systems and 166 mm for 2-leaf door systems.

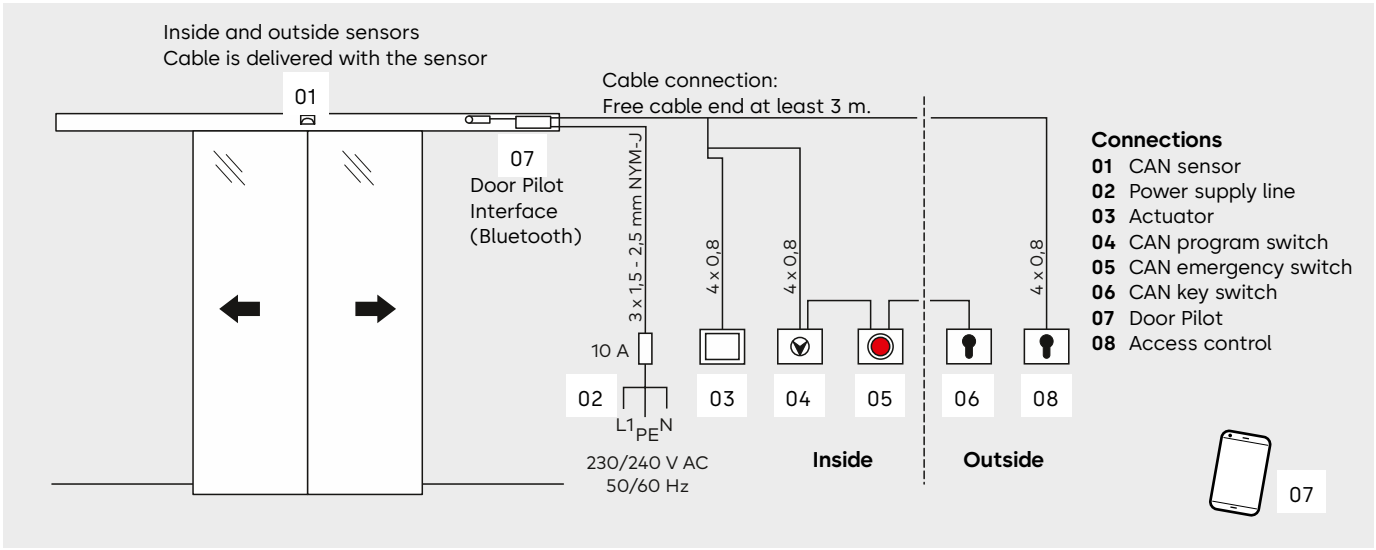


Technical data for sliding doors

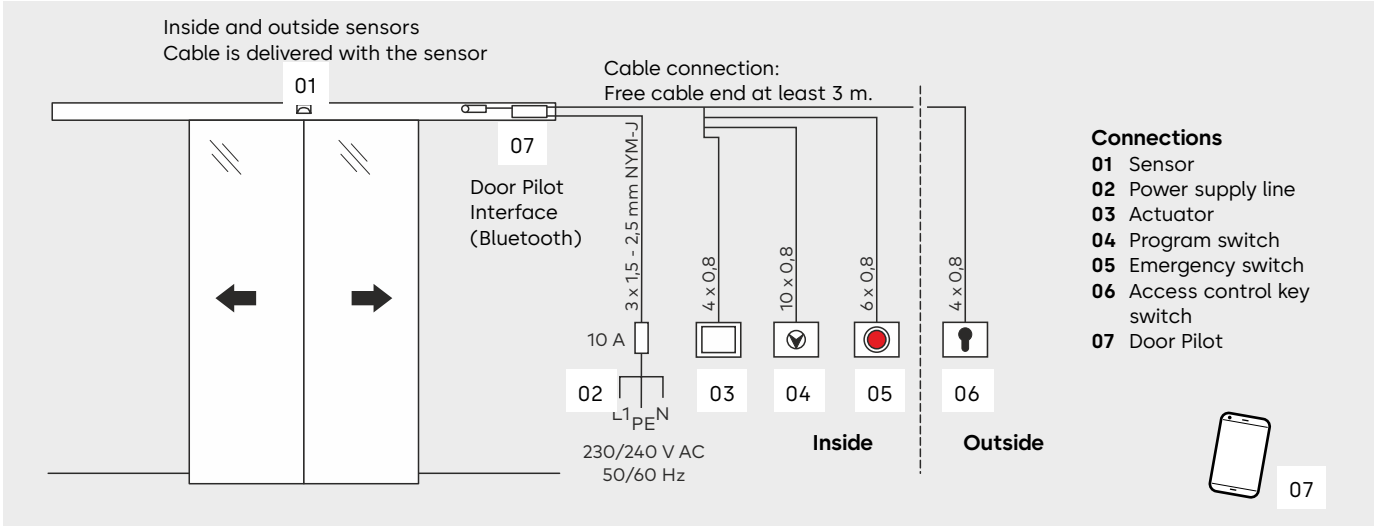
On-site preparation of the adjacent wall construction Surrounding masonry for RC-variants must feature the following characteristics:		**ST PRO Green**	**ST PRO Green RC2**	**ST PRO Green RC3**
Masonry according to German Industrial Standard DIN 1053-1	– Nominal thickness – Compression strength of the stones – Mortar group		≥ 115 mm ≥ 12 II	≥ 115 mm ≥ 12 II
Reinforced concrete according to German Industrial Standard DIN 1045	– Nominal thickness – Strength class		≥ 100 mm B15	≥ 100 mm B15
Preparation of the building on adjacent mullion-transom construction or similar connections Installation in mullion-transom constructions as burglar-resistant component of resistance class:			RC2	RC3
Drive unit and door system tested for 1.5 million operating cycles				
Versions				
Glass version	Security insulating glass	●		
	Security insulating glass according to DIN EN 356 RC2: grade P4A RC3: grade P5A	○	●	●
Construction	With side panels	○	○	○
	With skylight	○	○	○
	With safety screens	○	○	○
	Continuous floor guide	○	●	●
Locking device	Electro-mechanical belt locking device	○	○	○
	Manual lock release for electro-mechanical locking device	○	○	○
	Magnetic locking device, jam-free	○	○	○
	Electromotive hook locking device	○	●	●
	Manual lock release for electromotive locking device	○	○	○

● Yes ○ Optional – No

Connections with CAN-bus technology

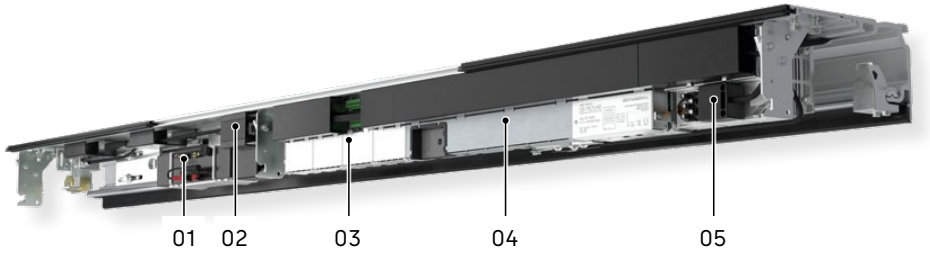


Conventional technology connections



Technical data for sliding door operators

01 Battery
02 Door Pilot interface
03 Expansion modules
04 Drive unit
05 Power supply unit



	Standard sliding door			Escape route sliding door	
Door parameters	**ES 250 PRO**	**ES 400 PRO**	**ES 250 PRO EASY**	**ES 250 PRO FST**	**ES 400 PRO FST**
Min. operator length	2 LW	2 LW	2 LW	2 LW	2 LW
Operator depth in mm	180	180	180	180	180
Operator height in mm	100	100	100	100	100
Use in escape routes and emergency exits	-	-	-	●	●
Force limitation in accordance with EN 16005/DIN 18650	●	●	●	●	●
Operating noise	<47 dB(A)	<47 dB(A)	<47 dB(A)	<47 dB(A)	<47 dB(A)
Settings					
Opening speed (adjustable in increments)	10 – 70 cm/s	10 – 90 cm/s	10 – 70 cm/s	ca. 20 – 70 cm/s	ca. 20 – 90 cm/s
Closing speed (adjustable in increments)	10 – 70 cm/s	10 – 90 cm/s	10 – 70 cm/s	10 – 70 cm/s	10 – 90 cm/s
Low speed OPEN	0 – 9 cm/s	0 – 9 cm/s	–	0 – 9 cm/s	0 – 9 cm/s
Low speed CLOSE	3 – 9 cm/s	3 – 9 cm/s	–	3 – 9 cm/s	3 – 9 cm/s
Hold-open time, night/bank hold-open time	0 – 180 s	0 – 180 s	0 – 180 s	0 – 180 s	0 – 180 s
Night/bank opening delay	0 – 10 s	0 – 10 s	–	0 – 10 s	0 – 10 s
Partial opening	25 – 300 cm	25 – 300 cm	25 – 300 cm	25 – 300 cm	25 – 300 cm
Low-speed travel OPEN/CLOSE	0 – 30 cm	0 – 30 cm	0 – 30 cm	0 – 30 cm	0 – 30 cm
Power supply					
Supply voltage	230 V, 50/60 Hz	230 V, 50/60 Hz	230 V, 50/60 Hz	230 V, 50/60 Hz	230 V, 50/60 Hz
Power consumption	130 W	180 W	130 W	130 W	180 W
On-site line fuse	10 A	10 A	10 A	10 A	10 A
Degree of protection	IP 20	IP 20	IP 20	IP 20	IP 20
Power supply for peripheral equipment under network conditions	24 V DC/2A	24 V DC/2A	27 V DC/1A	24 V DC/2A	24 V DC/2A
Power supply for peripheral equipment in the event of a power failure (battery operation)	Optional 21–27 V DC/2A	Optional 21–27 V DC/2A	Optional 21–27 V DC/1A	21–27 V DC/2A	21–27 V DC/2A
Temperature range	-20 – + 60 °C	-20 – + 60 °C	-20 – + 60 °C	-20 – + 60 °C	-20 – + 60 °C
Permissible air humidity (relative) (non-condensing)	max. 93 %	max. 93 %	max. 93 %	max. 93 %	max. 93 %
Standardisation and testing					
Compliant with the Low Voltage Directive and the EMC Directive	●	●	●	●	●
Monitoring of secondary closing edges verified to fulfil German standard DIN 18650 and EN 16005.	●	●	●	●	●
Manufactured to ISO 9001	●	●	●	●	●
Environmental product declaration according to ISO 14025; declaration holder: Institut Bauen und Umwelt e.V.	●	●	●	●	●

Control module	**ES 250 PRO ES 400 PRO**	**ES 250 PRO FST ES 400 PRO FST**
Modular design	●	●
Function programs – Off	●	●
– Automatic	●	●
– Permanent open	●	●
– Partial open	●	●
– Exit	●	●
Automatic reversing	●	●
Connection for securing the passageway (on both sides)	●	●
Tested in accordance with EN 16005/DIN 18650	●	●
Securing main and secondary closing edge(s) according to EN 16005/DIN 18650	●	●
Basic parameters set using integrated display and buttons	●	●
Parameterisation via Operator Service Interface (OSI)	●	●
Door Pilot interface (Bluetooth)	○	○
Automatic opening/closing in the event of a power failure (if a battery set is used)	●/ ●	●/– (Battery set supplied as standard)
Emergency battery operation (if a battery set is used)	●	–
24 V DC output for external appliances	●	●
Readable fault memory with fault codes	●	●
CAN interface for connecting a program switch	●	●
CAN interface for connecting additional CAN-bus components	●	●
Multiports for connecting accessory components	4	4
Functions*		
Pharmacy function	●	●
Door status signal contacts	●	●
Panic closing (observe regional regulations!)	●	●
Door bell contact	●	●
Airlock control	●	–
Synchronous operation	●	●
Safety deactivation	●	●
Night/bank function	●	●
Emergency open	–	●
Emergency stop	●	–
Configurable partial opening distance	●	●
Slide and Go	●	●
Close/open on malfunction	●	●
Fire service switch function	●	●
*The functions can be implemented by the master controller or by the 4 I/O modules. For further information, see page 22		
Safety and activation (SiAK) expansion module**		
For connecting conventional (not CAN-bus-capable) safety and activation sensors	○	○
Program switch (MS) expansion module**		
For connecting conventional (not CAN-bus-capable) program switches	○	○
Auxiliary equipment		
Battery set, mandatory for ST PRO Green RC2/RC3, even non-FST!	○	●
Emergency power supply UPS (external)	○	○
Module for connection to LON/LAN building control systems	○	○
Potential-free relay contact	○	○

● Standard ○ Optional

** Further information on the expansion modules can be found on page 22

Master controller functions and optional expansion module functions

A wide variety of functions can already be tapped into just using the master controller for the ES PROLINE sliding door operators. The optional expansion modules can be used to implement various special functions and connect conventional accessories that are not based on CAN-bus technology.

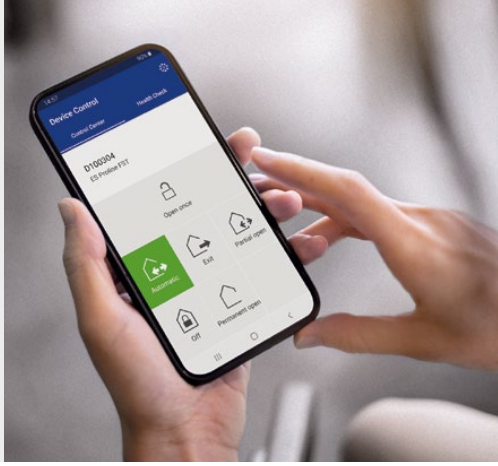
Master controller	PRO	PRO FST	PRO EASY
Pharmacy function/pharmacy door opening The door can be locked in a partially open position apart from when the program switch is in the "Off" position. This allows a pharmacy to dispense goods securely outside business hours, for example.	●	●	–
Door status signal contacts This function issues door statuses. E.g. Door open/closed/locked, System OK, Current door position.	●	●	●
Panic closing This function closes the door immediately and switches off passage security and force limitation. This function is only permissible in certain countries (observe regional regulations).	●	–	–
Door bell contact For connecting an on-site door bell or an audible indicator.	●	●	–
Airlock function The doors can be switched to function as a personal interlock (not for escape route systems).	●	–	–
Synchronous operation For instance, two doors opening on one side can be switched to act as one large, double-leaf door. This allows particularly wide opening distances or high door leaf weights to be achieved.	●	●	–
Safety deactivation The door can be opened or closed by pressing a button.	●	●	–
Night/bank function Allows the connection of access controls, key switches etc. with the program switch in the "Off" position. The door unlocks – opens – closes – locks.	●	●	●
Emergency open	–	●	–
Emergency stop	●	–	–
Configurable partial opening distance	●	●	●
Slide and Go An opening signal can be triggered by gently pushing the door leaf.	●	●	–
Unlock/lock in case of malfunction In case of system malfunction, a door can be deliberately triggered to close and lock or unlock and open.	●	●	–
Fire service function Used to deliberately open and close a door via a separate signal input.	●	●	–

● Function can be implemented via the four programmable inputs and outputs. – Function is not implementable

Expansion modules	PRO	PRO FST	PRO EASY
4 I/O Expansion module The 4 I/O module is capable of four inputs and four outputs. The master controller functions can be implemented if the master controller connections have already been assigned. Only one module can be used at a time.	○	○	–
Safety and activation (SiAK) expansion module The safety and activation (SiAK) expansion module is used to connect conventional accessories, such as sensors and radar detectors. Safety sensors can be connected either for the main closing edge (MCE) or the secondary closing edge (SCE). Two modules are required in order to combine these safety functions (MCE/SCE).	○	○	–
Program switch (MS) expansion module Used to connect a conventional program switch (mode switch/MS) that is not based on CAN-bus technology. Only one module can be used at a time.	○	○	–

○ optional – not extendable

Door Pilot interface



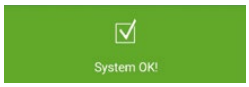
The dormakaba Door Pilot app allows automatic doors to be easily controlled from a smartphone. Operators from the ES PROLINE series can be equipped with the Door Pilot interface as an option. The app is available in iOS and Android versions and can be obtained from the respective app store.

Program switch functions

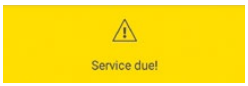
Use 6 different functions:

automatic	Opens from the inside and outside – perfect for normal opening hours.
Partial opening	Opens from the inside and outside with reduced opening width – ideal for cold winter days.
Output	Opens from the inside only – ideal for use shortly before closing time.
Permanent Open	Door is permanently open – suitable for deliveries or ventilation.
Off	Door remains closed (and perhaps locked) and can only be opened by changing the program switch position or by an externally controlled impulse.
Open-once	For easy opening in close proximity (not possible with the program switch in the "Off" position).

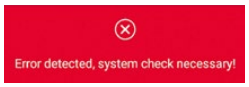
Door status signal contacts



System OK



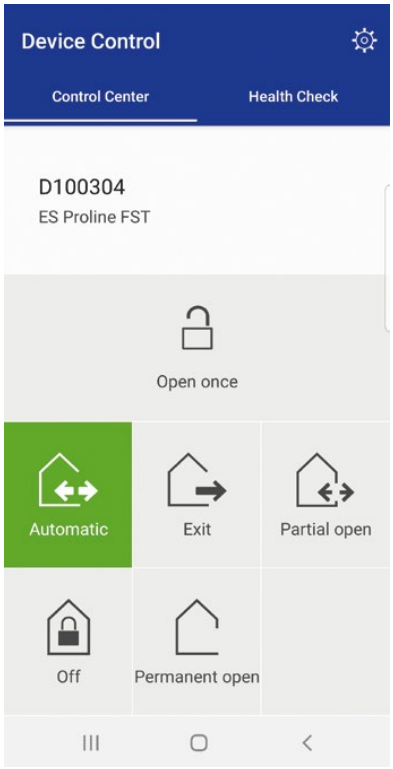
Maintenance due

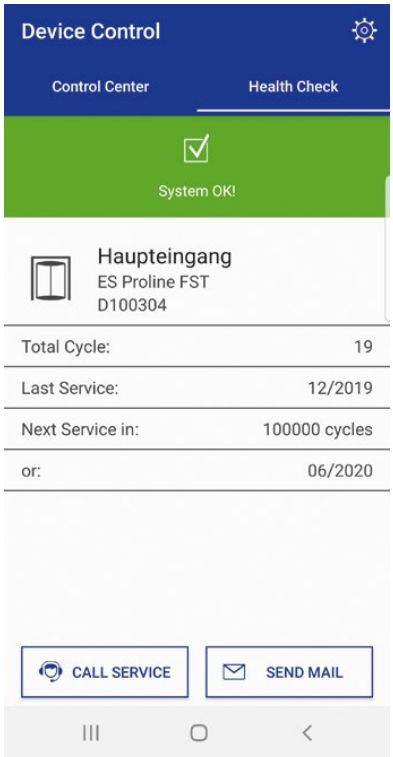


Fault detected, service due

Customer benefits

- Complement to the program switch, convenient operation from a smartphone.
- Check functions easily without needing specialist knowledge.
- No need to incorporate into existing building network.
- Direct contact function for simplified/direct access to dormakaba Service.



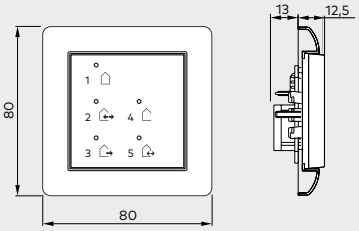


Wide range of accessories from dormakaba

Program switches

When combined with a program switch from the dormakaba accessories range, the automatic door system can satisfy all kinds of individual operating requirements and is easy to use. The program switches have been designed in various versions and for a wide range of requirements.
The options range from mechanical to fully electronic versions locked by your choice of profile cylinders, round cylinders or fully electronic coding.

- Up to 5 different functions: Off, automatic, exit only, partially open, permanent open
- Electronic program switches in System 55 design for the most discerning aesthetic demands

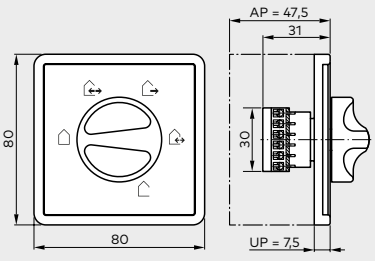


For sliding door operators without escape route and emergency exit requirements

		Article no.

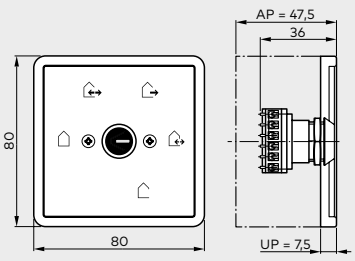
EPS fully electronic program switch
System 55 design, 5 positions, lockable using coding or additional TL-ST S55 key switch, membrane keypad, concealed, 80 x 80 mm

EPS, with frame	white	16556901150
EPS CAN, without frame	white	16712501150
Box for surface mounting		5226933332
EPS CAN (44 x 50 mm)		16712401150



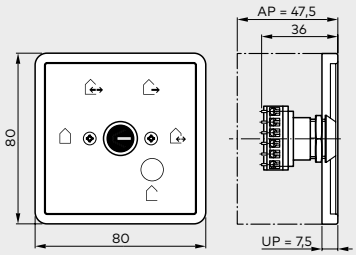
PG-S1 program switch
5 positions, aluminium, concealed, 80 x 80 x 40 mm

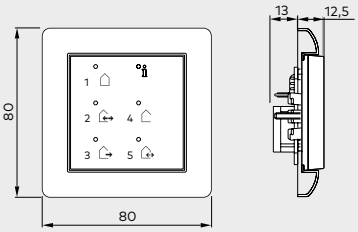
PG-S1	white, Gira S-Color	19135401150
Box for surface mounting		5227033332



PG-S2 program switch
5 positions, lockable, aluminium, concealed, 80 x 80 x 40 mm

PG-S2	white, Gira S-Color	19135602150
Box for surface mounting		5227033332





For sliding door operators in escape routes and emergency exits

		Article no.

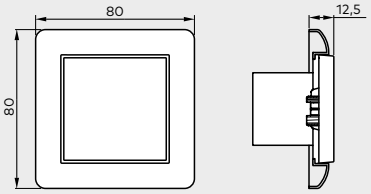
PG-FST1 program switch
5 positions, lockable, aluminium, concealed, 80 x 80 x 40 mm

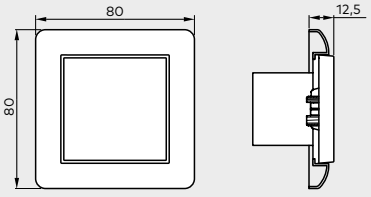
PG-FST1	white, Gira S-Color	19135603150
Box for surface mounting		5227033332

EPS-FST fully electronic program switch
System 55 design, 5 positions, lockable using coding or additional TL-ST S55 key switch, membrane keypad, concealed, 80 x 80 mm

EPS-FST, with frame	white	16556801150
EPS CAN, without frame	white	16712501150
Box for surface mounting		5226933332

Activation switches





		Article no.

CleanSwitch
contactless radar push-button, System 55, flush-mounted, detection zone adjustable 10 - 50 cm, dimensions: 80 x 80 x 40 mm, switch insert 55 x 55 mm, colour: white

CleanSwitch	neutral	16737401170
	wheelchair	16737501170
	door open	16737601170

Manual release switch
Single-pole change-over contact, single frame, concealed, System 55

Manual release switch	white	19144701170

Key switch

		Article no.

KT 3-1
1 NO contact with Europrofile half-cylinder in line with DIN 18252, half 30–32.5 mm, length 40.5–43.5 mm, locking cam position left (90°) (interchangeable with master-key system half-cylinder), key can only be removed in neutral position, aluminium, metal, 75 x 75 x 60 mm, flush-mounted version incl. flush-mounted box, diameter 59 mm x 50 mm deep

KT 3-1 UP	Concealed	05054531332
KT 3-1 AP	Surface-mounted	05054631332

KT 8
Labelled "Open"/"Closed", 2 NO contacts with Europrofile half-cylinder in line with DIN 18252, half 30–32.5 mm, length 40.5–43.5 mm, locking cam position left (90°) (interchangeable with master-key system half-cylinder), key can only be removed in neutral position, aluminium, metal, 75 x 75 x 60 mm

KT 8 UP	Concealed	05054831332
KT 8 AP	Surface-mounted	05054931332

TL-ST S55
Push button with single-pole changeover contact for on-site Europrofile half-cylinder in line with DIN 18252, half 30–32.5 mm, length 40.5–43.5 mm, locking cam position left (90°), with cover for System 55, not suitable for surface-mounted boxes, without Europrofile half-cylinder, without frame.

TL-ST S55 W	white	56330710
TL-ST S55 S	silver	56330701
TL-ST S55 A	anthracite	56330715

KT 3-2
1 NO contact with Europrofile half-cylinder, interchangeable with master-key system half cylinder, key can only be removed in neutral position, cover panel for replacement, labelled "Open"/"Closed", aluminium, concealed: 125 x 100 mm, surface-mounted: 70 x 90 mm

KT 3-2	05054731332

Key switch CAN
Switch with single-pole changeover contact, with Europrofile half-cylinder in line with DIN 18252, half 30–32.5 mm, length 40.5–43.5 mm, locking cam position left (90°) (interchangeable with master-key system half-cylinder), with cover for System 55, not suitable for surface-mounted boxes, without frame.

Key switch CAN	16715801150

LED touch key

		Article no.

LED touch key
Manual actuator with plastic frame in white, similar to RAL 9016 and traffic grey similar to RAL 7043

LED touch key	16672601170

LED hygienic touch key
Manual actuator, tempered glass encapsulated, glass button surface, hygienic version in line with EN 1672-1/2

LED touch key	16672901170

Emergency activation buttons

	Article no.

Emergency switch CAN
CAN-bus emergency activation button, red knob (emergency activation button off) or green knob (emergency open), System 55, without frame.

Emergency switch CAN, red	16718501150
Emergency switch CAN, green	16718502150

TL-N S55 conventional
The area around the emergency button is brightly illuminated and has a visual display of the locking status, an acoustic and visual alarm siren, is tamper-protected under glass, one NO contact and one NC contact, concealed, 80 x 80 mm, System 55, without frame

TL-N S55	56330500

Conventional emergency switch
Emergency activation button (Emergency Off function with red knob and Emergency Open function with green knob) with yellow central plate

NAT 1	One NO contact and one NC contact, white frame, concealed, 80 x 80 mm, System 55	90400025
NAT 2	Emergency Open version with green knob, white frame, concealed, 80 x 80 mm, System 55	90400035
NAT 4	One NO and one NC contact, surface-mounted 68 x 68 mm Concealed	05027031332

Cover frame for buttons and switches

	Article no.

Standard System 55

FR-S55 1	Single frame, white, 80.7 x 80.7	56391110
FR-S55 2	Double frame, white, 151.8 x 80.7	56391210
FR-S55 3	Triple frame, white, 223.3 x 80.7	56391310

E2 System 55 (not shown)

FR-E2W 1	Single frame, E2 55, white, 80.8 x 80.8	56392110
FR-E2W 2	Double frame, E2 55, white, 151.9 x 80.8	56392210
FR-E2W 3	Triple frame, E2 55, white, 223.4 x 80.8	56392310
FR-E2S 1	Single frame, E2 55, silver, 80.8 x 80.8	56392101
FR-E2S 2	Double frame, E2 55, silver, 151.9 x 80.8	56392201
FR-E2S 3	Triple frame, E2 55, silver, 223.4 x 80.8	56392301
FR-E2A 1	Single frame, E2 55, anthracite, 80.8 x 80.8	56392115
FR-E2A 2	Double frame, E2 55, anthracite, 151.9 x 80.8	56392215
FR-E2A 3	Triple frame, E2 55, anthracite, 223.4 x 80.8	56392315

Active infrared sensor and combined sensors

		Article no.
Combined sensor IXIO-DT1 Combined sensor featuring radar detector with direction recognition and safety curtain for non-escape route systems, width 270 mm		
IXIO-DT1	black	86800001
	silver	86800002
	white	86800003
Combined sensor IXIO-DT3 Combined sensor featuring self-monitored radar detector with direction recognition and safety curtain for escape route systems, width 270 mm		
IXIO-DT3	black	86800004
	silver	86800005
	white	86800006
Safety curtain IXIO-ST Safety curtain (tested) IXIO-ST for monitoring closing edges, width 270 mm		
IXIO-ST	black	86800010
	silver	86800011
	white	86800012

Combined sensor IXIO-D CAN Combined sensor featuring radar detector with direction recognition and safety curtain for escape route systems and non-escape route systems (CAN-bus technology), width 270 mm		
IXIO-D CAN	black	86800053
	silver	86800057
	white	86800056
Safety curtain IXIO-S CAN Safety curtain (tested) IXIO-S CAN for monitoring closing edges (CAN-bus technology), width 209 mm		
IXIO-S CAN	black	86800055
	silver	86800059
	white	86800058
Integrated combined sensor IXIO-D CAN Combined sensor (without cover) featuring self-monitored radar detector with direction recognition and safety curtain for escape route and non-escape route systems for integration into the sensor casing.		
Integrated IXIO-D CAN		86800050
Integrated safety curtain IXIO-S CAN IXIO-S CAN safety curtain (tested, without cover) for monitoring closing edges (CAN-bus technology), for integration into the sensor casing.		
Integrated IXIO-S CAN		86800052

Accessories for active infrared sensor and combined sensors

Article no.

Ceiling installation set
Ceiling installation system for IXIO-DT, IXIO-S, IXIO-D-CAN and IXIO-S-CAN, housing width 270 mm or 209 mm

Ceiling installation set	black	86800019
	white	86800020

Rain protection cover
Rain protection cover for IXIO-DT, IXIO-ST, IXIO-D-CAN and IXIO-S-CAN, housing width 209 mm or 270 mm

Rain protection cover	black	86800021

Fixing bracket
Fixing bracket for IXIO sensor

Fixing bracket for housing width 270 mm	black	86800016
Fixing bracket for housing width 209 mm	black	86800018

Our Sustainability Commitment

We are committed to foster a sustainable development along our entire value chain in line with our economic, environmental and social responsibilities toward current and future generations. Sustainability at product level is an important, future-oriented approach in the field of construction. In order to give quantified disclosures of a product's environmental impact through its entire life cycle, dormakaba provides Environmental Product Declarations (EPD), based on holistic life cycle assessments.

www.dormakaba.com/sustainability

Our offering

Access Automation Solutions

Entrance Automation
Entrance Security

Access Control Solutions

Electronic Access & Data
Escape and Rescue Systems
Lodging Systems

Access Hardware Solutions

Door Closers
Architectural Hardware
Mechanical Key Systems

Services

Technical Support
Installation and commissioning
Maintenance and Repair

WN 05522451532, EN, 10/2025
Subject to technical modifications.

dormakaba.com

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