

# ES PRO Easy Automatic sliding door operators





## **Table of contents**

ES PRO Easy	
The new generation of sliding door operators	4
Data and features	
Sliding door operators	
System dimensions and max. door leaf weight	
Technical data	(
Header profiles	10
Schematic illustration of door cross-section	10
Conventional technology connections	1
Telescopic sliding door operators	
System dimensions and max. door leaf weight	12
Technical data	1;
Header profiles	14
Schematic illustration of door cross-section	14
Conventional technology connections	1!
Locking devices	10
Casing variants	17
Master controller functions	18
Door Pilot App	19
Accessories	
Program switches	20
Activation switches	2
Key switch	2:
LED touch key	2:
Emergency activation buttons	23
Cover frame for buttons and switches	23
Active infrared sensor and combined sensors	24
Accessories for active infrared sensor and combined sensors	21

## **ES PRO Easy**

# The new generation of sliding door operators – powerful, quick and networked.

The new ES PRO Easy drive system for automatic sliding doors is the ideal solution in almost all applications and areas of use. It features many enhanced functions and attributes compared to the previous drive system. The modular structure of the system enables it to be used classic sliding doors and telescopic sliding doors.

The ES PRO Easy is a sound investment for the future. This drive system addresses current topical issues such as sustainability and digitisation. The ES PRO Easy also complies with the current European and German standards and safety regulations DIN 18650 and EN 16005.





#### Powerful

The ES PRO Easy is equipped with modern dormakaba Direct Drive motor technology for the dynamic opening and closing of sliding doors. The ES 250 PRO Easy drive model can be used for door leaves with a weight of up to 2 x 125 kg.



#### Durable

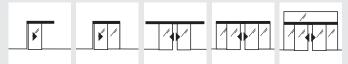
Verified dormakaba quality is the goal of the ES PRO Easy. This drive system successfully passed tests involving **1.5 million opening and closing cycles**. This extends the service life of doors by 50%.



#### Quick

The ES PRO Easy opens and closes automatic sliding doors swiftly. This ensures a smooth flow of users even in areas with a high volume of traffic. It also contributes to reducing energy losses caused by open doors.

#### ES PRO Easy for sliding door systems ST



#### ES PRO Easy for telescopic sliding door systems TST



#### Modular

The adaptable ES PRO Easy can be used to satisfy varying requirements for automatic sliding doors.

The modular kit can be universally combined with standard doors, escape route doors and telescopic sliding doors. Converting existing systems (dormakaba ES 200 and ES 200 Easy Plus) is quite straightforward.

#### **ES PRO Easy**

For standard sliding doors with door leaves weighing up to 2  $\times$  125 kg.





### Sustainable

The ES PRO Easy modular system is economical and utilises dormakaba Direct Drive motor technology. In addition, the packaging material is 100% recyclable.



## Quiet

Its gearless motor means that the ES PRO Easy opens and closes sliding doors extremely quietly.

Making it ideal for use in applications particularly sensitive to noise.



### Connected

The ES PRO Easy drive can be equipped with a module that enables it to be controlled by an app.
The app also provides useful additional information and a direct link to dormakaba Service.

## **ES PRO Easy**

## Data and features

		ES 250 PRO
		EASY
Control module		ES 250 PRO T EASY
Modular design		•
	– Off	•
Function programs	- Automatic	•
runction programs	– Permanent open	•
	– Partial open	•
	– Exit	•
Automatic reversing		•
Connection for securing	the passageway (on both sides)	•
Tested in accordance w	ith EN 16005/DIN 18650	•
Securing main and seco EN 16005/DIN 18650	ndary closing edge(s) according to	•
Basic parameters set us	sing integrated display and buttons	•
Parameterisation via Op	perator Service Interface (OSI)	•
Door Pilot interface (Blu	etooth)	0
Automatic opening/closing in the event of a power failure		●/●
Battery set		•
24 V DC output for accessories		•
Readable fault memory with fault codes		•
CAN interface for connecting a program switch		•
Multiports for connectir	ng accessory components	2
Door status signal cont	acts	•
Night/bank function		•
Emergency open		•
Configurable partial opening distance		•

	ES 250 PRO EASY ES 250 PRO T EASY
Auxiliary equipment	
Electro-mechanical belt locking device	0
Manual lock release for electro-mechanical locking device	0
Emergency power supply UPS (external)	0
Potential-free relay contact	0

ullet as standard  $\odot$  optional



## Sliding door operators



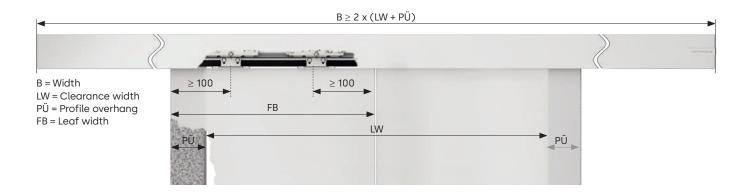
The innovative ES PRO Easy sliding door drive system can be used for classic single-leaf or double-leaf sliding door applications without a hitch. suitable for use on escape route and emergency exit doors.

## System dimensions and max. door leaf weight

	1-leaf	2-leaf
Door parameters	ES 250 PRO EASY	ES 250 PRO EASY
Max. door leaf weight	1 x 125 kg	2 x 125 kg
Clear passage width LW*	700 – 3000 mm	800 – 3000 mm
Clear passage height LH	2000 – 3000 mm	2000 – 3000 mm
Estimated door leaf weight		
Door leaf weight	_LH [m] x LW [m] x weight of glass [kg/m²]_ Number of door leaves	

Normal glass weights: 10 mm glass thickness e.g. toughened safety glass 10: 25 kg/m², 12 mm glass thickness e.g. double glazing 22, 2 x laminated safety glass 6: 30 kg/m²

\*The minimum clear passage width for escape route sliding doors is specified in the relevant regional building codes and may vary. The maximum practicable dimensions are subject to the respective door plans and door requirements and also depend on the selected profile system.





- 01 Battery02 Door Pilot interface03 Drive unit04 Power supply unit

## Technical data

	Standard Sliding door	
Door parameters	ES 250 PRO EASY	
Min. operator length	2 LW	
Operator depth in mm	180	
Operator height in mm	100	
Use in escape routes and emergency exits		
Force limitation in accordance with EN 16005/DIN 18650	•	
Operating noise	<47 dB(A)	
Settings		
Opening speed (adjustable in increments)	10 - 70 cm/s	
Closing speed (adjustable in increments)	10 - 70 cm/s	
Low speed OPEN	-	
Low speed CLOSE	-	
Hold-open time, night/bank hold-open time	0 – 180 s	
Night/bank opening delay	-	
Partial opening	25 – 300 cm	
Low-speed travel OPEN/CLOSE	0 – 30 cm	
Power supply		
Supply voltage	230 V, 50/60 Hz	
Power consumption	130 W	
On-site line fuse	10 A	
Degree of protection	IP 20	
Power supply for peripheral equipment under network conditions	27 V DC/1A	
Power supply for peripheral equipment in the event of a power failure (battery operation)	Optional 21–27 V DC/1A	
Temperature range	-20 - + 60 °C	
Permissible air humidity (relative) (non-condensing)	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.	•	

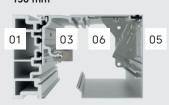
## **Header profiles**

Profiles for 100 mm and 150 mm drive heights, for corridor or wall installation, enable the system to be adapted to all conceivable areas of application. The basic mechanical system has a low number of components and is the same for both drive heights.

## Profiles for corridor installation: 100 mm



## Profiles for corridor installation: 150 mm



## Profiles for wall installation: 100 mm



#### Profiles for wall installation: 150 mm



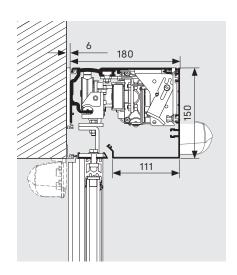
- 01 Aluminium girder
- 02 Mounting profile
- 03 Header profile
- **04** Internal casing for 100 mm drive height
- **05** Internal casing for 150 mm drive height
- **06** Cover bracket

# Schematic illustration of door cross-section (operator and sliding panel)

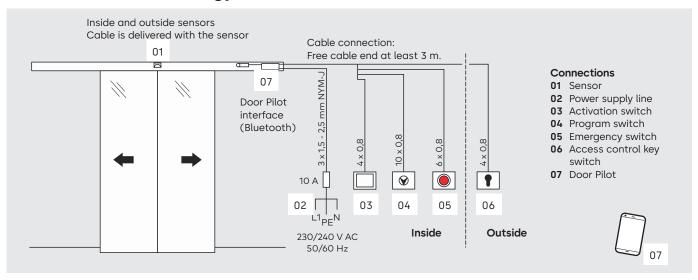
Schematic illustration of door cross-section: wall mounted, drive height 100 mm

6 180

Schematic illustration of door crosssection: wall mounted, drive height 150 mm



## Conventional technology connections



## Telescopic sliding door operators



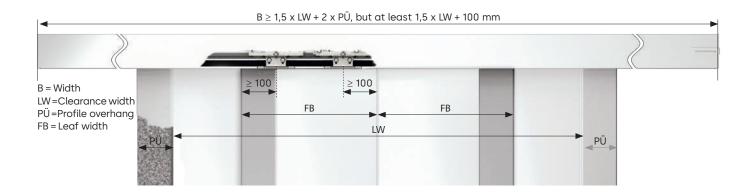
Automatic telescopic sliding door operators can be used to construct wide passageways with comparatively slim systems. And that is not the only reason they are so versatile: they can also be used for escape route and emergency exit doors with opening widths of up to 4000 mm.

## System dimensions and max. door leaf weight

	2-leaf	4-leaf
Door parameters	ES 250 PRO T EASY	ES 250 PRO T EASY
Max. door leaf weight	2 x 65 kg	4 x 65 kg
Clear passage width LW*	800 – 2400 mm	1400 – 4000 mm
Clear passage height LH	2000 – 3000 mm	2000 – 3000 mm
Estimated door leaf weight		
Door leaf weight	LH [m] x LW [m] x weight of glass [kg/m²]  Number of door leaves	

Normal glass weights: 10 mm glass thickness e.g. toughened safety glass 10:  $25 \text{ kg/m}^2$ , 12 mm glass thickness e.g. double glazing 22,  $2 \times 10^{-2}$  x laminated safety glass 6:  $30 \times 10^{-2}$  x laminated safety glass 7:  $30 \times 10^{-2}$  x laminated safety glass 7:  $30 \times 10^{-2}$  x laminated safety glass 7:  $30 \times 10^{-2}$  x laminated safety glass 8:  $30 \times 10^{-2}$  x laminated safety glass 7:  $30 \times 10^{-2}$  x laminated safety glass 8:  $30 \times 10^{-2}$ 

\*The minimum clear passage width for escape route sliding doors is specified in the relevant regional building codes and may vary. The maximum practicable dimensions are subject to the respective door plans and door requirements and also depend on the selected profile system.





- 01 Battery02 Door Pilot interface03 Drive unit
- **04** Power supply unit

## Technical data

Door parameters  Min. operator length  Operator depth in mm  Operator height in mm  Use in escape routes and emergency exits  Force limitation in accordance with EN 16005/DIN 18650  Operating noise	1,5 LW+100 252 100
Operator depth in mm  Operator height in mm  Use in escape routes and emergency exits  Force limitation in accordance with EN 16005/DIN 18650	252
Operator height in mm  Use in escape routes and emergency exits  Force limitation in accordance with EN 16005/DIN 18650	
Use in escape routes and emergency exits  Force limitation in accordance with EN 16005/DIN 18650	100 - •
Force limitation in accordance with EN 16005/DIN 18650	•
with EN 16005/DIN 18650	•
Operating noise	
operating noise	<47 dB(A)
Settings	
Opening speed (adjustable in increments)	10 - 70 cm/s
Closing speed (adjustable in increments)	10 - 70 cm/s
Low speed OPEN	-
Low speed CLOSE	-
Hold-open time, night/bank hold-open time	0,5 - 30 s
Night/bank opening delay	-
Partial opening	25 – 400 cm
Low-speed travel OPEN/CLOSE	0 - 30 cm
Power supply	
Supply voltage	230 V, 50/60 Hz
Power consumption	130 W
On-site line fuse	10 A
Degree of protection	IP 20
Power supply for peripheral equipment under network conditions	27 V DC/1A
Power supply for peripheral equipment in the event of a power failure (battery operation)	Optional 21–27 V DC/1A
Temperature range	-20 -+ 60 °C
Permissible air humidity (relative) (non-condensing)	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.	•

## **Header profiles**

Profiles for 100 mm and 150 mm installation heights, for corridor or wall installation, enable the system to be adapted to all conceivable areas of application.

The basic mechanical system, with a low number of components, is the same for both installation heights.

- 01 Aluminium girder
- 02 Mounting profile
- **03** Header profile
- **04** Internal casing for 100 mm drive height
- **05** Internal casing for 150 mm drive height
- 06 Cover bracket

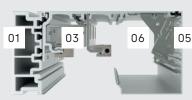




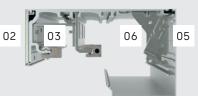




#### Profiles for corridor installation: 150 mm



Profiles for wall installation: 150 mm



Additional suspension guide rail

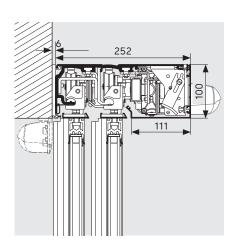
If the door leaf weight exceeds 75 kg, the use of a suspension of the guide rail is required.

Strongly recommended from 3 m opening width.

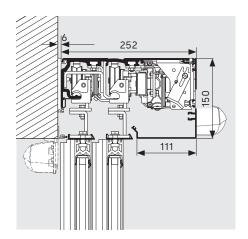


# Schematic illustration of door cross-section (operator and sliding panel)

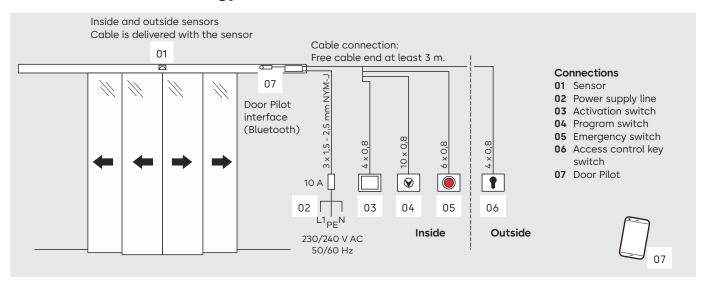
Schematic illustration of door cross-section: wall mounted, drive height 100 mm



Schematic illustration of door cross-section: wall mounted, drive height 150 mm



## **Conventional technology connections**



## **Locking devices**

dormakaba offers a range of locking device variants for the ES PRO Easy 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 PRO easy 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.

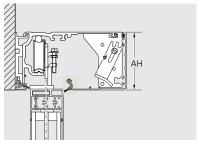


## **Casing variants**



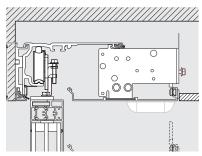
#### Standard casing

The standard casing for ES PRO Easy 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.



#### Integrated casing

Integrated casing allows the ES PRO Easy 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.



## **Master controller functions**

A wide variety of functions can already be tapped into just using the master controller for the ES PRO Easy sliding door operators.

Master controller	PRO EASY
Door status signal contacts This function issues door statuses. E.g. Door open/closed/locked, System OK, Current door position.	•
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	•
Configurable partial opening distance	•

<sup>•</sup> Function can be implemented via the four programmable inputs and outputs.

## **Door Pilot App**



The dormakaba Door Pilot app allows automatic doors to be easily controlled from a smartphone. Operators from the ES PRO Easy 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).

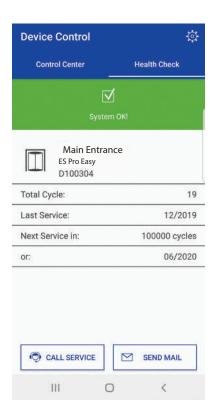
## Door status signal contacts



#### **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



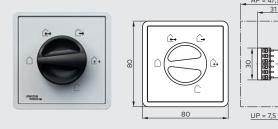
## For sliding door operators without escape route and emergency exit requirements

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

White	16556901150
White	16712501150
	5158533332
	16712401150

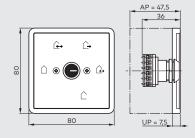


## PG-S1 program switch

5 positions, aluminium, concealed, 80 x 80 x 40 mm

<u> </u>	<u> </u>	
PG-S1	White, Gira S-Color	19135401150
Box for surface mounting		5080531332

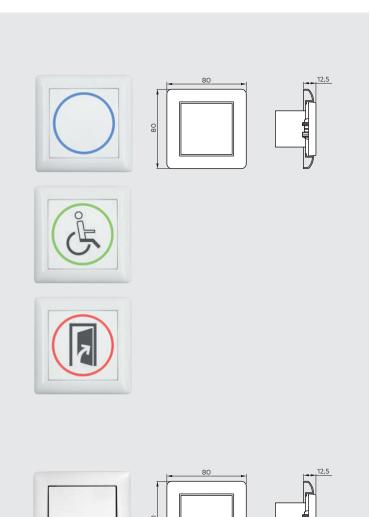




#### PG-S2 program switch

5 positions, lockable, aluminium, concealed, 80 x 80 x 40 mm

PG-S2	weiss, Gira S-Color	19135602150
Box for surface mounting		5080531332



## **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 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,  $75 \times 75 \times 60$  mm

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,  $75 \times 75 \times 60$  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:  $70 \times 90 \text{ mm}$ 

KT 3-2	05054731332





## 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.









#### 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, without frame, one NO contact and one NC contact, concealed,  $80 \times 80$  mm, System 55

TL-N S55	56330500
12 14 000	0000000

## Conventional emergency switch

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

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



# Cover frame for buttons and switches

		Article no.
Standard S	ystem 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

IXIO-DT1	Black	86800001
	Silver	86800002
	White	86800003

#### Safety curtain IXIO-ST

Safety curtain (tested) IXIO-ST for monitoring closing edges

Black	86800010
Silver	86800011
White	86800012
	Silver





Ceiling installation set

Ceiling installation system for IXIO-DT and IXIO-S

Ceiling installation set

Black
White

86800020



#### Rain protection cover

 $\stackrel{\cdot}{\operatorname{Rain}}$  protection cover for IXIO-DT and IXIO-ST

Rain protection cover Black 86800021



## Fixing bracket

Fixing bracket for IXIO-DT and IXIO-ST

Fixing bracket Black	86800016
----------------------	----------





Door Hardware

Access & Data





Mechanical Key Systems

Lodging Systems





Entrance Systems

Service

## Our commitment to sustainability

At dormakaba, we are committed to sustainable development along our entire value chain.

To give quantified data on the environmental effects of a product and its ecological footprint, dormakaba provides Environmental Product Declarations (EPD). You can find our EPDs and further information on our commitment to sustainability here or by scanning the QR code.

www.dormakaba.com/sustainability





## dormakaba UK & Ireland

Wilbury Way, Hitchin SG4 0AB T: +44 (0) 01462 477600 info.gb@dormakaba.com dormakaba.co.uk

