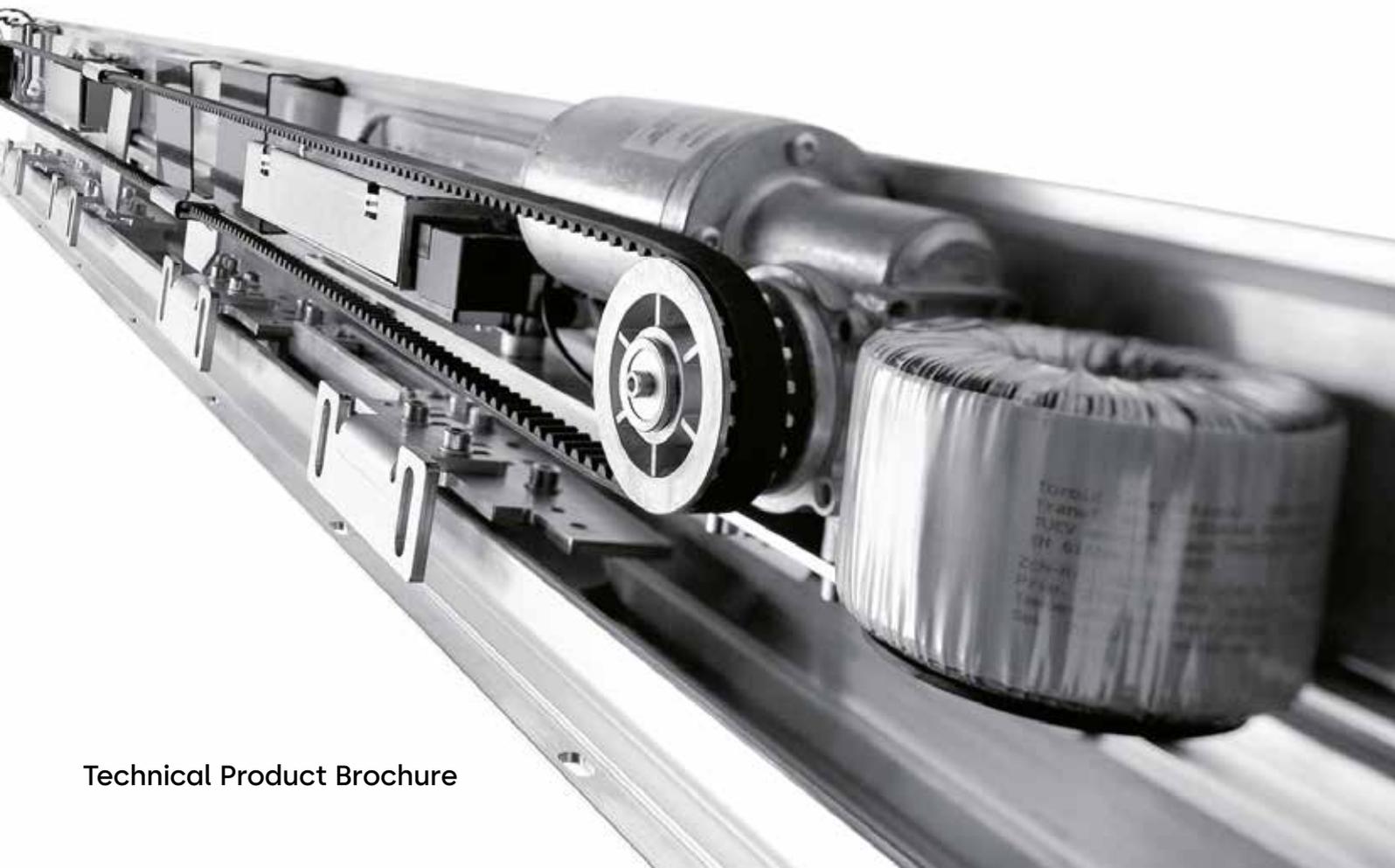**dormakaba**

ES 200-2D
Sliding door drive for escape route doors

Flexible, simple and modular
Safety first

With the ES 200, dormakaba supplies an innovative sliding door drive system for all applications and fields. For emergency exit and escape route doors, the ES 200-2D version with dormakaba DualDrive technology is an impressive solution with the highest level of operational reliability and safety.

The modular system
The modular construction of the ES 200 has the ideal prerequisites for realising new ideas and individual concepts for the design and implementation of sliding door systems. The identical mechanical components can be used in all three versions of the drive (ES 200-2D, ES 200 and ES 200 Easy).

dormakaba is also breaking new ground when it comes to the control system. There is no longer any need to replace components when functional upgrades are required. "Docking" is the solution. The modular control system comprises the basic control module (BM), the DualDrive module (2D module) and the functional module (FM). Thus, upgrading to individual customer requirements is no problem. The pre-fabricated MiniDriveUnit, industrially tested with all the requisite electrical and electronic components, is also impressive.

DualDrive security
The innovative and powerful DualDrive system provides double the security with particularly dynamic driver power and dynamic drive curve control. It comprises a control system with double protection, an extra powerful motor and an additional auxiliary coil in case of hazards. Sensitive wear parts which are susceptible to failure, such as rubber linkages, couplings or springs, are no longer used. This guarantees lasting fault-free function and considerably reduces the maintenance requirement. The highest level of operational reliability and safety in all situations is guaranteed by constant self-monitoring of the entire system.

Future-proof
Make future-proof investments and trust in the decades of experience in the automation business which make dormakaba the market leader for drive systems.
The ES 200-2D complies with the current European and German standards and safety regulations: AutSchR, BGR 232, DIN 18650 and EN 16005.The requisite safety measures as per DIN 18650 and EN 16005 (Germany) are defined in the respective risk analysis.

Supply variants
The ES 200-2D is available as a component kit, as a drive assembly or integrated into all dormakaba sliding door systems.

Accessories
As the ideal complement, dormakaba supplies program switches, activators and door profiles which are specifically tailored to the drive.

Characteristics and benefits
- Modular, flexible system
- With dormakaba **DualDrive**: doubly secure drive system, low-maintenance with redundant control system and powerful 2D motor
- Industrially pre-fabricated and tested MiniDriveUnit
- Modular control systems with function modules for upgrades
- Integrated DCW® (DORMA Connect and Work) bus system for easy connection to the dormakaba DCW® sensor technology
- Commissioning using integrated display screen
- Can be combined with all current dormakaba door profiles
- Complete accessories program
- Security of investments thanks to compliance with European and German standards

Data and features

Door parameters		ES 200-2D
Single-leaf Sliding door	– Clear passage width IW – Door leaf weight, max.	900 – 1800 mm 1 x 150 kg
Double-leaf Sliding door	– Clear passage width IW – Door leaf weight, max.	1000 – 3000 mm 2 x 130 kg
Passage width*		2100 – 3200 mm

*Other values available on request

Technical data of the drive	ES 200-2D
Height	100 and 150 mm
Depth	180 mm
Opening and closing force, max. 150 N	●
Opening speed (adjustable in increments)	10 – 70 cm/s
Closing speed (adjustable in increments)	10 – 50 cm/s
Hold-open time	0.5 – 30 s
Supply voltage, frequency	230 V, 50/60 Hz
Power consumption	180 W
Class of protection	IP 20
Temperature range	- 20 – + 60 °C
Permitted air humidity (relative)	max. 93 % (non-condensing)
Compliant with the Low Voltage Directive and the EMC Directive	●
Manufactured to ISO 9001	●
Environmental product declaration as per ISO 14025 Declaration holder: Institut Bauen und Umwelt e.V. Declaration number: EPD-DOR-2013511-D	●

Basic module (BM)		ES 200-2D
Modular construction		●
Microprocessor-controlled function programs	– Off – Automatic – Permanently open – Partially open – Exit only – Night bank function	● ● ● ● ● ●
Connection for	– Locking device – Light barriers	● ●
All basic parameters set using integrated display screen and buttons		●
PDA parametrisation		●
24 V output for external consumers		●
Readable fault memory with fault codes		●
DCW® bus connection (DORMA Connect and Work protocol)		●
Emergency battery mode with battery package		●

DualDrive module (2D module)	ES 200-2D
Self-monitoring	●
For activation of escape route functions	●
With double protection	●

Function module (FM) – optional	ES 200-2D
Pharmacy function	●
Door status indicator (triple-type)	●
Main and secondary closing edge safeguard	●
Door bell contact	●
Synchronous operation	●

DIN 18650 and EN 16005 function module – optional	ES 200-2D
The DIN 18650 and EN 16005 function module facilitates tested monitoring of the secondary closing edges in the interest of compliances with the German standards DIN 18650 and EN 16005.	○

Additional equipment	ES 200-2D
Electromagnetic locking device (bistable)	○
Manual lock release for electromech. locking device	○
Module for connection to EIB or LON building management system	○
Motion detector	○

● standard   ○ optional

DualDrive
On the safe side for escape route doors

**The DualDrive impresses with superior system innovations.**

The technical advance of the DualDrive is thanks to the combination of intelligent control electronics with a redundant motor system. Sensitive rubber linkages, couplings or springs for emergency opening which are susceptible to failure, are no longer used. This guarantees lasting fault-free function and considerably reduces the maintenance requirement.

The highest level of operational reliability and safety in all situations is guaranteed by constant self-monitoring of the system.
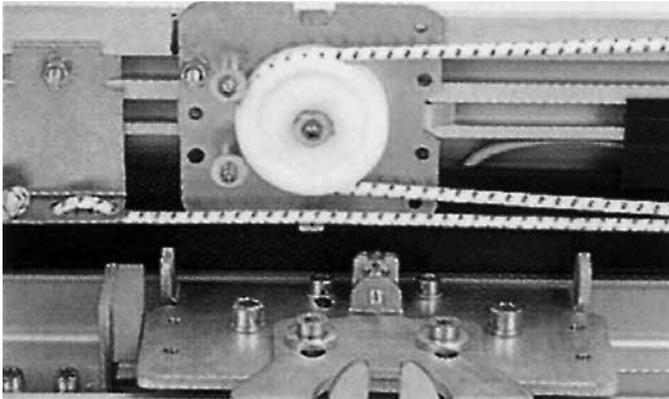
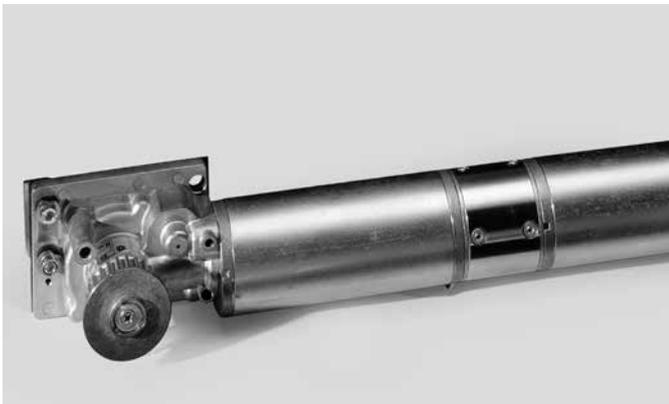**dormakaba DualDrive – more security from the very start.**

Features
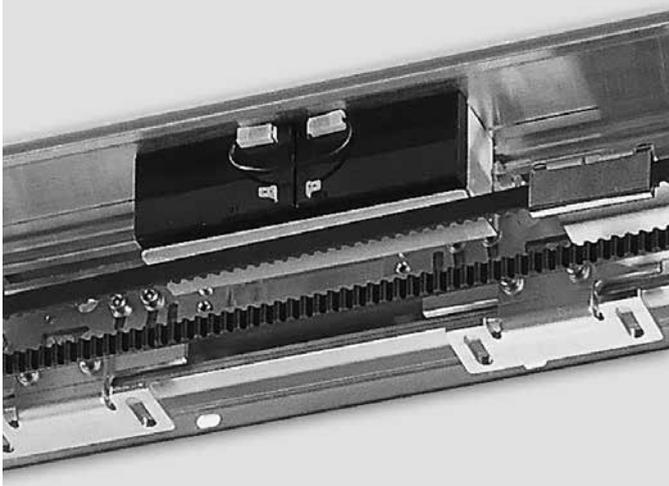
Emergency battery mode with integrated battery package
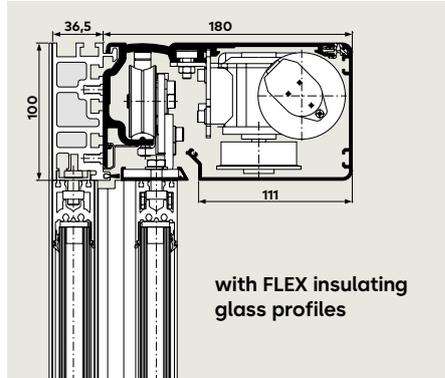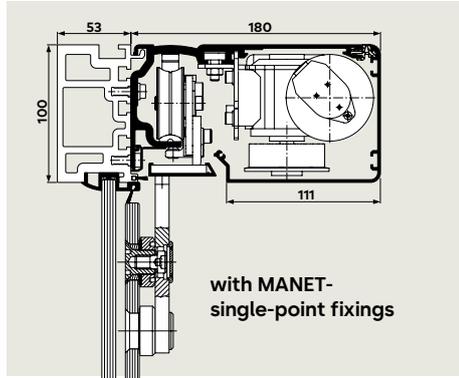
dormakaba DualDrive in brief

- More functional reliability for escape route sliding doors thanks to redundant motor and control system instead of rubber cord, coupling or springs
- High level of flexibility for planning and realisation of escape route sliding doors
- Reliable fail-safe opening and closing of the door in any situation thanks to integrated rechargeable battery module
- Additional mechanical manual unlocking function available on request
- Security of investment thanks to compliance with the current European and German standards for automatic doors in escape and rescue routes
- More efficiency thanks to simple installation and low-maintenance components
- Comprehensive services package

In the past: Security with rubber cord drive

Today: DualDrive security

The TÜV certificate for escape route door systems with **DualDrive** technology documents the important technical data and the manufacturing location. dormakaba escape route doors provide the additional security of certified production facilities.

The professional drive for individual door design

Door variants with ES 200-2D, 100 mm installation height and special "thermo profile" design

**with MANET-
single-point fixings**

**with FLEX insulating
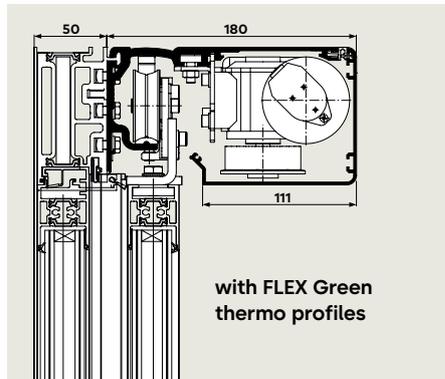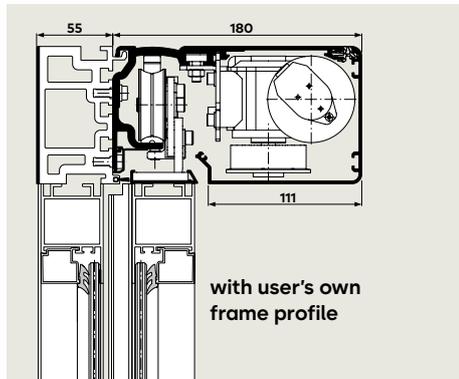glass profiles**

**with user's own
frame profile**

**with FLEX Green
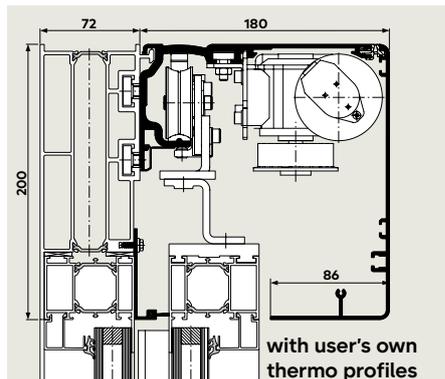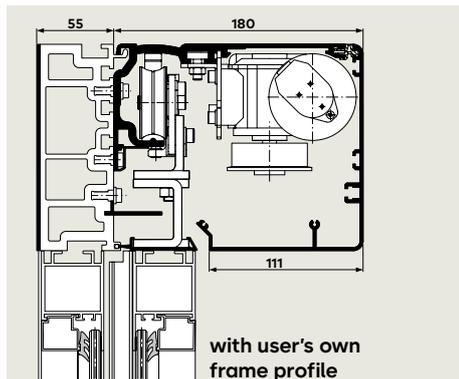thermo profiles**

dormakaba DualDrive system
the powerful, doubly secure escape
route drive solution

The door variants on this page are
shown as corridor installations with
aluminium girder.

See page 8 for profiles for wall
mounting.

Door variants with ES 200-2D, 150 mm installation height and special "thermo profile" design

**with MANET-
single-point fixings**

**with FLEX insulating
glass profiles**

**with user's own
frame profile**

**with user's own
thermo profiles**
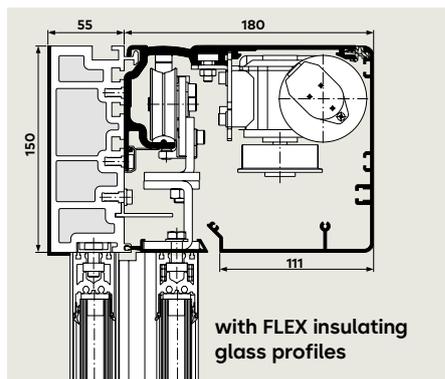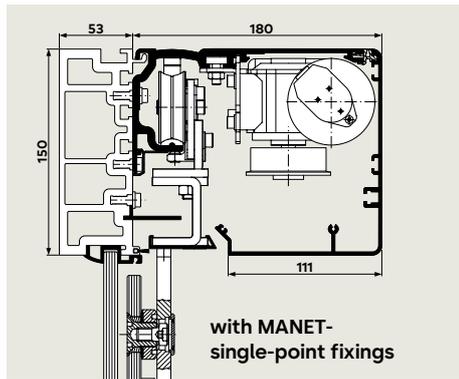
* Profile systems as examples / not available in all countries

Door profiles

01 **02** **03**
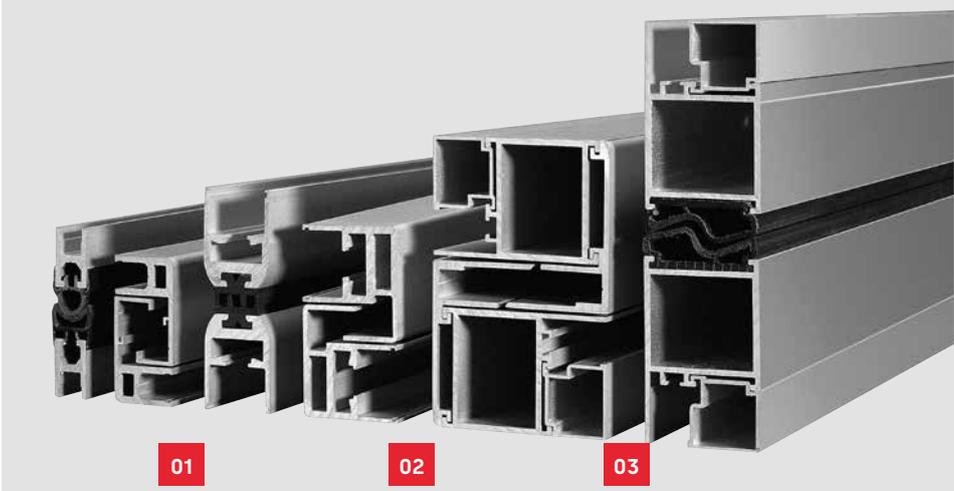
As the ideal complement for the **ES 200-2D**, dormakaba supplies door profiles for doors with an all-glass appearance, and for framed doors. MANET single-point fixing and a glass clamping rail round off the range.

1 G all-glass profile system
2 G-Iso insulating glass profile system
3 R frame profile system

MANET single-point fixing

Deflector roller with integrated locking device and belt tensioning device

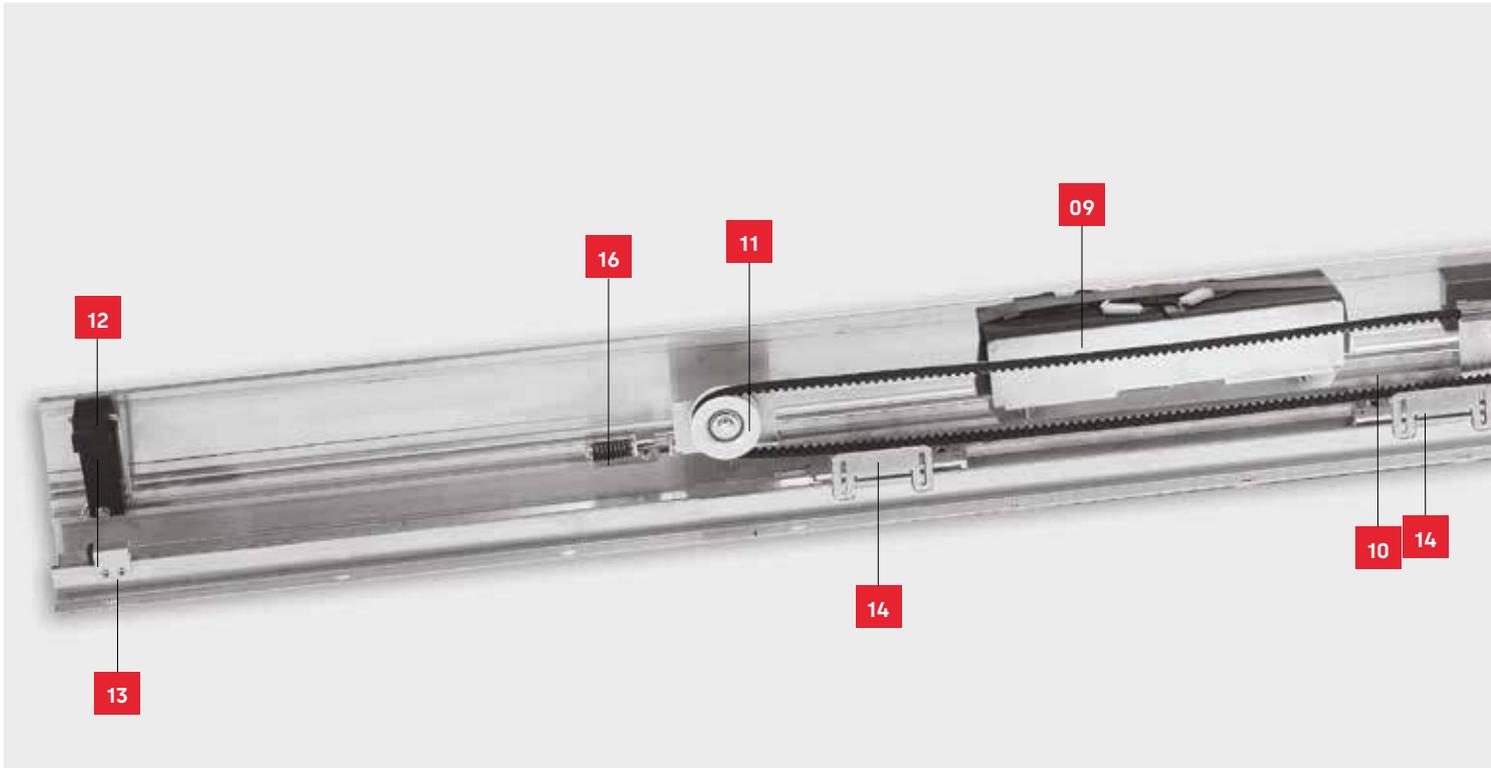Profiles for 100 mm and 150 mm installation height, for corridor installation or wall mounting facilitate adaptation to all conceivable areas of application.

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

Profiles for corridor installation, 100 mm
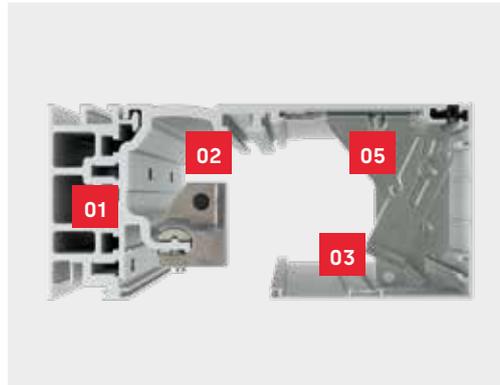
Profiles for wall mounting, 100 mm
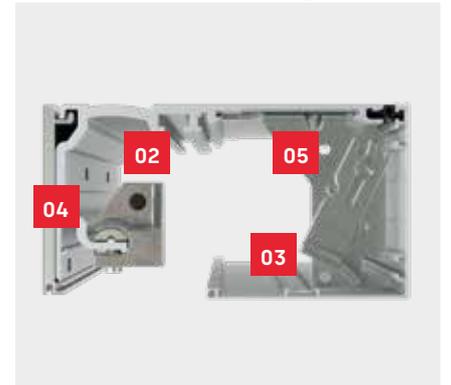
Profiles for corridor installation, 150 mm
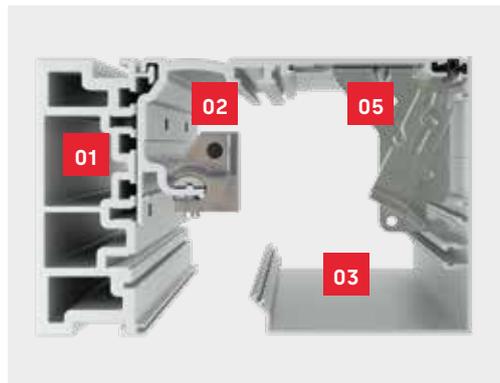
Profiles for wall mounting, 150 mm
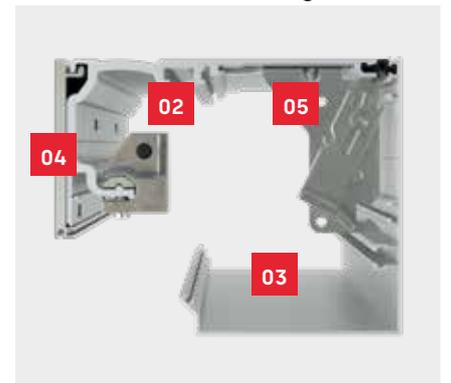
1 Aluminium girder
2 Basic header profile
3 Internal cover in 100 or 150 mm installation height
4 Wall mounting profile
5 Service mode cover bracket
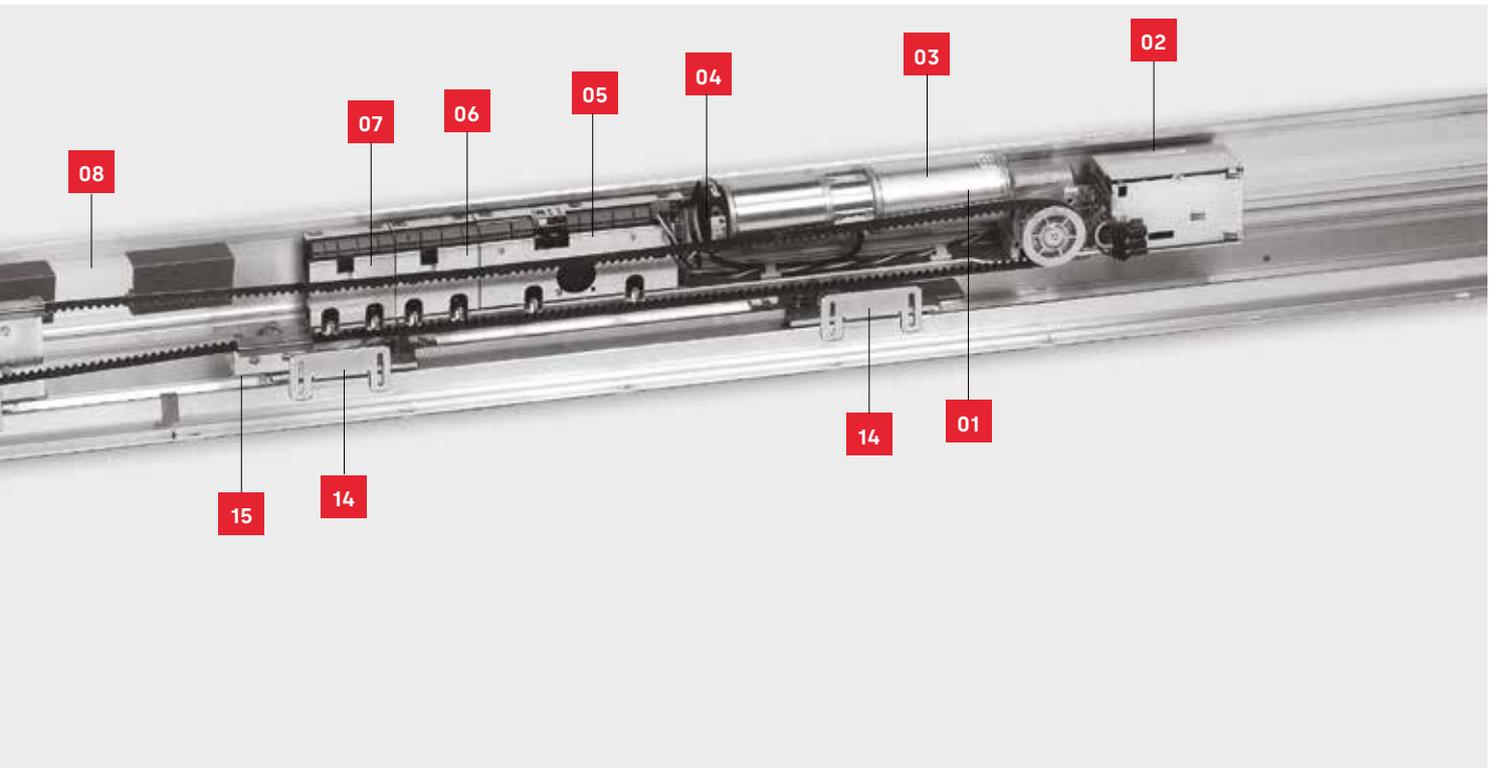
MiniDriveUnit with DualDrive

The centrepiece of the ES 200-2D
The pre-fabricated **MiniDriveUnit** with **DualDrive** is industrially tested with all the requisite electrical components, and makes assembly and maintenance of drives easier.

Components

1 **MiniDriveUnit** with **DualDrive**
2 Power supply unit
3 **Dual Drive** motor
4 Decoder
5 Basic control module (BM)
6 **DualDrive** module (2D module)
7 Function module (FM)

8 Runner and mounting profile
9 Battery package (optional)
10 Carrier head
11 Deflector roller
12 Service mode cover bracket
13 End stopper
14 Door suspension with adjustment device
15 Belt linkage
16 Belt tensioning device

Connections

6 x 0.8

Activator (combined activation and safety sensor)

8 x 0.8 each

6 x 0.8

Drive
Control unit

$3 \times 1.5 \, \text{mm}^2$

16 A

230/240 V AC
50/60 Hz

2 x 0.8
100 m

Emergency push-button near to door

10 x 0.8
100 m

Program switch

4 x 0.8
100 m

Outside:
Key switch,
Code card reader with dry contact or similar

2 x 0.8
100 m

Inside:
Button

* Sensors for monitoring the secondary closing edges as per DIN 18650 and EN 16005
** Sensors for monitoring the main closing edges as per DIN 18650 and EN 16005

Switch

	Designation	Specification	Installation system	Article no.
	On/Off switch	White, aluminium, flush-mounted, 80 x 80 mm	Gira S-Color	19135403150
	Switch	"MAGIC SWITCH" contactless radar switch, white, flush-mounted, 85 x 85 mm		05076831332
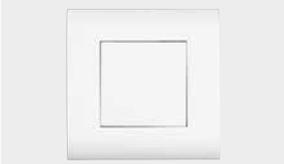
Program switch

Combination with a program switch from the dormakaba accessories program makes the automatic door system compatible with individual operating requirements and easy to handle. The program switches are engineered in various designs and for every conceivable requirement.

The options range from the mechanical to the fully electronic version, with optional profile half cylinder or fully electrical coding for locking.
- Up to 5 different functions:
  Off, automatic, exit only, partially open, permanent open
- Electronic program switches in Objectdesign System 55 for the most discerning aesthetic demands

For sliding door drives	Designation	Specification	Installation system	Article no.
	PG-S1	5 positions, aluminium, white, flush-mounted, 80 x 80 x 40 mm	Gira S-Color	19135401150
	PG-S2	5 positions, lockable, aluminium, white, flush-mounted, 80 x 80 x 40 mm	Gira S-Color	19135602150
	EPS-S	Fully electronic program switch in System 55 design, 5 positions, lockable with coding or additional TL-ST S55 key switch, membrane keypad, aluminium-coloured, white, flush-mounted, 80 x 80 mm	System 55	16556901150

For sliding doors in escape and rescue route doors	Designation	Specification	Installation system	Article no.
	PG-FST1	5 positions, lockable, aluminium, white, flush-mounted, 80 x 80 mm	Gira S-Color	19135603150
	EPS-FST	Fully electronic program switch in System 55 design, 5 positions, lockable with coding or additional TL-ST S55 key switch, membrane keypad, white, aluminium-coloured, flush-mounted, 80 x 80 mm	System 55	16556801150

Button

Manual release button	Designation	Specification	Installation system	Article no.
		Single-pole changeover contact, single frame, white, flush-mounted	System 55	19144701170

Key switch	Designation	Specification	Installation system	Article no.
	KT 3-1	1 normally open contact, with profile half cylinder (interchangeable with any closing system half cylinder), key can only be removed in zero position, aluminium, metal, 75 x 75 x 60 mm		
	KT 3-1 UP	Flush-mounted		05054531332
	KT 3-1 AP	Surface-mounted		05054631332
	KT 8	"Open, closed" marking, 2 normally open contacts, with profile half cylinder (interchangeable with any closing system half cylinder), key can only be removed in zero position, aluminium, metal, 75 x 75 x 60 mm		
	KT 8 UP	Flush-mounted		05054831332
	KT 8 AP	Surface-mounted		05054931332
	TL-ST S55	Button with single-pole changeover contact, for user's own profile half cylinder as per DIN 18252, half 30–32.5 mm, length 40.5–43.5 mm, lock bit position left (90°), with cover for System 55, not suitable for surface-mounted sockets, without profile half cylinder, **without frame**		
	TL-ST S55 W	White	System 55	56330710
	TL-ST S55 S	Silver	System 55	56330701
	TL-ST S55 A	Anthracite	System 55	56330715
	KT 3-2	1 normally open contact, with profile half cylinder, interchangeable with any closing system half cylinder, key can only be removed in zero position, cover panel for replacement, "On, Off" marking, aluminium, flush-mounted: 125 x 100 mm, surface-mounted: 70 x 90 mm		05054731332

Emergency push-buttons

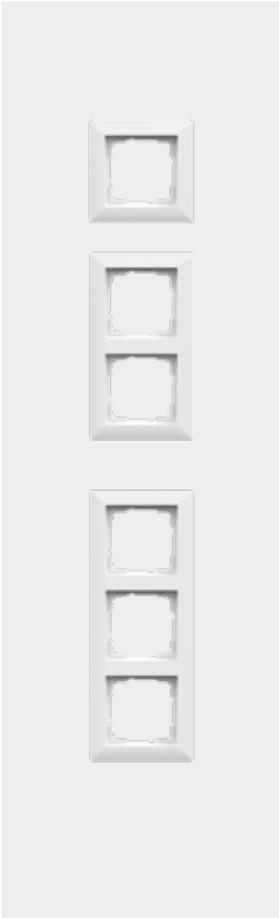|	Designation	Specification	Installation system	Article no.
	NAT	Emergency push-button (emergency stop function) for stopping the door movement with automatic door drives; design as per ZH 1/494, BGR 232, DIN 18650 and EN 16005; red switch knob with yellow central plate maximum load current: max. 10 A at 230 V AC		
	NAT 1	Normally open contact: 1, normally closed contact: 1, white frame, flush-mounted, 80 x 80 mm	System 55	90400025
	NAT 2 not shown	"Emergency open" version with green switch knob, normally open contact: 1, normally closed contact: 1, maximum load current: max. 10 A at 230 V AC, white frame, flush-mounted, 80 x 80 mm	System 55	90400035
	NAT 4	Schließer: 1, Öffner: 1, AP, 68 x 68 mm		05027031332
	TL-N S55	NO contact: 1, NC contact: 1, Maximum load current: 1 A at 24 V DC, flush-mounting, 80 x 80 mm	System 55	56330500

Active infrared safety sensor

Safety sensors	Designation	Specification	Colour	Article no.
	Prosecure Opti Scan	The active infrared curtain as per EN 16005 provides optimum security of the side door area. It protects personnel in the danger area of the opening door leaf.	Black Silver White	86301100 86302100 86303100
	Prosecure Opti Scan 1	The active infrared curtain as per DIN 18650 and EN 16005 provides optimum security of the side door area. It protects personnel in the danger area of the opening door leaf.	Black Silver White	86301101 86302101 86303101
Combined sensors				
	Prosecure Opti Combi	The active infrared curtain can be used as a substitute for a light barrier with direction detection, LCD, precise positioning of the AIR curtain thanks to display of the angle of inclination on clearly understandable dial (DIN 18650 and EN 16005).	Black Silver White	86711400 86712400 86713400
	Prosecure Opti Combi 1	Flexible field settings, active infrared curtain with self monitoring, setting to suit situation, cross traffic opti-misation, precise positioning of the AIR curtain thanks to display of the angle of inclination on clearly understandable dial,with direction detection. (DIN 18650 and EN 16005)	Black Silver White	86711401 86712401 86713401

Motion detector

Motion detector	Designation	Specification	Colour	Article no.
	Prosecure Easy Motion Mono	For fully automatic access of the door after impulse; adjustment option for angle of inclination, inclined field of vision and field size, LED status indicator Ambient temperature −20 °C to 60 °C	Black Silver White	86001000 86002000 86003000
	Prosecure Easy Motion Stereo	Adjustment option for angle of inclination, inclined field of vision and field size, with direction detection, cross traffic optimisation, immunity, LED status display Ambient temperature −20 °C to 60 °C	Black Silver White	86011000 86012000 86013000
	Prosecure Opti Motion Mono	Adjustment option for angle of inclination, inclined field of vision and field size, with direction detection, immunity, LED status display Ambient temperature - 20 °C to 60 °C	Black Silver White	86101000 86102000 86103000
	Prosecure Opti Motion Stereo	Adjustment option for angle of inclination, inclined field of vision and field size, with direction detection, cross traffic optimisation, slow motion function, immunity, LED status display Ambient temperature - 20 °C to 60 °C	Black Silver White	86111000 86112000 86113000

Accessories	Designation	Specification	Article no.
	Weather protection hood	For Easy Motion motion detectors	86031900
	Weather protection hood/ ceiling bracket	For Opti Motion motion detectors	86131900
	Prosecure Remote Control	Remote control for programming motion detectors from the Prosecure Opti range and external products; for exact setting of sensors with high installation height; self-explanatory menu navigation, LCD Ambient temperature - 20 °C to 60 °C	86991900

Frame and surface-mounted sockets for buttons and switches

	Designation	Specification	Dimensions in mm (W x H x D)	Installationssystem	Bestell-Nr.
	System 55	**Cover frame (STA range)**			
	FR-S55 1	Single frame, standard 55, white	80,7 x 80,7	System 55	56391110
	FR-S55 2	Double frame, standard 55, white	151,8 x 80,7	System 55	56391210
	FR-S55 3	Triple frame, standard 55, white	223,3 x 80,7	System 55	56391310
	FR-E2W 1	Single frame, E2 55, white	80,8 x 80,8	System 55	56392110
	FR-E2W 2	Double frame, E2 55, white	151,9 x 80,8	System 55	56392210
	FR-E2W3	Triple frame, E2 55, white	223,4 x 80,8	System 55	56392310
	FR-E2S 1	Single frame, E2 55, silver	80,8 x 80,8	System 55	56392101
	FR-E2S 2	Double frame, E2 55, silver	151,9 x 80,8	System 55	56392201
	FR-E2S3	Triple frame, E2 55, silver	223,4 x 80,8	System 55	56392301
	FR-E2A 1	Single frame, E2 55, anthracite	80,8 x 80,8	System 55	56392115
	FR-E2A 2	Double frame, E2 55, anthracite	151,9 x 80,8	System 55	56392215
	FR-E2A3	Triple frame, E2 55, anthracite	223,4 x 80,8	System 55	56392315

See STA price list for further frames and variants.

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

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