

# ES 200 Sliding door operator



# Flexible, simple and modular With drive power to spare

The new, innovative ES 200 sliding door operator system offers the perfect solution for all applications and service requirements. The ES 200, equipped with the dormakaba PowerDrive technology, fulfills every demand imposed on operators in terms of adaptability to different door widths, door weight capacity and functionality.

### The modular system

The modular design of the ES 200 provides an ideal basis for the implementation of new ideas and individual concepts in the design and construction of sliding door systems.

The identical mechanical components may be installed in all three versions of the operator (ES 200). dormakaba has also opened up a new dimension with its control system. Now there is no longer any need to replace components when you want to expand the functionality of your system. In future, "docking" will be the order of the day. The modular control system comprises of the basic module (BM) and the function module (FM). Consequently, upgrading in accordance with individual customer requirements may be carried out without problem. Particularly impressive is the prefabricated MiniDriveUnit, industrially tested and equipped with all the necessary electrical and electronic components.

## Integrated power

With its extra-powerful motor and a dynamic driving phase control, the integrated PowerDrive system ensures safe and reliable operation. And it can readily cope with sliding door weights of up to  $2 \times 160$  kg per door panel weight.

#### **Exceptional cost-efficiency**

With the ES 200, dormakaba offers a drive system of modular design capable of covering every application on the basis of just a few components. The system offers easy assembly and installation, reduced storage and stocking costs, and simple maintenance for enhanced operational cost efficiency.

## A system for the future

With this system you are investing in the future. You also have the security derived from our decades of experience in the automatics business – a history that sets dormakaba apart as the market leader in drive and control systems for doors. The ES 200 corresponds to all the latest European and German standards and safety regulations.

## **Delivery formats**

The ES 200 is available as a component kit, as a complete, preassembled operator or ready integrated in all dormakaba sliding door systems.

### Accessories

dormakaba furthermore provides program switches, activators and door profiles all perfectly matched to the operator as ideal complementary components.

#### Features and benefits

- Modular, flexible system
- With dormakaba PowerDrive: Dynamic driving phase control for particularly powerful operation – and with emergency power backup in the form of a rechargeable battery pack
- Industrially prefabricated and tested MiniDriveUnit
- Modular control system upgradeable with additional function
   modules
- Integrated DCW® (DORMA Connect and Work) bus system for easy integration of DORMA DCW® sensors and activators
- Easy commissioning via the integrated display
- May be combined with all customary door profiles
- Fully comprehensive range of accessories
- Reliable investment due to compliance with all relevant European and German standards



## Data and features

Door paramete	ES 200	
Single-panel sliding door	<ul><li>Clear passage width LW</li><li>Door panel weight, max.</li></ul>	700 – 3000 mm 1 x 200 kg
Double-panel sliding door	<ul><li>Clear passage width LW</li><li>Door panel weight, max.</li></ul>	800 – 3000 mm 2 x 160 kg
Clear passage	2100 – 3200 mm	

*Other dimensions on reques	t.
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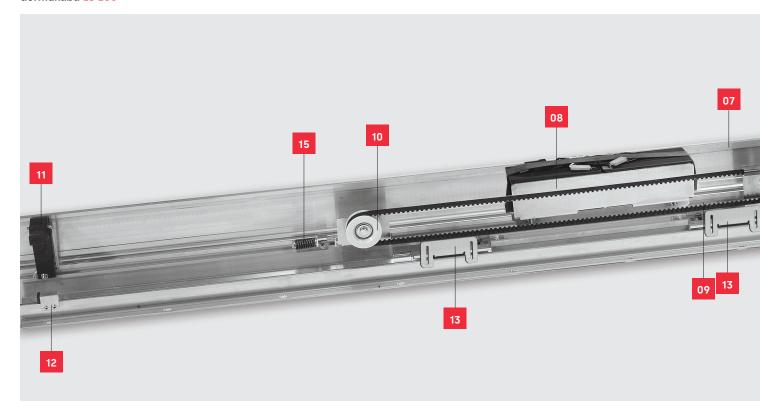
Technical data of operator	
Height	100 and 150 mm
Installation depth	180 mm
Opening and closing force, max. 150 N	•
Opening speed (incremental setting)	10 - 70 cm/s
Closing speed (incremental setting)	10 - 50 cm/s
Hold-open time	0 – 180 s
Supply voltage, frequency	230 V, 50/60 Hz
Power consumption	250 W
Class of protection	IP 20
Admissible temperature	- 20 - + 60 °C
Admissible humidity (relative)	max. 93 % (non condensing)
Compliant with EU Low Voltage Directive and EMC Directive	•
Manufactured to ISO 9001	•
Environmental product declaration in accordance with ISO 14025 Programme holder: Institute Construction and Environment e.V. Declaration number: EPD-DOR-2013511-E	•

Basic module (BM)		ES 200		
Modular design		•		
Microprocessor-controlled function programs	<ul> <li>Off</li> <li>Automatic</li> <li>Permanent Open</li> <li>Partial Open</li> <li>Exit Only</li> <li>Night-/Bank Function</li> </ul>	•		
Connections for	<ul><li>electro-mechanical locking device</li><li>light barriers</li></ul>	•		
Adjustment of all basic parameters via integrated display and pushbuttons				
24 V output for external acc	essory	•		
Read-out error memory with error codes				
DCW® bus interface (Protokoll DORMA Connect and Work)				
Rechargeable battery pack	for emergency operation	•		

Function module (FM) – optional extra	
Pharmacy Function	•
Door status contact (three)	•
Main and secondary closing edge protection	•
Panic Closing Function	•
Bell contact	•
Airlock control	•
Synchronous operation	•

DIN 18650 and EN 16005 function module – optional	
The DIN 18650 and EN 16005 function module enables the tested monitoring of the secondary closing edges in order to comply with the German standard DIN 18650 and EN 16005.	0

Additional equipment	
Electro-mechanical locking device (bistable)	0
Manual lock release for electro-mechanical locking device	0
Light barriers	0
Rechargeable battery pack (emergency opening, emergency closing)	0
Module for coupling to EIB or LON building management systems	0
Infrared detector	0



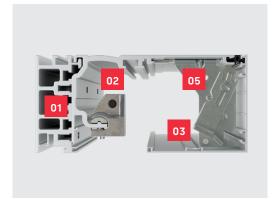


Pulley with integrated locking device and belt tensioning device

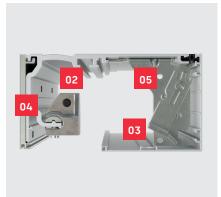
Our profiles for installation heights of 100 mm and 150 mm, which are suitable for both corridor or wall installation, make the system suitable for all kinds of applications.

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

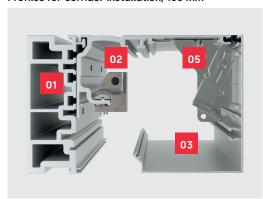
## Profiles for corridor installation, 100 mm



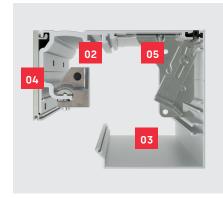
Profiles for wall installation, 100 mm



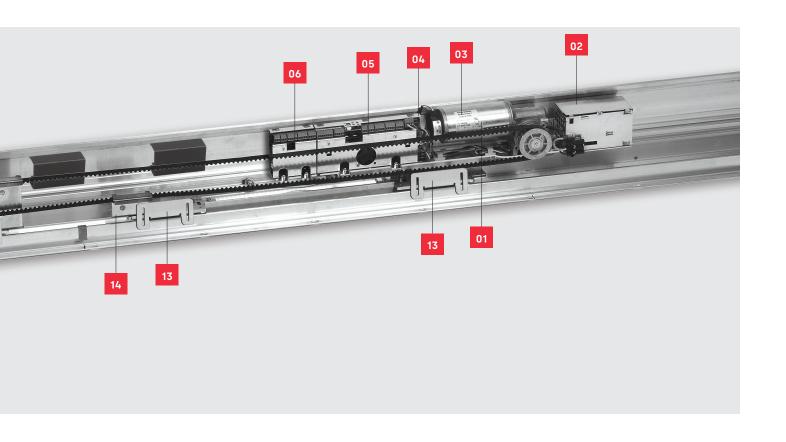
Profiles for corridor installation, 150 mm



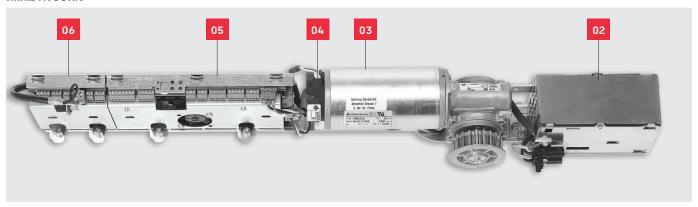
Profiles for wall installation, 150 mm



- 1 Aluminium girder (LM)
- 2 Basic operator profile
- 3 Internal cover,100 mm or 150 mm high
- 4 Wall connection profile
- 5 Service cover bracket



## MiniDriveUnit



## At the core of the ES 200

The prefabricated **MiniDriveUnit** has been industrially tested with all the requisite electrical and electronic components, thus greatly facilitating the assembly, installation and maintenance of the operator.

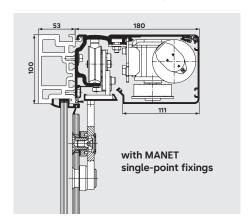
## Components

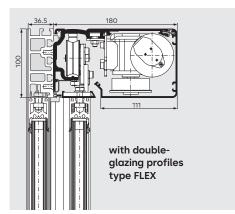
- 1 MiniDriveUnit
- 2 Power supply unit
- **3** Motor
- 4 Decoder
- **5** Basic module (BM)
- 6 Function module (FM)
- 7 Track rail and mounting profile
- 8 Rechargeable battery pack (optional)

- **9** Carrier head
- 10 Pulley (locking device)
- **11** Service cover bracket
- 12 End stop
- **13** Door connection with adjustment device
- 14 Belt connection
- 15 Belt tensioning device

## The professional operator for individual door design

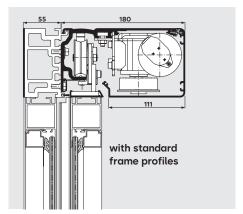
Door variants with ES 200, 100 mm installation height and special "profile" version

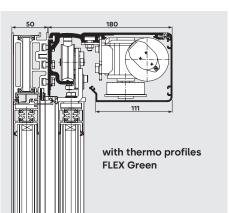




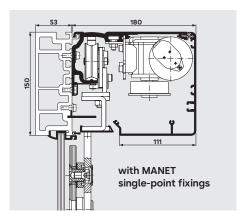
dormakaba PowerDrive System for particularly punchy performance The door variants on this page are shown as corridor installation with aluminium girder (LM).

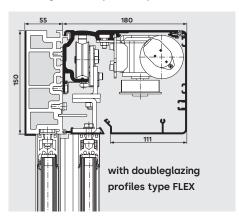
See page 4 for profiles for wall installation.

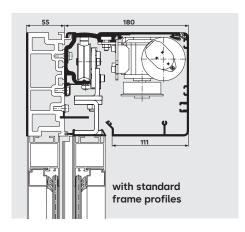


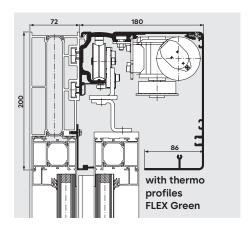


Door variants with ES 200, 150 mm installation height and special "profile" version

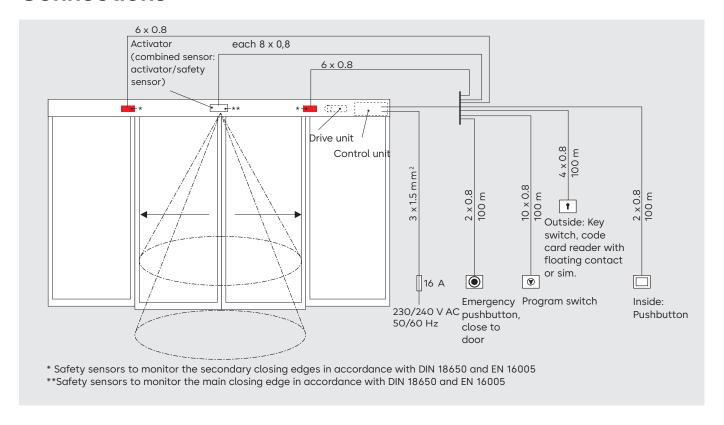








## **Connections**



## **Program switches**

A program switch from dormakaba's broad range of accessories allows the automatic door system to meet individual requirements and provides easy handling.

The corresponding 3-position program switches are available in various designs and suitable for all kinds of applications. They offer various options, from a mechanical to a full-electronic version,

alternatively also lockable via profile half-cylinder or in a full-electronic way via code.

- Up to 5 different functions:
  Off, Automatic, Exit Only, Partial Open, Permanent Open
- Electronic program switches in System 55 design to meet the highest aesthetical demands

For sliding door operators	Designation	Specification	Installation system	Order No.
	PG-S1	5-position, aluminum, white, flush-mounted version, 80 x 80 x 40 mm	Gira S-Color	19135401150
	PG-S2	5-position, lockable, aluminum, white, flush-mounted version, 80 x 80 x 40 mm	Gira S-Color	19135602150
2 G . C 3 G . S G	EPS-S	Full-electronic program switch in System 55 design, 5-position, lockable via code or additional TL-ST S55 key switch, membrane keypad aluminum-colored, white, flush-mounted version, 80 x 80 mm	System 55	16556901150

## **Switches**

	Designation	Specification	Installation system	Order No.
1 O Commonwell	On/Off switch	White, aluminium, flush-mounting, 80 x 80 mm	Gira S-Color	19135403150
	Radar switch	"MAGIC SWITCH", proximity-type radar switch responds to movement, for flush-mounting.		4020009048

## **Pushbutton**

Palm pushbutton	Designation	Specification	Installation system	Order No.
**C00m		Single-pole changeover contact, single-type frame, white, flush-mounted version.	System 55	19144701170
Key switches	Designation	Specification	Installation system	Order No.
	KT 3-1	1 NO contact with profile half-cylinder, may be replaced for any profile half-cylinder of a master key system, key only retractable in neutral position, aluminium, metal, $75 \times 75 \times 60$ mm.		
dorma @	KT 3-1 UP	flush-mounted version		05054531332
	KT 3-1 AP	surface-mounted version		05054631332
ZU AUF	КТ 8	Lettering "Auf, Zu" (German for "Open/Closed"), 2 NO contacts, with profile half-cylinder, may be replaced for any profile half-cylinder of a master key system, key only retractable in neutral position, aluminium, metal, $75 \times 75 \times 60$ mm.		
	KT 8 UP	flush-mounted version		05054831332
	KT 8 AP	surface-mounted version		05054931332
	TL-ST S55	Switch with single-pole changeover contact, for profile half-cylinder by others to DIN 18252, locking cam centre 30 – 32.5 mm, overall length 40.5 – 43,5 mm, locking cam position left (90°), incl. cover for System 55, not suitable for box for surface-mounting, not including profile half-cylinder, <b>not including frame</b> .		
	TL-ST S55 W	White	System 55	56330710
	TL-ST S55 S	Silver-coloured	System 55	56330701
	TL-ST S55 A	Anthracite	System 55	56330715
S S S AUS EN	KT 3-2	1 NO contact with profile half-cylinder, may be replaced for any profile half-cylinder of a master key system, key only retractable in neutral position, exchange cover, "Ein/Aus" lettering (German for "On/Off"), aluminium, flush-mounted version: 125 x 100 mm, surface-mounted version: 70 x 90 mm.		05054731332

## **Emergency pushbuttons**

	Designation	Specification	Installation system	Order No.
	NAT	Designed to interrupt the automatic movement of the door, emergency pushbutton (function: Emergency Off) for automatic door operators, manufactured to ZH 1/494 or BGR 232, DIN 18650 and EN 16005, red knob with yellow centre insert, max. load current: 10 A at 230 V AC.		
⊕ ⊕	NAT 1	NO contact: 1, NC contact: 1, white frame, flush-mounted version, 80 x 80 mm.	System 55	90400025
•	NAT 2 no picture	Function "Emergency Opening" with green knob, NO contact: 1, NC contact: 1, max. load current: 10 A at 230 V AC, white frame, flush-mounted version, 80 x 80 mm.	System 55	90400035
	NAT 4	NO contact: 1, NC contact: 1, surface-mounted version, 68 x 68 mm.		05027031332
Schebe eindrückerh	TL-N S55	Highly-illuminated emergency pushbutton environment with visual locking status indication, optical and acoustic alarm via yellow flashlight and integrated alarm siren, sabotage-proof, behind glass, <b>not including frame</b> .  NO contact: 1, NC contact: 1, max. load current: 1 A at 24 V DC, flush-mounted version, 80 x 80 mm.	System 55	56330500

## Trims and boxes for surface-mounted pushbuttons and switches

Designation	Specification	Dimensions in mm (W x H x D)	Installation system	Order No.
System 55	Cover frame (Programm STA)			
FR-S55 1	Single-type trim, Standard 55, white	80.7 x 80.7	System 55	56391110
FR-S55 2	Double-type trim, Standard 55, white	151.8 x 80.7	System 55	56391210
FR-S55 3	Triple-type trim, Standard 55, white	223.3 x 80.7	System 55	56391310
FR-E2W 1	Single-type trim, E2 55, white	80.8 x 80.8	System 55	56392110
FR-E2W 2	Double-type trim, E2 55, white	151.9 x 80.8	System 55	56392210
FR-E2W 3	Triple-type trim, E2 55, white	223.4 x 80.8	System 55	56392310
FR-E2S 1	Single-type trim, E2 55, silver	80.8 x 80.8	System 55	56392101
FR-E2S 2	Double-type trim, E2 55, silver	151.9 x 80.8	System 55	56392201
FR-E2S 3	Triple-type trim, E2 55, silver	223.4 x 80.8	System 55	56392301
FR-E2A 1	Single-type trim, E2 55, anthracite	80.8 x 80.8	System 55	56392115
FR-E2A 2	Double-type trim, E2 55, anthracite	151.9 x 80.8	System 55	56392215
FR-E2A 3	Triple-type trim, E2 55, anthracite	223.4 x 80.8	System 55	56392315

## **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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