

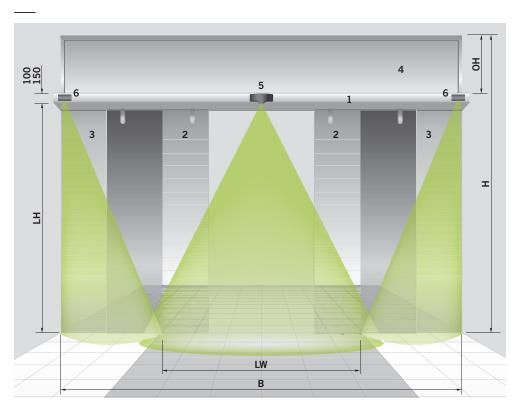


Automatic Sliding Door Systems

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SLIDING DOOR COMPONENTS



- 1 Unsupported header with track rail, drive unit and control unit
- 2 Sliding door panel
- 3 Stationary side screens (these screens are not required for installation between extending wall faces or similar)
- 4 Fanlight or solid cover
- 5 Activator (e. g. motion detector) including safety sensors to monitor the passage area
- **6** EN 16005, sensors to monitor secondary closing edges
- LW Clear passage width
- LH Clear passage height
- System width
- **OH** Height of fanlight
- System height

2

THE COMPLETE RANGE OF SLIDING DOORS COMBINED IN ONE SYSTEM

The ES 200 operator technology sets new trends

The DORMA Automatic sliding door range is both technologically advanced and flexible in construction. The ES 200 is a slimline unit with exceptional performance and various functions to suit your project and door type.

Tested to 1,000,000 cylces, the ES 200 is a high quality, high performing modular automatic sliding door operator unit giving reliable performance. Additional modules and options facilitate made-to-measure solutions for automatic sliding doors.

Select the door panel system for your requirements

DORMA automatic sliding doors and telescopic sliding doors provide all applications for the individual design of your entrance area. No matter if you prefer an elegant full-glass application with a compact operator and MANET single-point fixings or a rather functional and robust frame

structure, the ES 200 door system is the suitable application for your entrance. ST ES 200 systems not only meet all requirements, they also create new standards when it comes to functional range, motion paths, design, stability and heat insulation.

EN 16005

We offer our doors with EN 16005 compliant safety components as indicated on pages 18.

The required safety measures result from the respective risk analysis.

Features and benefits

- Unsurpassed performance scope
- Easily adaptable to your individual requirements
- Emergency exit and escape route doors are equipped with a redundant operator, an additional control unit for safety purposes and a self-monitoring motion detector
- Excellent cost effectiveness and reliability thanks to established components and quality-assured production

- Numerous adjustable parameters
- Various standard connection facilities
- Obstacle self-detection and automatic reversing
- Delivery of "ready for installation" systems, mounting and commissioning if desired
- Manufactured according to the latest state of technology and compliant with all regulations
- Optional: individual burglary control

Our commitment to a sustainable future

Environmentally-conscious behaviour is one of our guiding principles. DORMA's aim is to ensure energy-saving and resource-conserving production, a high recycling ratio and the longevity of our high-quality products.

On product level, we use Environmental Product Declarations (EPD) to calculate the sustainability of buildings. These declarations are based on a holistic life cycle assessment. Please find the full EPD at www.dorma.com.



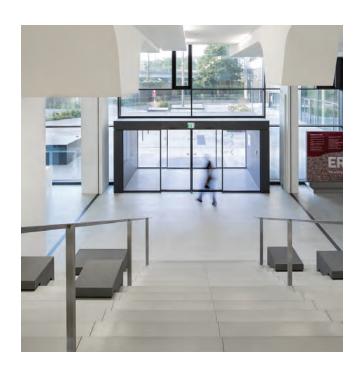
OPERATOR DATA ES 200

Door parameters		ES 200
Single-panel sliding door	– Clear passage width (LW) 1) – Max. door-panel weight	700 – 3000 mm 1 x 200 kg
Double-panel sliding door	- Clear passage width (LW) 1) - Max. door-panel weight	800 – 3000 mm 2 x 160 kg
Clear passage height 1)		2100 – 3000 mm
Door parameters		ES 200
Double-panel sliding door,	Clear passage width (LW) 1)	800 – 2400 mm
opening to one side	Max. door-panel weight	2 x 75 kg
4-panel sliding door, opening to both sides	– Clear passage width (LW) 1) – Max. door-panel weight	1400 – 4000 mm 4 x 75 kg
Clear passage height*		2100 – 3000 mm
1) Other dimensions on request.		
Designs		ES 200
Profile systems	ST FLEX GREEN fine-frame profile	•
	ST FLEX SECURE fine-frame profile	•
	FLEX fine-frame profile	•
	ST-G fine-frame profile	•
	ST-S robust frame profile	•
	ST-AP frameless	•
	MANET single-point fixing max. clear passage width (LW) single-panel version = 1600 mm double-panel version = 2000 mm Not suitable for telescopic doors	•
Operator height/depth	100 mm x 180 mm	•
	150 mm x 180 mm	•
Floor-integrated guide rail		0
Surface-mounted installation w (consider wind load and burgla	_	•
Technical specifications		
Suitable for application in eme	ergency exits and escape routes	•
Max. opening and closing force	e 150 N	•
Opening speed (incremental se		10 – 75 cm/s
Closing speed (incremental set	ting)	10 – 50 cm/s
Hold-open time		0 – 180 s
Power supply/frequency		230 V, 50/60 Hz
Power consumption		250 W
Class of protection		IP 20
Admissible temperature		-20 to +60 °C
Admissible humidity (relative)	Diverting	max. 93 % (non condensing)
Tested according to Low Voltag	e pirective	•
Manufactured to ISO 9001		•

ullet standard ullet optional - no

Basic Module (BM)		ES 200
Modular design		Basic Module (BM)
Microprocessor control		•
Function programs	 Off Automatic Permanent Open Partial Open Exit Only Night-/Bank Function 	•
Automatic reversing		•
Connection for electromecha	anical locking device (bistable)	•
Connection for safeguarding	of passage area (on both sides)	•
Equipped in accordance with	1 EN 16005	•
Adjustment of all basic parar via integrated display and ke		•
Parametrisation via handheld	d	•
Emergency opening/closing (only with rechargeable batte	ery pack)	0
Emergency operation via reclionly with rechargeable batte		0
Synchronous operation		•
24 V output for external acce	essories	•
Read-out error log with error codes		•
DCW® bus connection (Proto	col D ORMA C onnect and W ork)	•
Function Module (FM) - opti	onal	
Pharmacy Function	Uliai	•
Door status contact (3 x)		•
Safeguarding of main and se	econdary closing edge/s	0
Bell contact		•
Airlock control		•
Secondary Edge Function Mo	odule - optional	
The function module provide secondary closing edges for (0
Additional equipment		
Electromechanical locking d	evice (bistable)	0
	tromechanical locking device	0
Light curtains		0
	emergency opening/closing)	0
		The state of the s
DORMA USV emergency pow	ver supply unit (external) 'LAN building control system	0

ST FLEX GREEN, ENERGY EFFICIENCY IN ELEGANT DESIGN



Features

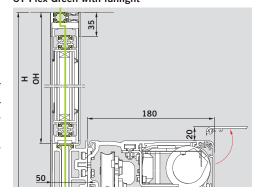
- The slender ST FLEX Green profile system is based on the FLEX profile system and provides thermal insulation in conjunction with excellent energy-saving features.
- Elegant fine-frame design
- High stability and rigidity
- Protection against draughts via circumferential seals
- Select secondary edge safety solution to meet EN 16005 from:
- full height pocket screens
- glazed barriers
- presence sensors See page 18

System dimensions and max. door-panel weight

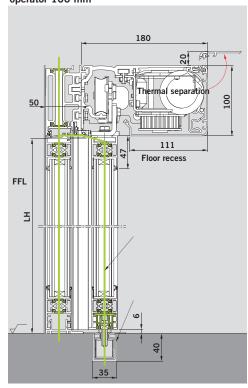
-				
	Single-panel version*		Double-panel version	
Operator	Min. system width (B) =	Max. door-panel weight	Min. system width (B) =	Max. door-panel weight
ES 200				
without side	2 x LW + 60 mm	1 x 200 kg	2 x LW + 120 mm	2 x 160 kg
screens				
with side	2 x LW + 80 mm	1 x 200 kg	2 x LW + 160 mm	2 x 160 kg
screens				

^{*} not considering the width of the door post

ST Flex Green with fanlight



Corridor mounting with side screens, operator 100 mm



Key

,	
ОН	Height of fanlight
LH	Clear passage height
Н	System height
В	System width
LW	Clear passage width
FFL	Finished Floor Level



Important customer benefits at a glance

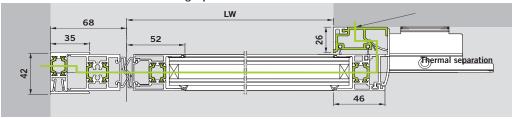
- Very low U_D-values from 1.4 to max. 1.8 (thermal transmission co-efficient)
- Tested quality with ift Rosenheim approval
- Compliant with the German energy-saving regulation (EnEV 2009)
- Sustainable, reliable and energy-saving system
- Interior and entrance doors in the same design to harmonise with the building's overall look
- Individual U_D-value certificates for each ST FLEX Green door system

- Glass panes with rugged but elegant frames
- Installation 'project coordinated' by the DORMA Projects Team
- Installed and commissioned by DORMA's highly skilled engineer team to meet the requirements of BS EN 16005 "Power operated pedestrian doorsets.
 Safety in use. Requirements and test methods"
- The full range of performance functions for the DORMA ES 200 automatic sliding door operator (tested to 1,000,000 cycle)

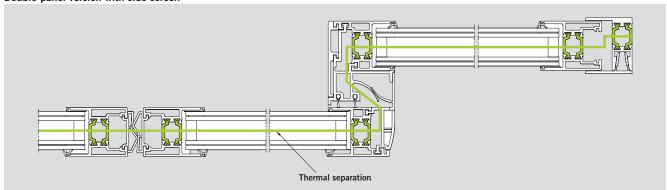
The ST FLEX Green fulfils the requirements of the latest German energy-saving regulation (EnEV 2009) and harmonises perfectly with the existing DORMA sliding door range. Even the smallest ST FLEX

Green door system meets the requirements of the German EnEV 2009, which stipulates a certain U_D -value (thermal transmission co-efficient) for complete door systems.

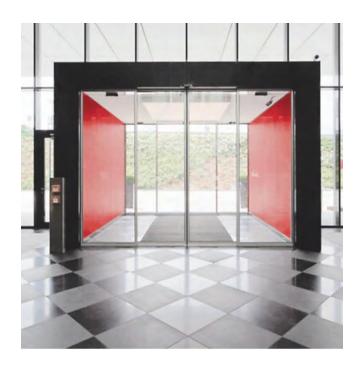




Double-panel version with side screen



ST FLEX SECURE SLIDING DOOR WITH ANTI-INTRUDER PROTECTION



Features

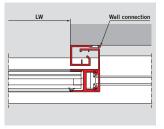
- Burglar resistant fine framed automatic door system
- Tested burglar resistance WK2
- Secure 4-point locking device
- Monitored battery back-up system suitable for use on emergency escape routes
- Special burglar resistant laminated safety glass
- Select secondary edge safety solution to meet EN 16005 from:
- full height pocket screens
- glazed barriers
- presence sensors See page 18

Important customer benefits at a glance

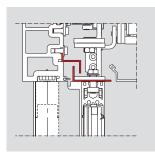
- Excellent intruder protection
- Appealing fine frame profiles
- Functionaility as a high usage automatic sliding door in normal use
- In contrast to similar security doorsets, there are no visible barriers. Thus, your frontage remains as transparent and inviting as ever without any negative effect on its appearance
- Installation 'project coordinated' by the DORMA Projects Team
- Installed and commissioned by DORMA's highly skilled engineer team to meet the requirements of BS EN 16005 "Power operated pedestrian doorsets. Safety in use. Requirements and test methods"
- The full range of performance functions for the DORMA ES 200 automatic sliding door operator (tested to 1,000,000 cycle)



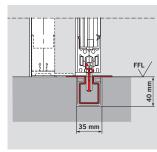
Wall connection



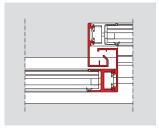
Security feature inside operator



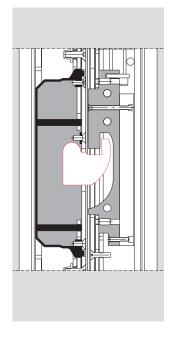
Floor guide



Unlocking of sliding panel



Main closing edge



ST FLEX WITH FLEX FINE-FRAME PROFILES



Features

- Attractive glass surfaces thanks to slender frames
- High stability and torsional rigidity
- Low damping behaviour (k-value) of frame due to double-glazing
- Excellent insulation features thanks to interlocking side seals and top and bottom seals
- Select secondary edge safety solution to meet EN 16005 from:
 - full height pocket screens
- glazed barriers
- presence sensors See page 18

Important customer benefits at a glance

- The full range of performance functions for the DORMA ES 200 automatic sliding door operator (tested to 1,000,000 cycle)
- Installation 'project coordinated' by the DORMA Projects Team
- Installed and commissioned by DORMA's highly skilled engineer team to meet the requirements of BS EN 16005 "Power operated pedestrian doorsets. Safety in use. Requirements and test methods"

System dimensions an	d max. door-panel weig	ght		
	Single-panel version*		Double-panel version	
Operator	Min. system width (B) =	Max. door-panel weight	Min. system width (B) =	Max. door-panel weight
ES 200	<u></u>			
without side screens	2 x LW + 50 mm	1 x 200 kg	2 x LW + 100 mm	2 x 160 kg
with side screens	2 x LW + 100 mm	1 x 200 kg	2 x LW + 180 mm	2 x 160 kg

 $^{^{\}ast}$ not considering the width of the door post

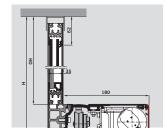
Glass panes

- Toughened safety glass
- Laminated safety glass, 8 mm
- Iso 22 double-glazing (4/14/4)
- Special glazing

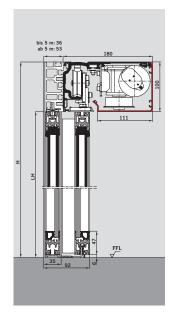
Clear passage height (LH)

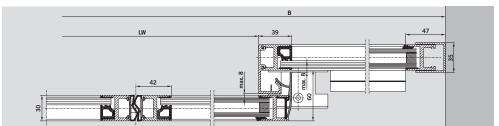
Determination of clear passage height LH (mm) depending on the clear passage width LW (mm) and the glazing: See diagrams on pages 16

ST-Flex with fanlight



Corridor mounting with side screens, operator 100 mm





ST-G



Features

- Fine framed door leaves
- Single glazed only
- Select secondary edge safety solution to meet EN 16005 from:
 - full height pocket screens
 - glazed barriers
- presence sensors See page 18

Important customer benefits at a glance

- The DORMA ES 200 automatic sliding door operator provides both quality and assurance, having been tested to 1,000,000 cycles
- ST-G can be tailor made in the UK to suit your individual needs
- Installation 'project coordinated' by the DORMA Projects Team
- Installed and commissioned by DORMA's highly skilled engineer team to meet the requirements of BS EN 16005 "Power operated pedestrian doorsets. Safety in use. Requirements and test methods"

System dimensions and max, door-panel weight

System uninensions an	u max. door-paner weig	giil		
	Single-panel version*		Double-panel version	
Operator	Min. system width	Max.	Min. system width	Max.
	(B) =	door-panel weight	(B) =	door-panel weight
ES 200				
without side screens	$2 \times LW + 50 \text{ mm}$	1 x 200 kg	2 x LW + 100 mm	2 x 160 kg
with side screens	2 x LW + 100 mm	1 x 200 kg	2 x LW + 180 mm	2 x 160 kg

^{*} not considering the width of the door post

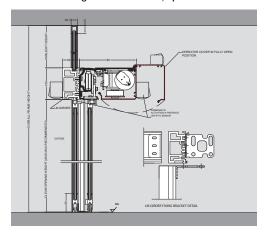
Glass panes

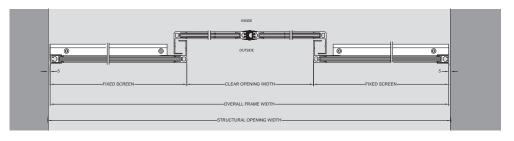
- Toughened safety glass
- Laminated safety glass, 8 mm
- Special glazing

Clear passage height (LH)

Determination of clear passage height LH (mm) depending on the clear passage width LW (mm) and the glazing: See diagrams on page 16

Corridor mounting with side screens, operator 100 mm





ST-S



Features

- Combined with laminated or toughened safety glass
- Select secondary edge safety solution to meet EN 16005 from:
 - full height pocket screens
 - glazed barriers
- presence sensors See page 18

Important customer benefits at a glance

- Robust framing for high traffic, high usage environments
- The DORMA ES 200 automatic sliding door operator provides both quality and assurance, having been tested to 1,000,000 cycles
- ST-S can be tailor made in the UK to suit your individual needs
- Installation 'project coordinated' by the DORMA Projects Team
- Installed and commissioned by DORMA's highly skilled engineer team to meet the requirements of BS EN 16005 "Power operated pedestrian doorsets. Safety in use. Requirements and test methods"

System dimensions and max. door-panel weight

	Single-panel version*		Double-panel version	
Operator	Min. system width Max. (B) = door-panel weight (Min. system width (B) =	Max. door-panel weight
ES 200				
without side screens	2 x LW + 50 mm	1 x 200 kg	2 x LW + 100 mm	2 x 160 kg
with side screens	2 x LW + 100 mm	1 x 200 kg	2 x LW + 180 mm	2 x 160 kg

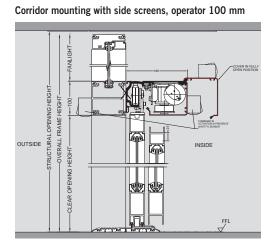
^{*} not considering the width of the door post

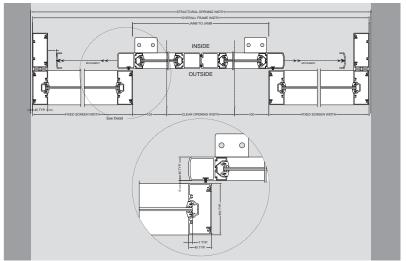
Glass panes

- Toughened safety glass
- Laminated safety glass, 8 mm
- Iso 22 double-glazing (4/14/4)
- Special glazing

Clear passage height (LH)

Determination of clear passage height LH (mm) depending on the clear passage width LW (mm) and the glazing: See diagrams on page 16





ST MANET, WITH MANET SINGLE-POINT FIXINGS FOR FULL-GLASS DOORS



Features

- For interior doors
- Weightless design thanks to unobtrusive stainless steel single-point fixings
- Versatile component range with various fitting options for walls, floors and ceilings, and to link glass elements
- Select secondary edge safety solution to meet EN 16005 from:
 - full height pocket screens

ST MANET with fanlight

- glazed barriers
- presence sensors See page 18

Important customer benefits at a glance

- The DORMA ES 200 automatic sliding door operator provides both quality and assurance, having been tested to 1,000,000 cycles
- ST MANET can be tailor made in the UK to suit your individual needs
- Installation 'project coordinated' by the DORMA Projects Team
- Installed and commissioned by DORMA's highly skilled engineer team to meet the requirements of BS EN 16005 "Power operated pedestrian doorsets. Safety in use. Requirements and test methods"

System dimensions and max. door-panel weight

	Single-panel version*		Double-panel version	
Operator	Min. system width (B) =	Max. door-panel weight	Min. system width (B) =	Max. door-panel weight
ES 200				
without side	2 x LW + 70 mm	1 x 200 kg	2 x LW + 140 mm	2 x 160 kg
screens with side	2 x LW + 100 mm	1 v 200 kg	2 x LW + 140 mm	2 v 160 kg
screens	2 X LW + 100 IIIII	1 X 200 kg	2 X LW + 140 IIIII	2 X 100 kg

^{*} not considering the width of the door post

Glass panes

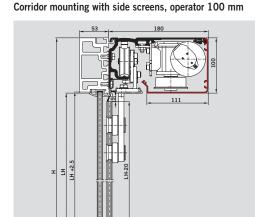
- Toughened safety glass (TSG) 10 mm
- Special glazing

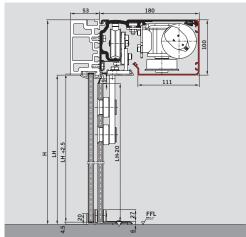
Clear passage height (LH)

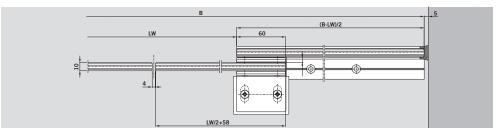
Determination of clear passage height LH (mm) depending on the clear passage width LW (mm) and the glazing: see diagrams on page 16

Please consider the limited opening dimensions on application of MANET single-point fixings:

Single- panel version max.	Clear passage width (LW)	1600 mm
	Clear passage height (LH)	2500 mm
Double- panel	Clear passage width (LW)	2000 mm
version max.	Clear passage height (LH)	2500 mm







ST-AP



Features

- Frameless door leaves with top and bottom rails or manet patch fittings
- Frameless door leaves with maximum visual transparency
- Select secondary edge safety solution to meet EN 16005 from:
 - full height pocket screens
 - glazed barriers
- presence sensors See page 18

Important customer benefits at a glance

- The full range of performance functions for the DORMA ES 200 automatic sliding door operator (tested to 1,000,000 cycles)
- Tailored sizes and bespoke manufacture in the UK to suit your project
- Installation 'project co-ordinated' by the DORMA Projects Team
- Installed and commissioned by DORMA's highly skilled engineer team to meet the requirements of BS EN 16005 "Power operated pedestrian doorsets. Safety in use. Requirements and test methods"

System dimensions and max. door-panel weight

	Single-panel version*		Double-panel version	
Operator	Min. system width (B) =	Max. door-panel weight	Min. system width (B) =	Max. door-panel weight
ES 200				
	2 x LW + 50 mm	1 x 200 kg	2 x LW + 100 mm	2 x 160 kg
screens with side screens	2 x LW + 100 mm	1 x 200 kg	2 x LW + 180 mm	2 x 160 kg

^{*} not considering the width of the door post

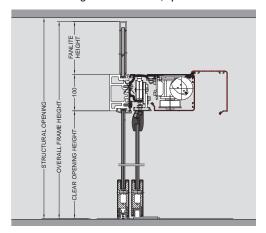
Glass panes

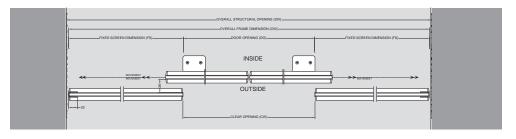
- Toughened safety glass
- Laminated safety glass, 8 mm
- Special glazing

Clear passage height (LH)

Determination of clear passage height LH (mm) depending on the clear passage width LW (mm) and the glazing: See diagrams on page 16

Corridor mounting with side screens, operator 100 mm





TST FLEX WITH FLEX FINE-FRAME PROFILES



Features

- Attractive glass surfaces thanks to slender frames
- High stability and torsional rigidity
- Low damping behaviour (k-value) of frame due to ISO glazing (double-glazing)
- Excellent insulation features thanks to interlocking side seals and top and bottom seals
- Select secondary edge safety solution to meet EN 16005 from:
 - full height pocket screens
 - glazed barriers
 - presence sensors See page 18

Important customer benefits at a glance

- Allows maximum opening width to be achieved thereby easing traffic flow
- Installation 'project coordinated' by the DORMA Projects Team
- Installed and commissioned by DORMA's highly skilled engineer team to meet the requirements of BS EN 16005 "Power operated pedestrian doorsets.
 Safety in use. Requirements and test methods"
- The full range of performance functions for the DORMA ES 200 automatic sliding door operator (tested to 1,000,000 cycle)

System dimensions and max. door-panel weight

	Opening to one side*		Opening to two sides	
Operator	Min. system width (B) =	Max. door-panel weight	Min. system width (B) =	Max. door-panel weight
ES 200				
without side	1.5 x LW + 60 mm	2 x 75 kg	1.5 x LW + 80 mm	4 x 75 kg
screens				
with side	1.5 x LW + 105 mm	2 x 75 kg	1.5 x LW + 170 mm	4 x 75 kg
screens				

^{*} not considering the width of the door post

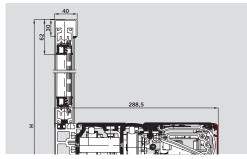
Glass panes

- Iso 22 double-glazing (4/14/4)
- Iso 22 double-glazing (6/10/6)
- Special glazing

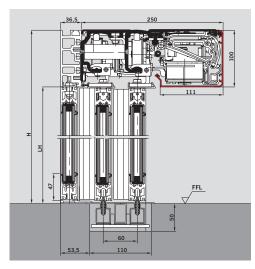
Clear passage height (LH)

Determination of clear passage height LH (mm) depending on the clear passage width LW (mm) and the glazing: see diagrams on page 16

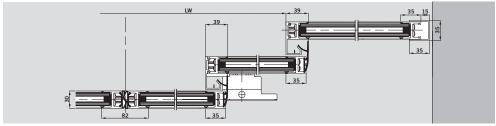
TST FLEX with fanlight



Corridor mounting with side screens, operator 100 mm



Horizontal section with side screen



Escape route version: Please consider the prevailing country-specific regulations.

DETERMINATION OF DOOR PANEL SIZE

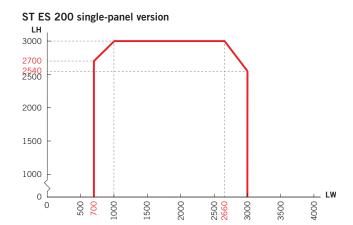
The diagrams show the dependence of the clear passage height (LH) on the clear passage width (LW).

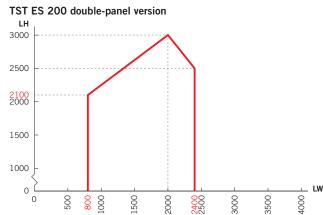
The maximum door-panel weight of the relevant operators must not be exceeded. We recommend smaller doors for areas with unfavourable wind conditions.

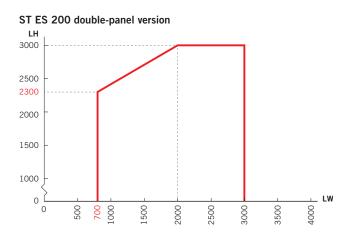
The charts refer to an average door panel weight of 25 kg/m².

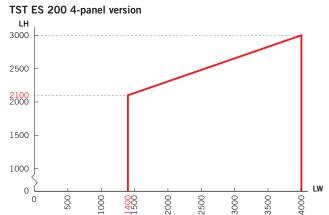
Higher clear passage heights (LH) on demand.

If using Manet fittings please refer to page 12 for specific opening dimensions.









PROGRAM SWITCHES

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

The 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 meet the highest aesthetical demands

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

SWITCHES

 Key switches
 Specification
 Installation system
 Order No.

 Nightbank external key switch
 4010005091

 Nightbank internal button (Green)
 4010009059

ACTIVE INFRARED DETECTOR AND COMBINED SENSOR

Designation

Safety sensors/Combined sensors

Prosecure Combined activation and threshold safety sensor
Opti Combi Quick and easy to install, wide field can be used to

Specification

Quick and easy to install, wide field can be used to substitute the light barrier, LCD display, precise positioning of AIR curtain thanks to indication of inclination angle on a well-readable scale, direction recognition (DIN 18650 and EN 16005)

black 86711400

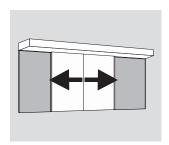
Colour

Order No.

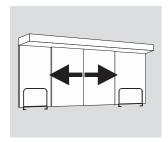
SECONDARY CLOSING EDGE (REAR EDGE) EN 16005 COMPLIANCE SOLUTIONS

Selected preferred solution

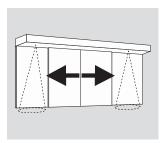
The appropriate solution should be based on a risk assessment taking into account the site and traffic conditions – please contact DORMA if you require assistance.



Full Height Pocket Screens



Barriers



Specification

Designation

Rear Edge Sensors



Safety sensors/Combined sensors

Prosecure The active infrared curtain according EN 16005 safeguards
Opti Scan the side of the door. It protects people from being hit by the door panel when the door opens.

black

Colour

86301100

Order No.



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