



SST  
FLEX  
—

Automatic break-out sliding doors  
for emergency exits and escape routes  
with powerful ES operators

# SST FLEX – SLIDE OPEN TO NORMAL WIDTH, BREAK-OUT TO FULL WIDTH

## For any entrance, any application, any requirement

Automatic sliding doors with break-out from DORMA fit into different structural openings, satisfy a variety of demands and can be adapted to suit individual requirements. Powerful DORMA ES door operators are characterised by their fast, smooth motion cycles, minimal noise emission and exceptional user friendliness. ES operators, with which the door sets presented here are equipped, have that extra capacity reserve which means that they continue to perform efficiently even when put under strain.



## The classic door solution for emergency exits and escape routes

With DORMA SST automatic sliding doors with break-out, not only the door panels but also the side screens are pivot-mounted to swing out when needed - without the need to disengage any locks. This doubles the passage width of the doorway - a decisive advantage not only in emergencies but also in certain everyday situations. The break-out function for the sliding panels and side screens is also approved in most countries as a viable solution for emergency exits.

## Exceptional economy

The variability of the dimensions available with SST FLEX automatic sliding doors means that they can be specified for maximum economy. Yet every door set is designed and made to measure and then supplied ready for installation. And DORMA will also carry out the installation and commissioning work if requested.

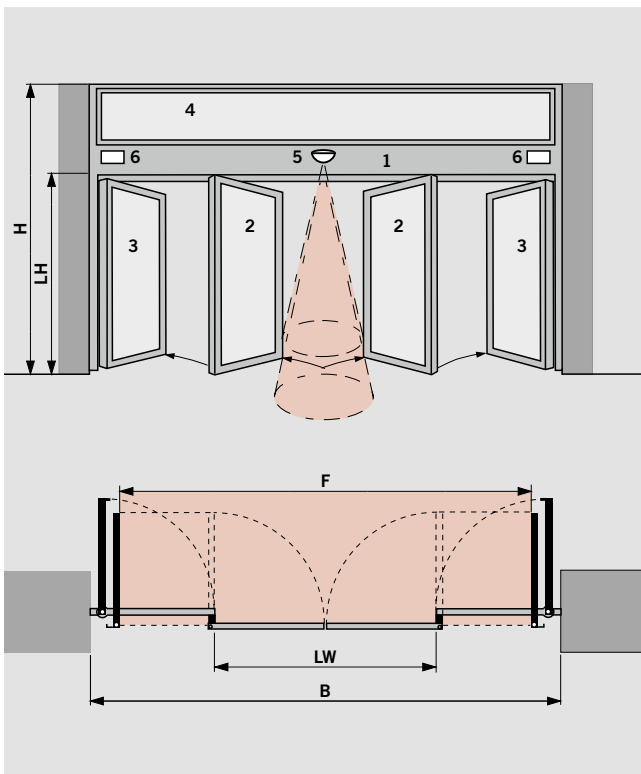
## Convenient and safe

The control units with their adjustable parameters and self-learn capability offer a full range of functionality. They are also utterly reliable and, together with the closing force monitoring, provide for maximum operational safety. Integrated locking devices also ensure that individual intruder protection requirements can be effectively satisfied.



Quality-assured manufacture

## Construction and scope of delivery



- |  |  |
|--|--|
| <p>1 Self-supporting header, operator with integrated control unit</p> <p>2 Break-out door panels with toughened (TSG) or laminated (LSG) safety glass</p> <p>3 Side screens with break-out function</p> | <p>4 Fanlight or panel cover</p> <p>5 Activators like motion detectors or sensors</p> <p>6 Safeguarding of secondary closing edges to DIN 18650 and EN 16005</p> |
|--|--|

## Features and benefits

- Excellent scope of supply
- Easily adapted to individual requirements
- Emergency exit and escape route doors with break-out panels and side screens
- Highly economical and reliable thanks to proven standard components
- Wide range of adjustable parameters
- Extensive provision of standard connections
- Safety equipment (sensors) to DIN 18650 and EN 16005 on request
- Supplied ready for installation – mounting and commissioning on request

<b>H</b>	System height
<b>LH</b>	Clear passage height
<b>B</b>	System width
<b>F</b>	Escape route width
<b>LW</b>	Clear passage width

Dimensions and versions		SST FLEX
Sliding panel and side screen design	FLEX profiles	●
	Fanlight	○
Door panels with break-out function		●
Side screens with break-out function		●
Approved for application in escape routes		●
Number of door panels		2
Clear passage width (LW)		1000 – 2500 mm
System width (B)		2520 – 5520 mm
Max. door-panel weight		2 x 110 kg
Operator cross section W x H (with square-edged cover)		202 x 200 mm
Clear passage height (LH)		2100 – 2500 mm
Safety clearance at secondary closing edges		○
Software for monitoring of secondary closing edges		○

#### Technical specifications

Continuously adjustable opening and closing force, max. 150 N	●
Parameter adjustment	●
Continuously adjustable opening speed - ES 200 operator	100 – 700 mm/s
Continuously adjustable closing speed	100 – 500 mm/s
Continuously adjustable low (creep) speed	30 – 90 mm/s
Supply voltage, frequency	240 V, 50 Hz
Max. power consumption	250 W
Power supply for external components	24 V, 2 A
Class of protection	IP 20
Temperature range	-20 – +60 °C
Admissible (relative) humidity	max. 93 % (non condensing)
German TÜV type-approval	●
Tested according to Low Voltage Directive	●
Manufactured to ISO 9000	●

● Standard ○ Option – Not available

Drive and control unit		SST FLEX
ES 200 operator		●
Microprocessor control		●
Function programs	Off	●
	Automatic	●
	Permanent Open	●
	Partial Open	●
	Exit Only	●
	Night-/Bank Function	●
Connection for airlock control		○
Delayed opening for check/code card reader or key switch		●
Self-learning		●
Potential-free contact		●
Equipped in accordance with DIN 18650 and EN 16005		○
Automatic reversing		●
Fail-safe design		○
Fail-secure design*		○
Panic closing function (Observe regulations!)		○
Program switch		○
Connection for access control system		●
Bell contact		●
Door status indicator		○
Coupling module for connection to EIB or LON building management systems		○
Visual error indication		○
Rechargeable battery pack		○
USV emergency power supply unit		○
System stop on panel break-out		●

\* Ensure compliance with latest regulations

#### Optional accessories/locking devices

Electromechanical combined locking device	○
Electrical manual lock release (only with rechargeable battery pack)	○

# WITH FLEX PROFILES

## Fine-framed sliding doors with break-out function in elegant full-glass design

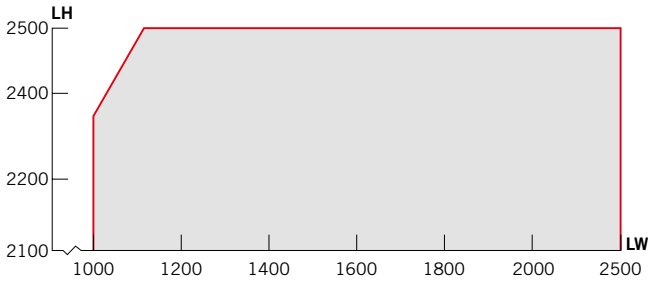
With the FLEX fine-frame system developed by DORMA, these automatic sliding doors with break-out offer all the aesthetic elegance of a full-glass construction.

The FLEX profile system provides maximum flexibility as it can be combined with toughened safety glass or double glazing. Slender though they are, the profiles nevertheless offer optimum

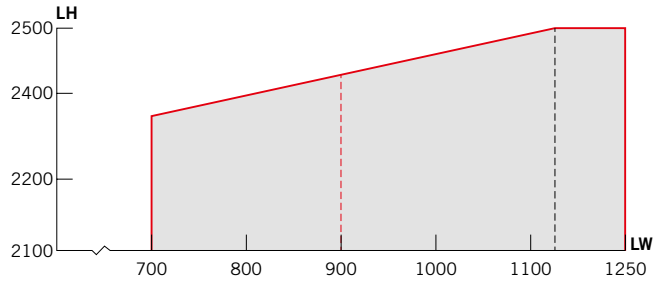
sealing performance and outstanding glass edge protection. Automatic sliding doors with break-out are the ideal solution wherever ensuring safety in emergency escape

routes is the main priority. At the same time, they also offer maximum light penetration, visibility and architectural compatibility.

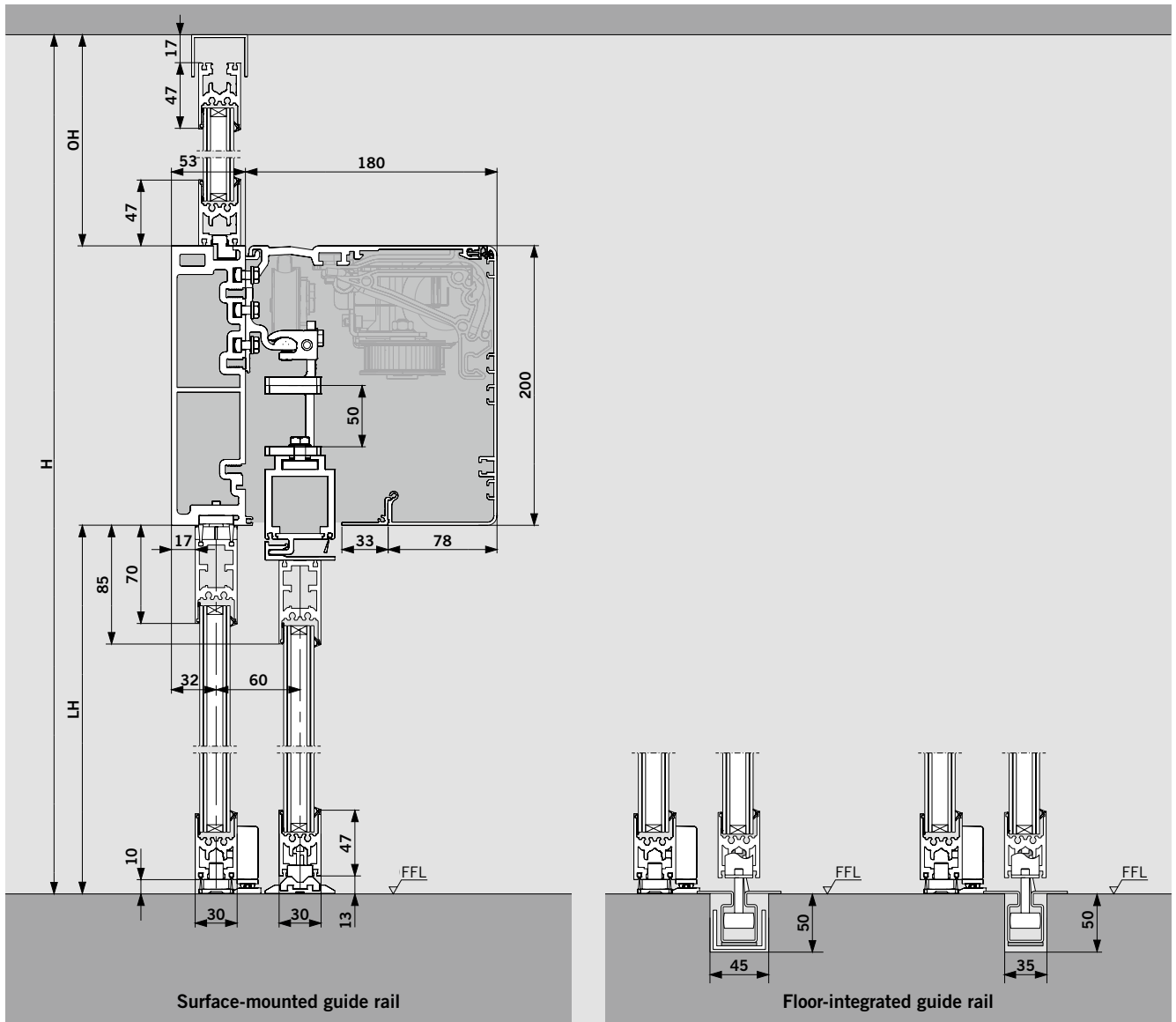
### Double-panel version



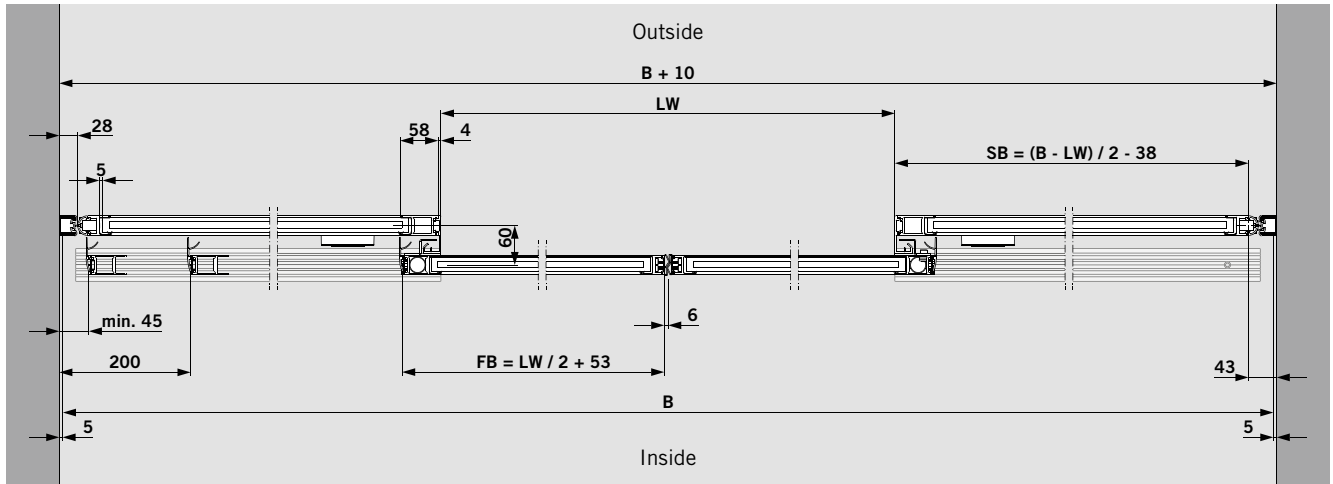
### Single-panel version (only on request)



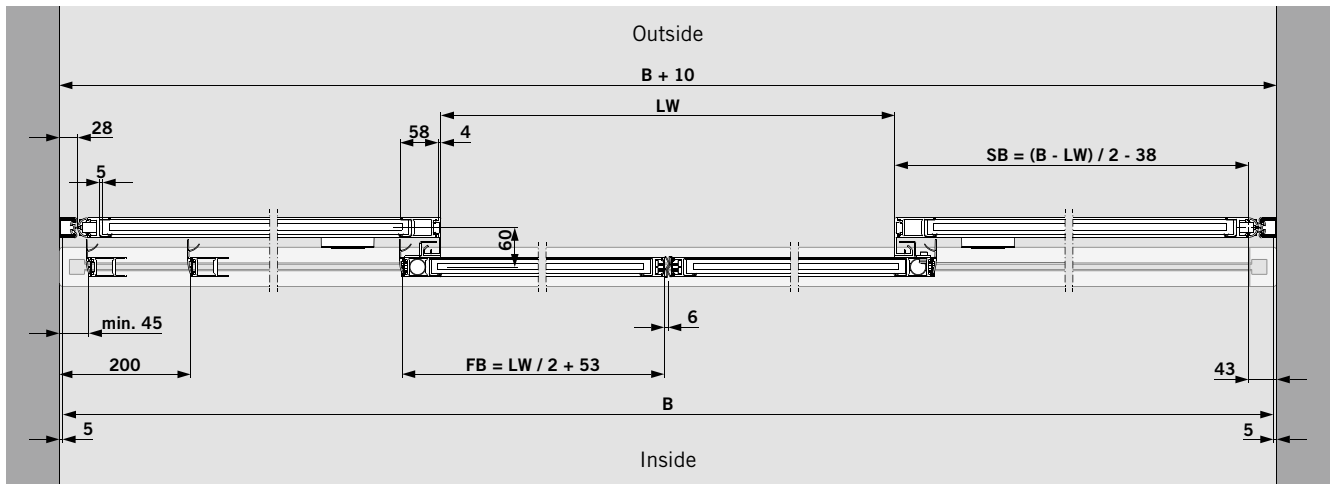
Escape route systems must have a minimum clear passage width of 900 mm!



Double-panel version with surface-mounted guide rail



Double-panel version with floor-integrated guide rail



SST FLEX standard dimensions

Version	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
<b>LW</b>	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
<b>B1</b>	2520	2750	2920	3120	3320	3520	3720	3920	4120	4320	4520	4720	4920	5120	5320	5520
<b>F</b>	2030	2230	2430	2630	2830	3030	3230	3430	3630	3830	4030	4230	4430	4630	4830	5030

Calculating the door dimensions

Including safety clearance: **B1** = LW x 2 + 520  
**LW** = (B1 - 520)/2

Without safety clearance: **B1** = LW x 2 + 210  
**LW** = (B1 - 210)/2

<b>H</b>	System height	<b>B</b>	System width
<b>OH</b>	Height of fanlight	<b>B1</b>	System with incl. safety clearance
<b>LH</b>	Clear passage height	<b>B2</b>	System with without safety clearance
<b>FFL</b>	Finished Floor Level	<b>SB</b>	Side screen width
		<b>FB</b>	Door panel width
		<b>F</b>	Escape route width
		<b>LW</b>	Clear passage width

All dimensions in mm

## DOOR PANELS AND SIDE SCREENS WITH BREAK-OUT FUNCTION

### SST-FLEX – maximum safety with added benefits

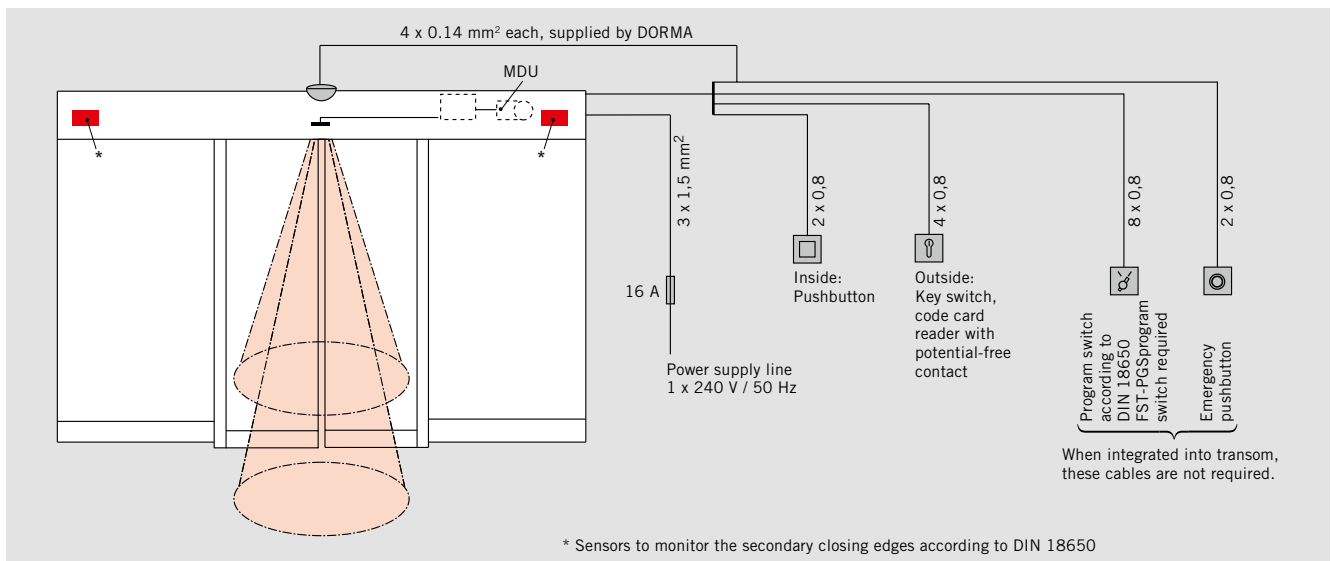
Pressure applied against the door panels and side screens of automatic break-out sliding door systems suffices to activate the break-out function, leaving the way out free. Fast escape from buildings equipped with this automatic break-out sliding door

system is thus ensured, even in a crush. Once broken out, the pivoted door panels and side screens remain in their position, however, they can easily be moved aside by hand. Such an opening could of course also be welcome on hot summer days, furthermore it can be utilised to turn the entrance area of shops

and department stores into additional sales space. When closed, DORMA SST automatic break-out sliding door systems effectively protect the interior against heat loss and draughts thanks to their especially developed frame profiles with integrated high-performance seals. At the same time, the

Softline cross sections and the minimum clearances between the door panels and the side screens provide maximum safety in the event of user contact with the door panels. Effective finger guard thanks to specially shaped pivot profiles at the break-out side screens.

## DORMA SST FLEX CONNECTIONS



The external emergency pushbutton has to be installed in the close range of the door. Max. cable length: 50 m.

Can be run in one cable with the program switch. The cable length for the external program switch must not exceed 50 m.

At the same time the cable must be shielded when ran with other wires (e. g. LIYCY 6 x 0.25 mm<sup>2</sup> flexible company Lapp).

DORMA has complemented their broad Automatic accessory range by further components to meet all kinds of safety-related requirements.

On the next few pages you will find a few products to give you an idea of DORMA's versatile accessory range.




## 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.



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 Euro 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 for the highest aesthetical demands

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

## EMERGENCY PUSHBUTTONS

	Designation	Specification	Installation system	Order No.
	<b>NAT</b>	Emergency pushbutton with Emergency Off function (door stops on activation of pushbutton) 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		
	<b>NAT 1</b>	NO contact: 1, NC contact: 1, white frame, flush-mounted version, 80 x 80 mm	System 55	90400025
	<b>NAT 2</b> No picture	Emergency pushbutton with Emergency Opening function, 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
	<b>NAT 4</b>	NO contact: 1, NC contact: 1, surface-mounting, 68 x 68 mm		05027031332
	<b>TL-N S55</b>	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>without 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

## ACTIVE INFRARED DETECTORS

Safety sensors	Designation	Specification	Colour	Order No.
	<b>Prosecure Opti Scan</b>	The active infrared curtain to EN 16005 comprehensively monitors the sides of the door and safeguards people within the opening range of the door panels (danger zone).	black silver-coloured white	86301100 86302100 86303100
	<b>Prosecure Opti Scan 1</b>	The active infrared curtain to DIN 18650 and EN 16005 comprehensively monitors the sides of the door and safeguards people within the opening range of the door panels (danger zone).	black silver-coloured white	86301101 86302101 86303101
Combined sensors	Designation	Specification	Colour	Order No.
	<b>Prosecure Opti Combi</b>	Active infrared curtain with direction recognition to replace light barriers, LCD display, precise positioning of AIR curtain thanks to indication of inclination angle on a well-readable scale (DIN 18650 and EN 16005)	black silver-coloured white	86711400 86712400 86713400



## ACTIVE INFRARED SAFETY SENSOR



Prosecure Opti Save safety sensors are excelled by their easy commissioning and adjustment. The sensors' monitoring quality within the driving path depends on the condition of the floor in the

close range of the door system. Prosecure Opti Save sensors are suitable to monitor standard floors and floors with low reflectance levels, gratings or floor mats. The operator and the Prosecure

Opti Save communicate bidirectionally via the integrated communication interface. The system performs the cyclical sensor test and activates the Energy Saving Mode (ESM) in a fast and reliable way, while the

operator automatically assesses its utilisation degree and switches the Prosecure Opti Save to Energy Saving Mode as soon as it is not required.

Designation	Specification	Colour	Order No.
<b>Prosecure Opti Safe 700</b>	with 1 master module and 2 pairs of transmitter/receiver modules, Length 700 mm, Type-approved in accordance DIN 18650 and EN 16005	Black	86501070
		Silver coloured	86502070
		Special colour	86504070
		White	86505070
<b>Prosecure Opti Safe 900</b>	with 1 master module and 2 pairs of transmitter/receiver modules, Length 900 mm, Type-approved in accordance DIN 18650 and EN 16005	Black	86501090
		Silver coloured	86502090
		Special colour	86504090
		White	86505090
<b>Prosecure Opti Safe 1200</b>	with 1 master module and 2 pairs of transmitter/receiver modules, Length 1200 mm, Type-approved in accordance DIN 18650 and EN 16005	Black	86501120
		Silver coloured	86502120
		Special colour	86504120
		White	86505120
<b>Prosecure Opti Safe 1600</b>	with 1 master module and 4 pairs of transmitter/receiver modules, Length 1600 mm, Type-approved in accordance DIN 18650 and EN 16005	Black	86501160
		Silver coloured	86502160
		Special colour	86504160
		White	86505160

# MOTION DETECTORS

	Designation	Specification	Order No.
	<b>Prosecure Easy Motion Mono</b>	Full-automatic access on pulse activation; adjustable inclination angle, inclined field of view and field size, LED status indicator Ambient temperature -20 °C to 60 °C	
		Black	86001000
		Silver-coloured	86002000
		White	86003000
	<b>Prosecure Easy Motion Stereo</b>	Adjustable inclination angle, inclined field of view and field size, direction recognition, cross-traffic suppression, immunity, LED status indicator Ambient temperature -20 °C to 60 °C	
		Black	86011000
	Silver-coloured	86012000	
	White	86013000	
	<b>Prosecure Opti Motion Mono</b>	Adjustable inclination angle, inclined field of view and field size, direction recognition, immunity, LED status indicator Ambient temperature -20 °C to 60 °C	
		Black	86101000
		Silver-coloured	86102000
		White	86103000
	<b>Prosecure Opti Motion Stereo</b>	Adjustable inclination angle, inclined field of view and field size, direction recognition, cross-traffic suppression, Slow Motion function, immunity, LED status indicator Ambient temperature -20 °C to 60 °C	
		Black	86111000
	Silver-coloured	86112000	
	White	86113000	
Accessories	Designation	Specification	Order No.
	<b>Rain protection cover</b>	For Easy Motion detectors	86031900
	<b>Rain protection cover/ ceiling angle bracket</b>	For Opti Motion detectors	86131900
	<b>Prosecure Remote Control</b>	Remote control for programming Prosecure Opti motion detectors or products from other brands; for the convenient and exact adjustment of high-mounted sensors; self-explaining menu navigation, LCD display Ambient temperature -20 °C to 60 °C	86991900

# SST FLEX

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## Specification text

Automatic break-out sliding door system in fine-frame design and break-out door panels firmly secured to the header and side screens with crush-free FLEX profiles. Manufactured according to the German guidelines for

power-operated windows, doors and gates, ZH 1/494, the German UVV (accident prevention) and VDE (Association of German Engineers) regulations latest edition in each case.

Quality assured manufacture, registered to ISO 9000. Equipped with two self-monitoring light barriers. TÜV type-approval on the basis of the DIN (German Industrial Standard) 18650 and EN 16005.

Power supply line: 230 V AC, 50 Hz. DORMA ES 200 mm sliding door operator with microprocessor control, self-learning.

### Track rail design

- Replaceable

### Locking devices

- Electromechanical combined locking device with internal manual lock release
- Electromechanical combined locking device with external manual lock release

### Activators

- Standard motion detector
- Motion detector with direction recognition
- Standard combined sensors
- Pushbutton
- Other activators, type = ...
- Safeguarding to DIN 18650 and EN 16005

### Operator options

- Module for connection to EIB building control system
- Safety software for closing edge protection of secondary closing edges with safety clearances of less than 200 mm via force limitation
- External power supply unit for 30 minutes of continuous operation

### Operation modes

- Off, Exit Only, Permanent Open, Automatic, self-regulated Partial Open
- Night-/Bank Function
- Airlock control for two successive doors

### Program switch design

- Lockable
- Lockable, with replaceable Euro profile half-cylinder

### Installation of lockable program switch

- External, flush-mounted version
- External, surface-mounted version

### Installation of Emergency Off pushbutton

- External, flush-mounted version
- External, surface-mounted version
- External, behind glass
- Without

### Dimensions

- Overall width B1 or B2 = ... mm
- System height H = ... mm
- Clear passage width LW = ... mm
- Clear passage height LH = ... mm

### Way of mounting for floor guide rail

- Continuous, flush-mounted version
- Sectional, surface-mounted version

### Glazing of sliding panel/s and side screens

- TSG 8, 10, 12 mm
- Double glazing (Iso) 22 mm
- Special glazing

### Fanlight

- Without fanlight, without panel cover
- With fanlight
- With panel cover

### Fanlight design

- Single-piece
- Two-piece
- Three-piece

### Glazing of fanlight

- TSG 8, 10, 12 mm
- Double glazing (Iso) 22 mm
- Special glazing

### Colour of aluminium components

- Silver-coloured, anodised E6/C0
- RAL = ...
- Special colour = ...



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