



SST FLEX

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

Technical product brochure

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 dormakaba fit into different structural openings, satisfy a variety of demands and can be adapted to suit individual requirements.

Powerful dormakaba 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 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 particularly in cases of emergency.

The break-out function for the sliding panels and side screens is also approved in most countries as a viable solution for emergency exits. The approved escape route function is not available in the operating states "Off" or "Locked".

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 dormakaba will also carry out the installation and commissioning work if requested.

Convenient and safe

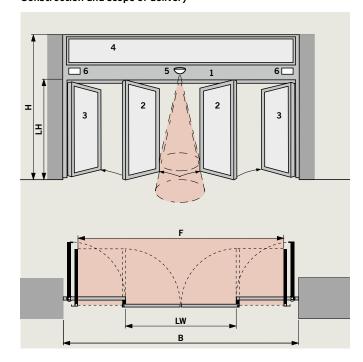
The control units with their adjustable parameters and self-learn capability offer a full range of functionality.

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.

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

Construction and scope of delivery



- 1 Self-supporting header, operator with integrated control unit
- 2 Break-out door panels with toughened (TSG) or laminated (LSG) safety glass
- 3 Side screens with break-out function
- 4 Fanlight or panel cover
- **5** Activators like motion detectors or sensors
- **6** Safeguarding of secondary closing edges to DIN 18650 and EN 16005
- H System height
 LH Clear passage height
 B System width
 F Escape route width
 LW Clear passage width

Data and features

Sliding panel and side	FLEX profiles	•		
screen design	Fanlight	0		
Door panels with break-o	out function	•		
Side screens with break-c	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 (with square-edged cover		202 x 200 mm		
Clear passage height (LH	l)	2100 – 2500 mm		
Safety clearance at secon	ndary closing edges	0		
Software for monitoring of secondary closing edge	es	0		
Technical specifications				
Continuously adjustable		•		
Continuously adjustable opening and closing force	e, max. 150 N	•		
Continuously adjustable opening and closing force	e, max. 150 N	•		
Continuously adjustable opening and closing force		• 100 – 700 mm/s		
Continuously adjustable opening and closing force Parameter adjustment	perator	100 – 700 mm/s		
Continuously adjustable opening and closing force Parameter adjustment Continuously adjustable opening speed - ES 200 o	perator closing speed			
Continuously adjustable opening and closing force Parameter adjustment Continuously adjustable opening speed - ES 200 o	perator closing speed ow (creep) speed	100 – 500 mm/s		
Continuously adjustable opening and closing force Parameter adjustment Continuously adjustable opening speed - ES 200 o Continuously adjustable (Continuously adjustable (C	perator closing speed ow (creep) speed	100 – 500 mm/s 30 – 90 mm/s		
Continuously adjustable opening and closing force Parameter adjustment Continuously adjustable opening speed - ES 200 o Continuously adjustable of Continuously adjustable I Supply voltage, frequency	perator closing speed ow (creep) speed	100 – 500 mm/s 30 – 90 mm/s 240 V, 50 Hz		
Continuously adjustable opening and closing force Parameter adjustment Continuously adjustable opening speed - ES 200 of Continuously adjustable of Continuously adjustable of Supply voltage, frequency Max. power consumption	perator closing speed ow (creep) speed	100 – 500 mm/s 30 – 90 mm/s 240 V, 50 Hz 250 W		
Continuously adjustable opening and closing force Parameter adjustment Continuously adjustable opening speed - ES 200 o Continuously adjustable of Continuously adjustable of Supply voltage, frequency Max. power consumption Power supply for external	perator closing speed ow (creep) speed	100 – 500 mm/s 30 – 90 mm/s 240 V, 50 Hz 250 W 24 V, 2 A		
Continuously adjustable opening and closing force Parameter adjustment Continuously adjustable opening speed - ES 200 of Continuously adjustable of Continuously adjustable of Continuously adjustable of Supply voltage, frequency Max. power consumption Power supply for external Class of protection	perator closing speed ow (creep) speed /	100 – 500 mm/s 30 – 90 mm/s 240 V, 50 Hz 250 W 24 V, 2 A IP 20		
Continuously adjustable opening and closing force Parameter adjustment Continuously adjustable opening speed - ES 200 o Continuously adjustable of Continuou	perator closing speed ow (creep) speed / I components	100 - 500 mm/s 30 - 90 mm/s 240 V, 50 Hz 250 W 24 V, 2 A IP 20 -20 - +60 °C max. 93 %		
Continuously adjustable opening and closing force Parameter adjustment Continuously adjustable opening speed - ES 200 o Continuously adjustable of Continuously adjustable of Continuously adjustable of Supply voltage, frequency Max. power consumption Power supply for external Class of protection Temperature range Admissible (relative) hum	perator closing speed ow (creep) speed / I components idity	100 - 500 mm/s 30 - 90 mm/s 240 V, 50 Hz 250 W 24 V, 2 A IP 20 -20 - +60 °C max. 93 %		

Dimensions and versions SST FLEX

Drive and control unit		SST FLEX
ES 200 operator		•
Microprocessor contro	l	•
Function programs	Off	•
	Automatic	•
	Permanent Open	•
	Partial Open	•
	Exit Only	•
	Night-/Bank Function	•
Connection for airlock	control	0
Delayed opening for cl switch	heck/code card reader or key	•
Self-learning		•
Potential-free contact		•
Equipped in accordance EN 16005	ce with DIN 18650 and	0
Automatic reversing	•	
Fail-safe design	0	
Fail-secure design*	0	
Panic closing function	(Observe regulations!)	0
Program switch	0	
Connection for access	control system	•
Bell contact		0
Door status indicator		0
Coupling module for c or LON building mana		0
Visual error indication		0
Rechargeable battery	pack	0
USV emergency powe	r supply unit	0
System stop on panel	break-out	•
* Ensure compliance w	·	
Electromechanical cor	mbined locking device	0
Electrical manual lock (only with rechargeabl		0

With FLEX profiles

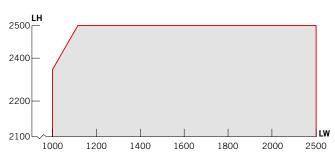
Fine-framed sliding doors with break-out function in elegant full-glass design

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

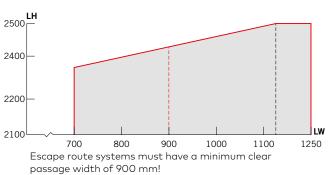
The FLEX profile system provides maximum flexibility as it can be combined with toughened safety glass or double glazing. Slender $\,$

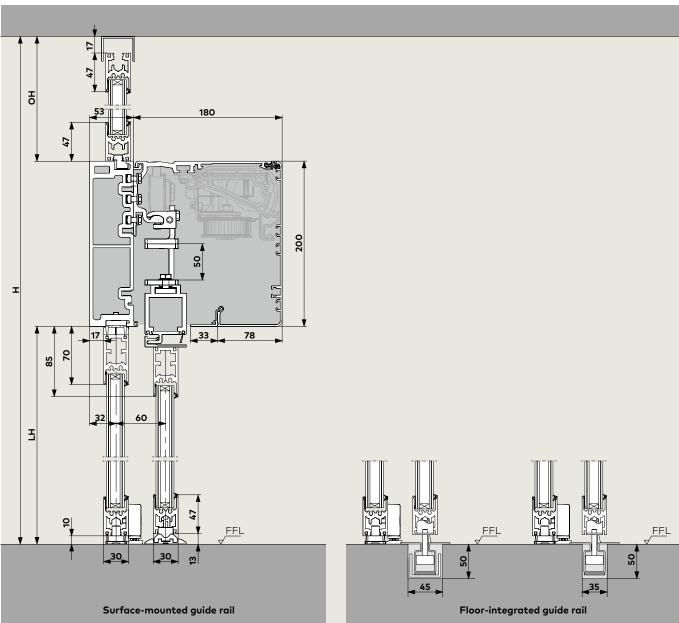
though they are, the profiles nevertheless offer optimum sealing performance and outstanding glass edge protection. Automatic sliding doors with break-out are the ideal solution wherever ensuring safety in emergency escape routes is the main priority. At the same time, they also offer maximum light penetration, visibility and architectural compatibility.

Double-panel version

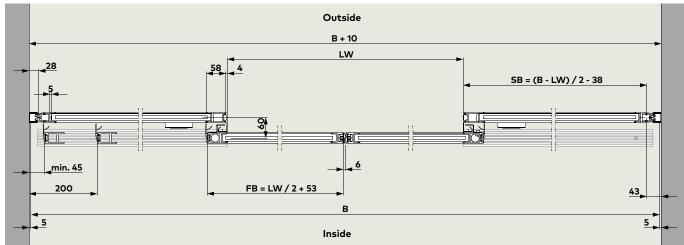


Single-panel version (only on request)

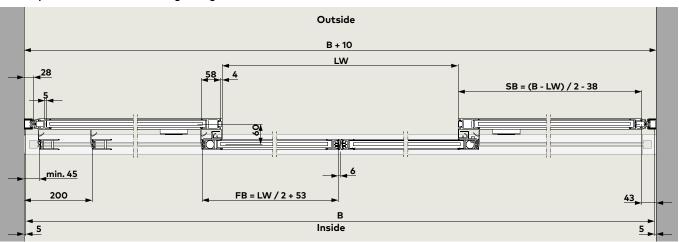




Double-panel version with surface-mounted guide rail



Double-panel version with floor-integrated guide rail



SST FLEX standard dimensions

Version	01	02	03	04	05	06	07	80	09	10	11	12	13	14	15	16
LW	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
B1	2520	2750	2920	3120	3320	3520	3720	3920	4120	4320	4520	4720	4920	5120	5320	5520
F	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 \times 2 + 520 **LW** = (B1 - 520) / 2 Without safety clearance:

B2 = LW x 2 + 210 **LW** = (B2 - 210) / 2

В	System width
B1	System with incl. safety clearance
B2	System with without safety clearance
SB	Side screen width
FB	Door panel width
F	Escape route width
LW	Clear passage width
Н	System height
ОН	Height of fanlight
LH	Clear passage height
FFL	Finished Floor Level

All dimensions in mm.

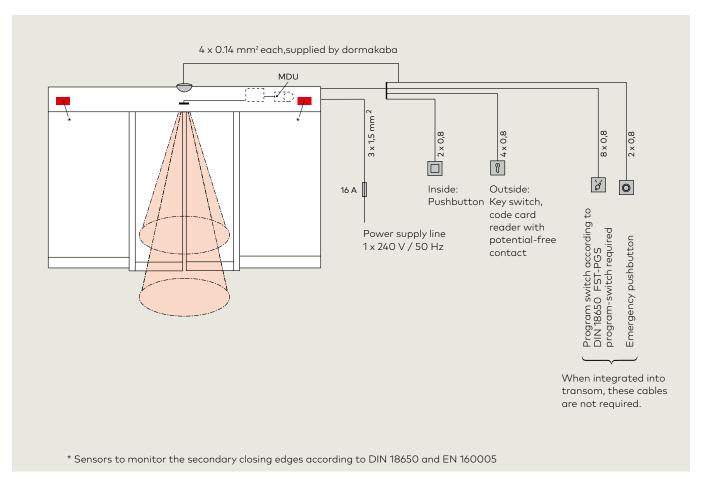
Door panels and side screens with break-out function

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. When closed, dormakaba 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.

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^2 flexible company Lapp).

dormakaba 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 dormakaba's versatile accessory range.

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.

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.
	PG-S1	5-position, aluminium, white, flush-mounted version, 80 x 80 x 40 mm	Gira S-Color	19135401150
	PG-S2	5-position, lockable, aluminium, white, flush-mounted version, $80 \times 80 \times 40$ 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, membrane keypad, aluminium-coloured, white, flush-mounted version, 80 x 80 mm	System 55	16556901150

dormakaba SST FLEX

Emergency pushbuttons

	Designation	Specification	Installation system	Order No.
	NAT	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		
	NAT 1	NO contact: 1, NC contact: 1, white frame, flush-mounted version, 80 x 80 mm	System 55	90400025
⊕⊕	NAT 2 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
	NAT 4	NO contact: 1, NC contact: 1, surface-mounting, 68 x 68 mm		05027031332
Schebe eindrücken	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, without frame , 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

Prosecure Opti Scan	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
Prosecure Opti Scan 1	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
Designation	Specification	Colour	Order No.
Prosecure Opti Combi	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
	Opti Scan Prosecure Opti Scan 1 Designation Prosecure	Opti Scan comprehensively monitors the sides of the door and safeguards people within the opening range of the door panels (danger zone). Prosecure Opti Scan 1 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). Designation Specification Active infrared curtain with direction recognition to replace light barriers, LCD display, precise positioning of AIR curtain thanks to indication of inclination angle	Opti Scan comprehensively monitors the sides of the door and safeguards people within the opening range of the door panels (danger zone). Designation Colour Colour Colour Active infrared curtain with direction recognition to replace light barriers, LCD display, precise positioning of AIR curtain thanks to indication of inclination angle comprehensively monitors the sides of the door and safeguards people within the silver-coloured white black silver-coloured white colour black silver-coloured white

dormakaba SST FLEX

Motion detectors

	Designation	Specification	Colour	Order-No.
	Prosecure Easy Motion Mono	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 silver-coloured white	86001000 86002000 86003000
	Prosecure Easy Motion Stereo	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 silver-coloured white	86011000 86012000 86013000
dormo.	Prosecure Opti Motion Mono	Adjustable inclination angle, inclined field of view and field size, direction recognition, immunity, LED status indicator Ambient temperature –20 °C to 60 °C	black silver-coloured white	86101000 86102000 86103000
	Prosecure Opti Motion Stereo	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 silver-coloured white	86111000 86112000 86113000
Accessories	Designation	Specification		Order-No.
	Rain protection cover	For Easy Motion detectors		86031900
	Rain protection cover/ ceiling angle bracket	For Opti Motion detectors		86131900
♦	Prosecure Remote Control	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

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	Operation modes Off, Exit Only, Permanent Open, Automatic, self-regulated Partial Open Night-/Bank Function Airlock control for two successive doors	Dimensions ☐ Overall width B1 or B2 = mm ☐ System height H = mm ☐ Clear passage width LW = mm ☐ Clear passage height LH = mm
device with internal manual lock release Electromechanical combined locking device with external manual lock release	Program switch design ☐ Lockable ☐ Lockable, with replaceable Euro profile half-cylinder	Way of mounting for floor guide rail Continuous, flush-mounted version Sectional, surface-mounted version Glazing of sliding panel/s and side screens
Activators		☐ TSG 8, 10, 12 mm
Standard motion detector Motion detector with direction recognition	Installation of lockable program switch ☐ External, flush-mounted version ☐ External, surface-mounted version	☐ Double glazing (Iso) 22 mm ☐ Special glazing
 □ Standard combined sensors □ Pushbutton □ Other activators, type = □ Safeguarding to DIN 18650 and EN 16005 	Installation of Emergency Off pushbutton External, flush-mounted version External, surface-mounted version External, behind glass	Fanlight ☐ Without fanlight, without panel cover ☐ With fanlight ☐ With panel cover
Operator options	☐ Without	Fanlight design
☐ Module for connection to EIB		☐ Single-piece
building control system		☐ Two-piece
Safety software for closing edge protection of secondary closing		☐ Three-piece
edges with safety clearances of less than 200 mm via force limitation		Glazing of fanlight
☐ External power supply unit		☐ TSG 8, 10, 12 mm
for 30 minutes of continuous operation		☐ Double glazing (Iso) 22 mm☐ Special glazing
		Colour of aluminium components Silver-coloured,
		anodised E6/C0
		□ RAL =
		Special colour =



Door Hardware



Electronic Access & Data



Mechanical Key Systems



Lodging Systems



Entrance Systems



Interior Glass Systems



Safe Locks



Service

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