



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 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.

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.

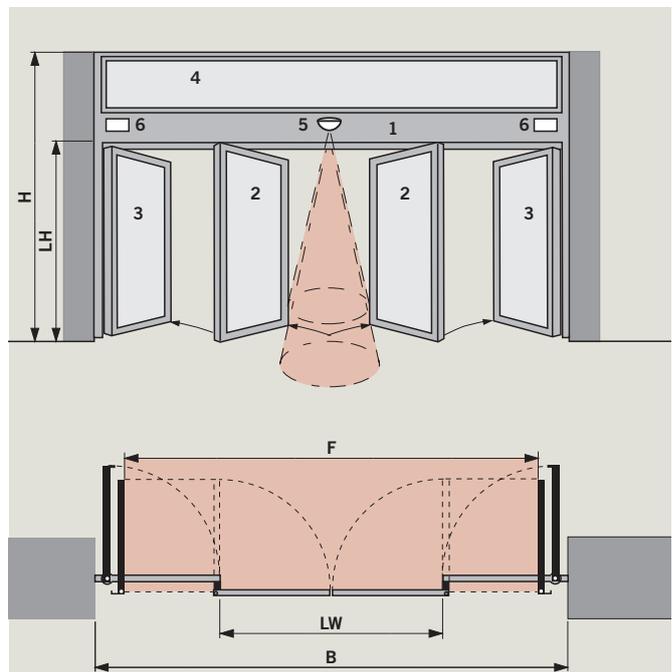
Features and benefits

- 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



Quality-assured manufacture

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

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 9001		●

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)	○

● Standard ○ Option – Not available

With FLEX profiles

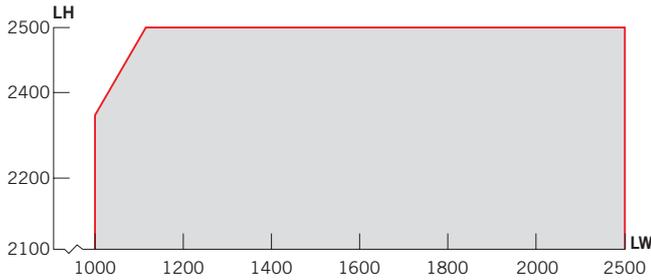
Fine-framed sliding doors with break-out function in elegant full-glass design

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.

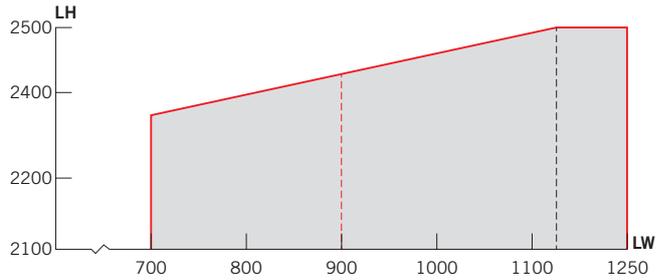
The FLEX profile system provides maximum flexibility as it can be combined with toughened safety glass or double glazing. Slender

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.

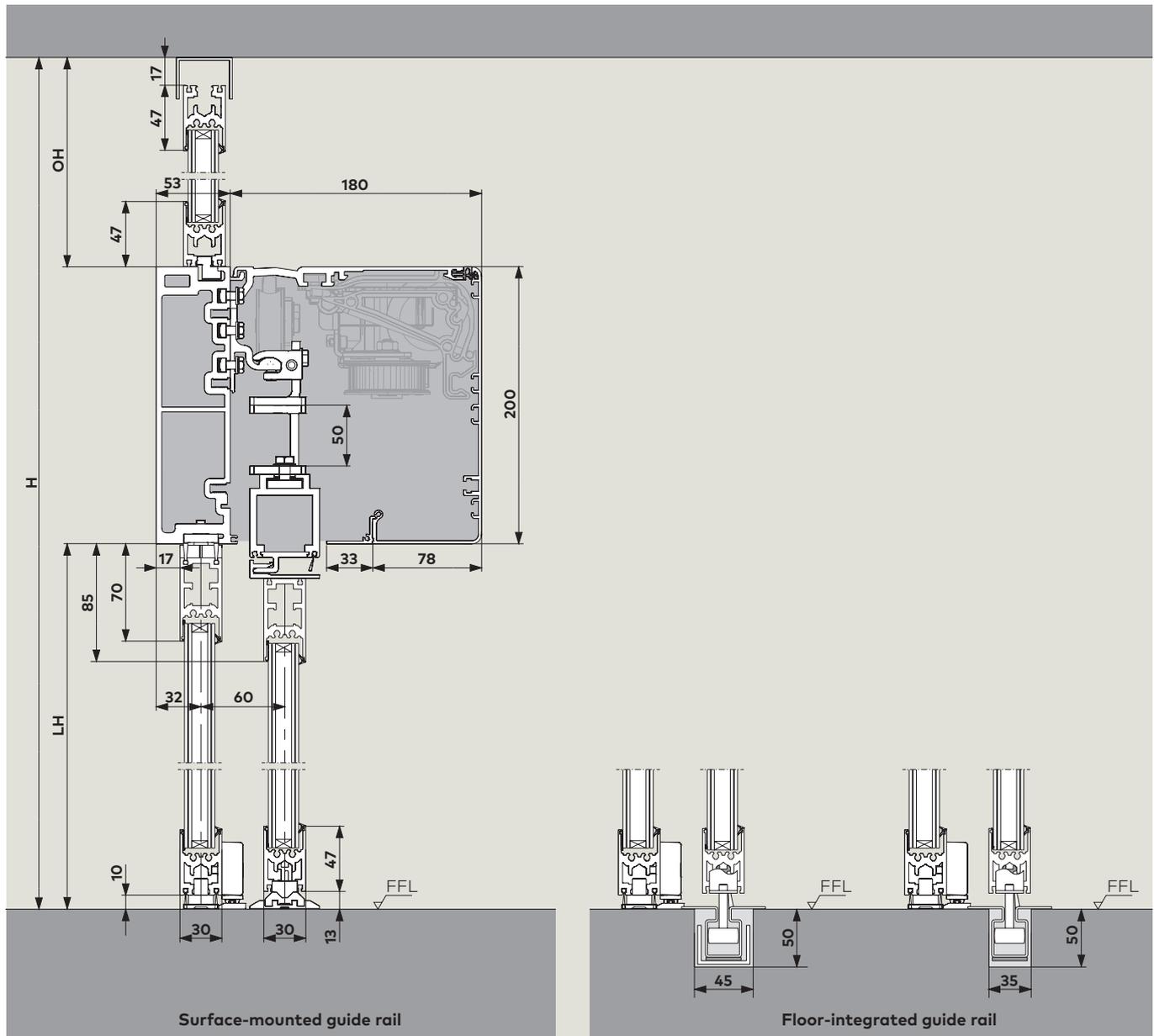
Double-panel version



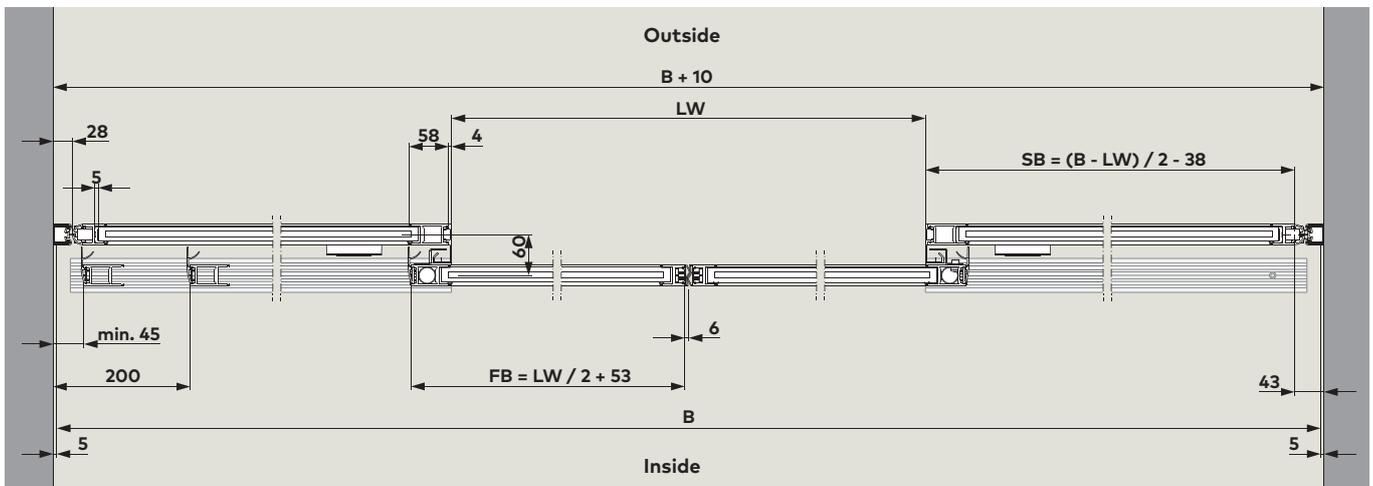
Single-panel version (only on request)



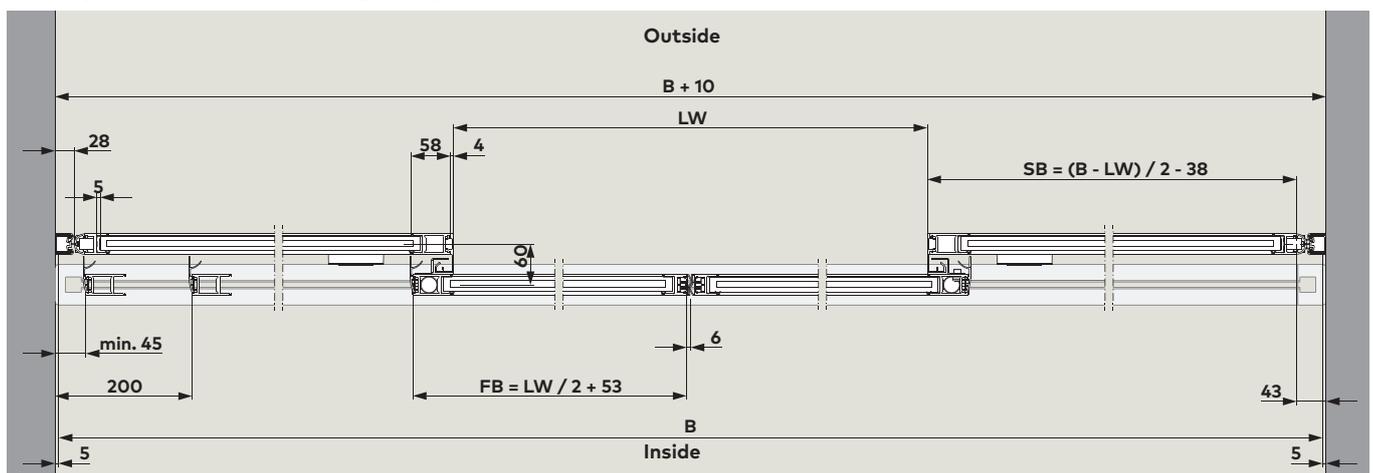
Escape route systems must have a minimum clear passage width of 900 mm!



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
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: $B2 = LW \times 2 + 210$
 $LW = (B2 - 210) / 2$

- B** 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
- H** System height
- OH** Height of fanlight
- LH** Clear passage height
- FFL** Finished Floor Level

All dimensions in mm.

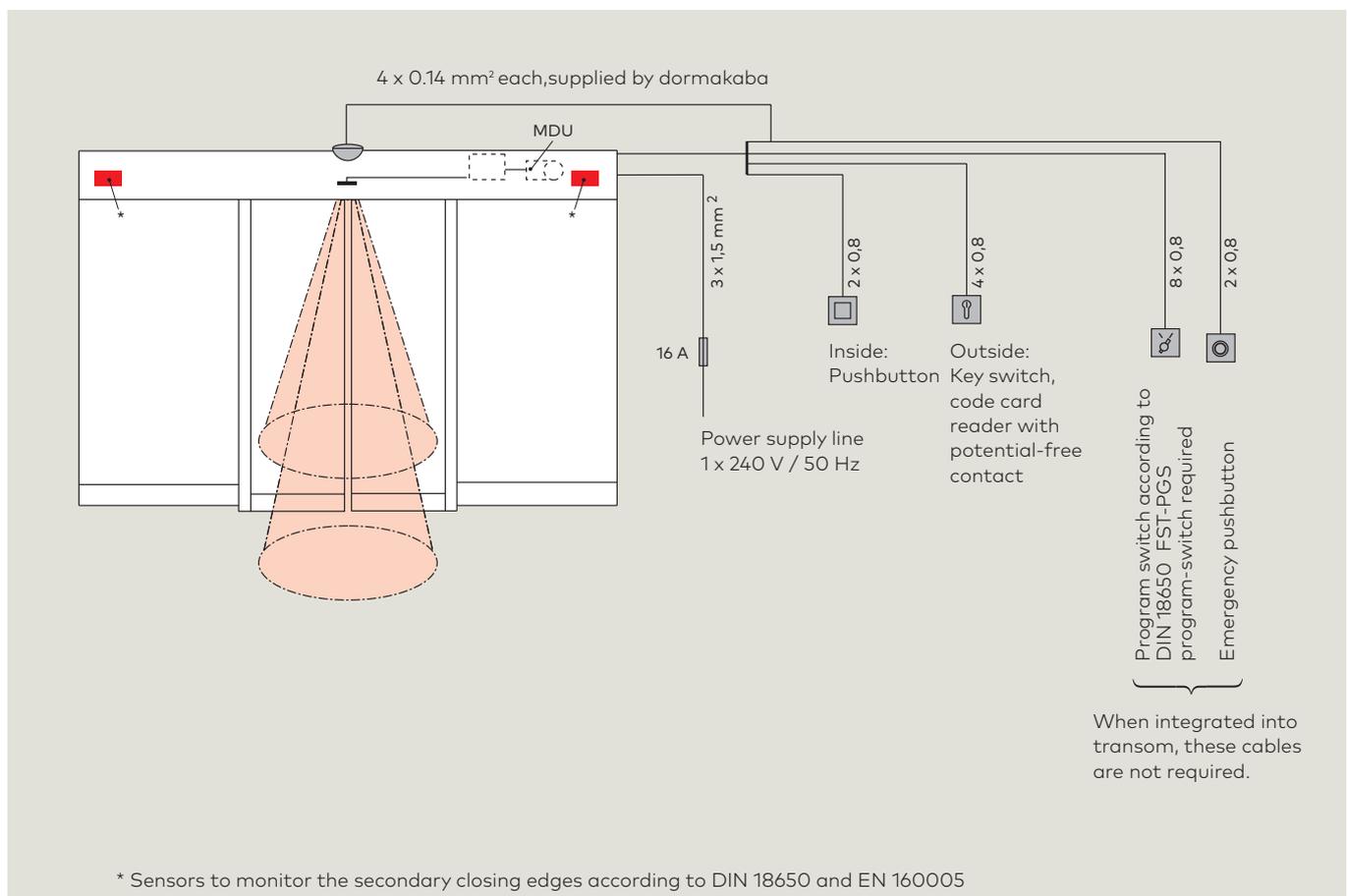
Door panels and side screens with break-out function

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. 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, 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 mm² flexible company Lapp).

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

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 aesthetic 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 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, membrane keypad, aluminium-coloured, white, flush-mounted version, 80 x 80 mm	System 55	16556901150

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
	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

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 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/CO
- RAL = ...
- Special colour = ...

The complete solution

Automatic entrance systems require careful specification and installation to ensure safety and reliability in use. Commencing with a risk assessment survey, dormakaba will advise at all stages of design and installation so the correct methods of operation and user safety protection are adopted.

Risk Assessment

All automatic doors must be specified and installed following appropriate safety standards requiring risk assessment prior to installation and periodically during the life of the product. dormakaba are experienced with safety specification and can provide further details on request.

Professional and impartial advice from staff assessed and accredited by ADSA (Automatic Door Suppliers Association):

- Site surveys, escape routes, impaired user access.
- Risk assessment reports
- Consultation with leading safety bodies and equipment manufacturers.
- CPD delivery to specifiers and professional organisations



Protection

Automatic doors installed in the UK are subject to the highest safety demands in accordance with EN 16005:2012. To meet these requirements consideration must be given to the use of barriers, self-monitoring sensors and other protective devices. These are mandatory for each door and uniquely specific to its location.

Advanced, standards-compliant technologies for all door types:

- Compact sensors with microwave Doppler technology for motion detection
- Combination sensors with active infrared technology for simultaneous motion and passageway protection
- Active infrared motion detectors based on the triangulation principle for protection of users or obstructions located in the door panel travel path
- Laser sensors with precision monitoring and extended field of view over the door face
- Barriers, fingerguards and appropriate signage for increased risk users, children or failsafe situations



Activation

dormakaba automatic doors are designed and tested to meet a wide range of building entrance styles and user requirements. Access to the building can be controlled through a number of methods from simple switches and keylocks to intelligent access control readers.

Wide choice of access methods from dormakaba:

- Radar approach sensors, opening integrated with emergency escape systems
- Manual pushbuttons with high visibility and ease of use for disabled users.
- Access control readers using simple access fobs or fully integrated with a monitored access control system



Maintenance

Automatic doors must be maintained and periodically assessed to be safety compliant. dormakaba have the UK's largest service network of trained engineers experienced on all types of door system both dormakaba and from other manufacturers.

Qualified service engineers assessed and accredited by ADSA:

- Scheduled maintenance visits and emergency callout.
- Risk assessment reports
- Trained and accredited service engineers with national coverage and logistic support



For further advice on dormakaba products and accessories please contact:

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