



Curved Sliding Doors

DORMA

BST/FBST 
COMFORT LINE

Attractive visual appearance, various fields of application.

DORMA BST COMFORT LINE automatic curved sliding doors are the perfect answer to providing entrance areas with a customised and aesthetically pleasing appearance.

The systems can be delivered in half-circle (180°) and full-circle (360°) design. They are available in 6 well-established diameters. The façade connection is realised with a flexible connection profile.

The door systems are manufactured as concave and convex versions. Tailored to your architectural concept, DORMA BST COMFORT LINE automatic curved sliding doors can be designed to either contrast or harmonise with the building façade, providing an all-glass appearance complemented and augmented by the slender profiles of their fine-framing.

They can also be combined with other automatic doors.

Reliable and safe

As in the case of all components and systems from the DORMA portfolio, DORMA BST COMFORT LINE curved sliding doors excel in reliability and user convenience. The self-learning microprocessor control unit keeps the system running smoothly and reliably. Combining with the integrated presence sensor, it also ensures maximum operational safety.

The doors are designed to order, manufactured to fit and supplied ready for installation. If required, DORMA will also perform the installation and commissioning work. If desired, the doors can be equipped with safety components (sensors) in accordance with DIN 18650.

For emergency exits and escape routes

Under the designation FBST COMFORT LINE, these curved sliding doors can also be supplied with a redundant operator, an additional control unit for safety purposes and a special radar motion detector.

The FBST is typed-approved by the German TÜV as an "automatic sliding door without breakout for use in escape routes".

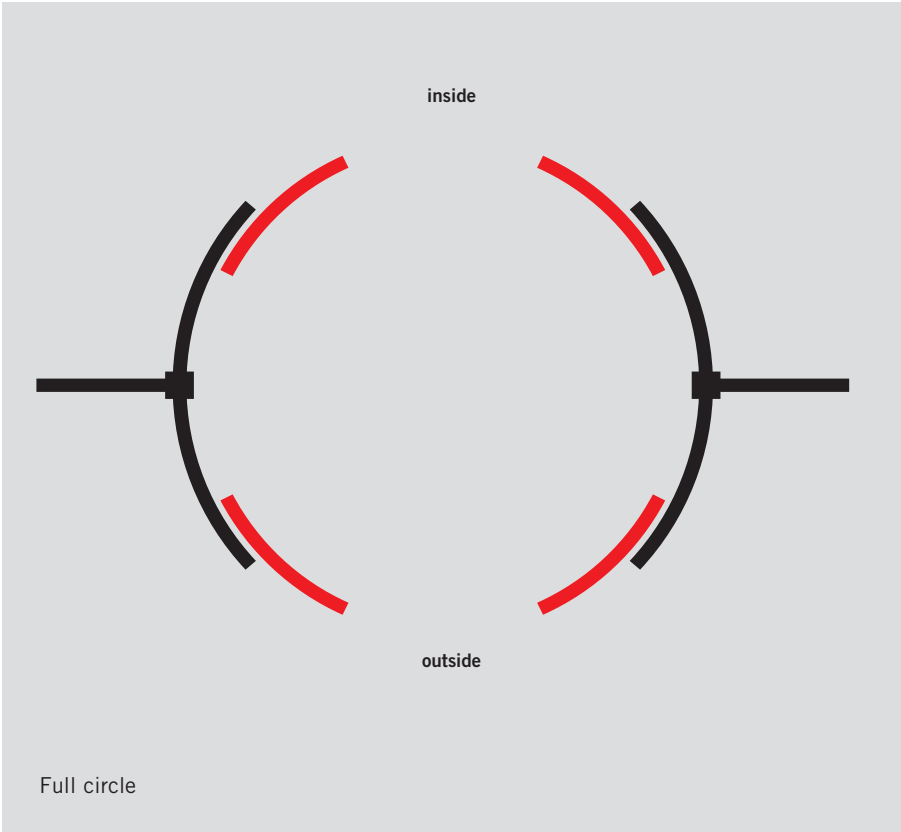
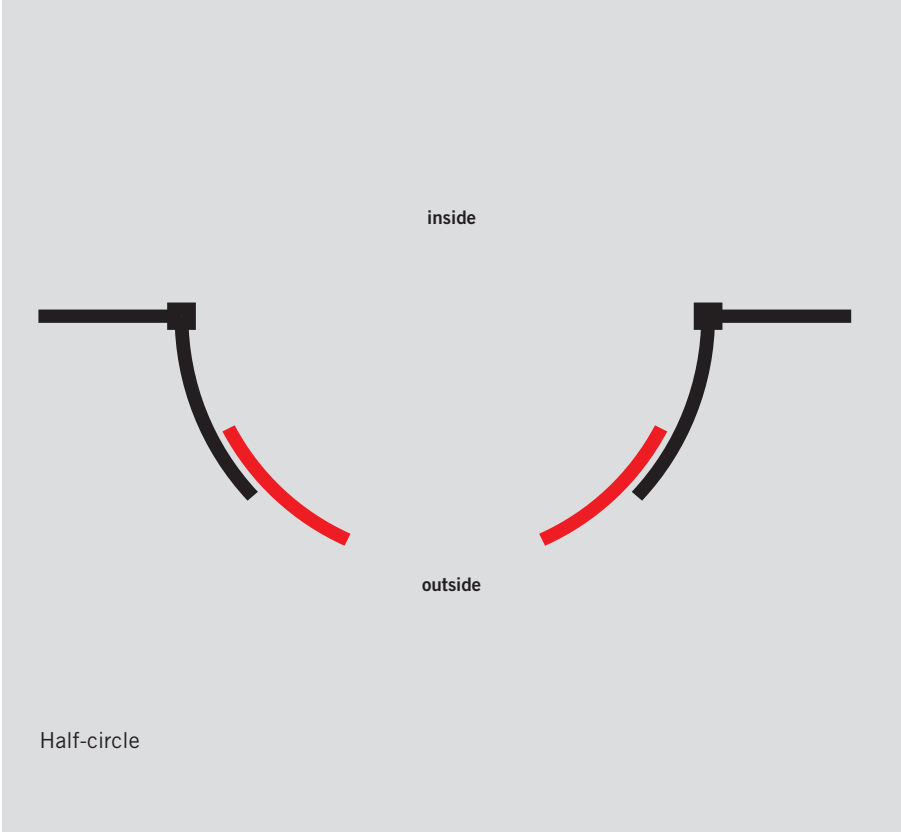
If desired, the doors can be equipped with safety components (sensors) in accordance with DIN 18650.



DORMA FBST with approval for application in emergency exits and escape routes according to DIN 18650



Basic configurations



| Data and features | BST COMFORT LINE | FBST COMFORT LINE |
|--|---------------------------------------|--------------------------|
| Clear passage width LW ²⁾ | 1235, 1519, 1660, 1802, 1943, 2085 | 1660, 1802 1943, 2085 |
| Escape route | | 1660, 1802 1943, 2085 |
| Installation width B, min. ²⁾ | 2100 mm | |
| Passage height H | 2200 / 2500 mm ¹⁾ | |
| Half-circle radius r | 1000, 1200, 1300, 1400, 1500, 1600 | 1300, 1400 1500, 1600 |
| Full circle radius r | 1000, 1200, 1300, 1400, 1500, 1600 | 1300, 1400 1500, 1600 |
| Number of sliding panels | 2 | |
| 2-panel, symmetrical | ● | |
| Fixed side screens | ● | |
| Canopy height (min.) | 260 mm | |
| Canopy height extension ¹⁾ | 260 – 500 mm | |
| Sliding panel, convex | ● | |
| Max. weight per door panel | 80 kg | 80 kg |

¹⁾ Standard dimensions (other dimensions on request)

²⁾ Depending on radius r

| Technical data | BST COMFORT LINE | FBST COMFORT LINE |
|--|-------------------------|--------------------------|
| Power consumption, max. | 250 W | |
| Power consumption, average | 30 W | |
| Supply voltage/frequency | 230 V / 50 – 60 Hz | |
| External power supply | 27 V DC / 2 A | |
| TÜV type-approved | ● | |
| Compliant with the Low Voltage Directive | ● | |
| Manufactured to ISO 9001 | ● | |

| Adjustable parameters | BST COMFORT LINE | FBST COMFORT LINE |
|---|-------------------------|--------------------------|
| Opening speed per panel, adjustable | 100 – 750 mm/s | |
| Closing speed per panel, adjustable | 100 – 500 mm/s | |
| Low (creep) speed per panel, adjustable | 30 – 90 mm/s | |
| Opening and closing force, adjustable | ● | |
| Max. force on contact with obstacle | 150 N | |

| Operator and control unit | BST | FBST |
|--|--------|-----------|
| Operator | ES 200 | ES 200 2D |
| Microprocessor control unit | ● | |
| Integrated presence sensor | ○ | |
| Equipped in accordance with DIN 18650 | ○ | |
| Obstruction self-recognition | ● | |
| Automatic reversing cycle on obstruction contact | ● | |
| Complete system self-test | ● | |
| Connection for airlock function | ● | - |
| Parameter adjustment capable | ● | |
| Self-learning | ● | |
| Class of protection | IP 20 | |
| Pulse expansion for cheque and code card readers or key switches | ● | |
| Potential-free contact | ● | |
| Bus-capable | ● | |
| Door status contact, locking device for door system | ○ | |

| Program modes | BST | FBST |
|-------------------------|-----|------|
| Off | | ● |
| Automatic | ● | |
| Exit Only | ● | |
| Permanent Open | ● | |
| Partial Open, Exit Only | ● | |
| Night-/Bank Function | ● | |

| Design of ceiling | BST | FBST |
|--|-----|------|
| Ceiling, melamine, white | ● | |
| Upper dust-proof ceiling | ● | |
| Rain-proof ceiling with drainage spouts (prepared) | ○ | |

| Profiles and glazing | BST | FBST |
|--|-----|------|
| Fine-frame profile system with 8 mm ESG - G | | ● |
| Fine-frame profile system with 8,76 mm VSG - G | | ○ |

| Accessories | BST | FBST |
|---|-----|------|
| Straight panel board for top façade connection | | ○ |
| Lateral façade connection glass/panel board | | ○ |
| Aluminium girder with aluminium cover, external | | ● |
| Aluminium girder | | ● |
| Downlights | | |
| Ceiling aperture for downlights by others | | ○ |
| Halogen spot, 20 W, including ceiling aperture and accessories | | ○ |
| Floor finish | | |
| Emco floor mat | | ○ |
| Arwei floor mat | | ○ |
| Floor guide rail | | |
| Surface-mounted floor guide without floor ring | | ● |
| Surface-mounted floor guide with floor ring | | ○ |
| Flush-mounted floor guide with floor ring (Compulsory for clear passage widths (LW) beyond 1500 mm) | | ○ |

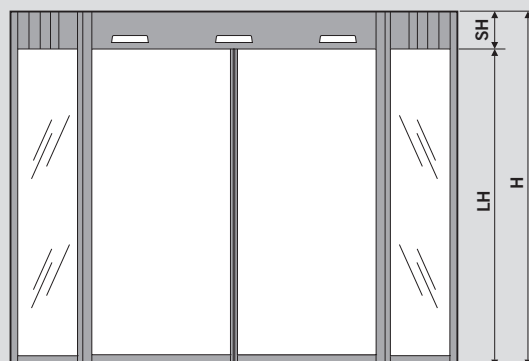
| Accessories/Safety equipment | BST | FBST |
|--|-----|------|
| Locking device | | |
| Electro-mechanical locking device | ○ | ○ |
| Fail-safe via emergency power supply unit | ○ | ● |
| Monitored rechargeable battery pack | ○ | ● |
| Intrinsically safe activator in escape direction | - | ● |
| Radar motion detector, external | | ○ |
| Radar motion detector, internal | | ○ |
| Emergency pushbuttons | | |
| Emergency Off function | ○ | - |
| Emergency Opening function | - | ○ |

● standard
○ optional

Half-circle and full-circle configurations

Standard dimensions

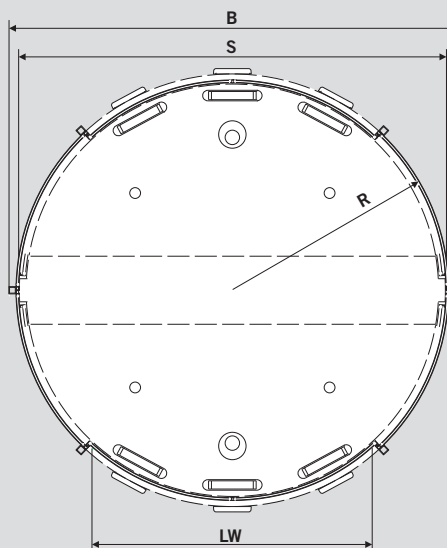
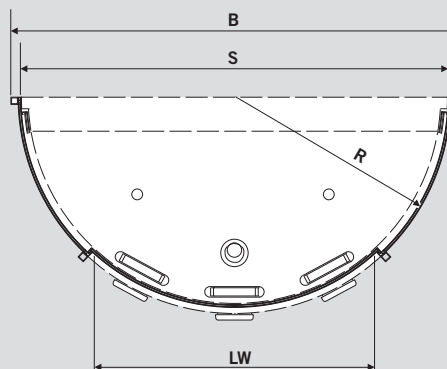
| | |
|----------------------|-----------|
| Clear passage width | LW |
| Actual radius | r |
| Internal width | S |
| System width | B |
| Clear passage height | LH |
| Canopy height | SH |
| System height | H |
| Dimensions in mm | |



Half-circle and full-circle configurations

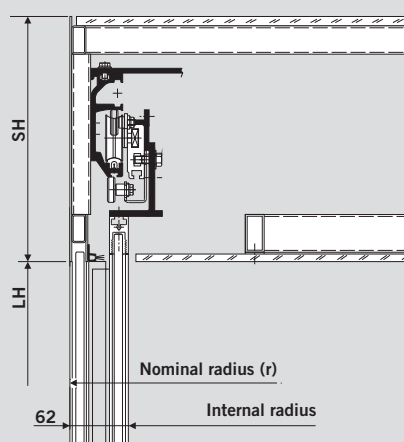
Fine-frame profile system G

| | | | | | | |
|-----------|------|------|------|------|------|------|
| r | 1000 | 1200 | 1300 | 1400 | 1500 | 1600 |
| B | 2100 | 2500 | 2700 | 2900 | 3100 | 3300 |
| S | 1960 | 2360 | 2560 | 2760 | 2960 | 3160 |
| LW | 1235 | 1519 | 1660 | 1802 | 1943 | 2085 |

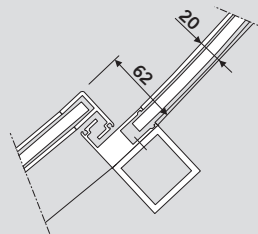


DORMA FBST with approval
 for application in emergency
 exits and escape routes
 according to DIN 18650

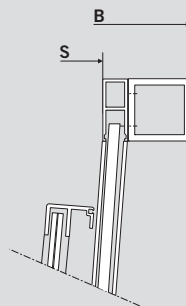
Fine-frame profile system G



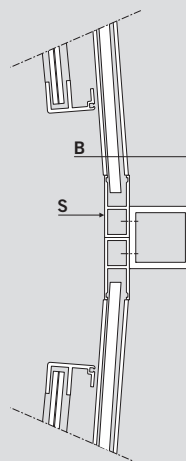
Drum wall and sliding panel with sealing profiles



Panels with centre seals

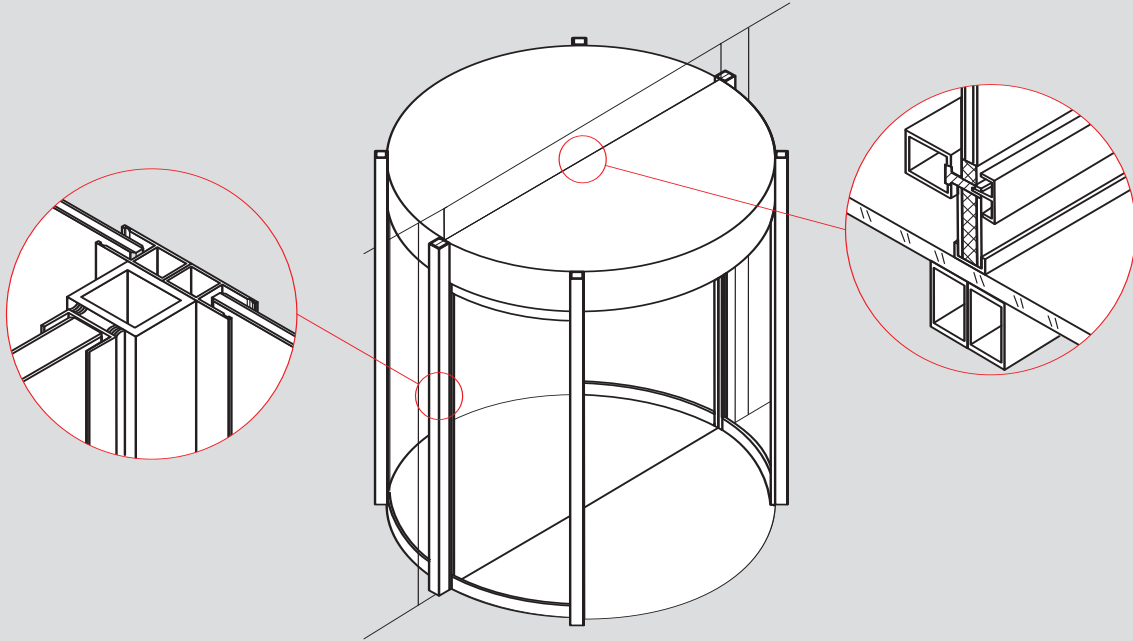


Aluminium girder with connection to half-circle drum wall

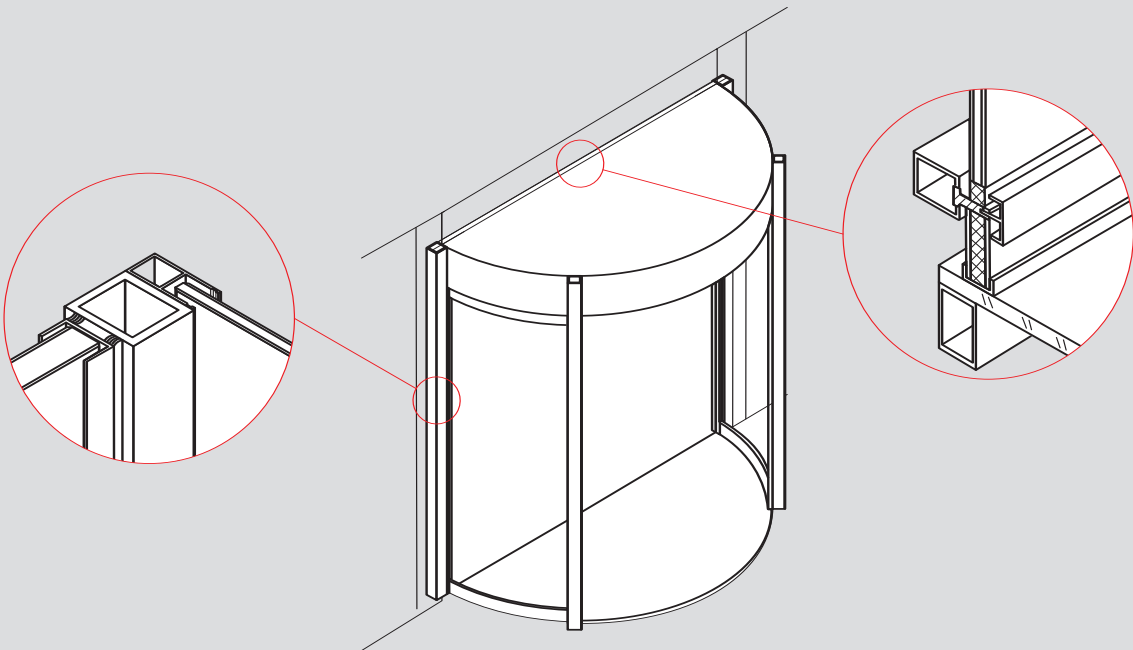


Aluminium girder with connection to full circle drum wall

Façade connection 360°

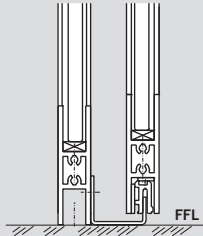


Façade connection 180°

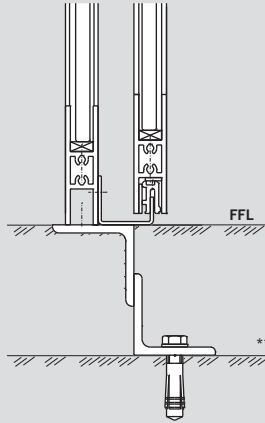


Floor guides

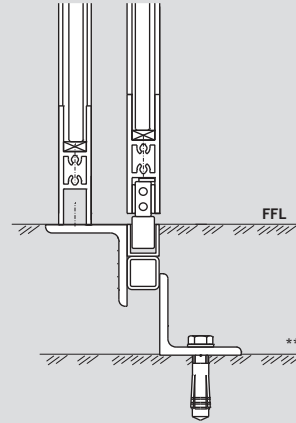
Surface-mounted floor guide without floor ring



Surface-mounted floor guide with floor ring



Flush-mounted floor guide with floor ring



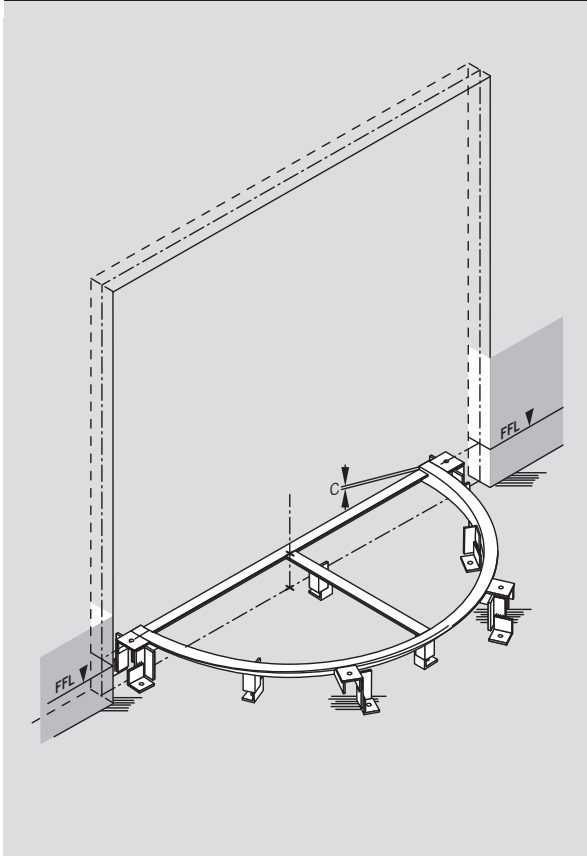
The design of the floor guide depends on the opening width* and the prevailing on-site conditions and comprises

- surface-mounted floor guides with/without floor ring
- flush-mounted floor guides with floor ring.

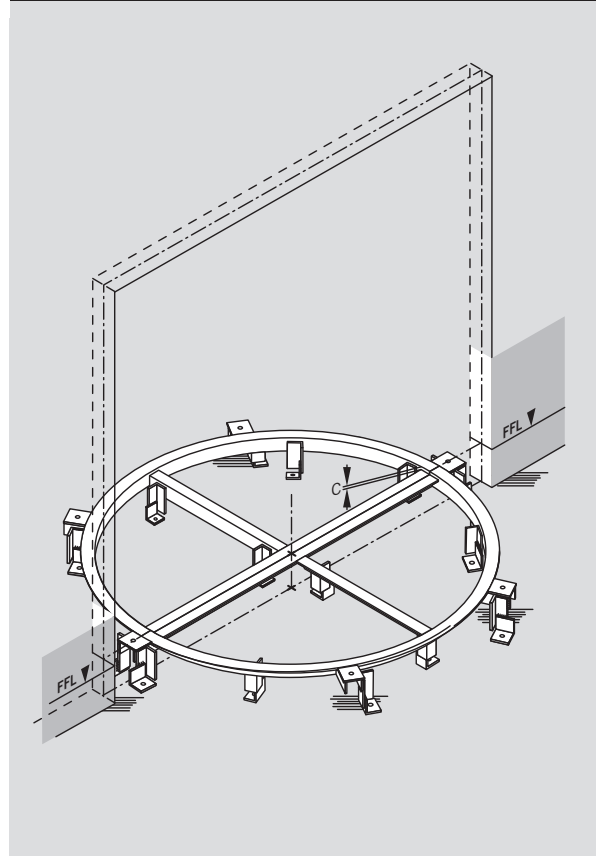
*Starting from a clear opening width of 1500 mm, a flush-mounted floor guide is required.

**upper edge of unfinished floor

Floor ring with half circle design

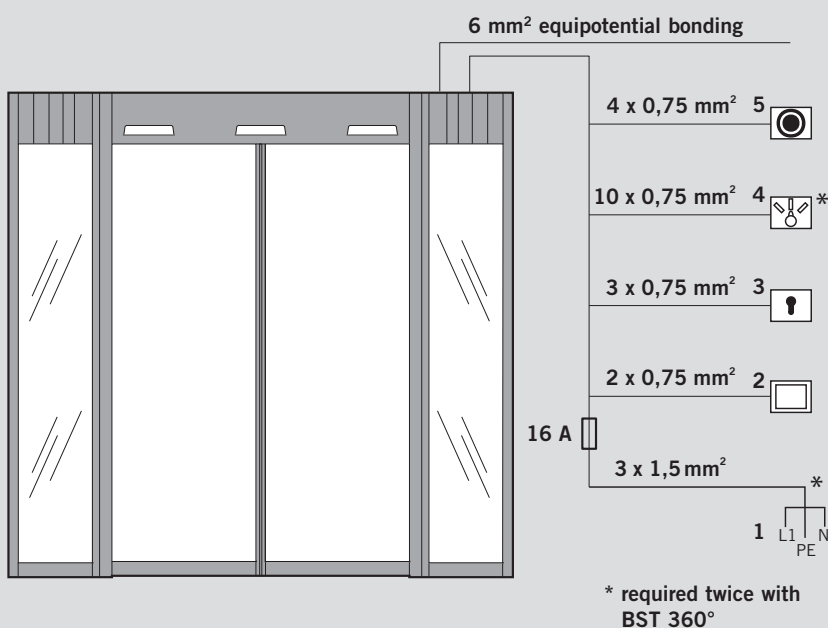


Floor ring with full circle design





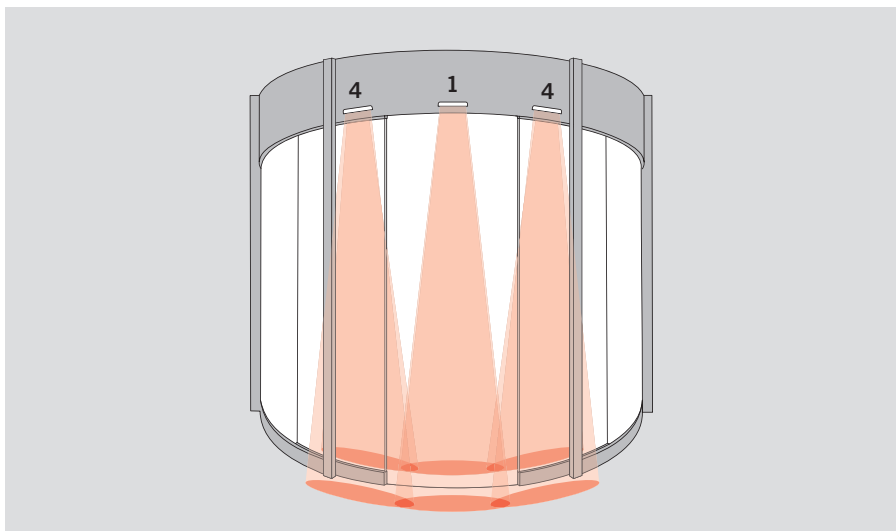
Connection diagram



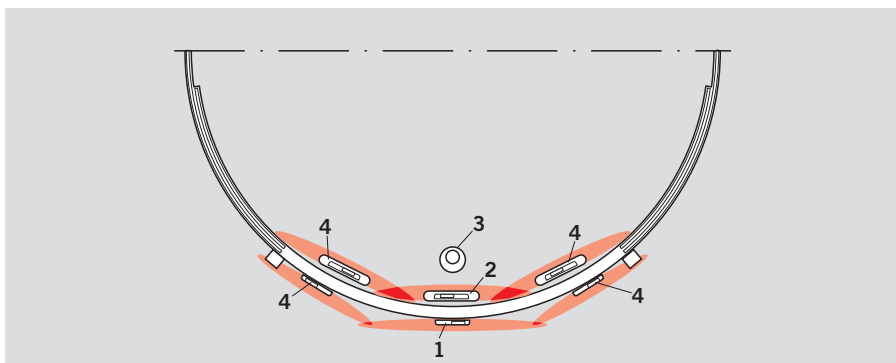
- 1 Feeder
- 2 Internal pushbutton
- 3 Key switch
- 4 Program switch
- 5 Emergency pushbutton (option)

The external Emergency Off pushbutton must be installed close to the door. The maximum cable length amounts to 30 m. The cable can be laid together with the cable for the program switch. The maximum length of the cable connecting the external program switch is 30 m. If the cable is laid with other cables, it must be provided with a shield..

Safety equipment



- 1 External radar motion detector/combined sensor, external (compulsory with DIN 18650)
- 2 Integrated infrared safety sensor to monitor the passage area
- 3 Internal radar motion detector
- 4 Infrared safety sensor (optional, compulsory with DIN 18650)



Program switch

When combining the system with a program switch out of the DORMA accessory range, the automatic door system even meets individual requirements and offers easy handling.

These program switches are available in various designs have been conceived for all kinds of demands.

Furthermore 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 to cope with the highest aesthetic demands



Program switches for sliding door operators

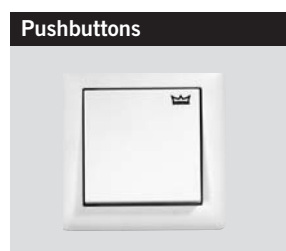
| Designation | Specification | Installation system | Order No. |
|--------------|--|---------------------|-------------|
| PG-S2 | 5-position, lockable, aluminium, white, flush-mounting, 80 x 80 x 40 mm | Gira S-Color | 19135602150 |
| EPS-S | Full-electronic program switch in System 55 design, 5-position,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



Program switches for sliding door operators in emergency exits and escape routes (FST)

| Designation | Specification | Installation system | Order No. |
|----------------|--|---------------------|-------------|
| PG-FST1 | 5-position, lockable, aluminium, white, flush-mounting, 80 x 80 mm | Gira S-Color | 19135603150 |
| PG-FST2 | 5-position, lockable via Euro profile half-cylinder, white, aluminium, flush-mounting, 105 x 80 x 65 mm | Deutsche Solenoid | 19142001170 |
| | box for surface-mounting: | | 19142201170 |
| EPS-FST | Full-electronic program switch in System 55 design, 5-position, lockable via code or additional key switch TL-ST S55, membrane keypad, white, aluminium-coloured, flush-mounting, 80 x 80 mm | System 55 | 16556801150 |

Pushbuttons



Pushbuttons

| Designation | Specification | Installation system | Order No. |
|-------------|---|---------------------|-------------|
| Pushbutton | Single-pole changeover contact, standard frame, white, flush-mounting | System 55 | 19144701170 |



Key switch

| Designation | Specification | Order No. |
|-------------|--|-------------|
| KT 3-1 | 1 NO contact, with Euro profile half-cylinder (can be replaced by any half-cylinder of a master-key system), you can only withdraw the key when it is in zero position, aluminium, metal, 75 x 75 x 60 mm | |
| KT 3-1 | flush-mounting | 05054531332 |
| KT 3-1 | surface-mounting | 05054631332 |
| KT 8 | Lettering "Auf, Zu", 2 NO contacts, with Euro profile half-cylinder can be replaced by any half-cylinder of a master-key system), you can only withdraw the key when it is in zero position, aluminium, metal, 75 x 75 x 60 mm | |
| KT 8 | flush-mounting | 05054831332 |
| KT 8 | surface-mounting | 05054931332 |

Emergency pushbutton



| Designation | Specification | Installation system | Order No. |
|-------------|---|---------------------|-----------|
| NAT 1 | To interrupt the automatic movement of the door. Emergency pushbutton (Function: Emergency Off) for automatic door operators. Manufactured according to ZH 1/494 (German Guidelines for power-operated windows, doors and gates) and BGR 232 (German Employer's Liability Insurance Association Rule) as well as DIN 18650 (German Industrial Standard). Red knob with yellow centre insert. Maximum load current: max. 10 A at 230 V AC. NO contact: 1, NC contact: 1, white frame, flush-mounting, 80 x 80 mm | System 55 | 90400025 |
| NAT 2* | Function: "Emergency Open" with green knob, NO contact: 1, NC contact: 1, Maximum load current: 10 A at 230 V AC, white frame, flush-mounting, 80 x 80 mm | System 55 | 90400035 |

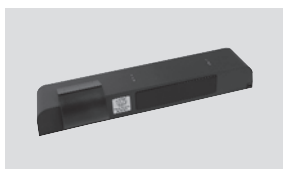
*no illustration

Active infrared safety sensor

Active infrared system to protect the passage area and the secondary closing edges

of sliding doors. To detect the presence of people and objects.

Active infrared safety sensor



Designation Specification

IRIS ON black

Radar motion detectors

The user-friendliness of automatic doors depends a lot on what kind of activator is used and its construction.

The DORMA sensor range combines the flexibility that is required for the different fields of application with reliability and the highest level of user friendliness.

Furthermore it effectively detects moving people or objects in order to activate (open) automatic doors.

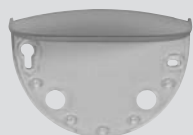
Radar motion detectors



Eagle



System for ceiling installation
Eagle



Rain protection cover
Eagle

Designation Specification

Order No.

Standard motion detectors

| Designation | Specification | Order No. |
|-------------|-----------------|-------------|
| Eagle 2 | Standard, black | 16503201170 |

Motion detectors with direction recognition

Direction recognition for perfectly controlled opening and closing cycles.

| | | |
|---------|------------------------------|-------------|
| Eagle 1 | Direction recognition, black | 16503101170 |
|---------|------------------------------|-------------|

Self-monitoring motion detector

(FST application – for doors with application in emergency exits and escape routes)

Radar motion detector for doors in emergency exits and escape routes with self-monitoring function and electronic systems in redundant design.

| | | |
|-----------|---|-------------|
| Eagle 3-N | Self-monitoring, direction recognition, black | 16551601170 |
|-----------|---|-------------|

Accessories for Eagle detectors

| | |
|--|-------------|
| System for ceiling installation, white | 16502901170 |
|--|-------------|


| | |
|------------------------------------|-------------|
| Rain protection cover, transparent | 05090731332 |
|------------------------------------|-------------|

Combined sensors

To activate (open) and protect automatic sliding doors. This system is designed to substitute light barriers with the aid of an integrated

active infrared function. This combined sensor opens sliding doors via radar and protects the main and secondary closing edges

with the aid of an active infrared system.

| Aktiv-Infrarotmelder | Designation | Specification |
|--|---|--|
|  <p data-bbox="228 685 552 712">Aktiv8 One on / Aktiv8 Three on</p> | <p data-bbox="802 539 1394 607">Aktiv8 One on Direction recognition, black</p> | <p data-bbox="802 629 1394 719">Aktiv8 Three on Direction recognition, self-monitoring, suitable for application on FST doors (fire and smoke doors), black</p> |



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Door Control



Automatic



Glass Fittings and Accessories



Security/Time and Access (STA)



Movable Walls