



# Curved Sliding Doors BST/FBST COMFORT LINE

Technical product brochure



# 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 wellestablished diameters. The façade connection is ealised 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 EN16005/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 EN16005/DIN 18650.



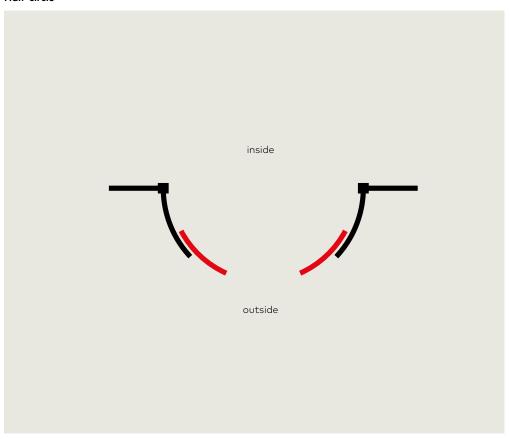
dormakaba FBST with approval for application in emergency exits and escape routes according to EN 16005/DIN 18650



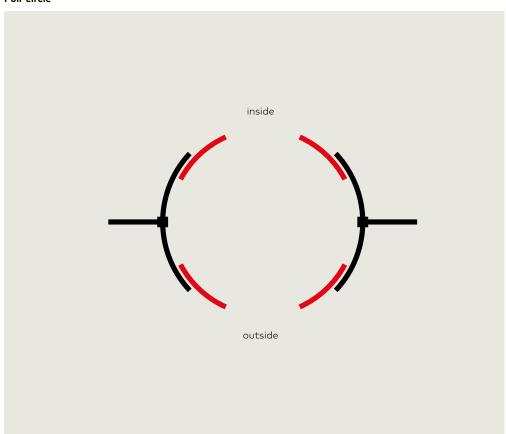


# **Basic configurations**

#### Half-circle



#### Full-circle



# **Technical Data**

Data and features	BST COMFORT LINE	FBST COMFORT LINE
Clear passage width LW <sup>2)</sup>	1235, 1519, 1660, 1802, 1943, 2085	1660, 1802 1943, 2085
Escape route	-	1660, 1802 1943, 2085
Installation width B <sup>2)</sup>	2100 mm	2100 mm
Passage height H	2200 / 2500 mm <sup>1)</sup>	2200 / 2500 mm <sup>1)</sup>
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
Segmental radius r	freely selectible, min. 1000 mm	freely selectible, min. 1000 mm
Number of sliding panels	2	2
2-panel, symmetrical	•	•
Fixed side screens	•	•
Canopy height (min.)	260 mm	260 mm
Canopy height extension 1)	260 – 500 mm	260 – 500 mm
Sliding panel, convex	•	•
Max. weight per door panel	80 kg	80 kg

<sup>&</sup>lt;sup>1)</sup> Standard dimensions (other dimensions on request) <sup>2)</sup> Depending on radius r

BST COMFORT LINE	FBST COMFORT LINE	
250 W	250 W	
30 W	30 W	
230 V / 50 – 60 Hz	230 V / 50 – 60 Hz	
27 V DC / 2 A	27 V DC / 2 A	
•	•	
•	•	
•	•	
	250 W 30 W 230 V / 50 – 60 Hz	

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

# Accessories

Operator and control unit	BST	FBST
Operator	ES 200	ES 200 2D
Microprocessor control unit	•	•
Integrated presence sensor	0	0
Equipped in accordance with EN 16005/DIN 18650	0	0
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	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	0	0

BST	FBST
•	•
•	•
•	•
•	•
•	-
•	•
	• • • • • • • • • • • • • • • • • • •

Design of ceiling		
Ceiling, melamine, white	•	•
Upper dust-proof ceiling	•	•
Rain-proof ceiling with drainage spouts (prepared)	0	0

Profiles and glazing		BST	FBST
Fine-frame profile system with 8 mm ESG	-G	•	•
Fine-frame profile system with 8,76 mm VSG	-G	0	0

Accessories	BST	FBST
Straight panel board for top façade connection	0	0
Lateral façade connection glass/panel board	0	0
Aluminium girder with aluminium cover, external	•	•
Aluminium girder	•	•
Downlights		
Ceiling aperture for downlights by others	0	0
Halogen spot, 20 W, including ceiling aperture and accessories	0	0
Floor finish		
Emco floor mat	0	0
Arwei floor mat	0	0
Floor guide rail		
Surface-mounted floor guide without floor ring	•	•
Surface-mounted floor guide with floor ring	0	0
Flush-mounted floor guide with floor ring (Compulsory for clear passage widths (LW) beyond 1500 mm)	0	0

Accessories/Safety equipment	BST	FBST
Locking device		
- Electro-mechanical locking device	0	0
Fail-safe via emergency power supply unit	0	•
Monitored rechargeable battery pack	0	•
Intrinsically safe activator in escape direction	-	•
Radar motion detector, external	0	0
Radar motion detector, internal	0	0
Emergency pushbuttons		
Emergency Off function	0	_
Emergency Opening function	-	0

# 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

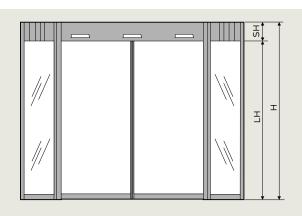
Dimensions in mm

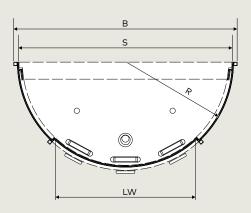
#### Half-circle and full-circle configurations

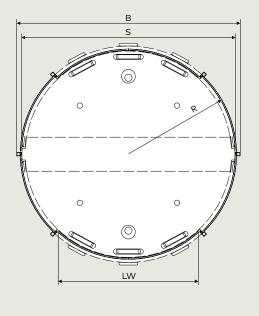
#### Fine-frame profile system G

LH		2200 2500			00	
SH		260				
Н		LH + SH				
r	1000	1200	1300	1400	1500	1600
S	1960	2360	2560	2760	2960	3160
В	2100	2500	2700	2900	3100	3300
LW	1235	1519	1660	1802	1943	2085

Dimensions in mm



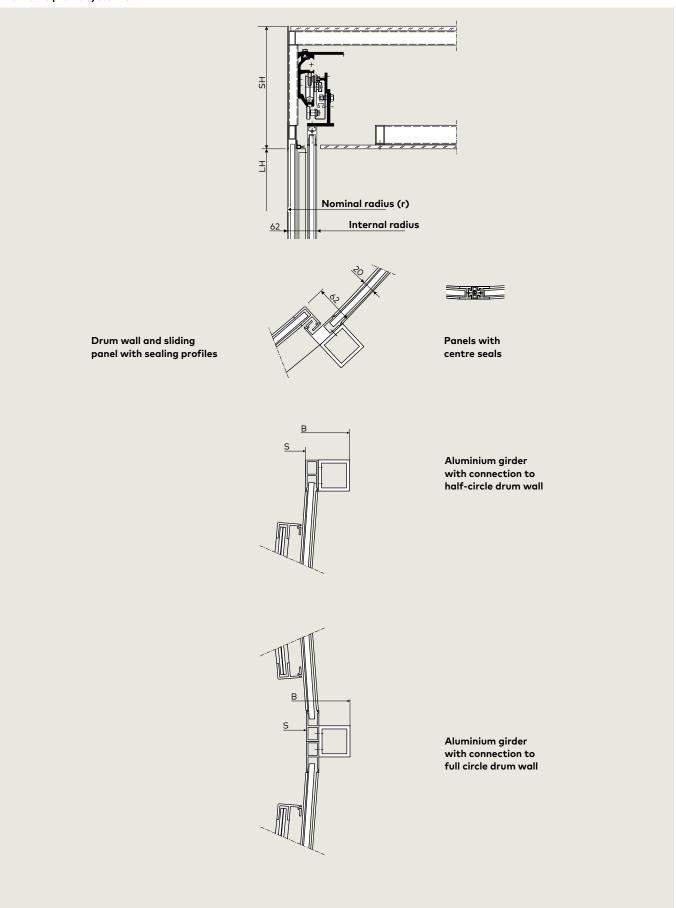






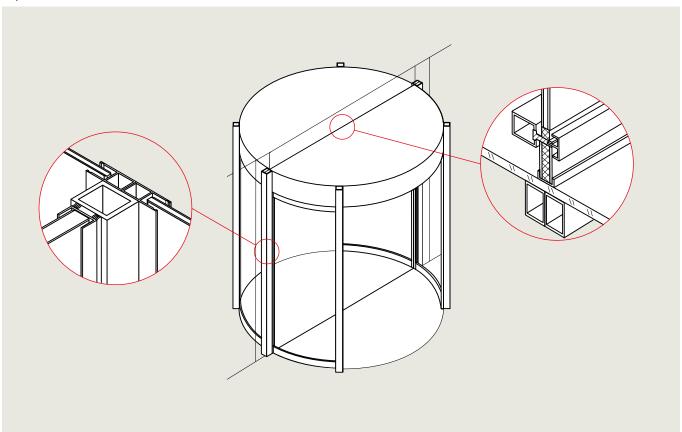
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#### Fine-frame profile system G

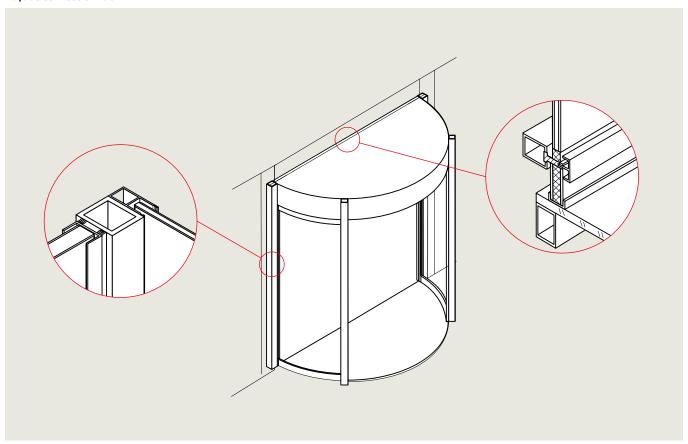


# Façade connections

### Façade connection 360°



#### Façade connection 180°



# Floor guides, Floor rings

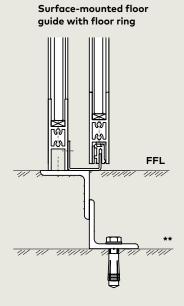
#### Floor guides

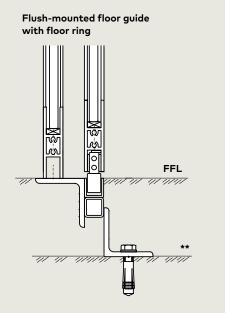


The design of the floor guide depends on the opening width\* and the prevailing on-site conditions and comprises

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

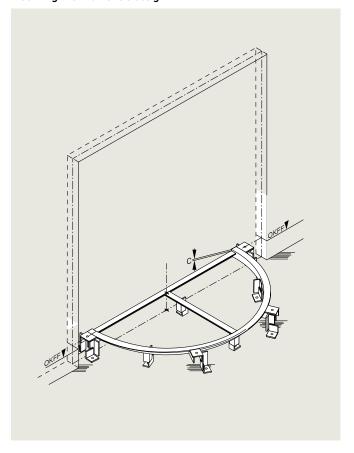
\*Starting from a clear opening width of 1500 mm, a flush-mounted floor guide is required.



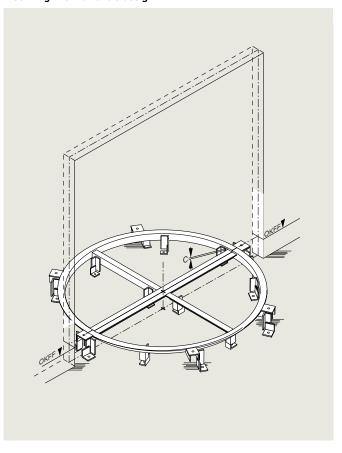


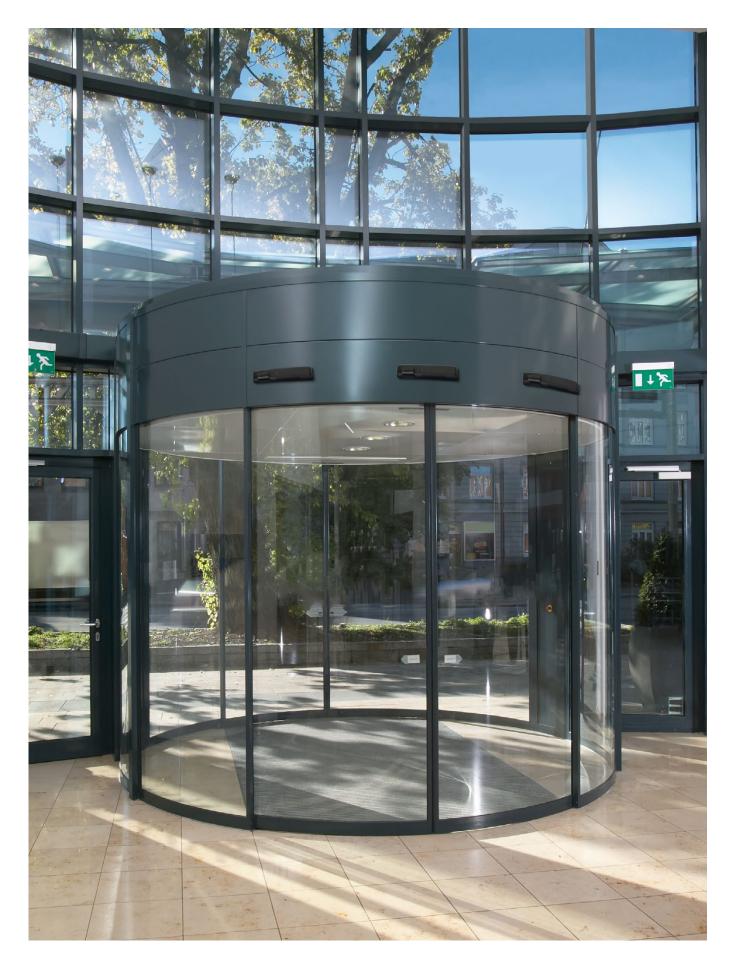
\*\*upper edge of unfinished floor

#### Floor ring with half circle design

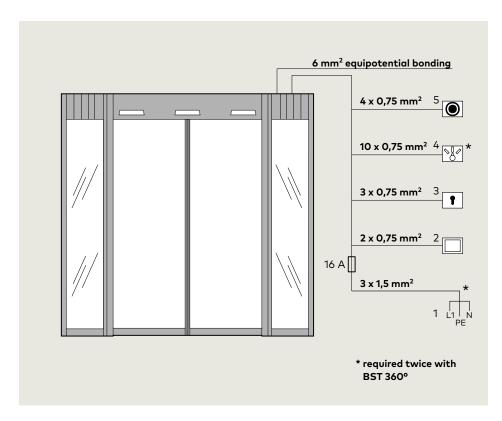


#### Floor ring with full circle design





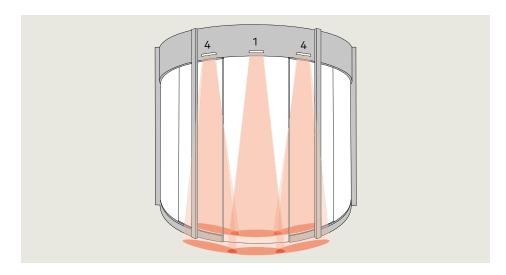
## **Connection diagram**



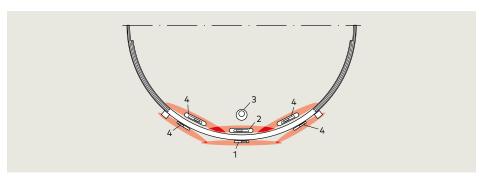
- 1 Feeder
- 2 Internal pushbutton
- 3 Key switch
- 4 Program switch
- 5 Emergency pushbutton (option)

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 EN 16005/DIN 18650)
- 2 Integrated infrared safety sensor to monitor the passage area
- ${f 3}$  Internal radar motion detector
- 4 Infrared safety sensor (optional, compulsory with EN 16005/DIN 18650)





Door Hardware



Automatic Door Systems



System Solutions Access and Time



Glass Systems



Mechanical Lock Systems



Service

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