Swing Door Operator

DORMA ED 200

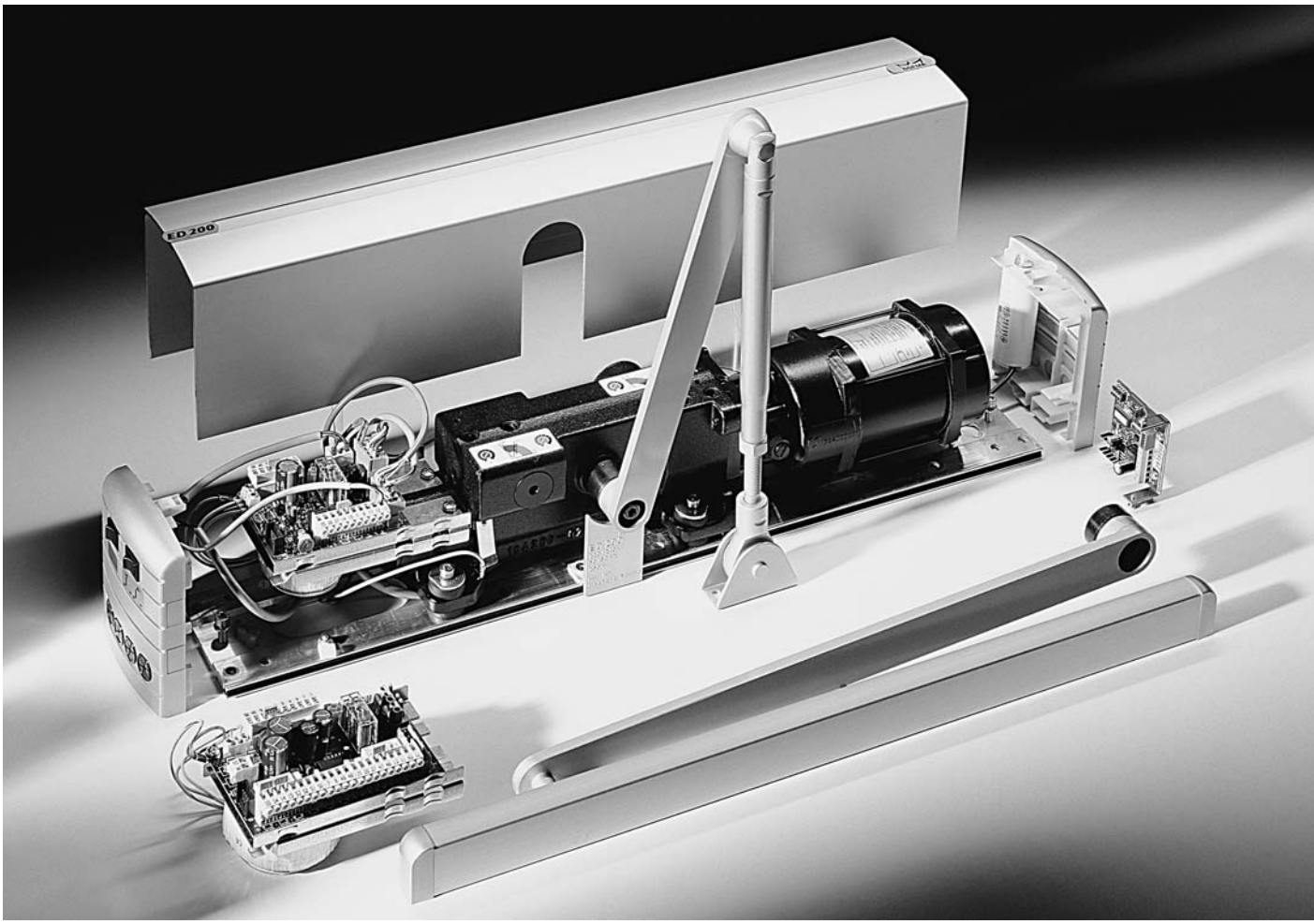
Universal application, simple installation, reliable function

As a powerful automatic electro-hydraulic swing door operator, the DORMA ED 200 is suitable for standard and for large and heavy doors. It can be adapted to a wide range of applications and mounting requirements and offers numerous adjustable features. When the permanent open function is activated, the door is held open by a solenoid valve in a way which ensures stability and operational silence.

The softline cover can be extended to the full door width providing an optical elegant solution. The DORMA ED 200 – available up to size EN 7 – is also suitable for fire and smoke doors, even with its permanent open function. Double-leaf doors may also be equipped with an integrated door coordinator (ED 200 ESR) which, when viewed from the outside, is concealed behind the cover.

As an alternative, we now offer our new VARIO cover (page 16).
It can also be installed in emergency exits and escape routes. It can likewise be combined with access control systems.

DIN 18 263/T4



Features and benefits

- Two variants (EN 4–6, EN 7), to suit all applications.
- One version for both door directions (left-handed/ right-handed) and mounting positions (hinge (pull) side/opposite hinge (push) side).
- Quick and easy mounting thanks to two auxiliary screws and plug-connected cabling.
- Reliable function even in the case of heavy-use doors and entrances exposed to various weather conditions.
- Optimum adaptability to individual requirements – e.g. in hospitals, homes for the elderly, facilities for the disabled, restaurants, security areas and laboratories.
- Numerous control options.
- Integrated door coordinator for double-leaf doors.
- Suitable for connection. of tested infrared safety sensors.

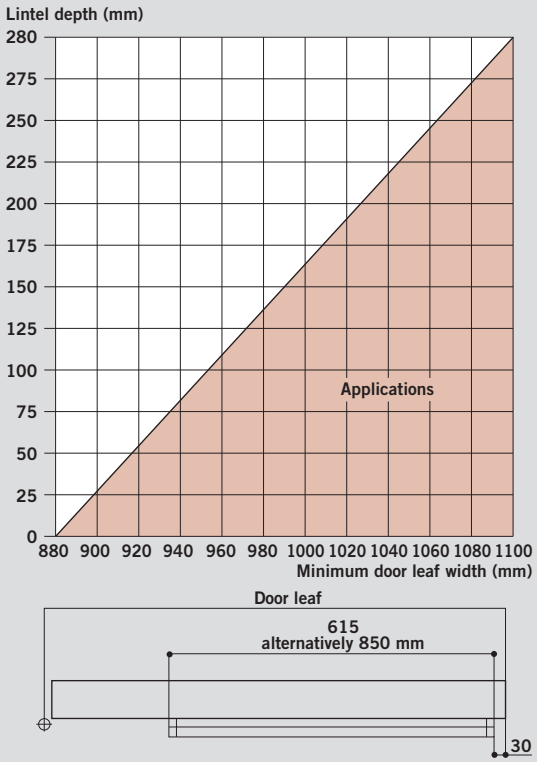
Applications

Single- and double-leaf standard doors	
Single- and double-leaf fire and smoke doors (only with standard arm)	
Opening width for single-leaf doors (Door leaf width)[1]	
Operator variant EN 4-6	
with standard arm	590 mm to 1400 mm
with slide channel (mounting on the hinge [pull] side)	880 mm to 1400 mm[2]
with slide channel (mounting on the opposite hinge [push] side)	800 mm to 1400 mm
with parallel arm	680 mm to 1400 mm
Operator variant EN 7	
with standard arm	750 mm to 1600 mm
with slide channel (mounting on the hinge [pull] side)	880 mm to 1600 mm[2]
with slide channel (mounting on the opposite hinge [push] side)	800 mm to 1600 mm
with parallel arm	680 mm to 1600 mm
Opening width for double-leaf doors[1] (for applications with symmetric door leaf widths)	
Operator variant EN 4-6	
with standard arm	1284 mm to 2800 mm
with slide channel (mounting on the hinge [pull] side)	1750 mm to 2800 mm[2]
with slide channel (mounting on the opposite hinge [push] side)	1600 mm to 2800 mm
with parallel arm	1360 mm to 2800 mm
Operator variant EN 7	
with standard arm	1284 mm to 3200 mm
with slide channel (mounting on the hinge [pull] side)	1750 mm to 3200 mm[2]
with slide channel (mounting on the opposite hinge [push] side)	1600 mm to 3200 mm
with parallel arm	1360 mm to 2800 mm
Door leaf weight, max.	250 kg
Lintel depth	
with standard arm	–40 mm to 500 mm
with slide channel (mounting on the hinge [pull] side)	–20 mm to 280 mm[2]
with slide channel (mounting on the opposite hinge [push] side)	0 mm
with parallel arm	–40 mm to 160 mm

1) Door widths beyond the above-mentioned ranges on demand!

2) Attention! Please consider the minimum door leaf width according to the above diagram.
Additionally a special slide channel or a mounting position different from the drawings in this brochure could be required. Special solutions on demand!

Applications ED 200 mounted on hinge (pull) side with slide channel



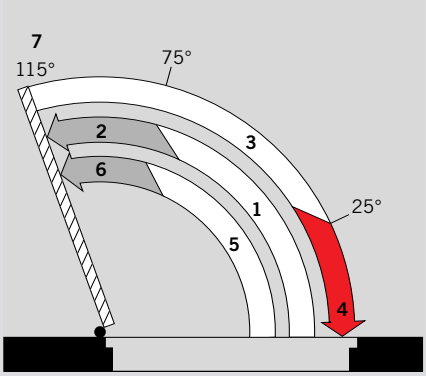
Technical data of the drive unit

Closing force (2 operator types)		EN 4 – 6 (adjustable)
		EN 7 (fixed)
Dimensions	Height	106 mm
	Depth	133 mm
	Width	665 mm
Continuous/extended cover for single- and double-leaf door operators		○
Weight per operator		18 kg
One operator variant for mounting on the hinge (pull) and opposite hinge (push) side, and LH (ISO 6) and RH (ISO 5) doors		●
Power consumption, max.		250 W
Supply voltage		230 V, 50/60 Hz
Power supply for external accessories		
with control board A		800 mA at 12/24 V AC; 600 mA at 24 V DC
with control board B		1500 mA at 12/24 V AC; 1000 mA at 24 V DC
Stabilized power supply (e.g. for smoke detectors)		
with control board B		100 mA at 24 V DC
Class of protection		IP 20
TÜV type-approved		●
Compliant with the Low Voltage Directive and the EMC Directive		●
Manufactured to ISO 9000		●

Adjustable parameters of the driving phase

Opening angle, max.	
with standard arm	115°
with slide channel (mounting on the hinge [pull] side)	90°
with slide channel (mounting on the opposite hinge [push] side)	90°
with parallel arm	90°
Adjustable opening time	≥ 1,5 s
Adjustable closing time	≥ 3 s
Adjustable hold open time	0 s – 30 s
Adjustable backcheck	●
Adjustable delayed action	●
Adjustable wall blanking for safety sensors	●

Functions and adjustment possibilities



1 Adjustable opening speed
2 Adjustable backcheck
1 + 2 Adjustable opening time
3 Adjustable closing speed
4 Adjustable delayed action
3 + 4 Adjustable closing time
5 Easy manual operation with bypass valve
6 Backcheck range for manual operation
7 Adjustable opening angle, adjustable hold open time

Function programs

	Control board A	Control board B
Off	●	●
Automatic	●	●
Permanent open	●	●
Exit only	–	●
Nurse-bed-function for double-leaf doors (only in combination with special module SM 206)	●	●
Special functions		
Airlock function (only in combination with door reed contact TK)	○	○
Timed airlock function (only in combination with special module SM 208 and door reed contact TK)	○	○
Night-/bank function	–	●
Push&Go function (only in combination with Push&Go module)	○	○
Flip-flop-function (only in combination with special module SM 202)	○	○
Door closer function under cut-out conditions	●	●

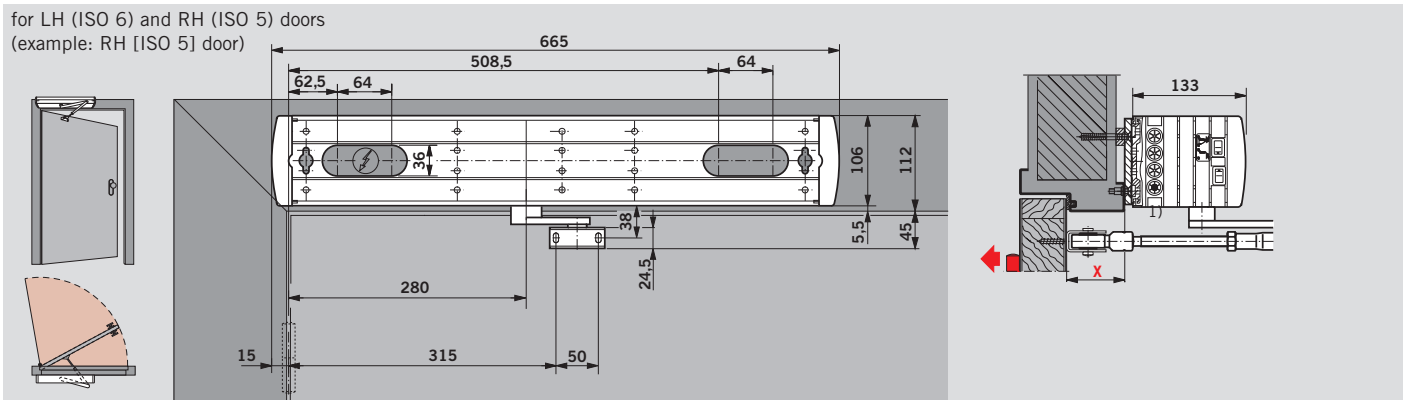
Prepared for connection of the following accessories

Standard arm, slide channel, parallel arm	●	●
DORMA IRS-2 infrared safety sensors (mounting on the hinge [pull] and opposite hinge [push] side)	●	●
Door locking device	●	●
Electric strikes (fail-safe/fail-secure principle)	●	●
DORMA SVP emergency exit motor lock with self-locking action	–	●
Access control system (DORMA AutoSwitch)	–	●
Activators (Pushbutton, Radar movement detector ...)	●	●
Radio remote control	●	●
External program switch (integrated 3-position program switch as standard)	●	●
Smoke detectors also with i ntegrated power pack*	–	●

* 1 x lintel-mounted RM-ED or RM when bottom edge of lintel to bottom edge of smoke-sealed ceiling < 1 m
In addition: 2 x ceiling-mounted RM when bottom edge of lintel to bottom edge of smoke-sealed ceiling > 1 m

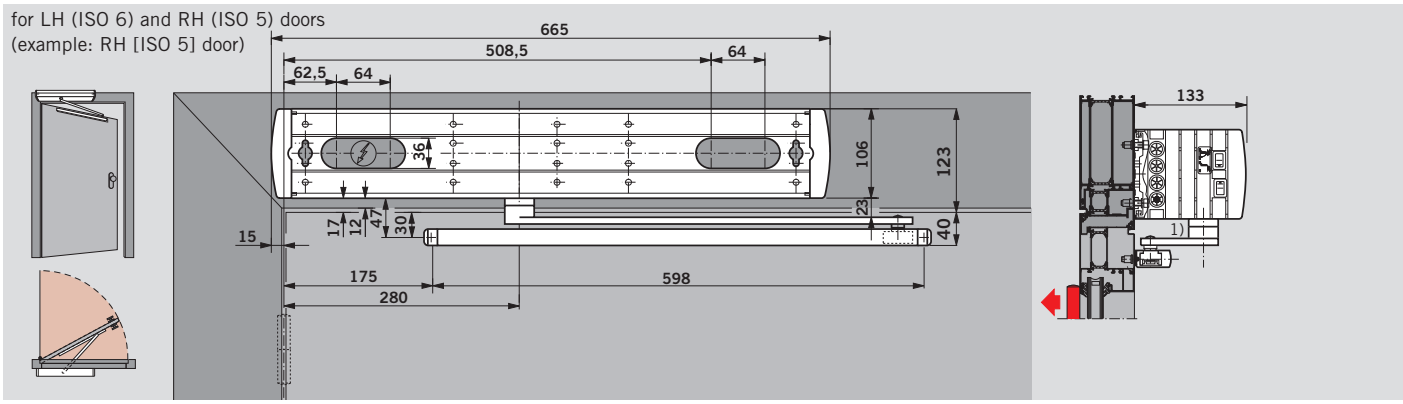
● standard ○ optional

Mounting on the opposite hinge (push) side with standard arm F



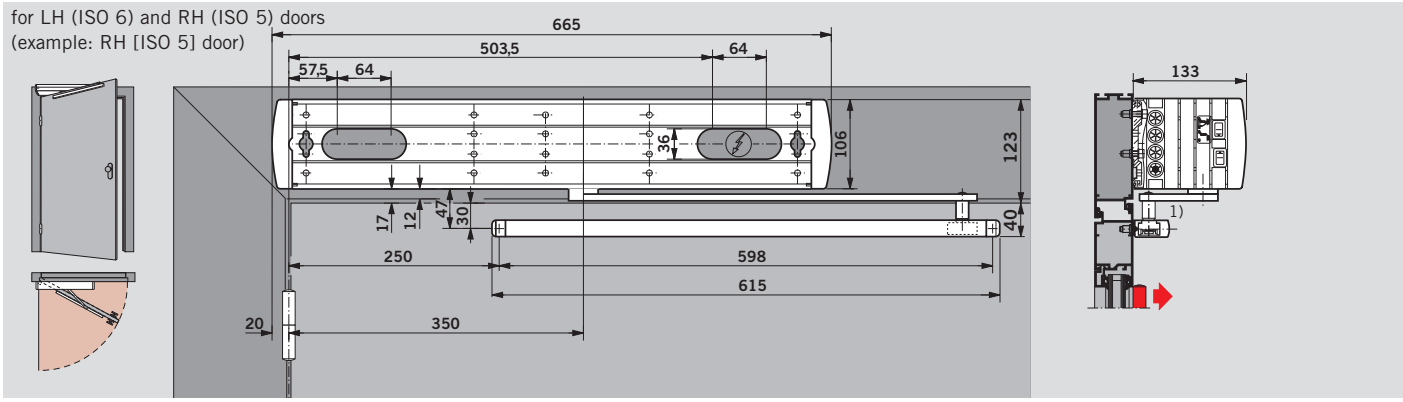
Mounting on the opposite hinge (push) side with slide channel

(not approved for fire and smoke doors)



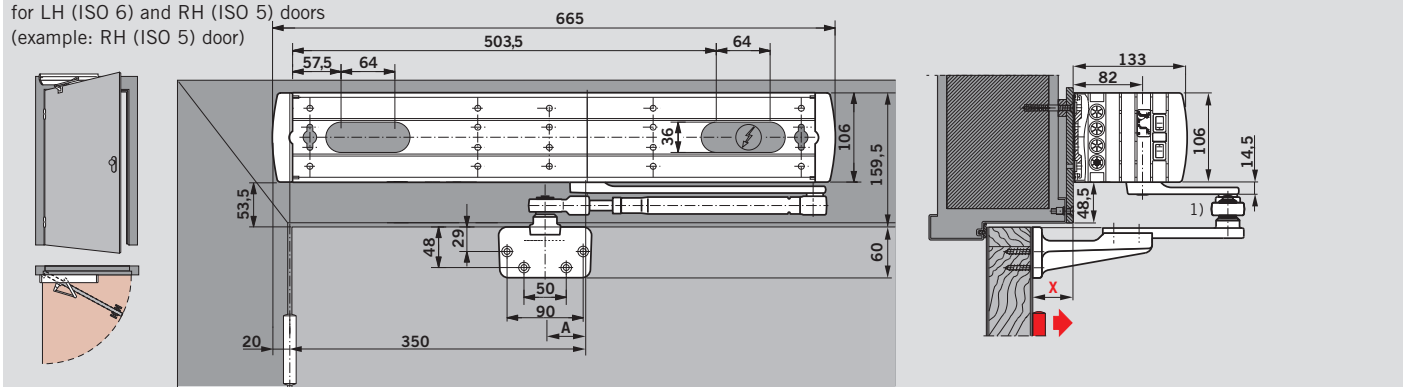
Mounting on the hinge (pull) side with slide channel

(not approved for fire and smoke doors)



Mounting on the hinge (pull) side with parallel arm

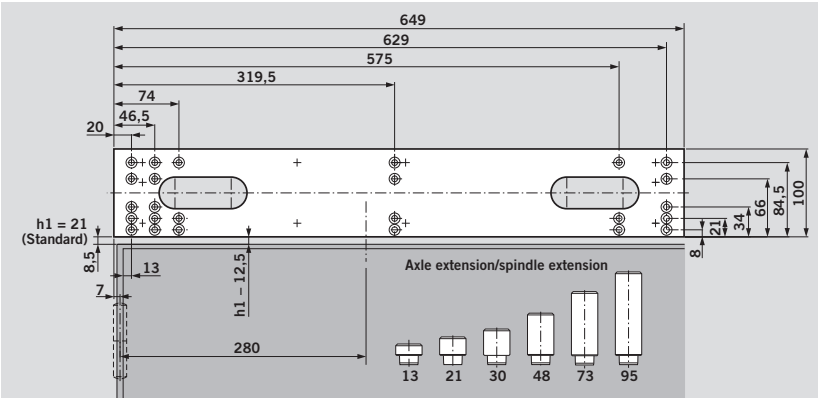
(not approved for fire and smoke doors)



Mounting plates/axle extension

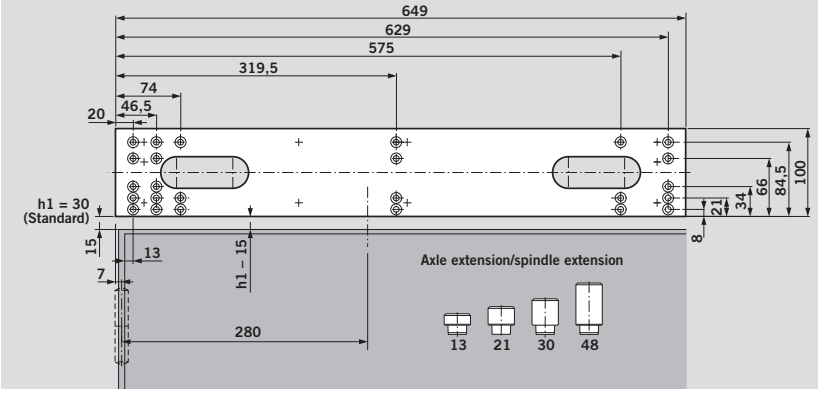
Lintel depth X	Standard arm
–40 to 120 mm	var. 01
80 to 240 mm	var. 02
240 to 360 mm	var. 03
360 to 500 mm	var. 04*

[1] optional axle extension (see page 18)
* maximum axle extension : 48 mm, maximum closing force: EN 6 maximum door leaf weight: 120 kg



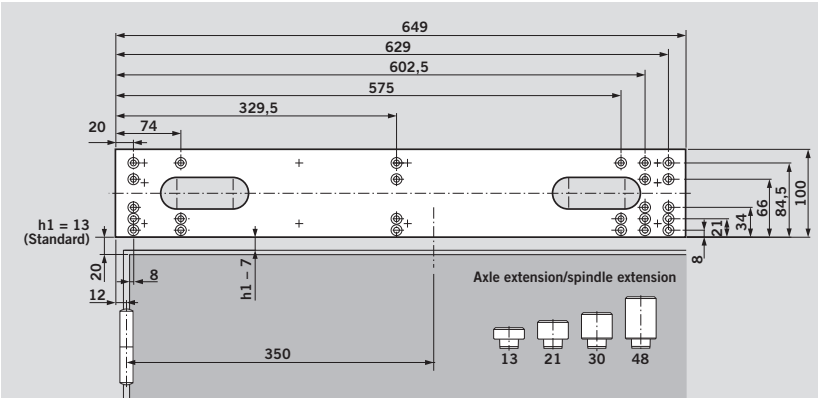
Lintel depth: 0 mm

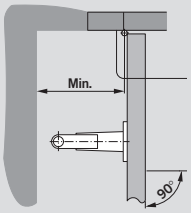
[1] optional axle extension (see page 18)



Lintel depth:
– 20 mm to 280 mm
(Attention! Please consider the minimum door leaf width according to the diagram on page 4)

[1] optional axle extension (see page 18)

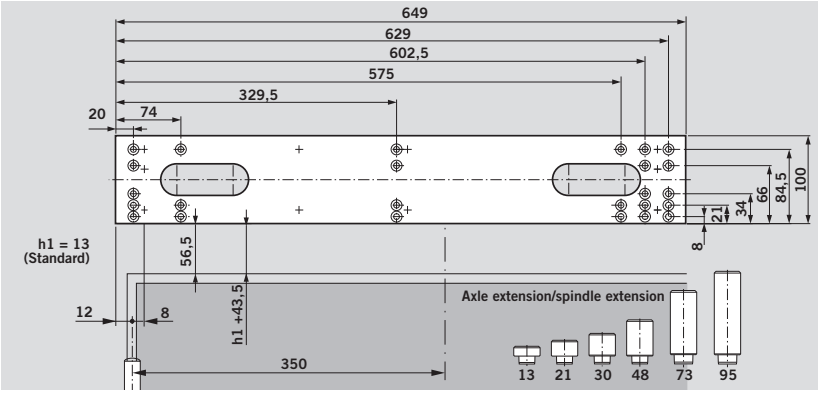




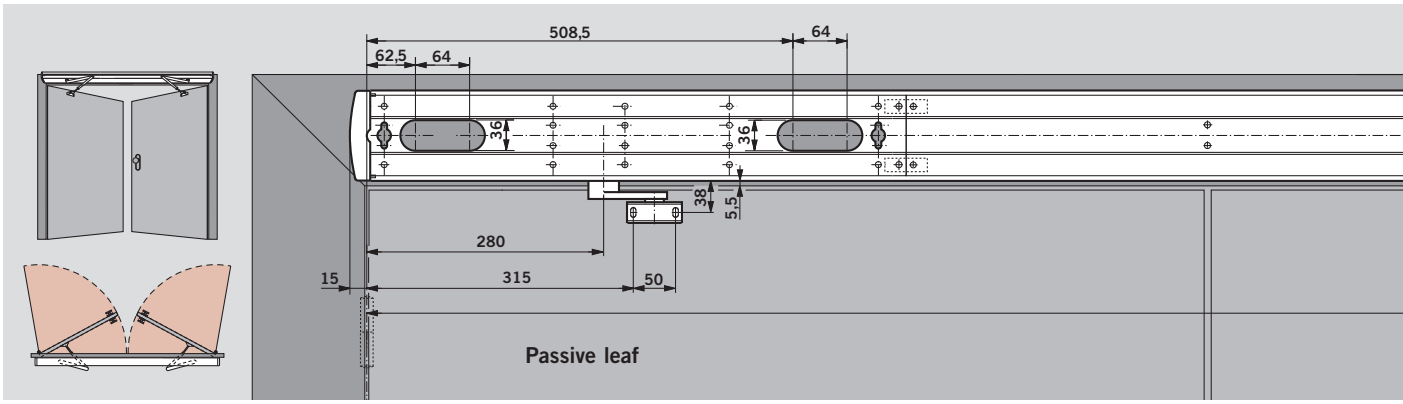
Min. distance
X up to 40 mm = 200 mm
X up to 100 mm = 260 mm
X up to 160 mm = 290 mm

Lintel depth X	A*	Parallel arm
–40 to 0 mm	50	var. 01
0 to 40 mm	50	var. 02
40 to 100 mm	80	var. 03
100 to 160 mm	80	var. 04

* For dimension A see drawing on the left

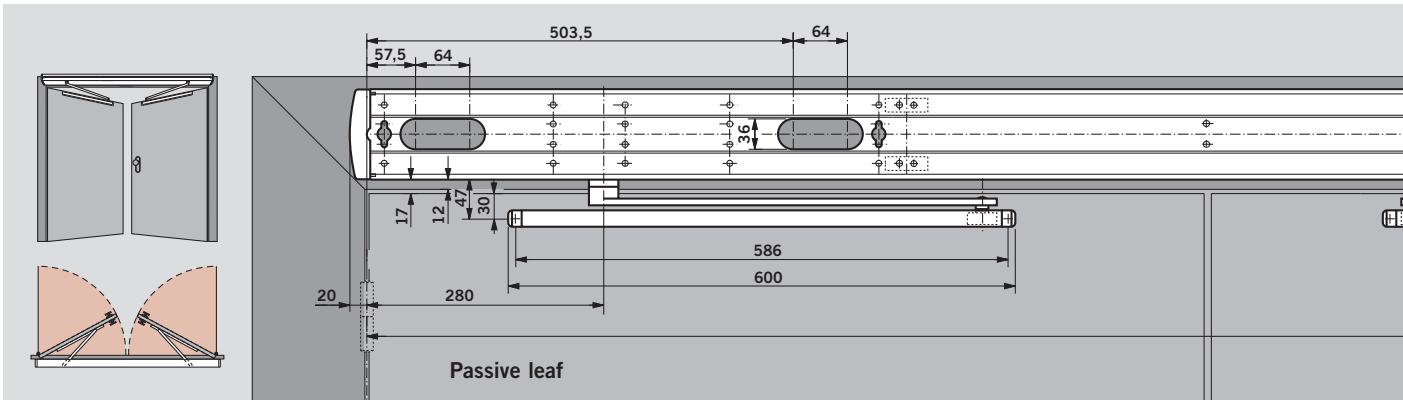


Mounting on the opposite hinge (push) side with standard arm F



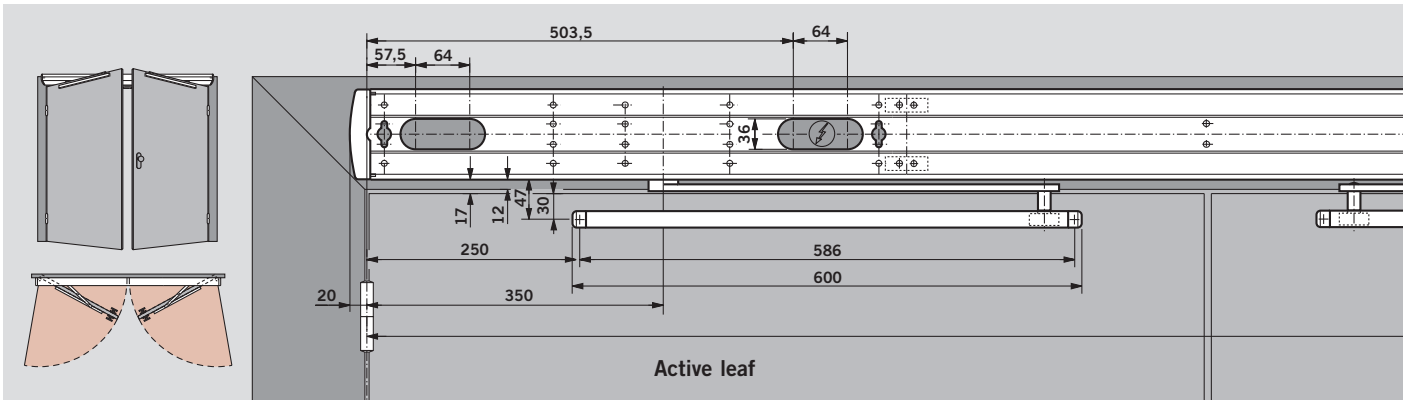
Mounting on the opposite hinge (push) side with slide channel

(not approved for fire and smoke doors)



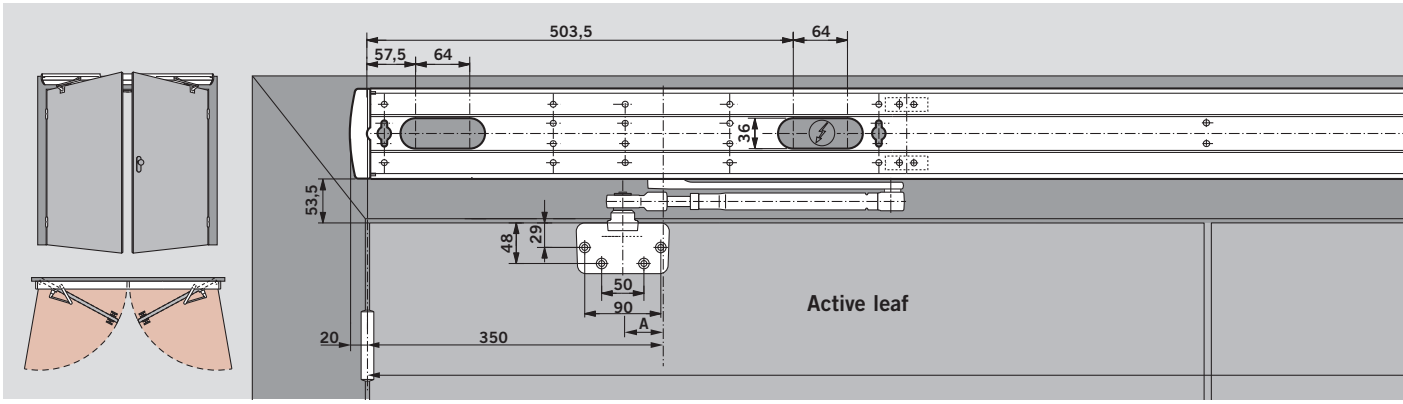
Mounting on the hinge (pull) side with slide channel

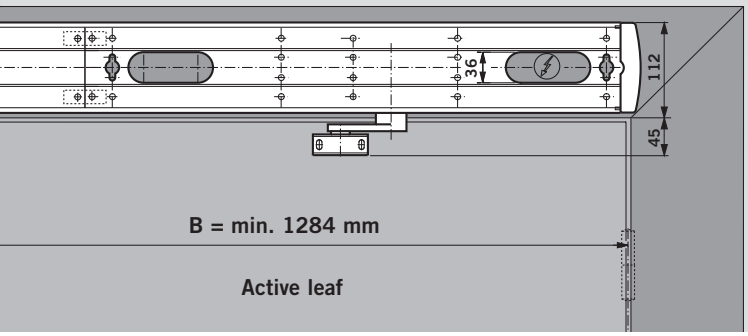
(not approved for fire and smoke doors)

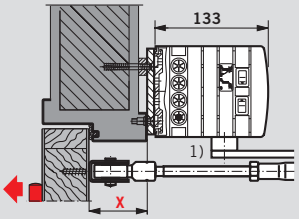


Mounting on the hinge (pull) side with parallel arm

(not approved for fire and smoke doors)



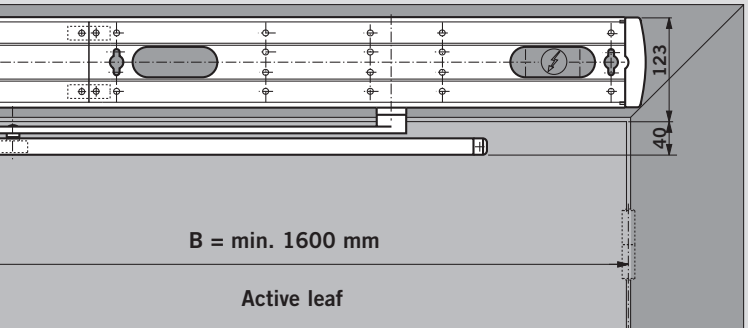


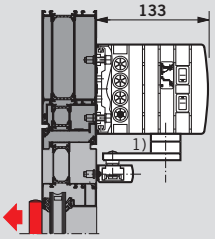


Lintel depth X	Standard arm
–40 to 120 mm	var. 01
80 to 240 mm	var. 02
240 to 360 mm	var. 03
360 to 500 mm	var. 04*

[1] optional axle extension (see page 18)

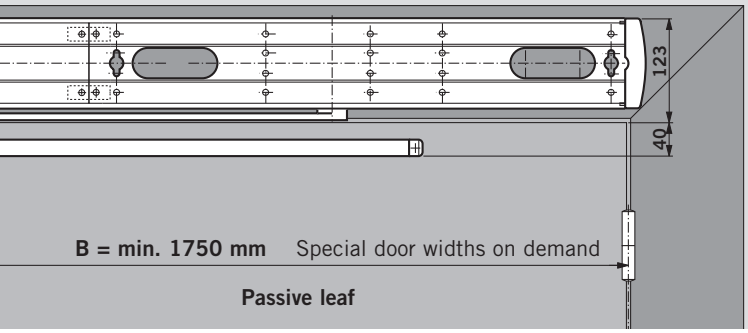
* maximum axle extension: 48 mm
maximum closing force: EN 6
maximum door leaf weight: 120 kg

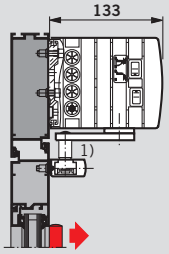




Lintel depth:
0 mm

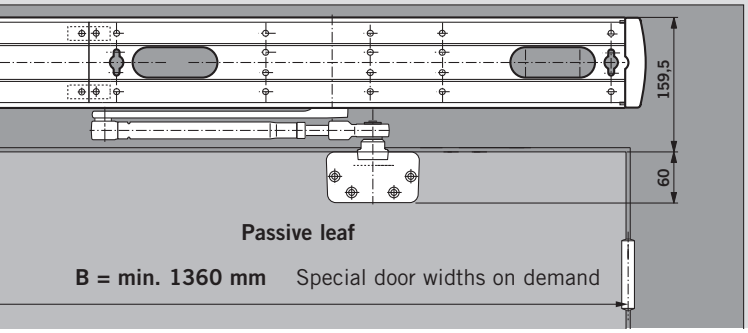
[1] optional axle extension (see page 18)

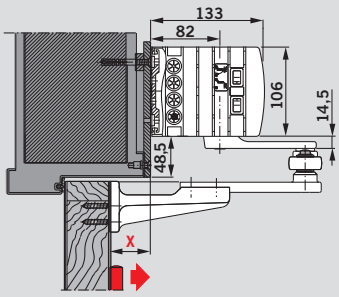




Lintel depth:
–20 mm to 280 mm
(Attention! Please consider the minimum door leaf width according to the diagram on page 4)

[1] optional axle extension (see page 18)



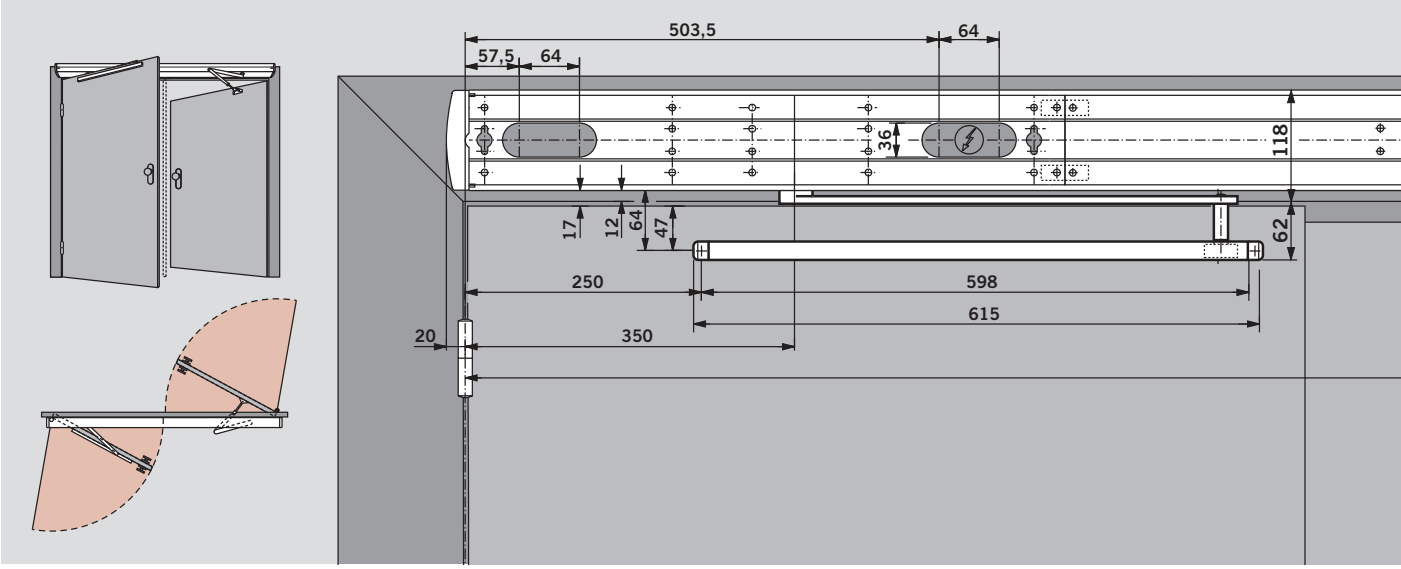


Lintel depth X	A*	Parallel arm
–40 to 0 mm	50	var. 01
0 to 40 mm	50	var. 02
40 to 100 mm	80	var. 03
100 to 160 mm	80	var. 04

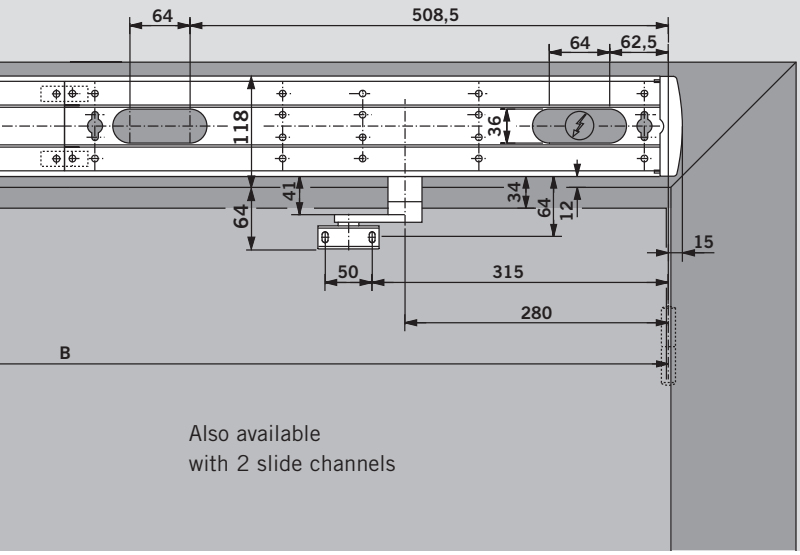
* For dimension A see drawing on the left

Mounting on the hinge (pull) and opposite hinge (push) side

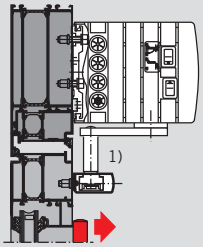
(not approved for fire and smoke doors)



The decisive advantage of the double-door “contraflow traffic” lies in the fact that each door leaf controls just one direction, so separating the ingress and egress flows as users enter or leave the building or area. There is also the advantage that passage through the doors takes place immediately because they always open in the walking direction. This application is therefore especially suitable for doors in which there is a constant or occasionally heavy flow of users like the entrances to department stores, leisure facilities and administration buildings, but also for the kitchen entrances of large restaurants and hotels. The two swing door operators operate individually: The drive unit of each operator controls all the parameters, such as opening, closing and hold open times, and also the functions triggered by the safety sensors.



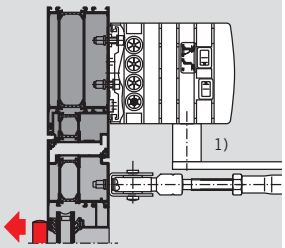
Also available
with 2 slide channels



Hinge (pull) side:
Slide channel, pulling

Lintel depth:
–20 mm to 280 mm
(Attention! Please consider the minimum door leaf width according to the diagram on page 4)

[1] optional axle extension (see page 18)

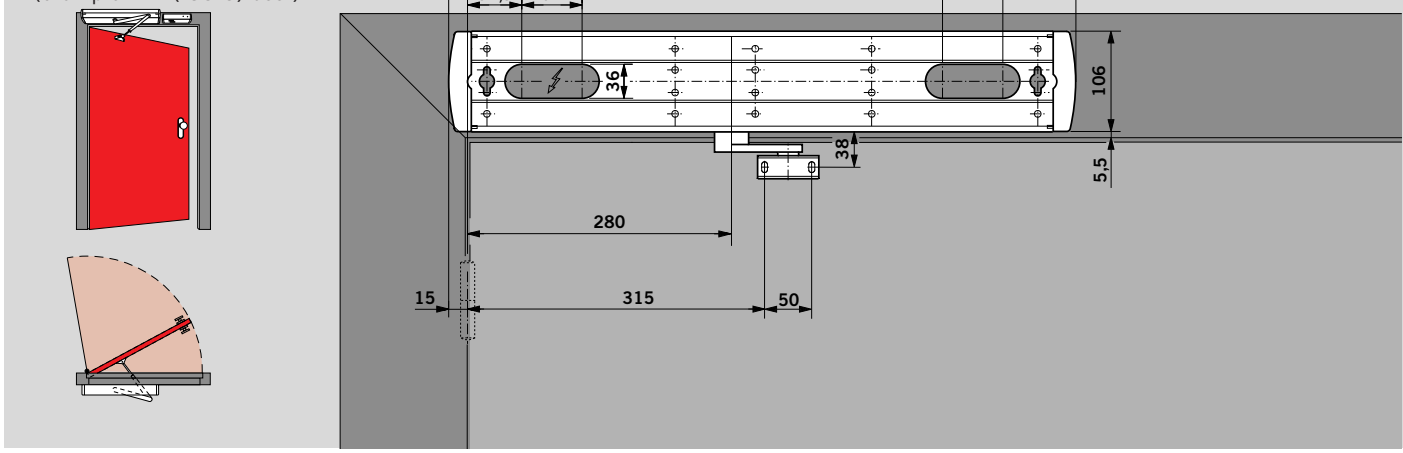


Lintel depth X	Standard arm
–40 to 120 mm	var. 01
80 to 240 mm	var. 02
240 to 360 mm	var. 03
360 to 500 mm	var. 04*

[1] optional axle extension (see page 18)
* maximum axle extension: 48 mm
maximum closing force: EN
maximum door leaf weight: 120 kg

Mounting on the opposite hinge (push) side with standard arm

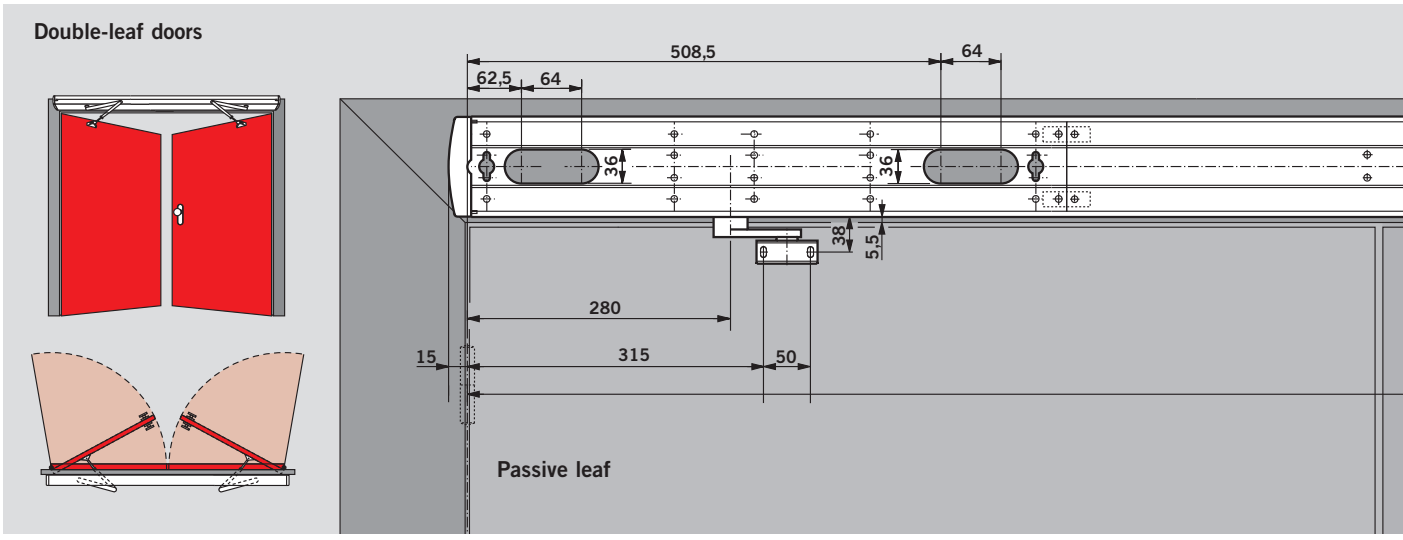
Single-leaf doors
for LH (ISO 6) and RH (ISO 5) doors
(example: RH (ISO 5) door)



Mounting on the opposite hinge (push) side with standard arm

(Drawing for ED 200, ED 200 ESR 1/2 and ED 200 ESR)

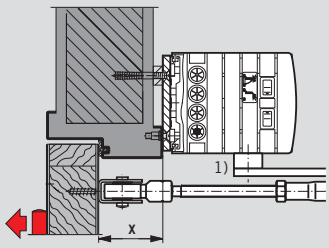
Double-leaf doors



In the case of fire and smoke doors, the ED 200 is always fixed on the opposite hinge (push) side with a standard arm. Such systems are referred to as hold open systems. Compliant with the German guidelines governing hold open systems issued by the German Institute for Civil Engineering DIBt (Berlin), hold open systems must always consist of the 4 following components:

1. Activator (complied with by RM-ED or RM)
2. Pushbutton (with “Tür schließen” wording)
3. Power supply and
4. Hold open system (3. and 4. complied with by ED 200).

The ED 200 has the approval for application at fire and smoke doors. Please refer to the chart on page 5 for all possible combinations of operators and DORMA smoke detectors. The connection of smoke detectors, supplied by others, is also possible. The number of smoke detectors normally depends on the distance between the bottom edge of the lintel and the bottom edge of the smoke-sealed ceiling. Please see page 14 for number and positioning of smoke detectors. Depending on requirements, individual or several electric strikes can be connected which must operate in accordance with the fail-secure principle. In addition, it must be ensured that they are installed in the correct (approved) position. For all components of this system, including the electric strikes, approvals must be obtained in accordance with the German Institute for Civil Engineering (DIBt).



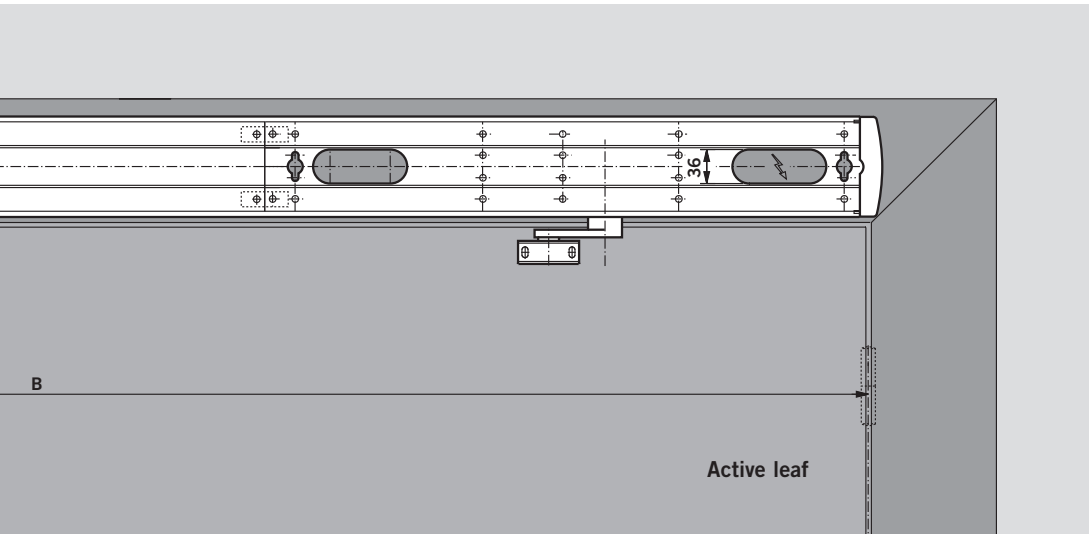
Lintel depth X	Standard arm
–40 to 120 mm	var. 01
80 to 240 mm	var. 02
240 to 360 mm	var. 03
360 to 500 mm	var. 04*

* maximum axle extension: 48 mm
maximum closing force: EN 6
maximum door leaf weight: 120 kg

1) optional axle extension
(see page 18)

Lintel depths of up to 500 mm

Fire and smoke doors with lintel depths of up to 500 mm may also be equipped with the ED 200 swing door operator, as it is also approved by the German Institute for Civil Engineering DIBt with standard arm variant 04.



F Approval Certification

The DORMA ED 200 automatic swing door operator is approved in Germany by the MPA (State Material Testing Authority) NRW Dortmund in accordance with DIN 18263, Part 4, and is subject to third-party quality assurance verification. In combination with the DORMA RMZ 2 smoke detector with integrated power pack and DORMA smoke detectors, it is approved by the German Institute for Civil Engineering DIBt (Berlin) for use on single- and double-leaf fire and smoke doors provided that this is allowed by the approval certificate for the door concerned.

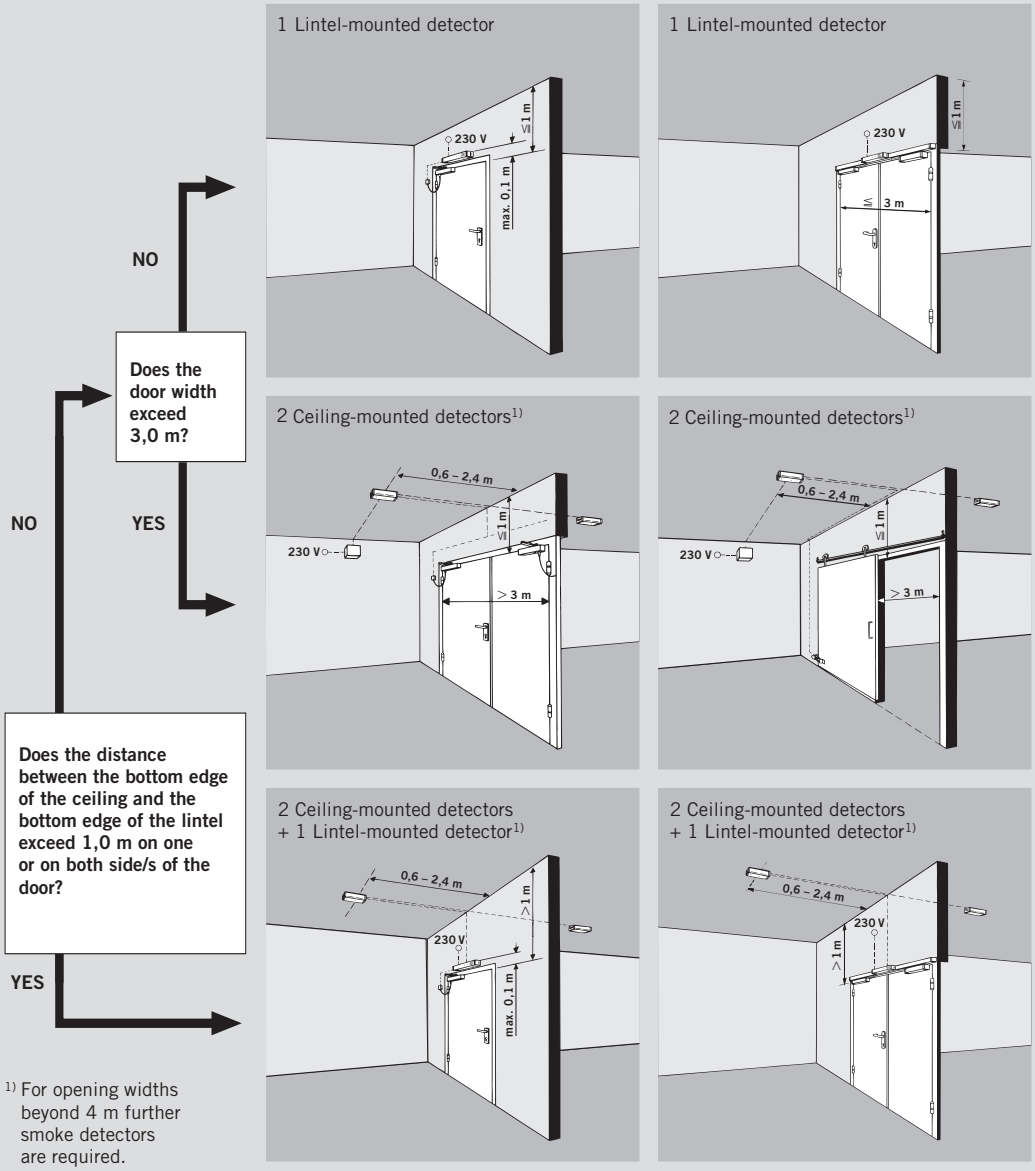
The DORMA ED 200 has been tested and approved as hold open system for single- and double-leaf doors in accordance with the German guidelines governing hold open systems.

The ED 200 is always mounted on the opposite hinge (push) side of single- and double-leaf fire and smoke doors with standard arm. The two operators, which are concealed behind the continuous cover, operate according to the master-slave principle: The active leaf operator controls all the parameters (e.g. hold open time) and also the functions actuated by the safety sensors (IRS-2).
Both operators are fed internally by an external power supply. In the event of a fire, the door can be activated by the DORMA RM-ED and RM smoke detectors (see page 5, 14/15). The connection of smoke detectors supplied by others is also possible.

Door coordinator

According to EN 1158, a double-leaf swing door operator must be equipped with a mechanical door coordinator. The purpose of the door coordinator is to ensure that even under cut-out conditions the two door leaves close in a correct sequence (passive leaf before active leaf), so producing a tight barrier seal. With two integrated versions and the external version, DORMA offers three door coordinators for the ED 200 (see page 16).

Number and positioning of smoke detectors

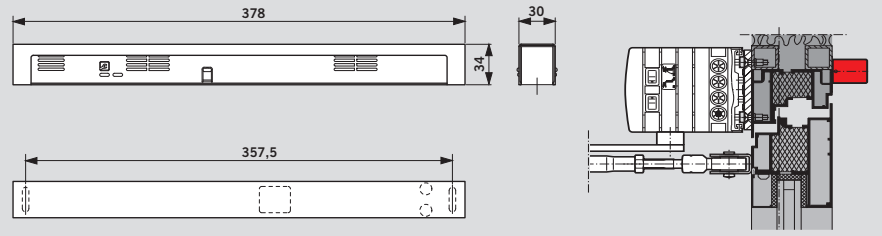


1) For opening widths beyond 4 m further smoke detectors are required.

For application at fire and smoke doors: RM-ED smoke detector

RM smoke detector

DORMA RM-ED lintel-mounted smoke detector



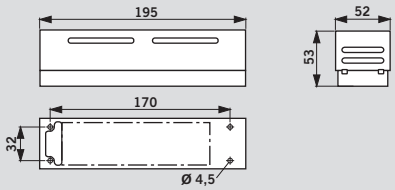
The optical DORMA RM-ED smoke detector can be installed as ED 200 lintel-mounted smoke detector.

Dimensions:
34 x 378 x 30 mm

DORMA RM-ED
Red/green light indicator, test input for functional test, power supply: 24 V DC, power consumption: 75 mA, maximum load current: max. 2 A at 60 V AC.

E 6/C 0 (silver-coloured)
Order No. 64840001
RAL 9016 (white)
Order No. 64840011
Special colour
Order No. 64840009

DORMA RM lintel- and ceiling mounted smoke detector



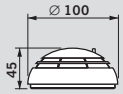
As universal optical smoke detector, the DORMA RM is suitable for lintel- and ceiling-mounting. It is connected to a DORMA RM-ED smoke detector or a DORMA ED 200 swing door operator. It is ready for connection of further DORMA RM smoke detectors, a manual release pushbutton and a light indicator.

Dimensions:
53 x 195 x 52 mm

DORMA RM
Red/green light indicator, test input for functional test, power supply: 24 V DC, power consumption: 25 mA, maximum load current: max. 2 A at 60 V AC.

E 6/C 0 (silver-coloured)
Order No. 64820001
RAL 9016 (white)
Order No. 64820011
Special colour
Order No. 64820009

DORMA RM-N ceiling-mounted smoke detector

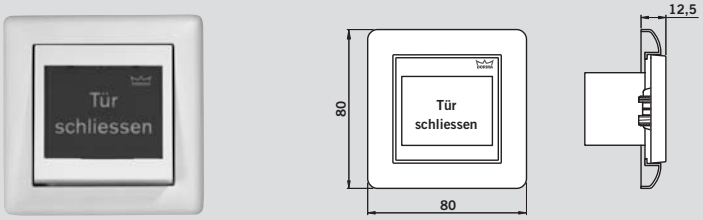


RM-N
The DORMA RM-N serial smoke detector detects smouldering fires as well as open fires with smoke emission at an early stage. It is designed for application as second or third detector for hold-open devices and in combination with RMZ-ED and RM detectors.
Operating voltage 24 V DC
White
Order No. 64830000

F Approval Certification

The smoke detectors DORMA RM-ED and RM are approved by the German Institute for Civil Engineering DIBt (Berlin) and are subject to third-party quality assurance verification.

DORMA HT manual release pushbutton for hold-open devices



This pushbutton is designed to release hold-open devices by hand. Where hold-open devices with free-swing door closers are applied at fire and smoke doors, the installation of a manual release pushbutton is compulsory according to the guidelines of the German Institute for Civil Engineering (DIBt), Berlin.

DORMA HT
single-pole changeover contact, standard frame, red label with white inscription reading “Tür schliessen”

flush-mounting
Order No. 19144601175

surface-mounted box for DORMA HT
Order No. 05158533332
(not displayed)

ED 200 ESR with integrated door coordinator

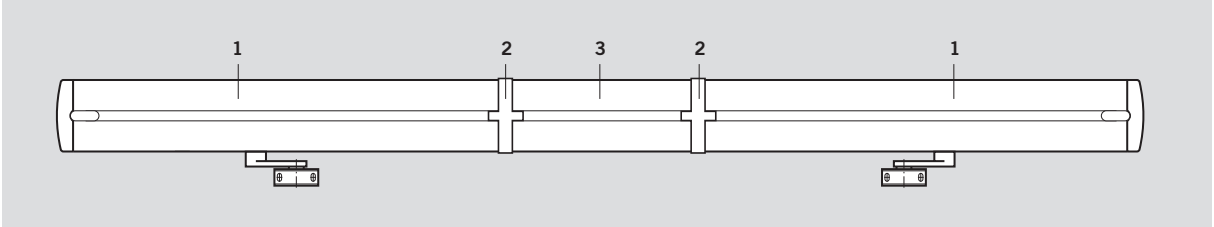
The ED 200 ESR combines operational reliability and excellent optical characteristics with a minimum of installation and maintenance costs.
The door coordinator is installed in the factory and located behind the continuous cover of the double-leaf door system and no additional slide channels and pivot bearings are required on the hinge side. Thanks to the fact that the door coordinator is installed in the factory, no additional installation work is necessary compared to the stand-alone operator, reducing both installation time and installation costs to a minimum.
The hydraulic system works in a closed circuit, which does not require readjustment and renders the system maintenance-free.
Furthermore all arm components of the ED 200 system can still be used. The ED 200 ESR is supplied as a closed unit so that you only need a single order number and no extensive search in the price list and the planning documents is required.
Of course the ED 200 ESR is suitable for installation at fire and smoke doors and its integrated door coordinator ensures – also in this combination – a proper closing behaviour of the door under cut-out conditions.
When applied at fire and smoke doors, the whole system has to be planned as hold-open device (see page 14/15).

ED 200 ESR ½ for partially automated double-leaf doors

The low-priced application for double-leaf doors (fire and smoke doors)
In general both door leaves of a double-leaf door are automated, however, for pedestrian traffic it is sufficient to automate only one door leaf. This is where the ED 200 ESR 1/2 comes into play as it is the low-price application that automates only one of the two door leaves. While the active leaf is opened full-automatically, the passive leaf can be operated manually and has the function of a door closer. Thanks to its integrated hold-open device, both door leaves can be set to Permanent Open while no further components are required. Of course the ED 200 ESR 1/2 is suitable for application at fire and smoke doors and ensures, due to its integrated door coordinator – also in this combination – the safe closing behaviour of the door under cut-out conditions.
When applied at fire and smoke doors, the whole system has to be planned as hold-open device (see page 14/15).

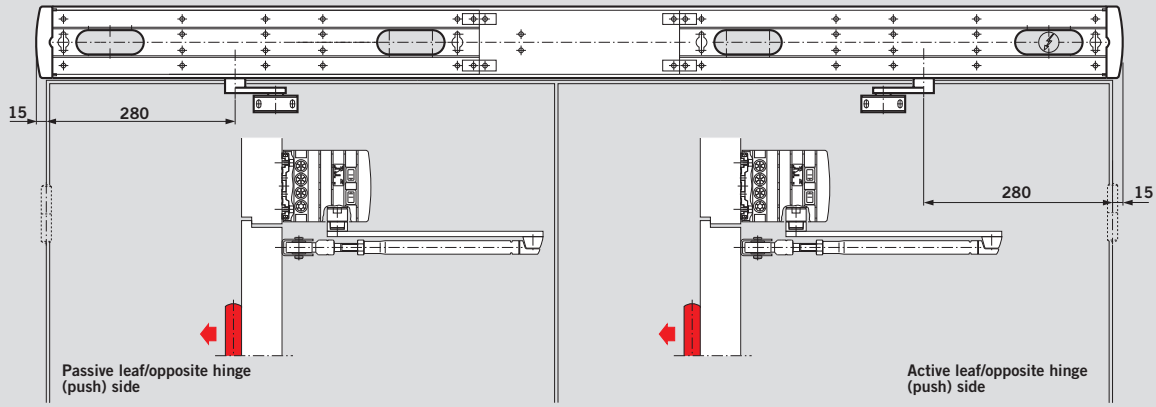
DORMA ED 200 with VARIO cover:

Always the suitable operator in stock
With the new ED 200, we now offer a ready-for-installation swing door operator for double-leaf doors that is available within a short period of time. A further benefit of this new system is its adaptability to any width you may desire to cover. It has a variable centrepiece between the two equally sized standard operator parts consisting of the cover and the base plate. Thanks to the innovative VARIO cover, you can cut the operator cover to the desired length on the building site. All parts are connected while covers hide the cutting edges.
The VARIO cover can also be combined with the well-established ESR integrated door coordinator and the ESR 1/2 version.

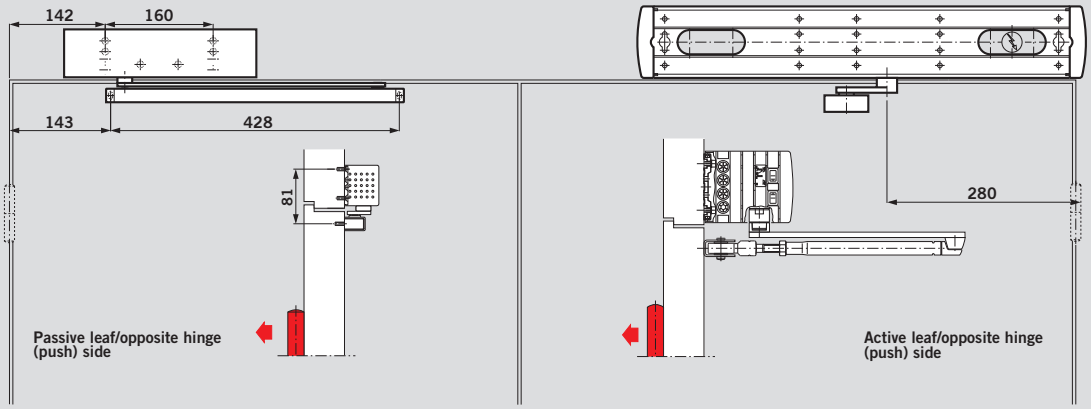


1. Standard cover
2. Cover for cutting edge
3. VARIO cover

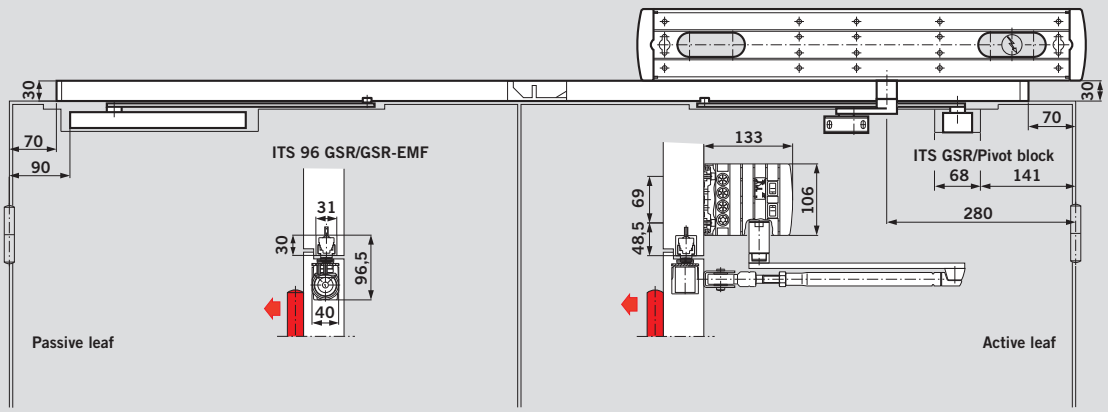
ED 200 ESR ½ behind continuous cover



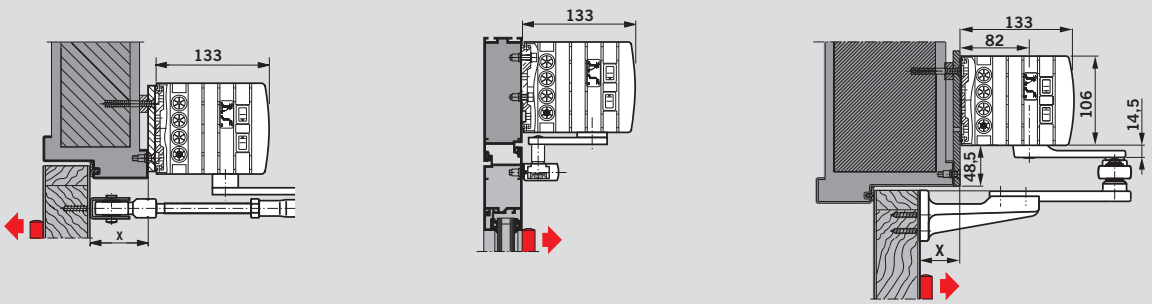
ED 200 with TS 93-B door closer without continuous cover



ED 200 with ITS 96-GSR-EMF

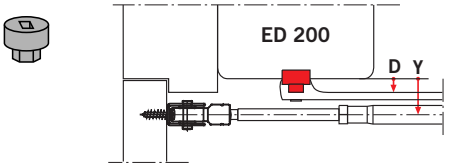
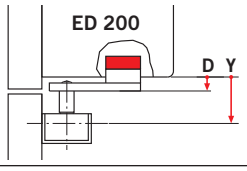
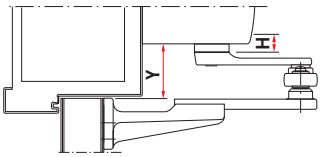


Arm versions



DORMA offers a competitive range of arms and axle extensions in order to cope with all door versions and ways of mounting. Apart from a standard arm, also a slide channel and a parallel arm are available.
The standard arm is especially suitable to transfer the maximum force onto the door leaf and is applied where the system is mounted on the opposite hinge side (push side).
The joint can be opened easily what facilitates the installation considerably.
The standard arm pushes the door in opening direction and offers the ED 200 operator enough power for installation at fire and smoke doors.
The slide channel is suitable for installation on the hinge side (pull side) and on the opposite hinge side (push side). Apart from its appealing design, it offers the benefit that it can also pull the door. However, due to its force progression, the slide channel is not suitable for application at fire and smoke doors.
The parallel arm is adequate where the operator is installed on the hinge side (pull side) and when small door leaves have to be automated. Furthermore lintel depths of up to 160 mm can be handled.
All these arm versions are supplied with an axle extension. When required, additional axle extensions are available as an option in order to compensate differentials in height.

Optional axle extension for variable height increase of ED 200 swing door operators

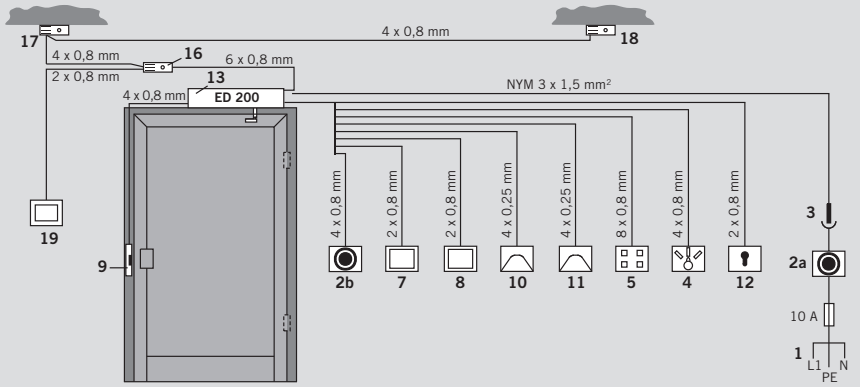
	Height H mm	..... D mm	.....Y mm	Order No.
with standard arm	13	6	30	19425251150
	21*	14	38	19425252150
	30	23	47	19425253150
	48	41	65	19425254150
	73	66	90	19425256150
	95	88	112	19425255150
with slide channel	13*	14	47	19433201150
	21	22	55	19433202150
	30	31	64	19433203150
	48	49	82	19433204150
with parallel arm	13*		53,5	19425204150
	21		61,5	19425201150
	30		70,5	19425202150
	48		88,5	19425203150
	73		113,5	19425206150
	95		135,5	19425205150

* Part of the scope of delivery

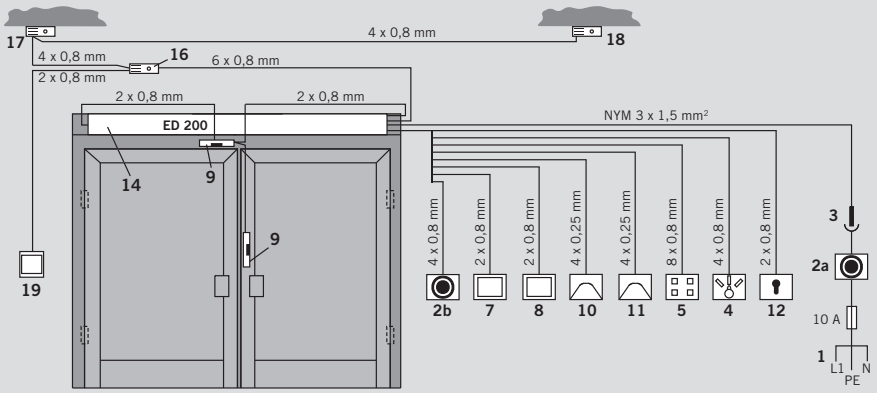
Connections

1 Feeder
2a Emergency pushbutton Function: Emergency off
2b Emergency pushbutton Function: Emergency stop
3 Two-pole-and-earth socket
4 Mechanical PGS external program switch
5 Electronic PGS external program switch
6 Pushbutton
7 Pushbutton, inside
8 Pushbutton, outside
9 Door locking device
10 Radar, inside
11 Radar, outside
12 Key switch
13 ED 200
14 ED 200 with continuous cover
15 ED 200 for “contraflow traffic”
16 RM-ED smoke detector
17 RM smoke detector, opposite hinge (push) side
18 RM smoke detector, hinge (pull) side
19 Manual release switch, with “Tür schließen” wording

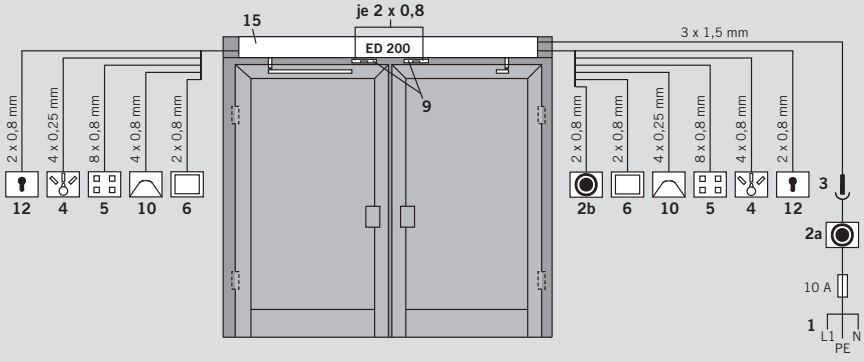
ED 200 for single-leaf doors



ED 200 for double-leaf doors



ED 200 for “contraflow traffic”



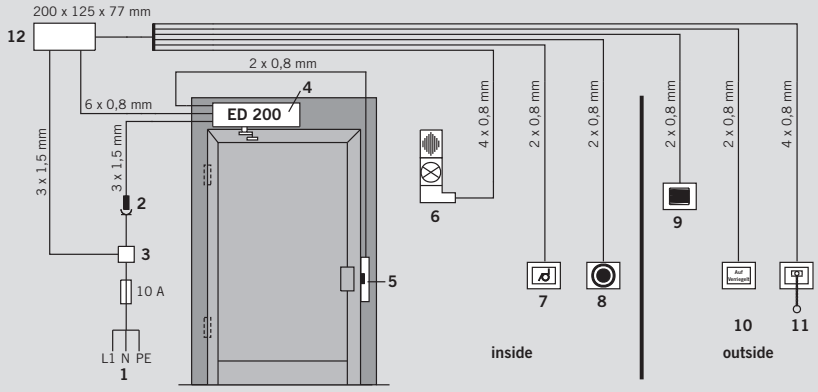
Suitably equipped for the requirements of handicapped people: The rest room for handicapped people

Public buildings must have rest rooms that are tailored to the requirements of handicapped people. However, special care must be devoted to the needs of wheelchair drivers. A corresponding room layout is as important as the availability of sufficient space. The accessibility with the aid of an automatic door operator is likewise important for handicapped people and can, among others, be realized with a special key switch, which triggers an opening pulse. In case there is a person inside the rest room, the door can be locked via pushbutton (locking via electric strike) while a red-green display indicates the door status. Emergency sensors may be integrated into the door system if desired. As you see, DORMA takes care that every special requirement is considered.

Connections

1 Feeder: 230 V, 50/60 Hz
2 Two-pole-and-earth socket (by others)
3 Junction box (by others)
4 DORMA ED 200
5 Fail-safe lock, 24 V DC
6 Alarm siren with signal lamp (red)
7 Palm pushbutton with disabled symbol
8 Concealed/flush-mounted emergency pushbutton, located behind emergency break glass
9 Concealed/flush-mounted signal lamp (red)
10 Concealed/flush-mounted palm switch, with "open/locked" wording
11 Flush-mounted pull switch, for emergency opening
12 Auxiliary drive unit, housed in external cover

ED 200 for rest rooms for the disabled



Application of the ED 200 swing door operator in smoke and heat ventilation systems

Smoke and heat ventilation systems are applied in preventing fire protection with the following objectives:

- To evacuate smoke and heat in the event of a fire.
- To keep emergency exits and escape routes free from smoke and gas.
- To create a smoke-free layer and to facilitate fire fighting.
- They can also be used for ventilation purposes (air supply/air withdrawal).
- To open air outlets like windows and dome lights in the event of a fire.
- Automatic and remote activation.
- To supply and to withdraw air.

A smoke and heat ventilation system consists of a smoke outlet, fire detectors, a control unit and an air supply opening.
In smoke and heat ventilation systems, the ED 200 is mounted to doors serving as air supply openings. These doors are designed to create a balance between the air inflow and the outflow of gas in the roof area of the building (e. g. windows).

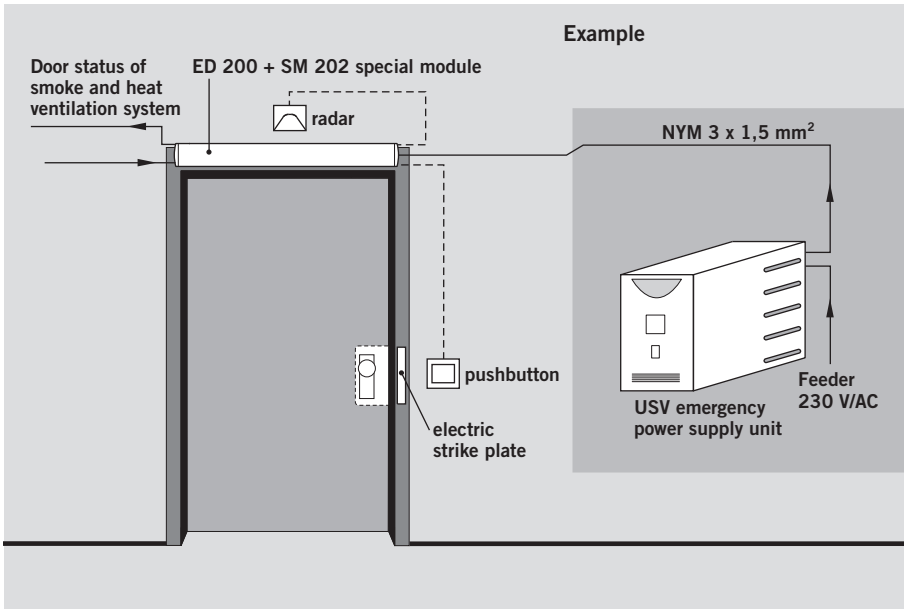
The following system solutions are approved as air supply openings:

1. **ED 200 with USV emergency power supply unit**
2. **ED 200 Inverse**

(see page 22 for “Mechanical opening under cut-out conditions”)

ED 200 with USV emergency power supply unit

The drawing shows an example for an air supply opening. In contrast to smoke and heat ventilation systems, equipped with the ED 200 Inverse, the ED 200 operates in daily use (without activation of the smoke and heat ventilation system) as properly and reliable as usually, which allows also heavy usage of the door. On activation of the smoke and heat ventilation system (floating opening contact), the ED 200 opens the door which remains open until the smoke and heat ventilation system has been reset. In order to ensure this function for a certain period of time even under cut-out conditions, the ED 200 is equipped with an emergency power supply unit integrated in its 230 V-wiring. In addition to the emergency power supply unit, the system is equipped with a power overload protection. If the power consumption falls below an admissible value, the emergency power supply unit switches to emergency mode within 20 ms.



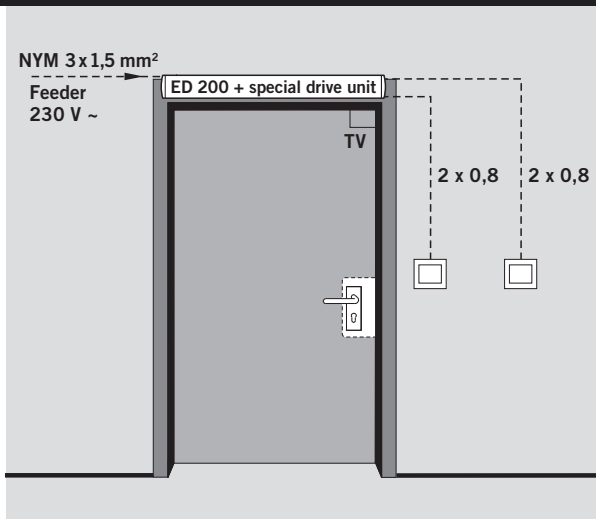
The following components must be installed when using the ED 200 in the air supply opening of a heat and smoke ventilation system:

- **Emergency power supply unit MT 700 USV**

- **Special module SM 202**

ED 200 Inverse (mechanical opening under cut-out conditions)

The ED 200 Inverse is especially suitable for large buildings such as airports, theatres or congress centres. In the event of an emergency, the ED 200 activates doors even under cut-out conditions in order to make escape routes available. For this application, the operating principle of the ED 200 is reversed: The operator actuates the door to open by using the energy stored in the integrated door closer, then the door is closed by motor power. The opening width must be limited by an external door stop. In contrast to the ED 200 with emergency power supply unit, the ED 200 Inverse cannot be connected to a radar motion detector; it is activated via push-button.
The ED 200 Inverse can perform 3 different operating principles.



System solution 1
Timed closing action. The ED 200 Inverse is activated via pushbutton and opens the door for an adjustable hold open time from 0 to 100 s. On expiry of this period, the door is closed automatically. The following components are required for this system solution:
- Operator variant ED 200 Inverse
- Special module SM 202
- Door locking device TV 200
- Pushbutton for activation

System solution 2
Flip-flop-function (positively activated closing action)
Pressing the pushbutton institutes the ED 200 to open the door. The door remains open until the door closing is activated by pressing the pushbutton again. The following components are required for this system solution:
- Operator variant ED 200 Inverse
- Special module SM 202
- Door locking device TV 200
- Pushbutton for activation

System solution 3
DORMA TMS door management system (for emergency exits and escape routes).
The ED 200 is approved for installation in emergency exits and escape routes when controlled by the DORMA TMS door management system. In the event of an emergency, the door terminal institutes the door to open. The following components are required for this system solution:
- Operator variant ED 200 Inverse
- Special module SM 202
- Door locking device TV-DCW
- Door terminal TL-TMS

Summary
The ED 200 Inverse can be instituted to open a door via:
- Pushbutton
- Power failure
- Emergency pushbutton
- Smoke detector
- A higher-level fire detection system or hazard warning system
- Activation from central control position


TV 200 electrical locking device


TL-TMS door terminal

SM 202 special module

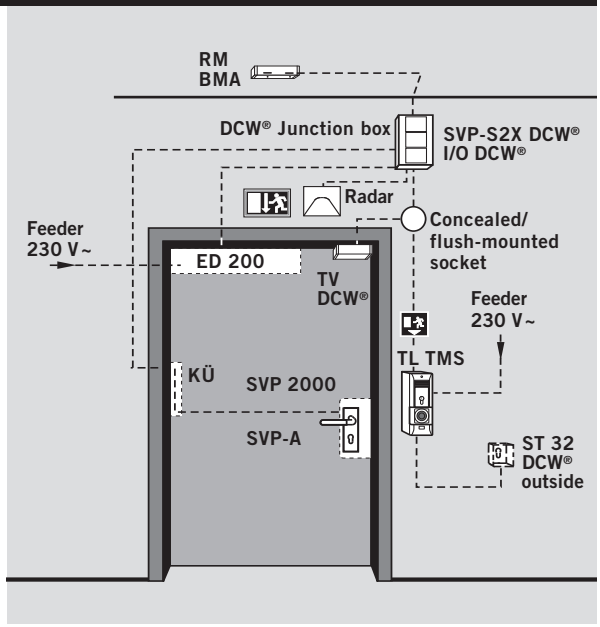
Emergency exit control system

The door is normally locked (DORMA TV 200, TV 500). Operation of the emergency pushbutton in the DORMA TL door terminal causes the locking mechanism to be de-energized and released, and also the deadbolt and latch of the DORMA SVP 200 emergency exit motor lock to be withdrawn and enabled respectively. At the same time the system emits an alarm and the DORMA ED 200 receives an opening signal. Authorized users may unlock the door with the DORMA TL key switch/button or via DORMA access control systems. If the DORMA RM smoke detector responds, the DORMA TV electrical locking device is unlocked, the DORMA SVP 2000 emergency exit motor lock with self-locking action is locked and the DORMA ED 200 is de-energized. These actions ensure that the fire protection characteristics of the door are maintained.

If activated from a central control position, the TV electrical locking device and the SVP 2000 emergency exit motor lock are unlocked and the ED 200 opens the door. MPA (German Material Testing Authority) VdS (insurance) approval certificates for use in emergency exits and escape routes have been issued for this system.

The following components are required:

- DORMA ED 200 swing door operator
- TL-G TMS door terminal with TL-S TMS control board
- TV 200, TV 200 DCW electrical locking device
- SVP 2000 emergency exit motor lock with self-locking action
- SVP-S DCW motor lock control module
- SVP-A ... motor lock cable
- Flush-mounted cable loop KÜ ST 32 DCW key button
- DCW junction box
- I/O DCW module

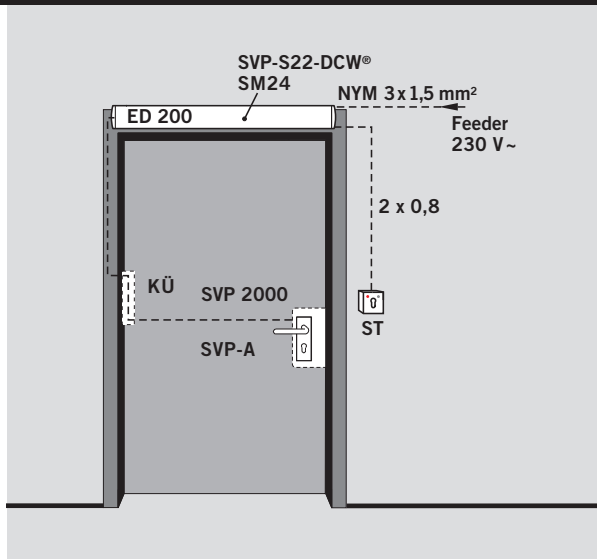


Insurance lock

When closed, the door is locked by the DORMA SVP 2000 emergency exit motor lock with self-locking action (insurance lock). The door can be opened and closed from the inside at any time, with unlocking action of the DORMA SVP 2000 and the delayed activation of the DORMA ED 200 being initiated either manually or by active detectors as required. Activation control from a central position is also possible. Authorized users may be granted access from the outside. Once the door is closed, the insurance lock is reinstated fully automatically as the DORMA SVP 2000 automatically throws the bolt after each closing cycle. The DORMA SVP-S22 motor lock control module is installed under the extended cover of the ED 200 for activation control of the DORMA SVP 2000.

The following components are required:

- ED 200 swing door operator
- SVP 2000 emergency exit motor lock with self-locking action
- SVP-S22 DCW motor lock control module
- SM 24 special module for stabilized power supply
- SVP-A ... motor lock cable
- Concealed/flush-mounted cable loop KÜ
- Activator



DORMA IRS-2

The DORMA IRS-2 safety sensor is a monitoring module designed to safeguard the sweep range of automatic swing doors. It can be mounted travelling on the hinge (pull) and opposite hinge (push) side of the door. If mounted on the opposite hinge (push) side, the DORMA IRS-2 safety sensor acts as an activator to open the door in the close range of the door. As soon as an object is located on

Safety

this side of the door, the door is reopened automatically due to a new activating impulse given by the safety sensor. In case that the safety sensor on the hinge (pull) side is activated, the automatic opening action of the door is stopped in order to avoid collisions with objects in the scanning range of the IRS-2 safety sensor. The technical principle of the safety sensor ensures that people and objects are

Reversal

detected at the same time. The scanning range of the IRS-2 is adjustable and infrared light is used to safeguard the driving phase of the door. As an active infrared sensor, the IRS-2 detects all static and moving objects, e. g. items or people, within its scanning range. The IRS-2 is available in different lengths and with a variable number of infrared sensors. Depending on the door width, DORMA

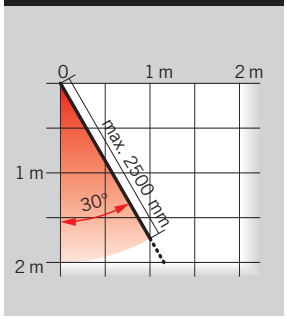
STOP

recommends to select the longest-possible IRS-2 safety sensor variant with a maximum number of integrated infrared sensors as the scanning range grows in line with the number of infrared sensors. This ensures the maximum safety of the swing door.

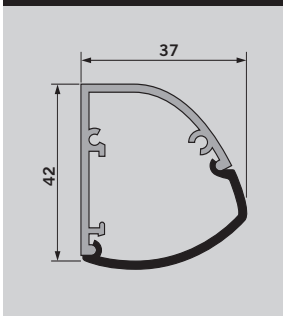
Benefits and features

- Available in the following lengths: 330, 700, 900 and 1200 mm
- Suitable for LH (ISO 6) and RH (ISO 5) doors
- Mounting on the hinge (pull) and opposite hinge (push) side
- Suitable as opening activator for automatic doors
- Ideal activating sensor for confined situations due to its small scanning range
- May serve as travelling opening protection for swing doors
- Monitoring of crushing- and shearing edges

Scanning range



Cross section

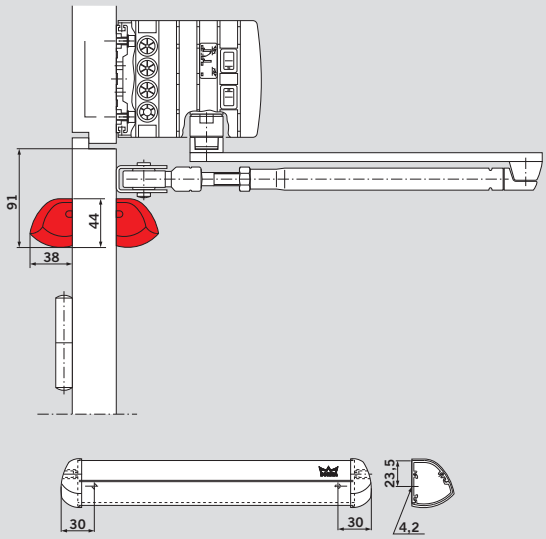


IRS-2 infrared safety sensor variants

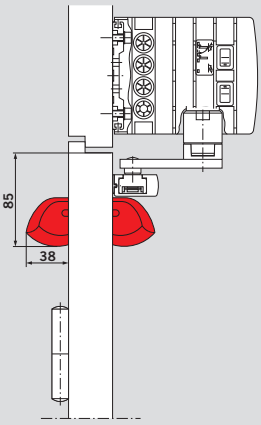
	Number of integrated safety sensors	Length of safety sensor
IRS-2-33	1	330 mm
IRS-2-70	1	700 mm
IRS-2-90	2	900 mm
IRS-2-120/2	2	1200 mm
IRS-2-120/3	3	1200 mm

IRS-2 mounting dimensions

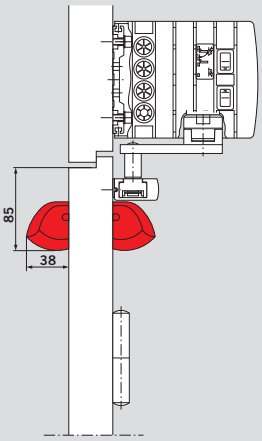
Mounting on the opposite hinge (push) side with standard arm



Mounting on the opposite hinge (push) side with slide channel

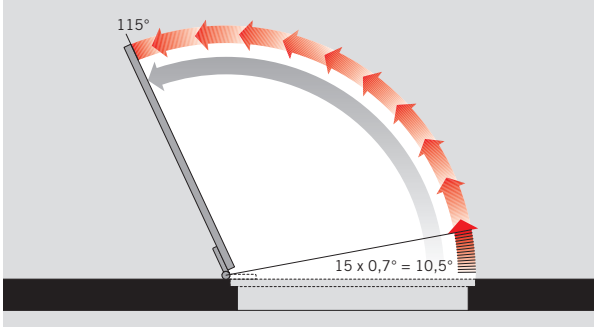


Mounting on the hinge (pull) side with slide channel



Electronic control unit Push&Go

The ED 200 is also available with the electronic control unit Push&Go, which can easily be retrofitted as an accessory. Just push slightly and the door leaf opens automatically, thus even heavy doors can be operated without any effort. Inhibitions not least older people might have when it comes to modern technology are being removed.
In contrast to radar or infra-red-controlled door systems, the comfort version ensures that heavy-used doors and entrances are not opened unnecessarily. Push&Go is the appropriate alternative for locations with insufficient space for radar or pushbutton activation. Where fire doors are retrofitted with Push&Go, the fail-safe lock need not be exchanged. An additional incremental encoder ensures that the Push&Go system can be activated from any opening angle. Furthermore, the sensitivity of the system is adjustable in 15 levels. If the door hits an obstacle during its closing action, it will be reopened immediately. As no additional wiring is required, Push&Go is the economical alternative to a radar-controlled system.



Application and benefits

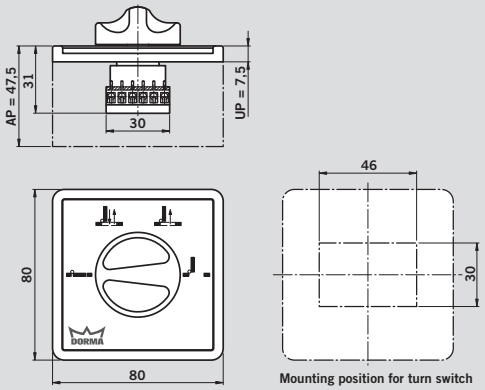
- In contrast to radar or infrared-operated door systems, the ED 200 Push&Go prevents heavy-used doors from being opened unnecessarily
- Ideal solution for locations with insufficient space for radar or pushbutton activation
- Even heavy doors can be opened manually with the support of Push&Go
- It minimizes the inhibition thresholds of older people
- Activation from any opening angle
- The ED 200 (with control board A and B) can easily be retrofitted with Push&Go
- Adjustable sensitivity (15 levels)
- Safety function: the opening action is reversed as soon as the door hits an obstacle

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 4 different functions: Off, Automatic, Exit Only, Permanent Open
- Electronic program switches in System 55 design to cope with the highest aesthetic demands

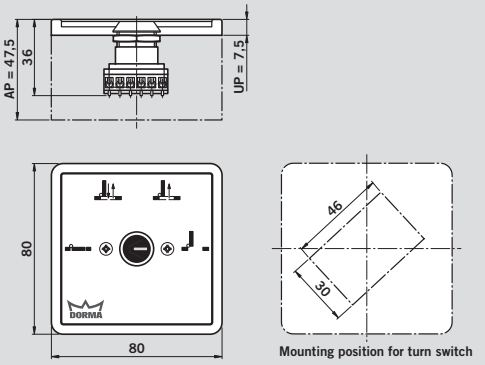
PG-D1



PG-D1 program switch
4-position, aluminium, white, for control unit A and B, flush-mounted, 80 x 80 mm, Gira S-Color

Order No. 19135404150

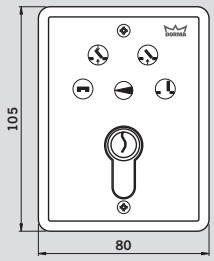
PG-D3

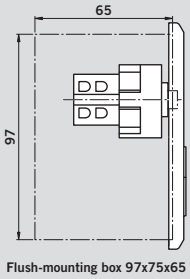


PG-D3 program switch
4-position, lockable, aluminium, white, control unit B, flush-mounted, 80 x 80 mm, Gira S-Color

Order No. 19135604150

PG-D4

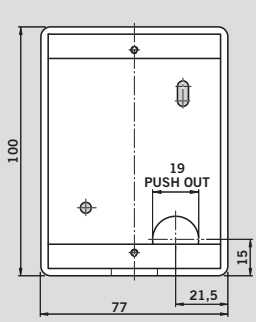


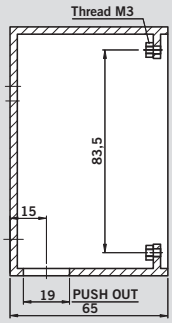


PG-D4 program switch
4-position, lockable via Euro profile half-cylinder, white, flush-mounting, 105 x 80 x 65 mm, box for surface-mounting: 19142201170

Order No. 19141801170

PG-D4

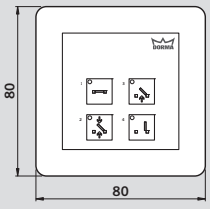


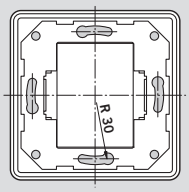


box for surface mounting for PG-D4
for mechanical program switch, 100 x 80 x 65 mm standard frame, white

Order No. 19142201170

EPS-D



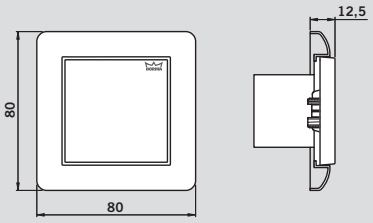


EPS-D full-electronic program switch
in System 55 design, 4-position, lockable via code or additional TL-ST S55 key switch, membrane keypad, aluminium coloured, white, flush-mounted, 80 x 80 mm

Order No. 16557001150

Pushbuttons

Pushbutton

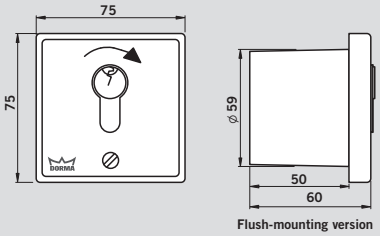


Pushbutton
Single-pole changeover contact, standard frame, white, flush-mounting, System 55

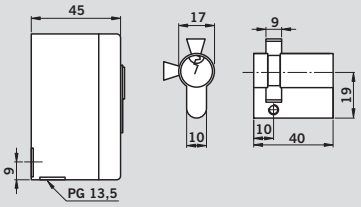
Order No. 19144701170

Key switch

KT 3-1
Flush-/Surface mounting



Flush-mounting version



Surface-mounting version

KT 8
Flush-/Surface mounting

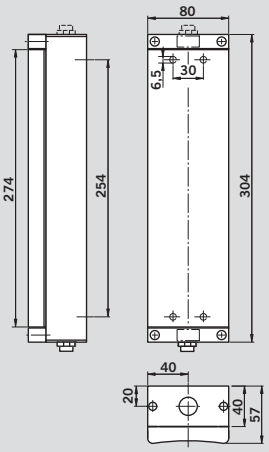
Key switch KT 3-1
1 NO contact, with Euro profile half-cylinder (can be replaced by any half-cylinder of a master-key system), you can only withdraw the key when it is in zero position, aluminium,
metal, 75 x 75 x 60 mm
KT 3-1 flush-mounting
Order No. 05054531332

KT 3-1 surface mounting
Order No. 05054631332

Key switch 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
Order No. 05054831332

KT 8 surface mounting
Order No. 05054931332

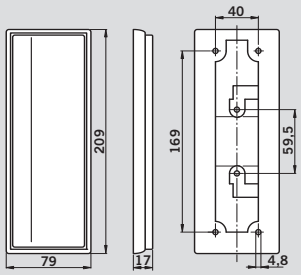
Large-sized pushbutton (elbow)



Large-sized pushbutton (elbow)
flush-mounting/surface-mounting, electrical, silver anodic coating CO,
304 x 80 mm

Order No. 90410015

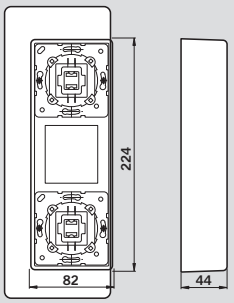
Large-sized pushbutton (elbow)



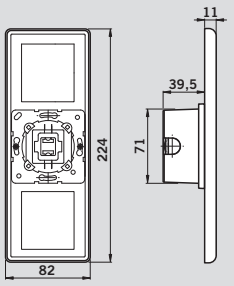
Large-sized pushbutton (elbow)
surface-mounting, extra-flat design, synthetic material, grey, 209 x 79 x 17 mm

Order No. 05080231332

Large-sized pushbuttons



Surface-mounted design



Flush-mounted design

Large-sized pushbutton
with box for flush-mounting, without switch pad, incl. switch, 224 x 82 mm
Order No. 05095531332

Large-sized pushbutton
with box for surface-mounting, without switch pad, incl. 2 switches, paint sprayed for aluminium effect, 224 x 82 x 44 mm
Order No. 05095231332

Switch pad
aluminium, suitable for flush-/surface-mounting, 214 x 70 mm
Order No. 05095431332

Switch pad
aluminium, suitable for flush-/surface-mounting, 214 x 70 mm, with inscription reading “Tür auf”
Order No. 05095331332

CT 4/1 code keypad as control for locking devices (keypad and electronic module have to be combined)

The code keypad does not require optional software for simple access authorizations. The metal keypad is waterproof and protected against manipulation thus it is also suitable for installation on the outside of a building. The four- or six-digit code can be changed at the keypad via Plug & Play. The respective control unit is installed in the protected area and can be connected to all DORMA operators.
Surface-mounting, 230 V/50 Hz, 1.5 V A, 1 x UM potential-free relay contact 8 A, 250 V, connections: max. 2.5 mm, 75 x 75 x 11.5 mm.

MTB 4/1 metal keypad
to enter the activation code (to open the door) and for programming purposes, surface-mounting, 75 x 75 x 11.5 mm
Order No. 05079331332

EB 4/1
Electronic module, incl. 2 m connection cable, plastic cover, black, surface-mounting
Order No. 05063431332

Radio transmitters and transponders

Radio remote control system

The RC-R radio receiver can be combined with all DORMA operators. Apart from the handy RC-T HandHeld radio remote control, also large-sized pushbuttons are available. Thanks to its individual code, the system can also be applied as a simple access control system. This is realized by storing the code of the radio remote control in the radio receiver via Plug&Play and allows you to allocate different access authorizations. Furthermore this system is especially suitable for upgrades as no wiring for the pushbuttons is required. Coverage: up to 20 m.

DORMA RC-R
Receiver module including adaptor for installation in ED 200, CD 400, CD 80 and PORTEO 24 V DC, 1 channel, self-learning – also for several remote controls, 24 V DC, max 100 mA, frequency: 433.92 MHz
Order No. 16562301170

DORMA RC-T
Large-sized pushbuttons

DORMA RC-T HandHeld
Hand-held transmitter

DORMA RC-T
Large-sized pushbutton with integrated radio transmitter, small pushbutton and RC-T radio remote control including battery (product life: approx. 1 year with 60 activations/day), without switch pad, 2 channels, 433.92 MHz, with box for surface-mounting 224 x 82 x 44 mm
Order No. 16562201175

Switch pad, aluminium, suitable for flush-/surface-mounting, 214 x 70 mm
Order No. 05095431332

Switch pad with inscription reading “Tür auf”, aluminium, suitable for flush-/surface-mounting, 214 x 70 mm
Order No. 05095331332

DORMA RC-T HandHeld
hand-held transmitter, incl. battery (product life: approx. 1 year with 60 activations/day), 4 buttons that can be assigned individually, 2 channels, frequency: 433.92 MHz, plastic, black
Order No. 1656210117

DORMA AutoSwitch transponder

The active transponder system: This system automatically sends a pulse to the control unit when entering the detection range (which amounts to approx. 2.5 m) and is especially suitable for areas where a manual operation has to be excluded.
Thanks to its coverage, it is the adequate access control system for doors used by wheelchair drivers.

DORMA AutoSwitch
Receiver/control unit, surface-mounting, white
Order No. 16571101175

Programming-(Transponder-) key, yellow
Order No. 16571201175

Standard-(Transponder-) key, blue
Order No. 16571301175

Radar motion detectors

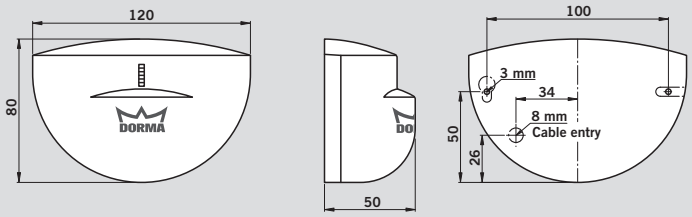
Radar motion detectors detect approaching people at an early stage and emit an activation (opening) signal for the door operator. Radar motion detectors only respond to movements. Thanks to their various adjustment options, also difficult installations can be realised.

Radar motion detectors with direction recognition

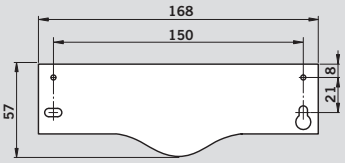
Eagle black

Eagle white

Eagle silver



Merkur



Eagle 1
Direction recognition, black
Order No. 16503101170

white
Order No. 16503103170

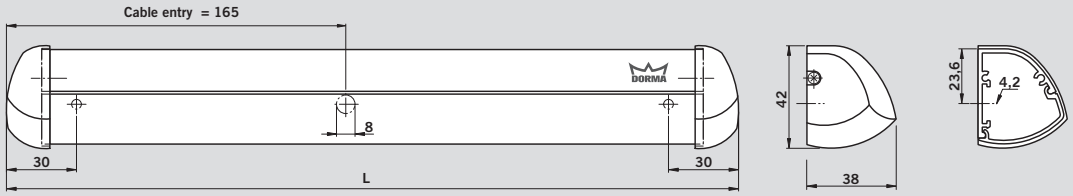
silver
Order No. 16503102170

Merkur
Cross traffic suppression with direction recognition, black
Order No. 16532201170

Active infrared safety sensors

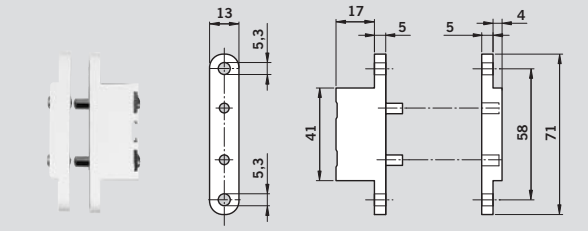
IRS-2 active infrared safety sensor		Colour	Order No.
IRS-2-33	with 1 sensor, length: 330 mm		
	Power supply: 24 V DC, power consumption: 100 mA,	silver (E 6/C 0)	16521701150
	Maximum load current: 0.2 A at 48 V DC,	(traffic white) RAL 9016	16521704150
	Installation height: min. 0.5 m / max. 2.5 m	further RAL	16521705150
IRS-2-70	with 1 sensor, length: 700 mm		
	Power supply: 24 V DC, power consumption: 100 mA,	silver (E 6/C 0)	16521706150
	Maximum load current: 0.2 A at 48 V DC,	(traffic white) RAL 9016	16521709150
	Installation height: min. 0.5 m / max. 2.5 m	further RAL	16521710150
IRS-2-90	with 2 sensors, length: 900 mm		
	Power supply: 24 V DC, power consumption: 200 mA,	silver (E 6/C 0)	16521711150
	Maximum load current: 0.2 A at 48 V DC,	(traffic white) RAL 9016	16521714150
	Installation height: min. 0.5 m / max. 2.5 m	further RAL	16521715150
IRS-2-120/2	with 2 sensors, length: 1200 mm		
	Power supply: 24 V DC, power consumption: 200 mA,	silver (E 6/C 0)	16521716150
	Maximum load current: 0.2 A at 48 V DC,	(traffic white) RAL 9016	16521719150
	Installation height: min. 0.5 m / max. 2.5 m	further RAL	16521720150
IRS-2-120/3	with 3 sensors, length: 1200 mm		
	Power supply: 24 V DC, power consumption: 300 mA,	silver (E 6/C 0)	16521721150
	Maximum load current: 0.2 A at 48 V DC,	(traffic white) RAL 9016	16521724150
	Installation height: min. 0.5 m / max. 2.5 m	further RAL	16521725150

IRS-2 safety sensors



Power transit device and cable loops

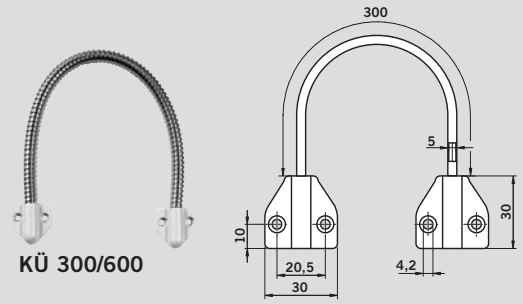
Power transit device type 10305



Power transit device
Type 10305
two-pole, to transfer electric current from the door frame to the door leaf while the door is closed.

Order No. 05045231332

Cable loops



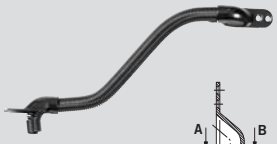
KÜ 300/600

KÜ 300 cable loop
Flexible metal loop for protection of cables between door and door frame, max. cable diameter: 5 mm, Length: 300 mm

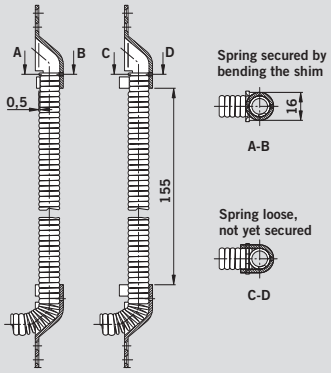
Order No. 05045331332

KÜ 600 cable loop
Flexible metal loop for protection of cables between door and door frame, max. cable diameter: 5 mm, Length: 600 mm

Order No. 05101933332



KS 155/370



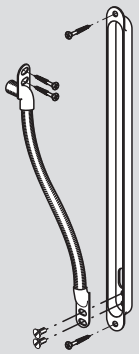
Robust stainless steel spiral to protect flexible cables with a diameter of up to 8 mm between movable elements.

KS 155 cable loop
Cable spiral for door hinges of up to 18 mm, to cover opening angles of up to 110°, variable length: 155 mm, Installation dimensions (W x H x D): approx.
17 x 255 x 15 mm

Order No. 15817000

KS 370 cable loop
Cable spiral for door hinges of up to 36 mm, to cover opening angles of up to 180°, variable length: 370 mm, Installation dimensions (W x H x D): approx.
17 x 470 x 15 mm

Order No. 15819000



KÜ 260/480

Robust stainless steel spiral with recess box for flexible connection cables, for cables with a diameter of up to 8 mm. Ensuring a pinch-free and sabotage-proof connection between the leaf and frame of doors and windows.

KÜ 260 cable loop
for door hinges of up to 18 mm, to cover opening angles of up to 110°, variable length: 155 mm, installation dimensions of recess box (W x H x D): approx. 24 x 260 x 17 mm

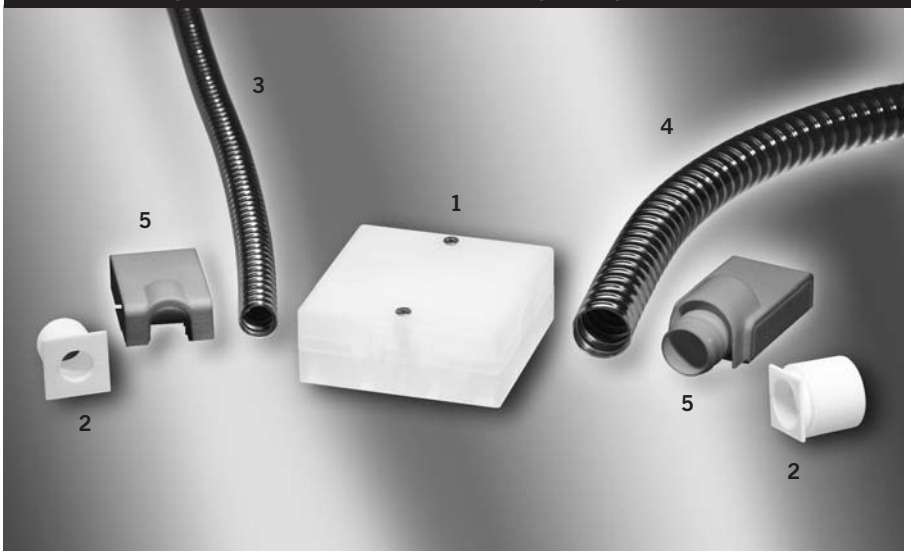
Order No. 15811000

KÜ 480 cable loop
for door hinges of up to 36 mm, to cover opening angles of up to 180°, variable length: 370 mm, installation dimensions of recess box (W x H x D): approx. 24 x 480 x 17 mm

Order No. 15813000

As linking element between the door leaf and the door frame, the cable loop is of special importance. Like all other DORMA products, these cable loops offer solidity and long product life. Therefore DORMA cable loops have an especially robust metal spiral, which ensures, together with the recess box, the optimum protection of the contained flexible connection cables.

KÜ-CD cable loop for door-leaf mounted DORMA swing door operators



The DORMA KÜ-CD cable loop offers the ideal solution for the door leaf fixing
options of the CD operator.
The combination of

- Junction box **(1)**
- Junction box accessories **(2)**
- Cable loop (inner diameter 12 mm) **(3)**
- Cable loop (inner diameter 20 mm) **(4)**
- Adapter-unit **(5)**

enables elegant concealment of all the requisite cabling connecting the operator to the supply.

Junction box (1)
for cable loop (internal diameter: 12 mm or 200 mm), white, including **accessories (2)**

Order No. 5163333332

cable loop (3) 600 mm, internal diameter: 12 mm, silver

Order No. 5163433332

cable loop (4) 600 mm, internal diameter: 20 mm, silver, incl. fixing elements

Order No. 5163533332

Adaptor unit (5)
to conceal the cabling on its way into the operator, combinable with both cable loops

silver
Order No. 5163133332

RAL 9016 (traffic white)
Order No. 5163233332

Further accessories

Red-green display

The red-green display indicated the status of the door system. The extravagant, semicircular designer signal lamp is made of acryl, manufactured according to the latest LED technology and has a high-grade LED display (24 V, brilliancy according to DIN VDE (German association of engineers) 0834, part 1). The light signals are visible from both sides and the front even from a large distance. Its display is resistant against almost all disinfectants and cleaning agents. Light signal, 24 V DC, LED-display red, green, white.

Order No. 05111631332

Emergency power supply unit

In order to assure unlimited safety to all visitors of a building, every door system within this building has to remain fully functional even in the event of a power failure. This is ensured by the DORMA MT 700 USV emergency power supply unit. Depending on its equipment, this unit can maintain the function of an operator for up to one hour. During this time, the whole door system is provided with emergency power so that there remains sufficient time for countermeasures and securing the building.
USV MT 700 VA emergency power supply unit
integrated in 230-V power supply line
Dimensions: 160 x 120 x 360 mm (W x H x D)

Order No. 05094531332

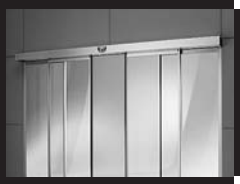
SM 202 special module

SM 202 special module
completely packed (suitable for installation in end cap)

Order No. 18806701175

www.dorma.com

Door Control



Automatic

Glass Fittings and Accessories

Security/Time and Access (STA)

Movable Walls

Automatic Division worldwide

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Phone +32 50 312849
www.dorma.be

Luxembourg
Luxembourg Subsidiary Automatic
Phone +49 2333 793-216
www.dorma.de

Switzerland
DORMA Schweiz AG
Phone +41 71 8864646
www.dorma.ch

Region Emerging Markets
P, RUS, UA, BG, GR, TR, IND, IL, RSA

Poland
DORMA Polska Sp. z o.o.
Phone +48 22 736-59-00
www.dorma.pl

Russia
Representative Office in Russia
Phone +7 095 2581225
www.dorma.com

Ukraine
DORMA Representation Ukraine
Phone +380 44 2443897
www.dorma.com

Bulgaria
DORMA Bulgaria
Phone +359 2 9714 904
www.dorma.com

Greece
DORMA Representation Greece
Phone: +30 21 09944388
www.dorma.com

Turkey
DORMA Kapi Kontrolleri Ltd. Sti
Phone: +90 216 3600056
www.dorma.com

India
DORMA Door Controls India
Phone +91 442 8585097
www.dorma.com

Israel
DORMA GmbH + Co. KG
Phone +49 2333 793-0
www.dorma.com

South Africa
DORMA Door Controls (Pty.) Ltd
Phone +27 11 8300280
www.dorma.com

Region Far East
SGP, HK, VRC, RC, MAL, RI, RP, ROK, VN, J

Singapore
DORMA Far East Pte. Ltd.
No. 31 Gul Lane
Phone +65 62 68 76 33
www.dorma.com.sg

Hong Kong
DORMA Door Controls Pte. Ltd.
Phone +852 25034632
www.dorma.com.sg

China
DORMA Door Controls (Suzhou) Co. Ltd.
Phone +86 512 676 12481
www.dorma.com.sg

Taiwan
DORMA Door Controls Pte. Ltd.
Phone +886 2 9182987
www.dorma.com.sg

Malaysia
DORMA Emerald Entrance Systems Pte Ltd
Phone +65 459 5733
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Indonesia
DORMA Emerald Entrance Systems Pte Ltd
Phone +65 459 5733
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South Korea
DORMA Emerald Entrance Systems Pte Ltd
Phone +65 459 5733
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Philippines
DORMA Door Controls Pte. Ltd.
Phone +632 893 40778
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Vietnam
DORMA Emerald Entrance Systems Pte Ltd
Phone +65 459 5733
www.dorma.com.sg

Japan
DORMA Emerald Entrance Systems Pte Ltd
Phone +65 459 5733
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Region France
F

France
DORMA Accueil S. A. S.
Phone +33 4 79348924
www.dorma.fr

Region Gulf
Saudi Arabia, Bahrain, Kuwait, Egypt, Syria, Jordan, Lebanon, Iran
DORMA ARABIA
Automatic Doors Ltd.
Kingdom of Saudi Arabia
Phone +966 3 847 2394
www.dorma.com

United Arab Emirates, Oman, Qatar
DORMA Middle East LLC
Dubai
Phone +971 4 282 4424
www.dorma.com

Region North America
USA, CDN, MEX

USA
DORMA Automatics Inc.
Phone +1 301 390-3600
www.dorma-usa.com

Canada
DORMA Door Controls
Phone +1 905 6701281
www.dorma.com

Mexico
DORMA México, S. de R.L. de C.V.
Phone +52 55 5272 6937
www.dorma.com

Region Scanbalt
N, S, DK, FIN, LV, EST, LT

Norway
DORMA Norge A/S
Phone +47 23 176800
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Sweden
DORMA Sverige AB
Phone +46 31 289520
www.dorma.se

Denmark
DORMA Danmark A/S
Phone +45 44 543000
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Finland
DORMA Finland Oy
Phone +358 9 8789130
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Latvia
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Estonia
DORMA Representation Estonia
Phone +372 6707064
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Lithuania
DORMA Norge AS
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Region South America
BR, RA

Brazil
DORMA Sistemas de Controles
Phone +55 11 41913244
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Argentina
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Phone +54 11 45051032
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Region South-East Europe
A, H, CZ, CS, HR, SLO, RO

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Hungary
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DORMA URED
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Romania
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Region South Europe
I, E, P

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Spain
DORMA Ibérica, S.A.
Phone +34 91 8757851
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Portugal
DORMA Portugal para Portas, Lda.
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Region UK/Ireland
GB, IRL

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DORMA UK Limited
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