

ARCHITECTURAL HARDWARE



CONTENT



1. Surface Mounted Door Closers Cam Action - TS 90, TS 91, TS 92, TS 93, TS 97 Rack and Pinion - TS 68, TS 72, TS 73V, TS 77, TS 79, TS 83



3.

Floor springs and accessories BTS 65, BTS 75V, BTS 80, BTS 80F-EMB-FLB-BSR, BTS 84, accessories



6. Power assisted & Automatic Swing Door Operators ED 100, ED 250, PORTEO





7. Locks CL600, ST9200, ST9600



Concealed closers ITS 96, RTS 84, RTS 85



8. Door furniture and Ancillary products Coastal Series - 5300, 5400, 6400, 6500, 6600, 6700 Ancillary items ,Door holders, Gate index springs, Hinges



4. Panic exit devices PHA, PHB



Information



5.

Fire and life safety products Electro Magnets, TS 73EMF, TS 73EMR





Cam-action door closer in Contur Design

A PERFECT COMBINATION OF FORM AND FUNCTION

With its new model TS 97, DORMA is able to offer a very compact surface-mounted cam-action door closer available in the project sector. Single-piece face plates with internal end caps and uniform lengths of the door closer body and slide channel characterise the impressive design credentials of this product.

Benefits For the trade

stocking.

Like all DORMA cam-action door closers, the TS 97 features the proven heart-shaped cam for maximum user convenience based on minimum opening effort. With its compact dimensions, the TS 97 ideally complements the overall appearance of any door.

Certified to ISO 9001.

For the architect/specifier

designs.

For the user

action.

=

High-quality architectural

solution for superior interior

Uniform lengths of body and

slide channel for enhanced harmony of appearance.

without slots or fixing points.

High ease of use and fully

with adjustable latching

controlled, reliable closing

Dead stop unit as standard to

protect the wall and door.

Single-piece faceplate

Data and features		TS 97				
Closing force adjustable	Size	EN 2 – 4				
Standard doors ¹⁾	up to 1100 mm	•				
External doors, outward openi	ng ¹⁾	_				
Fire and smoke check doors ¹⁾		•				
Non-handed		•				
Arm assembly	m assembly Slide channel					
Closing speed adjustment by v	valve	•				
Latching action adjustment by	•					
Dead stop unit (mechanical)		•				
Delayed action		_				
Backcheck		_				
Hold-open		0				
Weight in kg		2.5				
Dimensions in mm	Length	340				
	Overall depth	37				
	Height	49				
Door closer compliant with EN	•					
€ mark for construction produ	•					

● yes - no ○ option

¹⁾ In the case of particularly heavy doors and doors that have to close against wind pressure, we recommend the DORMA TS 93.

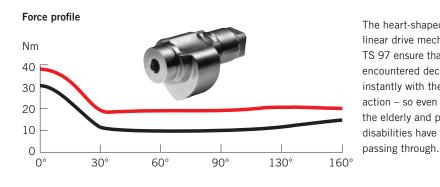
F Approval certification

The DORMA TS 97 is CERTI FIRE approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240.

User-friendly and reliable closing is also ensured by the delayed increase in the actuating torque at the 'latching' end of the sweep.

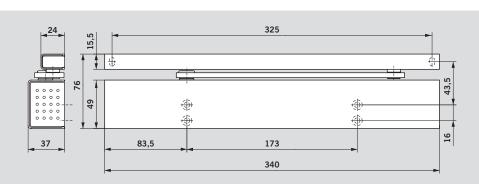
Opening force Closing force

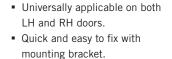
Certifire



Y

reddot design award winner 2005





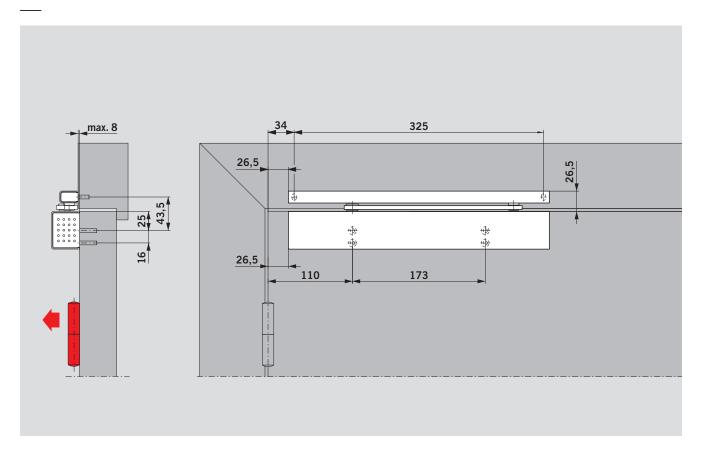
• One closer model for all

For the installer/fabricator

applications to simplify

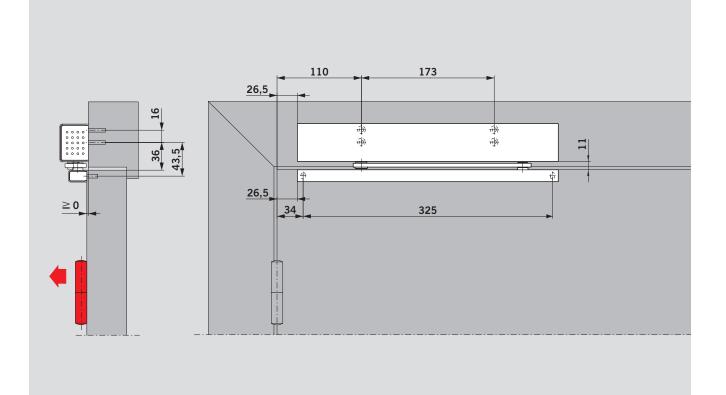
materials management and

Single pack for easy handling.

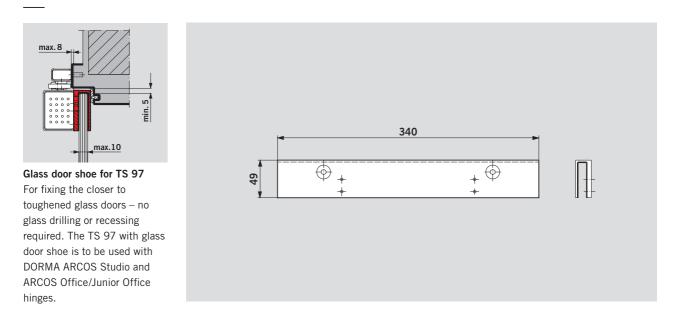


DOOR LEAF FIXING, PULL-SIDE (example: LH/ISO 6 door; mirror image for RH/ISO 5 door)

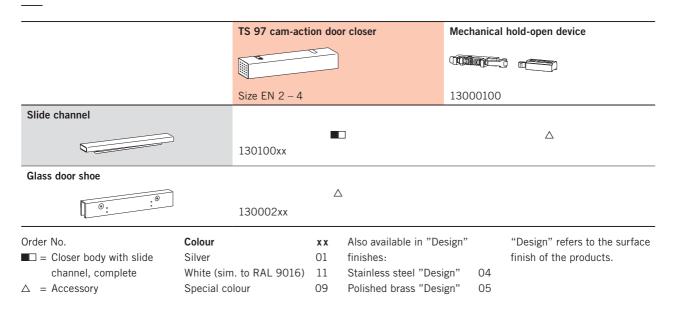
TRANSOM FIXING, PULL SIDE (example: LH/ISO 6 door; mirror image for RH/ISO 5 door)



ACCESSORIES



STANDARD EQUIPMENT AND ACCESSORIES

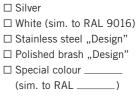


SPECIFICATION TEXT

Cam-action door closer in Contur Design with rapidly decreasing opening torque, conforming to EN 1154, carries the CE mark. Uniform lengths of door closer body and slide channel. Closing force EN 2 – 4, closing speed and latching action adjustable. Non-handed. With standard slide channel and cushioned limit stay.

Accessories □ Mechanical hold-open device □ Glass door shoe

Colour



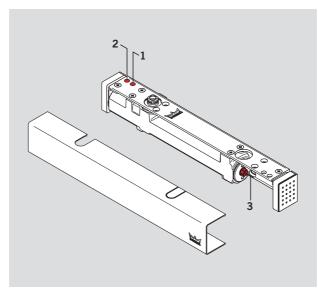
Make DORMA TS 97

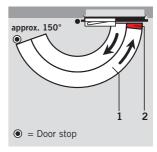
STANDARD AND OPTIONAL FUNCTIONS

The functions of the TS 97 can be individually adjusted to each door situation and matched to varying requirements.

The closer speed of the TS 97 can be infinitely adjusted by means of a valve, and there is a second valve for adjusting the latching action.

The closing force is adjustable between EN 2 and 4 by means of a screw.



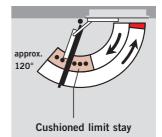


- **2** Infinitely adjustable latching action in the range $7^{\circ} 0^{\circ}$.
- **3** Adjustable closing force.

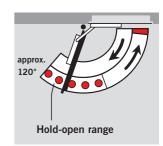
The integral **cushioned limit stay** of the TS 97 features progressive damping and helps to prevent a normally opened door from colliding with the adjacent wall.

It can be adjusted to an opening angle between 80° and max. 120°.

The cushioned limit stay is not an overload protection device and in many cases is no substitute for a door stop.





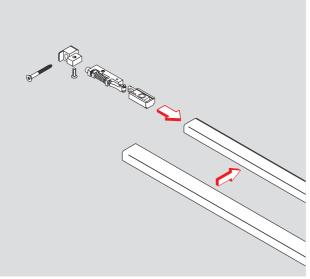




The mechanical hold-open

device enables doors to be held without fallback at an opening angle up to approx. 120°. The hold-open device is suitable for both LH and RH doors and is designed for retrofitting into the slide channel.

Not suitable for fire and smoke check doors







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Cam action door closer system in Contur Design

VERSATILE AND ELEGANT



The TS 93 cam action door closer system provides a high-quality architectural solution for all project application requirements. The proven DORMA technology featuring the heart-shaped cam ensures exceptional ease of opening.

The Contur design offers an even more impressive specification - thanks to

- concealed fixings
- height-adjustable G-N slide channel
- delayed closing action as standard
- smoke detector integrated in the slide channel
- simple, fast installation



TS 93 N

Rapidly decreasing opening force

The TS 93 system's unique cam technology sets it apart from conventional door closer systems. The resistance encountered when opening the door is instantly reduced, offering an



TS 93 EMF

easy opening action much appreciated by, in particular, children and older people.



TS 93 EMR

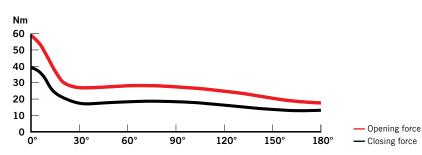






Force profile

DORMA TS 93 (Spring strength EN 5)



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door closer system				
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CAM ACTION DOOR CLOSER SYSTEM TS 93

The perfect project solution for all application needs

The TS 93 cam action door closer system sets new standards in user convenience in project applications. The proven DORMA technology of the heart-shaped cam ensures exceptional ease of opening.

Plus points...

- ... for the trade
- Clear product allocation ensures use of the right models for the right applications.
- Identical door closer model for single and double doors
- ... for the installer
- The TS 93 system is suitable for all fixing positions.
- Mounting bracket with universal fixing hole pattern for optimal fixing.
- Simple, fast installation.

The TS 93 series comprises a modular system which enables just a few door closer models to be combined with a number of different slide channels to meet virtually every conceivable functional requirement. Doors of varying designs can be equipped for a wide range of different applications.

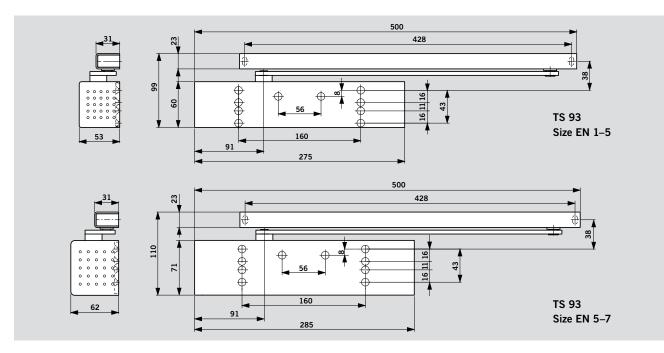
- ... for the specifier/architect
- High-quality design ensures an ideal solution for all project applications.
- Harmonious appearance thanks to integral smoke detector.
- Available in a wide range of colours and finishes.
- ... for the user
- Easy opening action and fully controlled closing.
- Smoke detector with convenient service and maintenance indicator.
- Adjustable hydraulic functions for easy adaptation to each specific door situation.

TS 93 B/G¹⁾ Data and features Variable Spring ΕN ΕN closing force strength 1–5 5–7 Standard doors²⁾ ≤ 1250 mm • ≤ 1600 mm • External doors < 1250 mm _ • outward opening²⁾ ≤ 1600 mm • For fire and ≤ 1250 mm • smoke check doors²⁾ ≤ 1600 mm Handed • . Arm assembly type Standard Slide channel • • Closing force variable by means of adjustment screw . . Closing speed adjustable by valve • Latching speed adjustable at arm at valve • Backcheck (BC/ÖD) adjustable at valve • . Delayed action (DC/SV) • . adjustable at valve Hold-open 0 0 Weight in kg 3.5 5.2 Dimensions in mm (L) 275 285 Length (B) Overall depth 53 62 Height (H) 60 71 Door closer tested to EN 1154 • • Hold-open devices tested to EN 1155 . . Door co-ordinators tested to EN 1158 • • CE mark for building products •

● yes - no ○ optional

¹⁾ B = Standard model for pull-side door leaf fixing/push-side transom fixing

G = Special model for push-side door leaf fixing/pull-side transom fixing.
 ²⁾ For applications involving particularly heavy or wide doors, and doors which have to close against wind resistance, the next highest door closer size should be selected, or the closing force adjusted to a higher setting.



Standard mounting backplate with universal fixing hole system

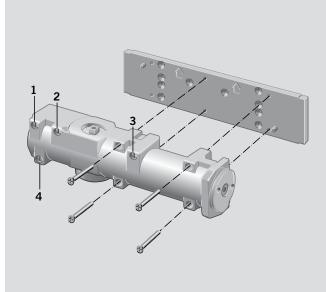
This mounting backplate with its universal hole system, including hole pattern to supplementary sheet 1 of DIN EN 1154 A, ensures ideal fixing whatever the conditions and irrespective of the door type. The fixing hole patterns are the same for both sizes of the TS 93. Additional mounting plates/brackets are no longer required. Alignment dowels on the mounting backplate facilitate location of the closer body.

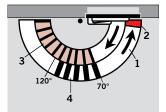
Backcheck

The backcheck feature ensures the safe deceleration and restraint of a door which has been flung open or caught by a gust of wind. This effectively reduces the danger of the door and adjacent wall being damaged.

Delayed action

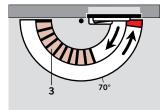
The delayed action feature retards the closing cycle between 120° and 70° (approximate values for pull-side door leaf fixing). The extra time allowed for passage through the doorway can be essential for people with luggage or bulky items: mothers with prams, personnel with tea trolleys, post trolleys, hospital beds, etc.; and also for disabled people.



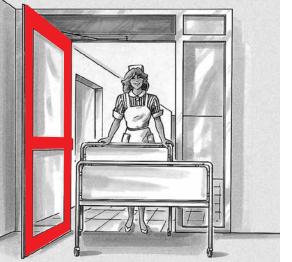


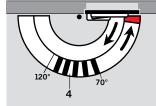
- 1 Fully controlled closing action with adjustable speed
- 2 Adjustable latch speed
- 3 Adjustable backcheck
- 4 Adjustable delayed action





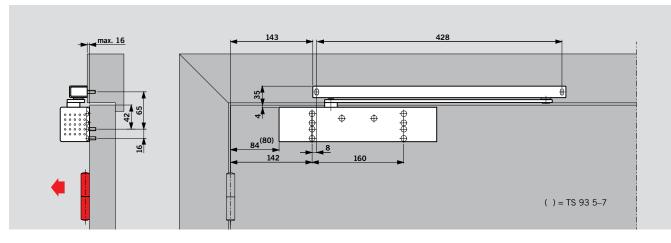
3 Adjustable backcheck





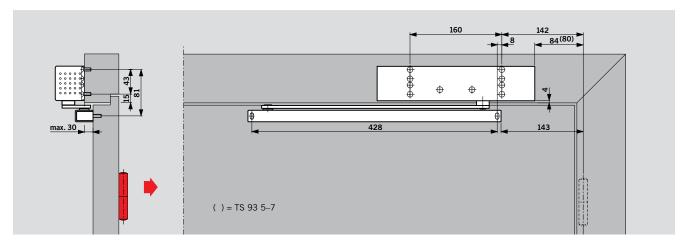
4 Adjustable delayed action

PULL-SIDE DOOR LEAF FIXING



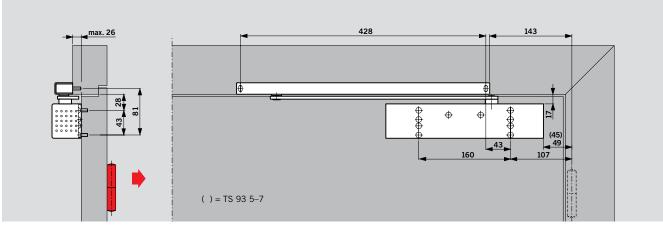
Door leaf fixing (standard arrangement) of the TS 93 B on the pull side. Structural conditions permitting, an opening angle of 180° is possible with this fixing method. In most cases, a wall recess may have to be provided for the door closer. Example: Anticlockwiseclosing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.

PUSH-SIDE TRANSOM FIXING



Transom fixing (overhead frame fixing) of the TS 93 B on the push side. Backcheck and delayed action non-operative with this fixing arrangement. The door opening angle is limited to approx. 120° to 145°, depending on the structural conditions. In order to prevent damage to the wall and door, a door stop should be installed to limit the maximum angle of door opening. Example: Anticlockwiseclosing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.

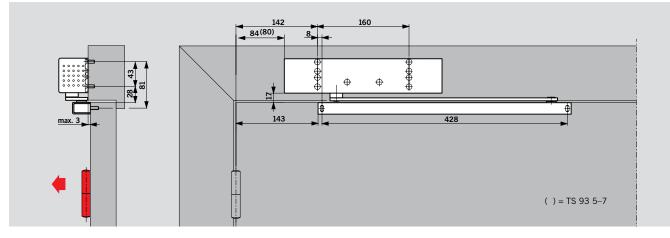
PUSH-SIDE DOOR LEAF FIXING



Door leaf fixing (standard installation) of the TS 93 G on the push side.

The door opening angle is limited to approx. 120° to 145°, depending on the structural conditions. In order to prevent damage to the wall and door, a door stop should be installed to limit the maximum angle of door opening. Example: Anticlockwiseclosing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.

PULL-SIDE TRANSOM FIXING

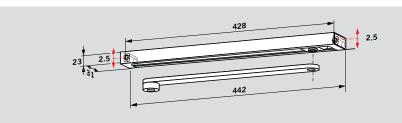


Transom fixing (overhead frame fixing) of the TS 93 G on the pull side.

Structural conditions permitting, an opening angle of 180° is possible with this fixing method.

Example: Anticlockwiseclosing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors

G-N SLIDE CHANNEL

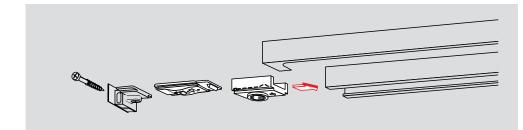


The **G-N** slide channel assembly incorporates the slide arm, slide channel, slide block, fixing adapters, screws and end caps. The G-N slide channel assembly is non-handed and can be combined with all door closer models. Thanks to oblong holes in the

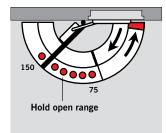
fixing adapters, the slide channel

can be effectively adjusted to variations in the drill hole pattern while keeping the gap between door closer body and slide channel aligned and parallel.

HOLD-OPEN UNIT

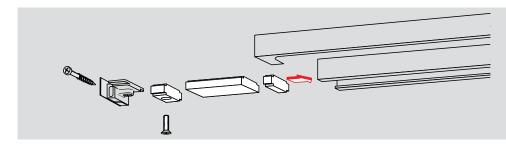


The **RF** hold-open unit enables doors to be securely held without any fall-back at precisely the required position up to an opening angle of approx. 150°. The hold-open function can be easily switched on and off by the user, and the release force can be adjusted to the door type concerned. The RF mechanism is non-handed and has been specifically designed for retrofitting to the G-N type standard slide channel. The suitability of the hold-open unit may be limited where the closer unit is fixed to the door leaf on the push side, in combination with outwardopening doors, and also in the case of large, heavy doors.



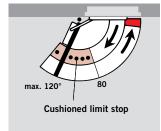
Not for fire and smoke doors.

CUSHIONED LIMIT STOP

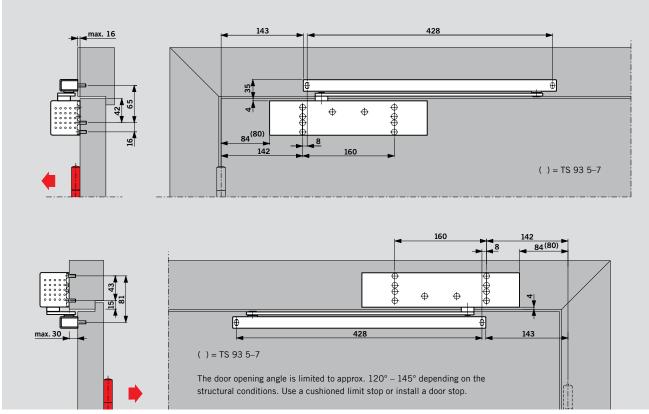


Accessories for the G-N, RF slide channel: **Cushioned limit stop** for retrofitting to the slide channel. Adjustable between 80° and **max. 120°**.

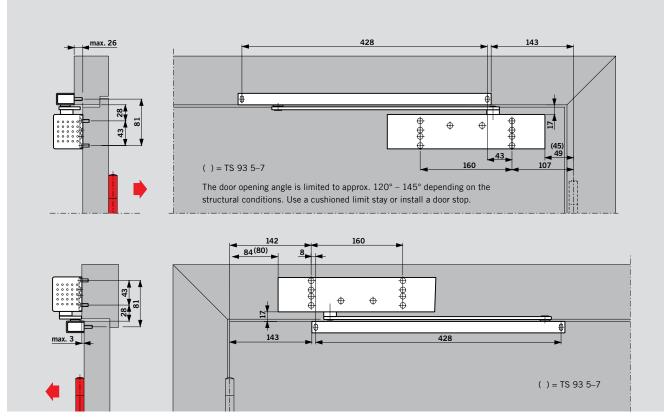
The cushioned limit stop prevents the door from hitting the adjacent wall when opened normally.



The cushioned limit stop is not a heavy-duty protective device and in many applications cannot substitute for a door stop.

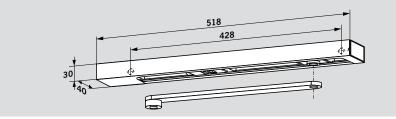


TS 93 B door closer with G-N slide channel assembly, door leaf fixing on the pull side and transom fixing on the push side. Examples: Anticlockwise-closing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.



TS 93 G door closer with G-N slide channel assembly, door leaf fixing on the push side and transom fixing on the pull side. Examples: Anticlockwise-closing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.

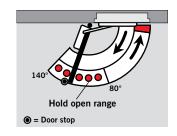
G-EMF SLIDE CHANNEL WITH ELECTRO-MECHANICAL HOLD-OPEN



The **G-EMF** slide channel assembly enables the door to be held open securely at a preselected position without fall-back. The hold-open point can be adjusted within an opening angle of approx. 80° and 140°.

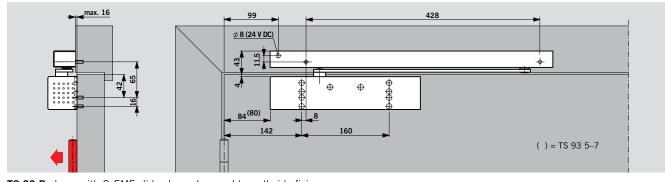
Note

The active leaf can be opened up to the maximum selected hold-open point (door stop to be positioned accordingly). In the event of an alarm or a fault in the power supply, the hold-open is released and the door is closed by the door closer. The release is triggered by a signal from external smoke detectors (e.g. DORMA RMZ or DORMA RM). The release force for the hold-open mechanism can be adjusted without tools and is rated to ensure that the door can also be easily released manually. The G-EMF slide channel assembly comprises the slide arm, slide channel, slide block, electro-mechanical holdopen unit, cover, fixing screws and end caps. The G-EMF is transom-fixed and non-handed. In the case of particularly large

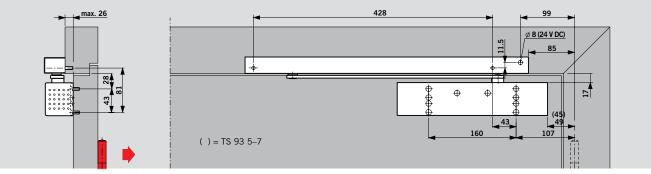


and heavy doors (over 1250 mm), or doors in which the hold-open point required exceeds 140°, we recommend that DORMA EM hold-open magnets in conjunction with the DORMA RMZ central smoke detector be employed instead of the electromechanical hold-open unit.

Technical data		
Operating voltage	24 V DC, ± 15%	
Power input	1.4 W	
Rated for continuous duty	100% ED	
Release force	adjustable	



TS 93 B closer with G-EMF slide channel assembly, pull-side fixing Example: Anticlockwise-closing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.



TS 93 G closer with G-EMF slide channel assembly, push-side fixing

Example: Anticlockwise-closing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.

F Approval certification

The TS 93 EMF has been successfully type-tested to EN 1155, Electrically Powered Hold-Open Devices. Certificates are available on request.

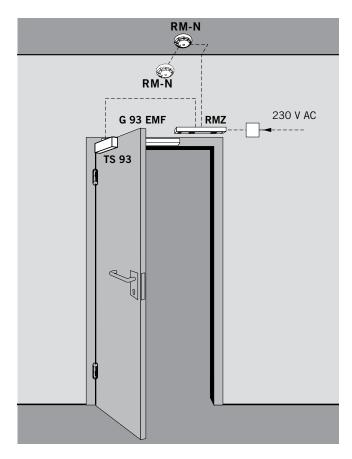
Regulations/Information

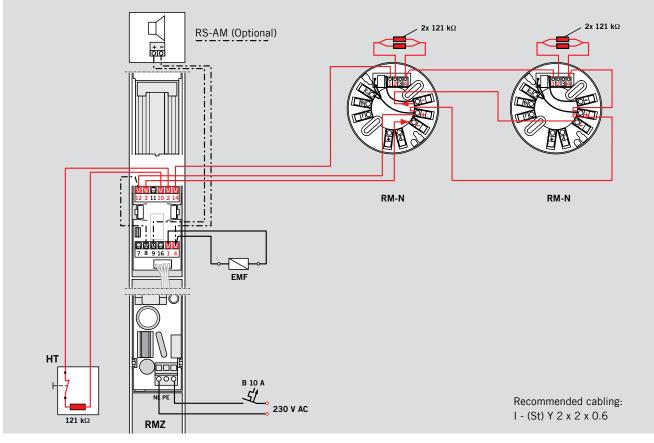
The use of hold-open devices may be subject to certain conditions – see page 27.

Example application

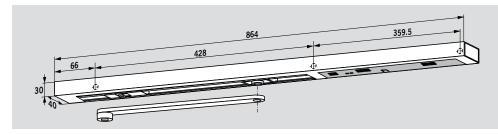
Hold-open system on a fire and smoke door, comprising: TS 93 B door closer, G-EMF slide channel assembly, RMZ (smoke sensor, release switching unit and stabilised power pack for 24 vDC) as frame-mounted smoke detector, plus one RM-N smoke detector on both sides of the door.

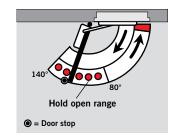
(See also page 22.)





G-EMR SLIDE CHANNEL ELECTRO-MECHANICAL HOLD-OPEN AND INTEGRAL SMOKE DETECTOR





The G-EMR slide channel assembly enables fire and smoke doors to be held open securely at precisely the angle required, and monitored and controlled completely independently of other systems. The hold-open point can be adjusted to opening angles between approx. 80° and 140°.

Note

The active leaf can be opened up to the maximum selected hold-open point (door stop to be positioned accordingly).

In the event of an alarm or a fault in the power supply, the hold-open is released and the door is closed by the door closer. The release force for the hold-open mechanism can be adjusted without tools and is rated to ensure that the door can also be easily released manually. The G-EMR slide channel assembly comprises the arm, slide channel, slide block, electromechanical hold-open unit, smoke detector, power pack, cover, fixings and end caps. It is non-handed, enabling use with both RH/ISO 5 and LH/ISO 6 doors. A floating (volt-free) alarm contact and connections for further detectors and external manual release devices are

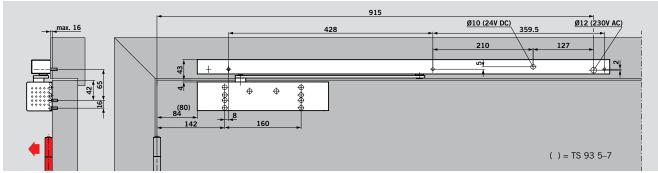
provided. The G-SR-EMR DCW® slide channel assembly is also available without a power pack for integration in building management and control systems via a DCW® bus and the DORMA TMS door management system. In the case of particularly large and heavy doors (over 1250 mm),

I	point required exceeds 140°,
١	we recommend that DORMA EM
ļ	hold-open magnets be employed
i	instead of the electro-mechanical
ļ	hold-open unit, in conjunction
١	with the DORMA RMZ-K/S
1	frame-mounted smoke detector.

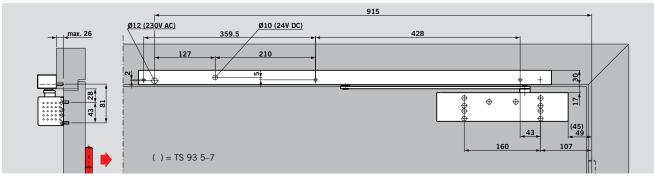
or doors in which the hold-open

Technical data		
Power supply	230 V AC ± 10%	
Operating voltage (internal)	24 V DC	
Max. output rating	9.8 W	
Power input EMF	1.4 W	
Rated for continuous duty	100% ED	
Release force	adjustable	
detailed data se nage 22		

etailed data se page 22



TS 93 B closer with G-EMR slide channel assembly, pull-side fixing Example: Anticlockwise-closing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.



TS 93 G door closer with G-EMR slide channel assembly, push-side fixing

Example: Anticlockwise-closing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.

F Approval certification

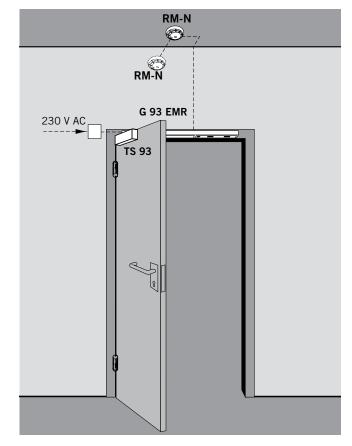
The TS 93 EMR has been successfully type-tested to EN 1155, Electrically Powered Hold-Open Devices. Certificates are available on request.

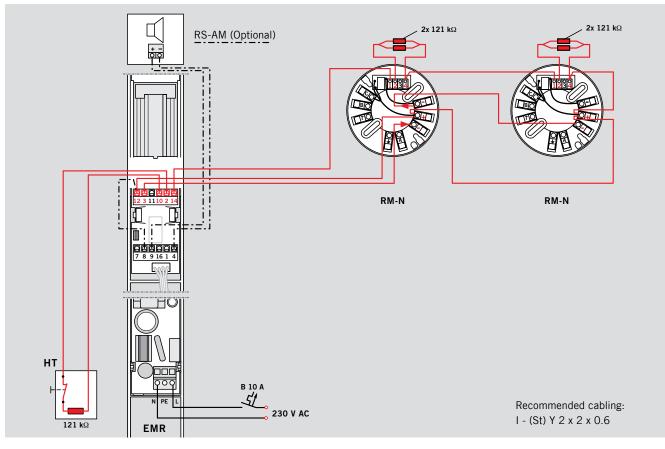
Regulations/Information

The use of hold-open devices may be subject to certain conditions – see page 27.

Example application

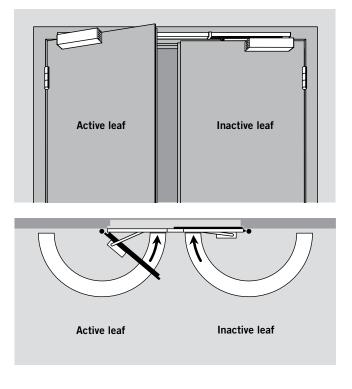
Hold-open system on a fire and smoke door, comprising: TS 93 B door closer, G-EMR slide channel assembly, plus one RM smoke detector on both sides of the door. (See also page 22.)





G-SR DOOR CO-ORDINATOR SLIDE CHANNEL PULL SIDE FIXING

The G-SR slide channel with integral door co-ordinator featuring a push rod clamping system for **double doors**, ensures that the active leaf always closes after the inactive leaf. As this system operates independently of the door closer hydraulics, it offers maximum safety and reliability (doors prevented from "creeping closed"). An overload release protects both the door co-ordinator and the door set from damage. The G-SR door co-ordinator is non-handed and suitable for combination with TS 93 B door closers.



G-SR-EMF WITH ELECTRO-MECHANICAL HOLD-OPEN G-SR-EMR WITH INTEGRAL SMOKE DETECTOR

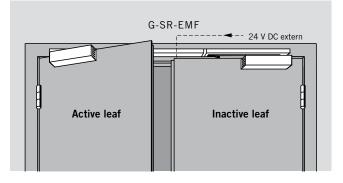
These door co-ordinators not only ensure the correct closing sequence of double doors, but also allow the door leaves to be individually held open. In the event of an alarm or power failure, the hold-open is released and the door is closed by the door closer.

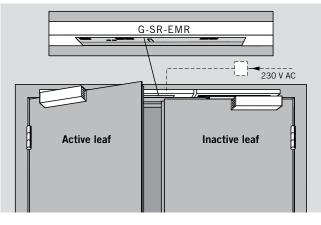
The release action is triggered by a signal from the smoke detector integrated in the G-SR-EMR door co-ordinator. The G-SR-EMR DCW[®] door co-ordinator model is also available without a power pack for integration in building management and control systems via a DCW[®] bus and the DORMA TMS door management system.

The pull-off force for the holdopen mechanism can be adjusted without tools and is rated to ensure that the door can also be easily released manually. G-SR-EMF and G-SR-EMR door co-ordinators are non-handed and suitable for combination with TS 93 B door closers. In the case of doors in which the hold-open point required exceeds 130°, we recommend that DORMA EM hold-open magnets be applied instead of the electromechanical hold-open unit.

Regulations/Information

The use of hold-open devices may be subject to certain conditions – see page 27.





G-SR-EMF 1

This door co-ordinator contains just one hold-open mechanism, located in the inactive leaf slide channel, for holding open both door leaves. The single-point hold-open position is adjustable between approx. 80° and 130°. **Note**

The active leaf can be opened up to the maximum selected hold-open point (door stop to be positioned accordingly). The active leaf can be held open by the door co-ordinator at any angle up to max. 150°.

G-SR-EMF 2

With this door co-ordinator, the active leaf can be held open independently of the inactive leaf. The hold-open points for each leaf lie bet-ween approx. 80° and 130°.

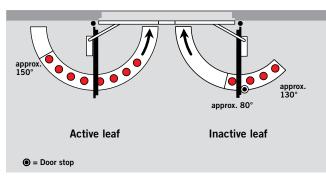
Note

The active leaf can be opened up to the maximum selected hold-open point (door stop to be positioned accordingly).

G-SR-EMF 1G:

This door co-ordinator enables the active leaf to be held open independently in special door sets involving, for example, fixed side screens, narrow inactive leaves ("penny farthing" doors), etc. The hold-open point lies between approx. 80° and 130°. **Note**

The active leaf can be opened up to the maximum selected hold-open point (door stop to be positioned accordingly).



G-SR-EMR 1

This door co-ordinator includes an integral smoke detector. A floating (volt-free) alarm contact and connections for further detectors and external manual release devices are also provided.

This door co-ordinator includes

an integral smoke detector.

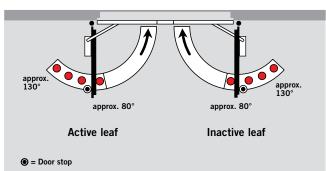
A floating (volt-free) alarm

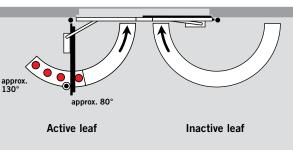
contact and connections for

further detectors and external

manual release devices are also

Technical data for smoke detectors: see page 22.





Technical data for smoke detectors: see page 22.

provided.

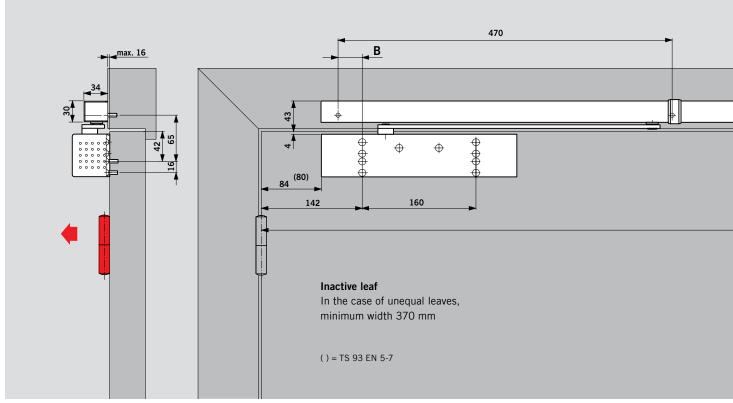
G-SR-EMR 2

G-SR-EMR 1G:

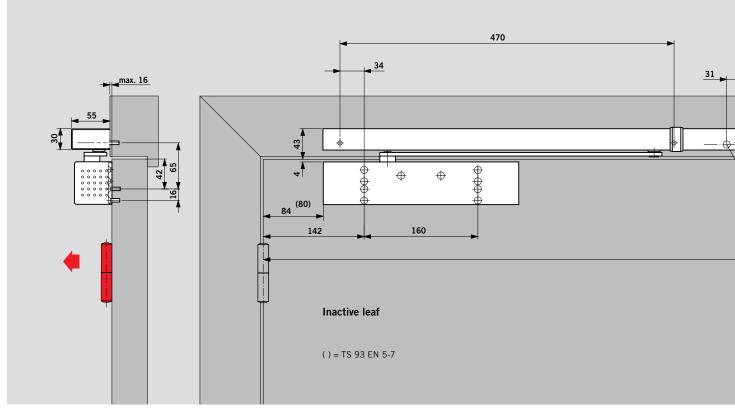
This door co-ordinator includes an integral smoke detector. A floating (volt-free) alarm contact and connections for further detectors and external manual release devices are also provided.

Technical data for smoke detectors: see page 22.

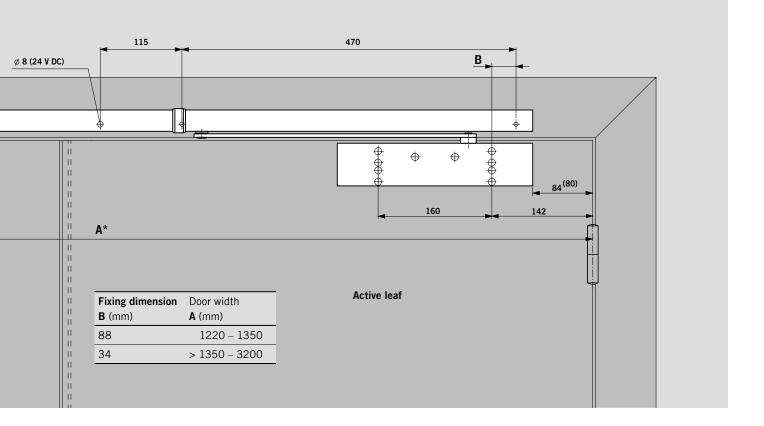
Technical data		
Power supply	EMR	230 V AC ± 10%
Max. output rating	EMR	9.8 W
Operating voltage	EMF	24 V DC, ± 15%
Power input	EMF 1	1.4 W
	EMF 2	2.8 W
Rated for continuous duty		100% ED
Release force		adjustable

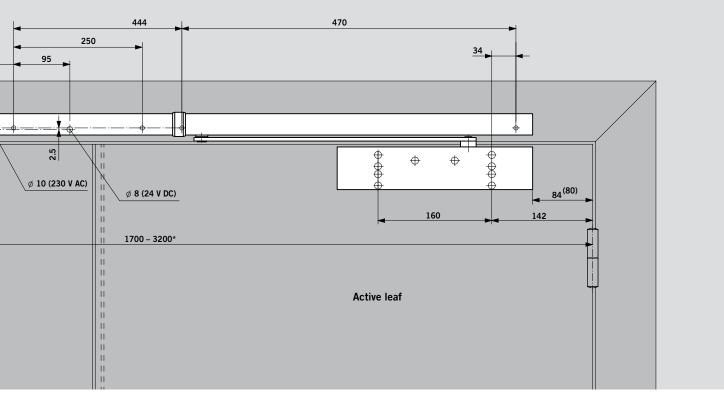


Door co-ordinator TS 93 B with electro-mechanical hold-open G-SR/G-SR-EMF, pull side fixing



Door co-ordinator TS~93~B with integral smoke detector G-SR-EMR, pull side fixing





* In the case of particularly large and heavy doors (over 2500 mm), we recommend that DORMA EM hold-open magnets be employed instead of the electro-mechanical hold-open unit.

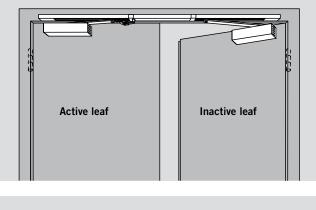
G-SR/BG SLIDE CHANNEL DOOR CO-ORDINATORS PUSH SIDE FIXING

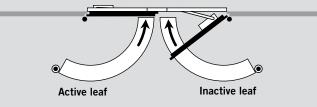
The G-SR/BG push-side slide channel with integral door co-ordinator, featuring a push rod clamping system for **double doors**, ensures that the active leaf always closes after the inactive leaf. As this system operates independently of the door closer hydraulics, it offers maximum safety and reliability (doors prevented from "creeping closed"). An overload release protects both the door co-ordinator and the door set from damage.

The DORMA G-SR/BG door coordinator is non-handed and suitable for combination with DORMA TS 93 G door closers.

Note

Max. opening angle 120° (door stop to be positioned accordingly). Not suitable for emergency exit doors which are opened at the inactive leaf.





G-SR-EMF/BG WITH ELECTRO-MECHANICAL HOLD-OPEN G-SR-EMR/BG WITH INTEGRAL SMOKE DETECTOR

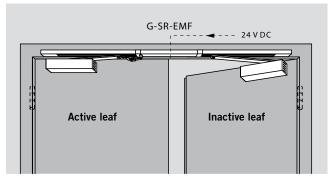
These push-side door coordinators not only ensure the correct closing sequence of double doors, but also allow the door leaves to be individually held open. In the event of an alarm or power failure, the hold-open is released and the door is closed by the door closer. The release is triggered by a signal from the smoke detector integrated in the G-SR-EMR/BG door coordinator.

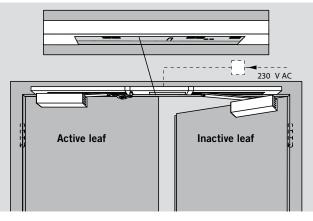
The G-SR-EMR DCW[®]/BG door co-ordinator model is also available without a power pack for integration in building management and control systems via a DCW[®] bus and the DORMA TMS door management system.

The pull-off force for the hold-open mechanism can be adjusted without tools and is rated to ensure that the door can also be easily released manually. The G-SR-EMF/BG and G-SR-EMR/BG door co-ordinators are non-handed and suitable for combination with TS 93 G door closers. Not suitable for emergency exit doors which are opened at the inactive leaf.

Regulations/Information

The use of hold-open devices may be subject to certain conditions – see page 27.



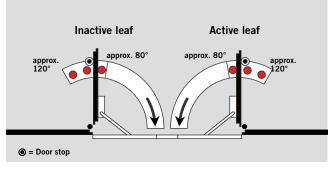


G-SR-EMF 2/BG

With this door co-ordinator, the active leaf can be held open independently of the inactive leaf. The hold-open points for each leaf lie between approx. 80° and 120°.

Note The act

The active leaf can be opened up to the maximum selected hold-open point (door stop to be positioned accordingly).



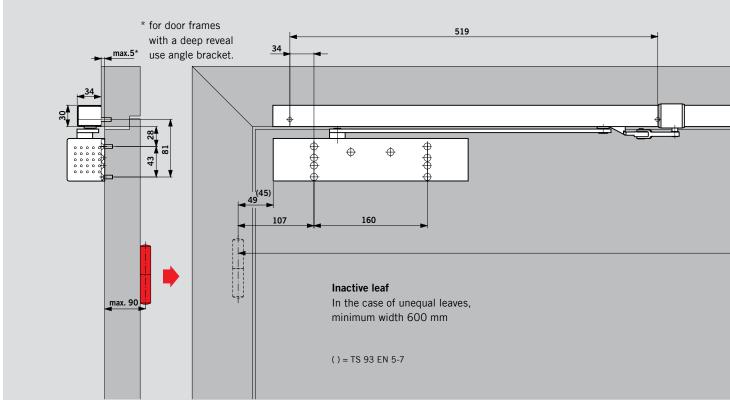
Technical dataPower supply EMR230 V AC ± 10%Max. output rating EMR9.8 WOperating voltage EMF24 V DC, ± 15%Power input EMF 22.8 WRated for continuous duty100% EDRelease forceadjustable

G-SR-EMR 2/BG

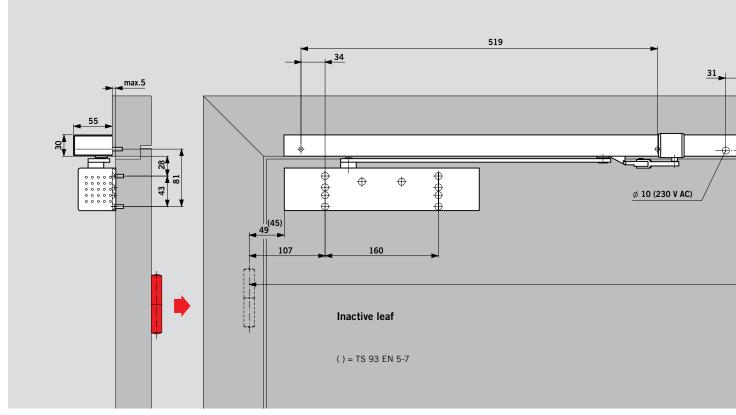
This push-side door co-ordinator includes an integral smoke detector.

A floating (volt-free) alarm contact and connections for further detectors and external manual release devices are also provided.

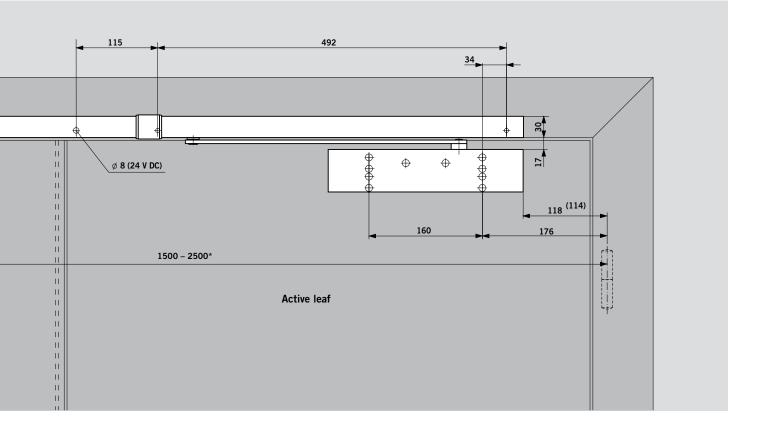
Technical data for smoke detectors: see page 22.

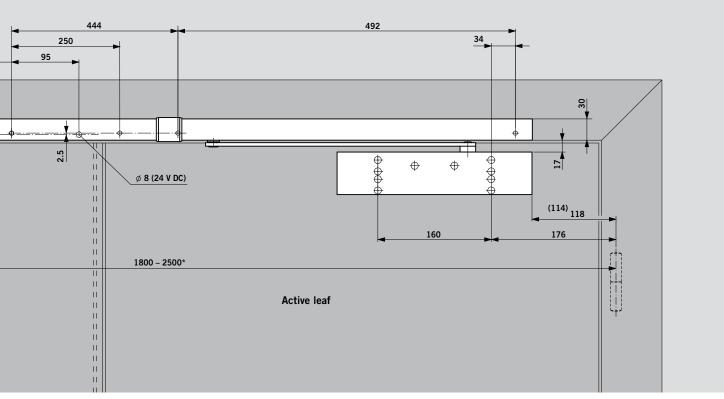


Door co-ordinator TS 93 G with electro-mechanical hold-open G-SR/BG / G-SR-EMF/BG, push side fixing



Door co-ordinator TS 93 G with integral smoke detector G-SR-EMR/BG, push side fixing





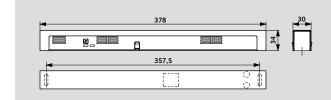
* In the case of particularly large and heavy doors, we recommend that DORMA EM hold-open magnets be employed instead of the electro-mechanical hold-open unit.

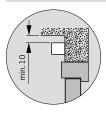
SMOKE DETECTORS

The RMZ and RM-N smoke detectors provide the ideal complement to the TS 93 system for passive/preventive fire protection. They are designed in accordance with the latest codes issued by the German Institute for Building Technology and ensure perfect interaction between all the devices employed for holding open fire and smoke check doors – whatever the situation.

RMZ

The RMZ smoke detector in the Contur design provides a 24V DC supply for all the hold-open devices connected to it. In the event of an alarm or power failure, it de-energises the devices (release function). It has an automatic reset which can be switched to manual mode if required. A floating (no-volt) change-over contact and connections for both further detectors and for an external manual release device are also provided. The unit is available in the RMZ version with a stabilised power pack, or in the RMZ DCW[®] version without a power pack for integration in building management and control systems via a DCW[®] bus and the DORMA TMS door management system.





	Power supply unit	•	-	
Smoke	Scattered light principle	•	•	
detection	(optical sensor)	•	•	
Fixing	Lintel or			
	transom-mounted	•	-	
	Ceiling-mounted	-	٠	
Connection of other	detectors	•	-	
Total installed load	(max.)			
for hold-open device	9.8	-		
other detectors in W				
Power consumption	of	1.2	0.65	
internal detectors in	W			
LED	Alarm	•	•	
indicators	Standby	•	-	
	Maintenance due	•	-	
	Contaminated	•	-	
Input voltage		230 V AC	24 V DC	
		± 10 %	+15%, -10%	
Output voltage		24 V DC	-	
Detector operating v	voltage	24 V DC	24 V DC	
Input current (max.)	in mA	+15%, -10%	20	
Floating (no-volt) ch		24 V	30 V	
Safety extra low volt	-	AC/DC	AC/DC	
Salety extra low von	age (JLLV)	2 A	1 A	
Reset	Automatic	•	•	
110501	Can be changed to	•	•	
	manual reset ¹⁾	•	_	
Functional check	Smoke detection	•	•	
Connection terminal	S			
for external manual	release	•	-	
Degree of protection]	IP 30	IP 43	
Ambient temperatur	e in °C	-20, +40	-10, +60	
Weight in kg		0.25	0.15	
Dimensions	Length	379	ø 100	
in mm	Overall depth	34		
	Height	30	44	
CE mark for building	products	•	•	
Ves - No				

Smoke detector

Release device

Power supply unit

RMZ

•

RM-N

• Yes – No

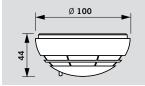
Data and features

Functions

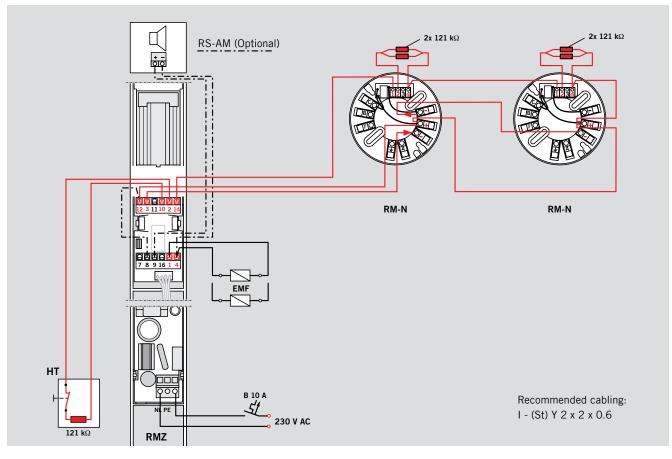
¹⁾ Required in connection with TS 99 FL and ITS 96 FL

RM-N

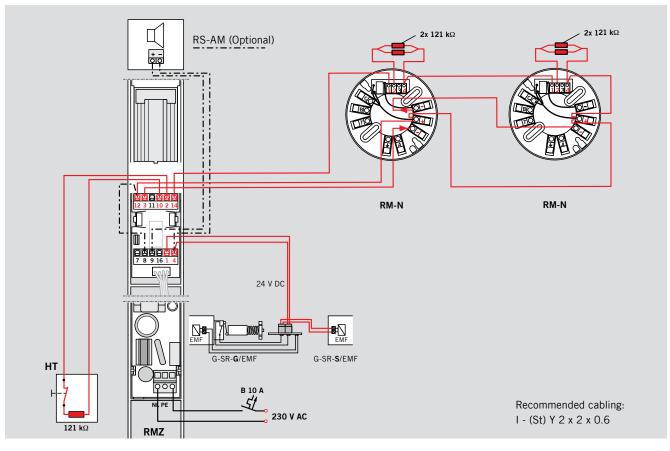
The RM-N smoke detector ensures the early detection both of smouldering fires and open fires with smoke evolution. It can be connected to all DORMA hold-open systems.



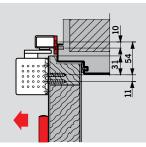
RMZ + 2x RM-N



G-SR-EMR + 2x RM-N

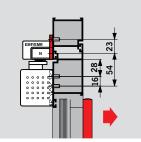


ACCESSORIES FOR SINGLE DOORS



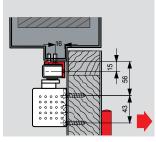
30 mm mounting backplate for G-N

For fixing the slide channel to the door frame where direct fixing is not possible.

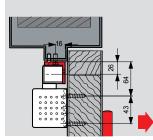


40 mm mounting backplate for G-N, EMF, EMR

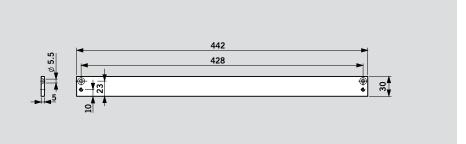
For fixing the slide channel to the door frame where direct fixing is not possible.

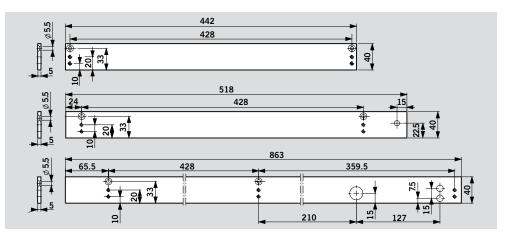


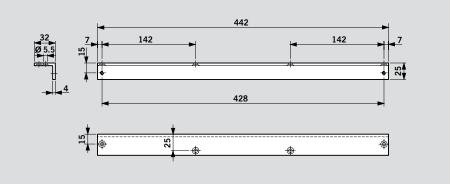
Angle bracket for G-N For push-side fixing of the slide channel to door frames with a deep reveal.

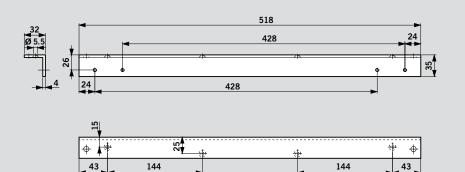


Angle bracket for G-EMF For push-side fixing of the slide channel to door frames with a deep reveal.

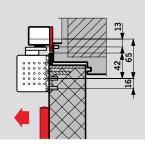






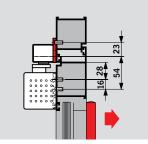


ACCESSORIES FOR DOUBLE DOORS



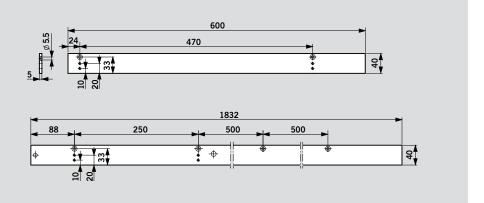
40 mm mounting backplate for G-SR

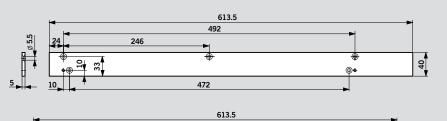
For fixing the slide channels to the door frame where direct fixing is not possible.

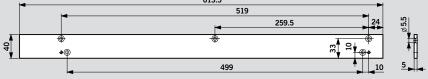


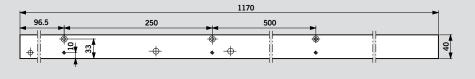
40 mm mounting backplate for G-SR/BG

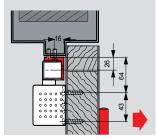
For fixing the slide channels to the door frame where direct fixing is not possible.



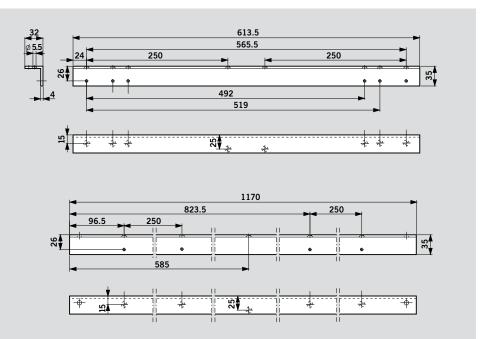








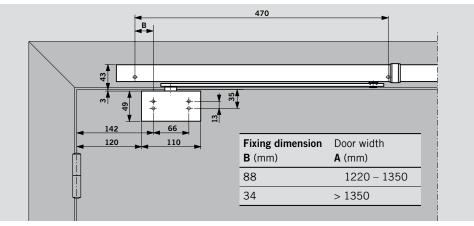
Angle bracket for G-SR/BG For fixing the slide channels to door frames with a deep reveal.



G-SR PIVOT BLOCK

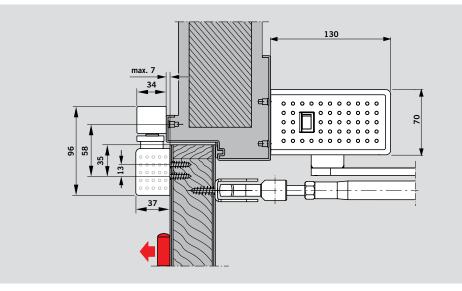
If the G-SR door co-ordinator is to operate independently of the TS 93 door closer, for example, in combination with the ED 100/ED 250 automatic swing door operator, the connection between the door co-ordinator and the door leaf is provided by means of G-SR pivot blocks.

G-SR pivot block for door co-ordinator



DORMA ED 100/ED 250 automatic swing door operator

with G-SR door co-ordinator and G-SR pivot block



HOLD-OPEN SYSTEMS REGULATIONS / INFORMATION

The use of hold-open systems is subject to special regulations based on official approval requirements. These relate in particular to the final inspection (acceptance), continuous monitoring and maintenance. The regulations and instructions provided below are intended as an aid, pursuant to statutory regulations that apply e.g. in Germany, to ensure that all participants are properly informed of the most important requirements that relate to the installation and operation of hold-open systems.

Further information can be found in the following documents:

- Richtlinien f
 ür Feststellanlagen des Deutschen Instituts f
 ür Bautechnik, Berlin [Code of practice relating to hold-open systems issued by the German Institute for Building Technology, Berlin]
- General building regulations pertaining to the approval of the hold-open system concerned
- EN 1155
- EN 14637

1. General

1.1 In the case of fire doors (and similar shutters/closures/ barriers) that are held open by hold-open systems, the sweep area necessary for the closing operation must be kept constantly clear. This area must be clearly identified by lettering, floor markings or similar. Where necessary, structural measures must also be implemented to ensure that cables, leads, lines,

2. Commissioning

2.1 In Germany and countries governed by DIN regulations: Following on-site installation of the operable hold-open system, its functional integrity and quality of installation must be confirmed by an acceptance inspection procedure. The acceptance inspection may only be performed by skilled personnel of manufacturers of monitoring

3. Routine Inspection

3.1 The hold-open system must be kept by the operator in a constantly good operating condition, and inspected at least once a month to ensure that it is functioning properly.

pipes, stored/deposited goods or components (e.g. false ceilings or other overhead items/elements) are reliably prevented from falling into the sweep area.

1.2 Wherever possible, smoke detectors should be used for hold-open systems. For hold-open systems for fire doors in emergency escape routes, smoke detectors must be used.

1.3 Each hold-open device must also be capable of being released by hand, without adversely affecting the functional capabilities of the automatic release device. In the case of door closers with electro-magnetic hold-open, the manual release may be performed by a small tug applied to the door leaf. If holding electromagnets or free-swing door closers are used, a pushbutton must be provided to facilitate manual release. The manual release pushbuttons employed for this purpose must be red and carry the wording "Close Door" or equivalent. The pushbutton must be located in the immediate vicinity of the door and must not be concealed by the door when this is held open.

and/or hold-open devices, skilled personnel authorized by same, or skilled personnel from an accredited inspection agency.

2.2 In Germany and countries governed by DIN regulations: Once the acceptance inspection has been successfully completed, the operator shall permanently fix on the wall, in the

immediate vicinity of the door, a plate supplied by the manufacturer of the hold-open system measuring 105 mm x 52 mm and carrying the inscription Hold-open system Inspected by... (company logo with month and year of accept-

ance inspection) or equivalent

2.3 The operator is to be provided with a certificate detailing the successful acceptance inspection; this certificate must be retained by the operator.

3.2 In addition, the operator is obliged at least once a year, or at shorter intervals if specified in the approval certificate, to inspect all the devices to ensure that they are operating and interacting properly and without

fault, and to carry out or instigate adequate maintenance. The associated test, inspection and the maintenance work may only be performed by an expert or an appropriately trained person. **3.3** The scope, result and time of the periodic inspection are to be recorded. These records must be retained by the operator.

RANGE OF EQUIPMENT AND OPTIONAL ACCESSORIES SINGLE DOORS

			TS 93 B		TS 93 G		30 mm mounting backplate for G-N	40 mm mounting backplate for G-N	
							00	0 •••	
			1-5 y430900 5-7 y435200		1-5 y431000 5-7 y435300		644000xx	644100xx	
Product description: see page			6		7		24	24	
G-N	y640100xx	8	у	у	у	у	Δ	Δ	
G-EMF	y640800xx	10	у	у	у	у			
G-EMR	y640700xx	12	у	У	у	У			
G-EMR DCW®	y640703xx	12	у	У	у	У			

40 mm mounting backplate for G-EMF	40 mm mounting backplate for G-EMR	Angle bracket for G-N	Angle bracket for G-EMF	Cushioned limit stop set for G-N	Add-on old-open unit for G-N
		° h		C)	
644200xx	644600xx	644300xx	644400xx	35800093	18570000
24	24	24	24	8	8
		Δ		Δ	Δ
Δ			Δ		
	Δ				
	Δ				

Smoke detector system RMZ

648000xx 6483 **RMZ DCW®** pack 648003xx

RM-N 64830900 packaging unit 2 pcs.

Product description: see page 22

xx Colour

- 01 Silver
- 11 White (RAL 9016)
- 09 Special colour

Also available in matching "Design" finishes

- 04 Stainless steel
- 05 Polished brass

 * "Design" refers to the surface finish of the products

- Hold-open device tested to EN 1155 (max. EN 5)
- Smoke detector
- xx Colour
- y Closer separate
- y Slide channel assembly separate
- \triangle Optional accessory

RANGE OF EQUIPMENT AND OPTIONAL ACCESSORIES DOUBLE DOORS

				TS 93 B		TS 93 G			Mounting backplate for G-SR/BG	
				1-5 430900x			3		0 0 0	
Active leaf Inactive leaf				430900x 5-7 435200x		1-5 431000>	xx	644800xx	644900xx	
Product description: see page				6			7	25	25	
G-SR	уV	641010xx 641020xx 641030xx	14	у	2 x y			Δ		
G-SR-EMF 1	уV	641110xx 641120xx 641130xx	14	у	2 х у			Δ		
G-SR-EMF 2	y V	641310xx 641320xx 641330xx	14	у	2 x y			Δ		
G-SR-EMF 1G	уV	641210xx 641220xx 641230xx	14	у	2 x y			Δ		
G-SR-EMR 1	yV yVL	642150xx 642160xx	14	у	2 х у			Δ		
G-SR-EMR 2		642350xx 642360xx	14	У	2 х у			Δ		
G-SR-EMR 2 DCW®	y VL	642353xx 642363xx		У	2 х у			Δ		
G-SR-EMR 1G		642250xx 642260xx	14	У	2 x y			Δ		
G-SR/BG	у V	641440xx	18			У	2 x y		Δ	
G-SR-EMF 2/BG	у V	641740xx	18			у	2ху		Δ	
G-SR-EMR 2/BG	у V	642770xx	18			у	2ху		Δ	
G-SR-EMR 2 DCW [®] /BG	у V	642773xx	18			у	2ху		Δ	

۲ f	Angle bracket or G-SR/BG	Pivot block	Cushioned limit stop
			BCII
e	544400xx	64500001	35800093
	25	26	8
		Δ	Δ
	Δ	Δ	Δ

_

Smoke detector system	
RMZ	RM-N
648000xx	64830900
RMZ DCW [®]	packaging unit 2 pcs.
648003xx	
Product description: see page 22	
Door v	vidth (mm)
Р	DC.

		2000	
		В	BG
G-SR/G-SR-EMF	VK	1220 – 1350	_
	V	>1350 - 2500	1500 – 2500
	٧L	>2500 - 3200	-
G-SR-EMR	٧	1700 – 2500	1800 – 2500
	٧L	>2500 - 3200	-

Hold-open device tested to EN 1155 (max. EN 5)

xx	Colour

- 01 Silver
- 11 White (RAL 9016)
- 09 Special colour
- Also available in matching "Design" finishes

04 Stainless steel

* "Design" refers to the surface finish of the products

- Hold-open device tested to EN 1155 (max. EN 5)
- Smoke detector
- xx Colour
- y Closer separate
- y Slide channel assembly separate
- \triangle Optional accessory

SPECIFICATION TEXT SINGLE DOORS

DORMA TS 93 N EN 2-5 / EN 5-7

Cam action door closer conforming to EN 1154, carries the CE mark, Contur design, with rapidly decreasing opening torque/force. Door leaf fixing on the pull side, transom fixing on the push side. Closing speed, latching speed, hydraulically controlled backcheck and delayed action conveniently adjustable at valves accessible from the front

DORMA TS 93G N EN 2-5 / EN 5-7

Cam action door closer conforming to EN 1154, carries the CE mark, Contur design, with rapidly decreasing opening torque/force. Door leaf fixing on the push side, transom fixing on the pull side. Closing speed, latching speed, hydraulically controlled backcheck and delayed action conveniently adjustable at valves accessible from the front.

DORMA TS 93 EMF EN 2-5

Cam action door closer
conforming to EN 1154, carries
the CE mark, Contur design,
with rapidly decreasing opening
torque/force. Pull-side fixing.
Closing speed, latching speed,
hydraulically controlled
backcheck and delayed action
conveniently adjustable at
valves accessible from the front.

DORMA TS 93G EMF EN 2-5

Cam action door closer conforming to EN 1154, carries the CE mark, Contur design, with rapidly decreasing opening torque/force. Push-side fixing. Closing speed, latching speed, hydraulically controlled backcheck and delayed action conveniently adjustable at valves accessible from the front. Mounting bracket with universal fixing hole system. Non-handed. Height-adjustable slide channel.

Mounting bracket with universal

fixing hole system. Non-handed.

Height-adjustable slide channel.

Optional

- y With retrofittable cushioned limit stay for integration in the standard slide channel.
- y With retrofittable mechanical hold-open unit (RF), hold-open point adjustable between 75° and 150°.

Use of mechanical hold-open units is not permitted on fire and smoke check doors.

Optional

- y With retrofittable cushioned limit stay for integration in the standard slide channel.
- y With retrofittable mechanical hold-open unit (RF), hold-open point adjustable between 75° and 150°.

Use of mechanical hold-open units is not permitted on fire and smoke check doors.

Approved by the German Institute for Building Technology, Berlin, for use in hold-open systems. Acceptance inspection of the system is mandatory.

Approved by the German

Berlin, for use in hold-open

of the system is mandatory.

Institute for Building Technology,

systems. Acceptance inspection

Colour

- y silver white, sim. to RAL y9010 y9016 y stainless steel y polished brass
- y special colour (sim. to RAL)

Make

DORMA TS 93 N, EN 2-5 DORMA TS 93 N, EN 5-7 DORMA TS 93 RF, EN 2-5 DORMA TS 93 RF, EN 5-7

Colour

- y silver white, sim. to RAL y9010 y9016
- y stainless steel
- y polished brass
- y special colour (sim. to RAL)

Make

DORMA TS 93G N, EN 2-5 DORMA TS 93G N, EN 5-7 DORMA TS 93G RF, EN 2-5 DORMA TS 93G RF, EN 5-7

Colour

- y silver white, sim. to RAL y9010 y9016
- y stainless steel
- y polished brass
- y special colour (sim. to RAL)

Make

DORMA TS 93 EMF, EN 2-5

Colour

y silver white, sim. to RAL y9010 y9016

y stainless steel y polished brass

y special colour (sim. to RAL)

Make

DORMA TS 93G EMF, EN 2-5

integral electro-mechanical hold-open, 24 V DC, conforming to EN 1155. Hold-open point (80° - 140°) and pull-off force infinitely variable. One-piece cover. Overall height 30 mm.

Mounting bracket with universal fixing hole system. Non-handed. Slide channel assembly with integral electro-mechanical hold-open, 24 V DC, conforming to EN 1155. Hold-open point (80° - 140°) and pull-off force infinitely variable. One-piece cover. Overall height 30 mm.

Mounting bracket with universal fixing hole system. Non-handed. Slide channel assembly with

DORMA TS 93 EMR EN 2-5

Cam action door closer conforming to EN 1154, carries the CE mark, Contur design, with rapidly decreasing opening torque/force. Pull-side fixing. Closing speed, latching speed, hydraulically controlled backcheck and delayed action conveniently adjustable at valves accessible from the front. Mounting bracket with universal fixing hole system. Non-handed. Slide channel assembly with integral smoke detector featuring standby and maintenance

DORMA TS 93G EMR EN 2-5

Cam action door closer conforming to EN 1154, carries the CE mark, Contur design, with rapidly decreasing opening torque/force. Push-side fixing. Closing speed, latching speed, hydraulically controlled backcheck and delayed action conveniently adjustable at valves accessible from the front. Mounting bracket with universal fixing hole system. Non-handed. Slide channel assembly with integral smoke detector featuring standby and maintenance indicators, power pack and

DORMA RMZ

Smoke detector, Contur design, with standby and maintenance indicators, integral power pack and optical smoke sensor for transom/lintel fixing. For activation of DORMA hold-open devices. A floating (volt-free) alarm contact and connections for further detectors and external manual release devices are provided.

DORMA RM-N

Optical smoke detector, 24V DC, for ceiling fixing. For use as second and third triggering detector on all DORMA hold-open systems. With floating (no-volt) changeover indicators and electro-mechanical hold-open, 24 V DC, conforming to EN 1155. Hold-open point (80° – 140°) and pull-off force infinitely variable. A floating (volt-free) alarm contact and connections for further detectors and external manual release devices are provided. One-piece cover. Overall height 30 mm. Approved by the German Institute for Building Technology, Berlin, for use as a hold-open unit. Acceptance inspection of the system is mandatory.

electro-mechanical hold-open, 24 V DC, conforming to EN 1155. Hold-open point (80° – 140°) and pull-off force infinitely variable. A floating (volt-free) alarm contact and connections for further detectors and external manual release devices are provided. One-piece cover. Overall height 30 mm. Approved by the German Institute for Building Technology, Berlin, for use as a hold-open unit. Acceptance inspection of the system is mandatory.

Can be switched to manual reset. One-piece cover. Overall height 30 mm. Approved by the German Institute for Building Technology, Berlin, for use in a hold-open system. Acceptance inspection of the system is mandatory.

Model

y TS 93 EMR with integrated power pack. Power supply 230 V AC, operating voltage 24 V DC

y TS 93 EMR DCW[®] Smoke detector without power pack for connection to DCW[®] bus.

y Optional integral alarm module adding an audible signal to the visual indicator.

Model

y TS 93G EMR with integrated power pack. Power supply 230 V AC, operating voltage 24 V DC

y TS 93G EMR DCW[®] Smoke detector without power pack for connection to DCW[®] bus.

y Optional integral alarm module adding an audible signal to the visual indicator.

Model

y RMZ with integrated power pack. Power supply 230 V AC, operating voltage 24 V DC

y RMZ DCW[®] Smoke detector without power pack for connection to DCW[®] bus.

y Optional integral alarm module adding an audible signal to the visual indicator.

Colour

y silver white, sim. to RAL y9010 y9016 y stainless steel y polished brass

y special colour (sim. to RAL)

Make

DORMA TS 93 EMR, EN 2-5 DORMA TS 93 EMR DCW®, EN 2-5

Colour

y silver white, sim. to RAL y9010 y9016 y stainless steel

y polished brass

y special colour (sim. to RAL)

Make

DORMA TS 93G EMR, EN 2-5 DORMA TS 93G EMR DCW®, EN 2-5

Colour

y silver white, sim. to RAL y9010 y9016

y stainless steel

y polished brass

y special colour (sim. to RAL)

Make

DORMA RMZ DORMA RMZ DCW®

Colour y white, sim. to RAL 9003

Make DORMA RM-N

contact. General building approval granted by DIBt, Berlin and the VdS, Cologne; compliant to EN 54, Part 7. Acceptance inspection mandatory in Germany.

SPECIFICATION TEXT DOUBLE DOORS

DORMA TS 93 GSR EN 2-5

Cam action door closer conforming to EN 1154, carries the CE mark, Contur design, with rapidly decreasing opening torque/force. Pull-side fixing. Closing speed, latching speed, hydraulically controlled backcheck and delayed action conveniently adjustable at

Mounting bracket with universal fixing hole system. Non-handed. Slide channel assembly with integrated mechanical door co-ordinator, conforming to EN 1158. This system operates independently of the door closer hydraulics using a push rod

hold-open, 24 V DC,

conforming to EN 1155.

Hold-open point (80° - 130°)

variable. This system operates

independently of the door closer

overload release and one-piece

Institute for Building Technology,

systems. Acceptance inspection

cover. Overall height 30 mm.

and pull-off force infinitely

hydraulics using a push rod

clamping system with an

Approved by the German

Berlin, for use in hold-open

of the system is mandatory.

Non-handed.

valves accessible from the front.

clamping system with an overload release and one-piece cover. Overall height 30 mm. Non-handed. Approved by the German Institute for Building Technology, Berlin, for use on fire and smoke check doors.

Colour

- y silver
- y white, sim. to RAL 9016
- y stainless steel
- y special colour (sim. to RAL)

Make

DORMA TS 93 GSR

DORMA TS 93 GSR-EMF EN 2-5

Cam action door closer conforming to EN 1154, carries the CE mark, Contur design, with rapidly decreasing opening torque/force. Pull-side fixing. Closing speed, latching speed, hydraulically controlled backcheck and delayed action conveniently adjustable at valves accessible from the front. Mounting bracket with universal fixing hole system. Non-handed. Slide channel assembly with integrated mechanical door co-ordinator, conforming to EN 1158. With electro-mechanical

DORMA TS 93 GSR-EMR EN 2-5

Cam action door closer conforming to EN 1154, carries the CE mark, Contur design, with rapidly decreasing opening torque/force. Pull-side fixing. Closing speed, latching speed, hydraulically controlled backcheck and delayed action conveniently adjustable at valves accessible from the front. Mounting bracket with universal fixing hole system. Non-handed. Smoke detector with standby and maintenance indicators, fully integrated in the door co-ordinator body. A floating (volt-free) alarm contact and connections for further detectors and external manual release devices are provided. Power supply 230 V AC, operating

voltage 24 V DC. Slide channel assembly with integrated mechanical door co-ordinator, conforming to EN 1158. With electro-mechanical hold-open, 24 V DC, conforming to EN 1155. Hold-open point $(80^{\circ} - 130^{\circ})$ and pull-off force infinitely variable. This system operates independently of the door closer hydraulics using a push rod clamping system with an overload release and one-piece cover. Overall height 30 mm. Non-handed. Approved by the German Institute for Building Technology, Berlin, for use as a hold-open unit. Acceptance inspection of the system is mandatory.

Model

y TS 93 GSR-EMF 1 With electro-mechanical hold-open for the inactive leaf

y TS 93 GSR-EMF 2 With electro-mechanical hold-open for the active and inactive leaf

y TS 93 GSR-EMF 1G With electro-mechanical hold-open for the active leaf

Colour

- y silver y white, sim. to RAL 9016 y stainless steel
- y special colour (sim. to RAL)

Make

DORMA TS 93 GSR-EMF 1 DORMA TS 93 GSR-EMF 2 DORMA TS 93 GSR-EMF 1G

Model

y TS 93 GSR-EMR 1 With electro-mechanical hold-open for the inactive leaf

y TS 93 GSR-EMR 2 With electro-mechanical hold-open for the active and inactive leaf

y TS 93 GSR-EMR 1G With electro-mechanical hold-open for the active leaf

y TS 93 GSR-EMR 2 DCW[®] Smoke detector without power pack for connection to DCW[®] bus. With electro-mechanical hold-open for the active and inactive leaf.

Colour

- y silver y white, sim. to RAL 9016 y stainless steel
- y special colour (sim. to RAL)

Make

DORMA TS 93 GSR-EMR 1 DORMA TS 93 GSR-EMR 2 DORMA TS 93 GSR-EMR 1G DORMA TS 93 GSR-EMR 2 DCW®

DORMA TS 93 GSR/BG EN 2-5

Cam action door closer conforming to EN 1154, carries the CE mark, Contur design, with rapidly decreasing opening torque/force. Push-side fixing. Closing speed, latching speed, hydraulically controlled backcheck and delayed action conveniently adjustable at valves accessible from the front. Mounting bracket with universal fixing hole system. Non-handed. Slide channel assembly with integrated mechanical door co-ordinator, conforming to EN 1158. This system operates independently of the door closer hydraulics using a push rod clamping system with an overload release and one-piece cover. Overall height 30 mm. Non-handed.

General building approval issued by the German Institute for Building Technology, Berlin, for use on fire and smoke check doors.

DORMA TS 93 GSR-EMF 2/BG EN 2-5

Cam action door closer conforming to EN 1154, carries the CE mark, Contur design, with rapidly decreasing opening torque/force. Push-side fixing. Closing speed, latching speed, hydraulically controlled backcheck and delayed action conveniently adjustable at valves accessible from the front. Mounting bracket with universal fixing hole system. Non-handed. Slide channel assembly with integrated mechanical door co-ordinator, conforming to EN 1158. With electro-mechanical hold-open for the active and inactive leaf, 24 V DC, conforming to EN 1155.

Hold-open point $(80^{\circ} - 120^{\circ})$ and pull-off force infinitely variable. This system operates independently of the door closer hydraulics using a push rod

DORMA TS 93 GSR-EMR 2/BG EN 2-5

Cam action door closer conforming to EN 1154, carries the CE mark, Contur design, with rapidly decreasing opening torque/force. Push-side fixing. Closing speed, latching speed, hydraulically controlled backcheck and delayed action conveniently adjustable at valves accessible from the front. Mounting bracket with universal fixing hole system. Non-handed. Smoke detector with standby and maintenance indicators, fully integrated in the door co-ordinator body. A floating (volt-free) alarm contact and connections for further detectors and external manual release devices are provided. Power supply 230 V AC, operating voltage 24 V DC.

Slide channel assembly with integrated mechanical door co-ordinator, conforming to EN 1158. With electromechanical hold-open for the active and inactive leaf, 24 V DC, conforming to EN 1155. Hold-open point $(80^{\circ} - 120^{\circ})$ and pull-off force infinitely variable. This system operates independently of the door closer hydraulics using a push rod clamping system with an overload release and one-piece cover. Overall height 30 mm. Non-handed. Approved by the German Institute for Building Technology, Berlin, for use as a hold-open unit. Acceptance inspection of the system is mandatory.

clamping system with an overload release and one-piece cover. Overall height 30 mm. Non-handed.

Approved by the German Institute for Building Technology, Berlin, for use in hold-open systems. Acceptance inspection of the system is mandatory.

Colour

- y silver
- y white, sim. to RAL 9016
- y stainless steel
- y special colour (sim. to RAL)

Make

DORMA TS 93 GSR/BG

Colour

- v silver
- y white, sim. to RAL 9016
- y stainless steel
- y special colour (sim. to RAL)

Make

DORMA TS 93 GSR-EMF 2/BG

Model

y TS 93 GSR-EMR 2/BG With integrated electromechanical hold-open for the active and inactive leaf.

y TS 93 GSR-EMR 2 DCW[®]/BG Smoke detector without power pack for connection to a DCW[®] bus. With integrated electromechanical hold-open for the active and inactive leaf.

Colour

- y silver
- y white, sim. to RAL 9016
- y stainless steel
- y special colour (sim. to RAL)

Make

DORMA TS 93 GSR-EMR 2/BG DORMA TS 93 GSR-EMR 2 DCW[®]/BG





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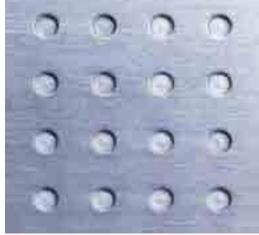
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DORMA TS 93 System

Contur Design





Tomorrow's functions for the architecture of today

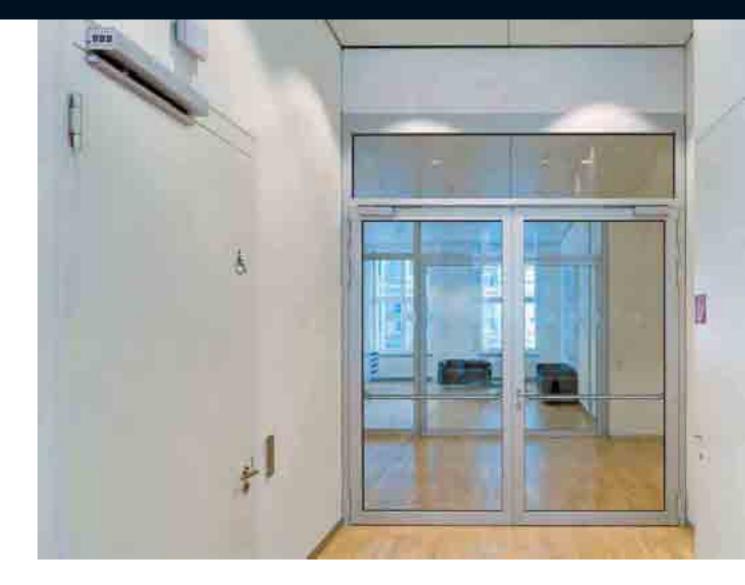
The objective of modern-day architecture is to combine operational efficiency with design harmony – functional excellence incorporated within a uniform language of shape and style. Advanced products are therefore needed that can be both technically and visually integrated within the architectural environment. The new DORMA Contur design concept offers precisely the solution required for ensuring homogeneity of appearance throughout the build.





GAP 15, Düsseldorf









The systematic solution to all application needs

The DORMA portfolio enables architects to implement complete, integrated concepts in projects of widely differing requirements. Our new products in the Contur design support both the classic and the modern style of construction, creating the optimum visual and functional solution every time. Combining advanced technology with cubic lines, the new DORMA TS 93 System is exemplary in this respect – ideally suited to any architectural ambience.



The DORMA Contur design concept – shaping creation for a new generation

DORMA is defining the design of the future. Clear, functional, uniform – these are the visual basics being applied to the new language of shape. Our approach to design successfully combines convenience and functional efficiency. It accentuates the individuality of the architecture by providing a harmonious conceptual style throughout the entire project building. The exemplary individuality of the DORMA Contur design concept was recognized with the German red dot award in 2005. Now, the TS 93 cam action door closer system offers the first point of reference to this advanced, unifying approach.



reddot design award winner 2005

Uniform design lines across all product groups

DORMA's various product groups will be recognisable in the future by their common Contur design lines. Among the features characterising this styling concept are the attractively perforated end caps. These closures are harmoniously integrated within the unit housings of all similar products. The new TS 93 offers the perfect embodiment of this elegant uniformity. All the gap dimensions have been reduced to a minimum. One of the special highlights is the seamlessly integrated smoke detector.

minnel

TS 93 N



Uniformly enhanced aesthetics

Four different DORMA product lines, one identical design concept. The advantage: excellent technology for every application with a uniform look throughout the entire building.

The CD 80 in the Contur design is DORMA's compact automatic swing door operator. Thanks to modern hydraulics, it operates in almost total silence, making it suitable not just for larger developments but also for private dwellings.

The TS 97 is one of the most compact surface-mounted cam action door closers available. Its dimensions – with a depth of 37 mm – make it a particularly elegant and discrete solution while its Contur design serves to enhance the quality and appearance of any project door. The TS 97 also offers maximum ease of use with its heart-shaped cam for greatly reduced opening resistance.

As a modular operator, the ES 200, again in the Contur design, can be used for virtually any sliding door. With various "MiniDriveUnits" available, the system is readily adaptable to almost any set of requirements.

The TEGO Glass represents the most advanced automatic door solution available. Its expansive transparency and lightness of construction – achieved despite all the functional components being concealed within the profile system – will grace the appearance of any room. High safety and convenience plus minimal operating noise mean that the TEGO Glass, as a fully glazed swing door, offers an ideal solution to meeting individual requirements.











TS 93 N

This is the DORMA TS 93 in its standard configuration with the N-type slide channel. With its cam action technology, the TS 93 series offers exceptional user friendliness with reduced door opening resistance. Backcheck and delayed action come as standard.





TS 93 EMF

The DORMA TS 93 EMF enables single-leaf fire and smoke check doors to be held open at precisely the required position by an electromechanical mechanism. The system is released in fire situations, enabling the integral spring to close the door. The hold-open point can be adjusted between angles of 80° and 120°.





TS 93 EMR

Offering enhanced safety for singleleaf fire and smoke check doors, the DORMA TS 93 EMR is in a league of its own. With electro-mechanical hold-open and integral smoke detector, this system is able to function independently of other detectors and alarms.









Exclusive user convenience – inclusive

The DORMA TS 93 System is complemented by the DORMA TS 92 and TS 91 cam action door closers. The advantages of these two quality products, likewise available in the new DORMA Contur design, read as follows:

DORMA TS 92

This cam action door closer constitutes the ideal complementary unit to the DORMA TS 93. It is specially designed for interior doors up to 1100 mm in width, and boasts all the styling credentials of the new DORMA Contur concept.

DORMA TS 91

Specially designed for light interior doors up to 950 mm in width, this door closer likewise has all the impressive convenience of the resistance-reducing cam mechanism. The TS 91 can be mounted on the door leaf on the pull side, or on the transom on the push side, and again offers the significant advantage of the DORMA Contur design.



Easy opening technology

The linear actuator and the heartshaped cam serve to instantly reduce the resistance encountered when opening the door, offering an easy opening action much appreciated by, in particular, children and older people.





Force curves, spring strength EN 3 Opening torque
 Closing torque



TS 93 System

The entire product range offers comprehensive door solutions for different requirements. The complete system corresponds to European standards and carries the **(€** mark.

Closers for single-leaf doors TS 93 N with slide channel Image: State of the stat

Closers for double-leaf doors	
<u></u>	
	TS 93 G-SR with door coordinator
<u></u>	
	TS 93 G-SR-EMR with door coordinator and integral smoke detector with integral power pack

Accessories		
Smoke detector with integral power pack	Smoke detector	Smoke detector



Perfectly matched: DORMA TS 93 door coordinator with integrated smoke detector

In accordance with the precepts of the new DORMA Contur design line, the RMZ smoke detector with power pack is incorporated in the closer to give an integrated appearance. And the intelligent array of functional hardware is equally impressive. The combinability of slide channels, door coordinator and electro-mechanical hold-open offers good practical solutions for a wide variety of double-leaf fire and smoke check doors. There are three hold-open arrangements available to suit different application requirements. For maximum reliability, the DORMA door coordinator is equipped with a mechanical push-rod clamping system. As an option, we can also accommodate central monitoring and control by the building management system, with integration via a DCW bus and LON.



The innovative status and service indicator is particularly useful. Its coloured LEDs signal three different situations. An alarm module for audible warning signals can also be provided.





Status display: Green – Standby



Status display: Off – Fault Red – Alarm In the event of an alarm, the status indicator switches to red. The hold-open is released and the door closes under its own power.



Service display (shown here is the "Maintenance symbol") Yellow = Fault (service necessary) Yellow flashing – Maintenance due or contaminated condition (servicing necessary)









Door Control



Automatic



Glass Fittings and Accessories



Security/Time and Access Control (STA)



Movable Walls

www.dorma.com

Door Control Division worldwide

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Door Controls Division Wilbury Way **GB-Hitchin** Hertfordshire SG4 0AB Phone +44 1462 477600 Fax +44 1462 477601







Cam action door closers in Contur Design

THE UNIVERSAL CLOSERS FOR STANDARD DOORS – TESTED AND APPROVED TO EN 1154

As units designed especially for interior applications, the TS 92 and TS 91 door closers constitute the perfect complement to the DORMA TS 93 cam-action door closer system. They likewise come in the Contur design and, thanks to their linear drive mechanism with heart-shaped cam, they offer the same ease of use. Moreover, their competitive pricing combined with their outstanding level of assured quality make them particularly attractive from an economic standpoint as well.

Certified to ISO 9001

Size ≤ 950 mm ≤ 1100 mm g ²⁾	EN 1-4 - - - -	EN 3 - - -
< 1100 mm	• - - •	- - -
< 1100 mm	- • -	• •
Ig ²⁾	• •	_
<u> </u>	-	-
5	•	•
	•	•
Slide channel	•	•
180°–15°	•	•
	•	•
15°- 0°		
al	0	0
	_	_
	-	-
	0	0
	2.0	1.9
Length	281	267
Overall depth	47	47
Height	65	65
	•	•
	•	•
	180°–15°	15°- 0° cal 0 - - 0 2.0 Length 281 Overall depth 47

Plus points

For the trade

- Inexpensive cam-action technology for standard interior doors.
- Low storage costs and reduced inventory requirement thanks to uniform slide channels of the Contur series.

For the fabricator

- Non-handed.
- Easy to fix and quickly adjustable.

For the architect/specifier

- Excellent value for money.
- Uniform appearance throughout the entire Contur
- slide channel range.

For the user

- Exceptional ease of use and fully controlled closing action.
- Optimum adaptability of the closing speed with reliable latching thanks to two regulating valves.

● yes - no ○ optional

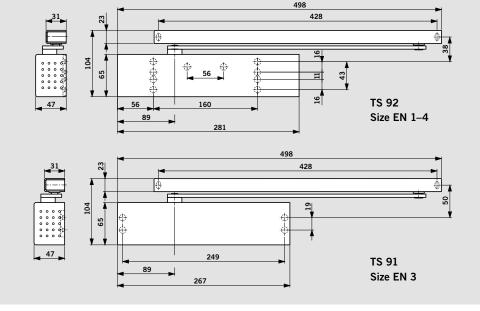
 $^{\rm 1)}$ B = Standard model for pull-side door leaf fixing/push-side transom fixing

G = Special model for push-side door leaf fixing/pull-side transom fixing.
 ²⁾ For particularly heavy doors and doors which have to close against wind resistance, we recommend the DORMA TS 93.



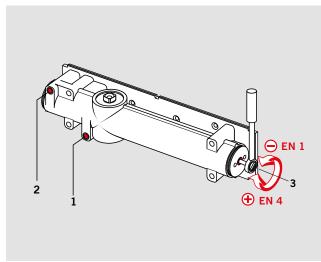
The TS 92/TS 91 complies with the requirements and/or recommendations of the following: CERTIFIRE approved for fire doors ITT 120, MM/IMM 240; Ref. CF 119

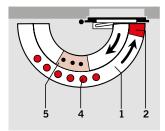




STANDARD AND OPTIONAL FUNCTIONS

TS 92 B/G



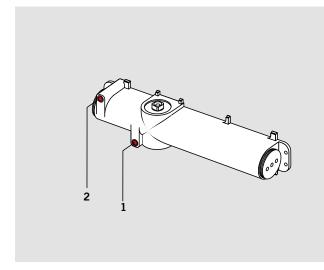


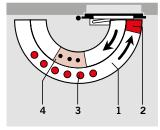
- **1** Variable closing speed in the range 180°–15°
- **2** Variable latching speed in the range 15°–0°
- **3** Infinitely variable closing force
- 4 Hold-open (option)
- 5 Cushioned limit stay (option)

The **closing speed** of the TS 92 is individually adjustable over two independent ranges at two separate valves.

The closing force setting (spring strength) for the relevant door width is adjusted with the TS 92 at an infinitely variable lateral adjustment screw.

TS 91 B

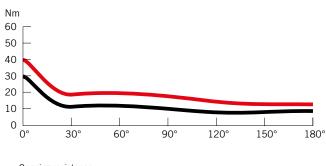




- 1 Infinitely variable closing speed in the range 180°-15°
- **2** Infinitely variable latching speed in the range 15°–0°
- 3 Hold-open (option)
- 4 Cushioned limit stay (option)

The **closing speed** of the TS 91 is individually adjustable over two independent ranges at two separate valves. The **closing force (spring strength)** in the TS 91 is permanently set to size EN 3.

Force profile DORMA TS 92 B Closing force setting: size EN 4



- Opening resistance

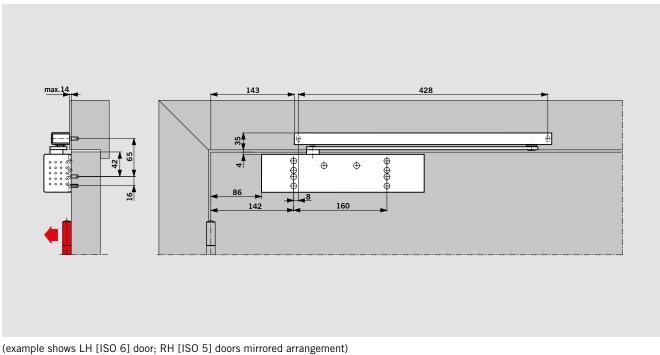
- Closing force



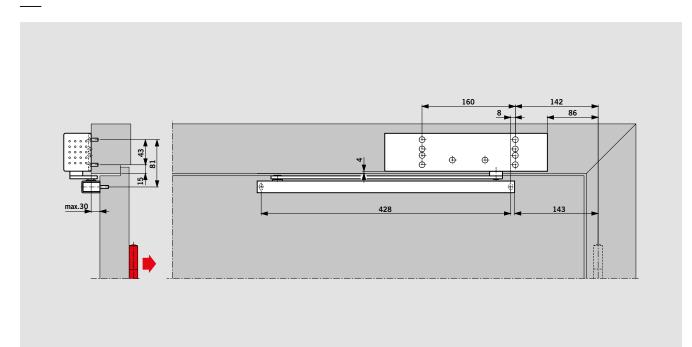
The heart-shaped cam and the linear drive mechanism which characterise all DORMA camaction door closers produce a rapidly decreasing opening torque, so greatly reducing the amount of effort required. This means that even children, the elderly and the disabled can open doors with ease. The user-friendliness of the system is further enhanced by the reliable latching action achieved by the fact that the closing force only rises in the end phase of the cycle.

3

TS 92 B DOOR LEAF FIXING, PULL SIDE



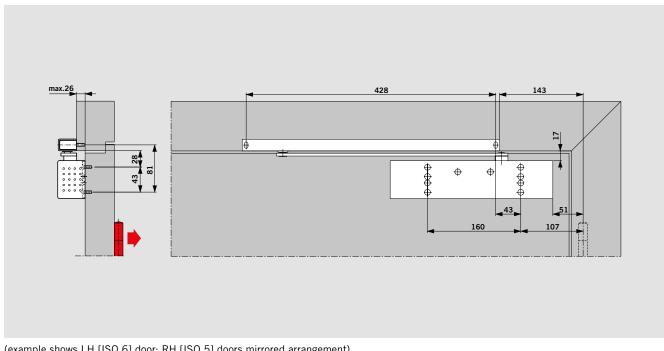
Provided the structural conditions allow, an opening angle of 180° is possible with this method of fixing. In most cases, however, a wall recess will have to be provided for the door closer.



TS 92 B TRANSOM FIXING, PUSH SIDE

(example shows LH [ISO 6] door; RH [ISO 5] doors mirrored arrangement)

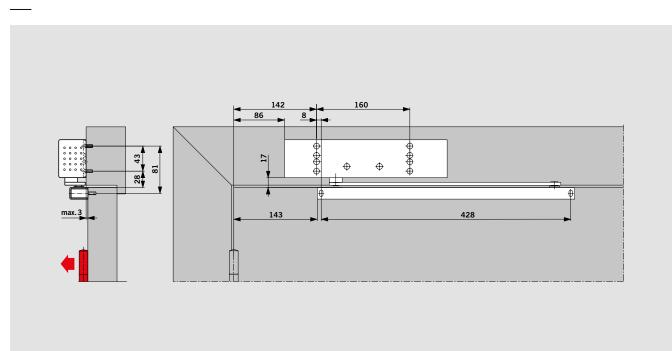
Depending on the structural conditions, the door opening angle with this method of fixing is limited to approx. 120° to 145°. In order to avoid damage to the door or door closer, users are recommended to install a cushioned backstay or a door stop.



TS 92 G DOOR LEAF FIXING, PUSH SIDE

(example shows LH [ISO 6] door; RH [ISO 5] doors mirrored arrangement)

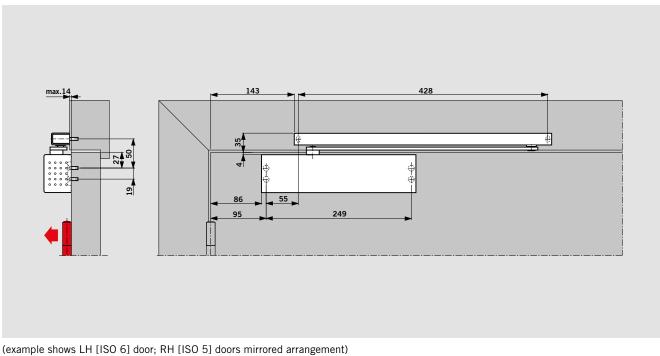
Depending on the structural conditions, the door opening angle with this method of fixing is limited to approx. 120° to 145°. In order to avoid damage to the door or door closer, users are recommended to install a cushioned backstay or a door stop. A door stop must be installed in the case of fire and smoke check doors.



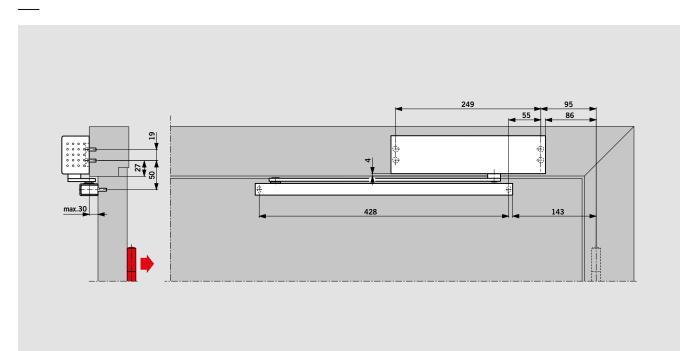
TS 92 G TRANSOM FIXING, PULL SIDE

(example shows LH [ISO 6] door; RH [ISO 5] doors mirrored arrangement) Provided the structural conditions allow, an opening angle of 180° is possible with this method of fixing.

TS 91 B DOOR LEAF FIXING, PULL SIDE



Provided the structural conditions allow, an opening angle of 180° is possible with this method of fixing. In most cases, however, a wall recess will have to be provided for the door closer.



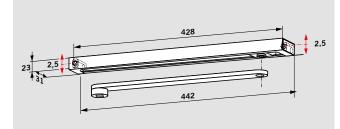
TS 91 B TRANSOM FIXING, PUSH SIDE

(example shows LH [ISO 6] door; RH [ISO 5] doors mirrored arrangement)

Depending on the structural conditions, the door opening angle with this method of fixing is limited to approx. 120° to 145°. In order to avoid damage to the door or door closer, users are recommended to install a cushioned backstay or a door stop.

SLIDE CHANNEL

Slide channel



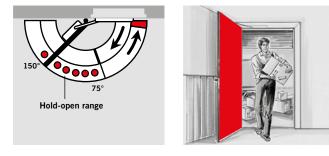
The **G-N** slide channel assembly comprises the main arm, slide channel, slide block, fixings, screws and end caps. The G-N slide channel is non-handed and can be combined with both door closers. Thanks to oblong holes in the fixing pads, it is possible to compensate for deviations in the drill hole pattern and to keep the door closer body and slide channel perfectly parallel.

Hold-open unit

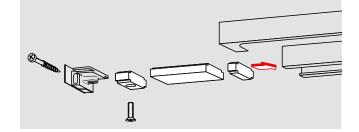


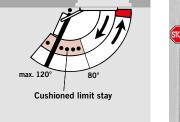
The **RF** mechanical hold-open unit ensures that doors are held open at precisely the correct angle – up to approx. 150° – without any fallback. The hold-open unit can be switched on and off by the user as required, and the pull-off force can be adjusted to suit each individual door situation. The RF hold-open unit is non-handed and can also be supplied for retrofitting to the slide channel at a later date.

Not for fire and smoke check doors.



Cushioned limit stay



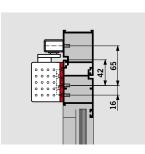




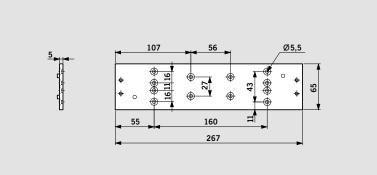
Cushioned limit stay simply slides into the slide channel. Adjustable between 80° and max. 120°. Also suitable for retrofitting.

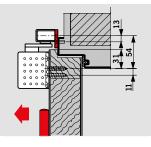
Fitting a cushioned limit stay prevents doors which are opened normally from impacting against adjacent walls. The cushioned limit stay is not an overload protection device and in many applications will not be a suitable substitute for a door stop.

ACCESSORIES



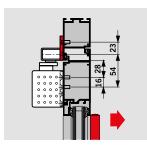
Mounting backplate for TS 91 For fixing to doors which provide no means of direct mounting. Fixing hole pattern as per Supplement 1 to EN 1154.





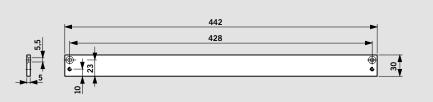
Mounting backplate 30 mm for G-N

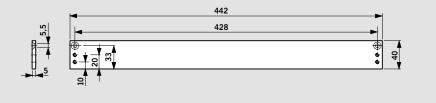
For fixing the slide channel to the door frame where there is no means of direct mounting.

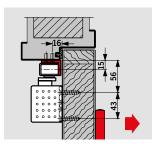


Mounting backplate 40 mm for G-N

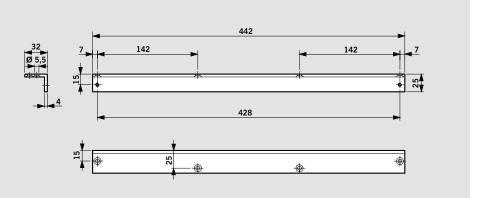
For fixing the slide channel to the door frame where there is no means of direct mounting.

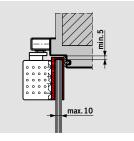




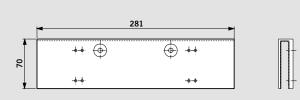


Angle bracket for G-N For push-side fixing of the slide channel to door frames with a deep reveal.





Glass door saddle plate for TS 92 For fixing the closer to toughened glass doors – No glass drilling or recessing required.



STANDARD EQUIPMENT AND ACCESSORIES

	TS 92	В	TS 92	G	TS 91	В	Mounting backplate 30 mm for G-N	Mounting backplate 40 mm for G-N	Angle bracket for G-N	Cushioned limit stay set for G-N	Hold-open unit for G-N
				3]		0.	0.000		GOI	
	Size EN 1–4 ■ 420		Size EN 1–4 ■ 420		Size EN 3 ■ 410		644000xx	644100xx	644300xx	35800093	18570000
G-N □ 640100xx		-				•	Δ	Δ	Δ	Δ	Δ
Mounting backplate for TS 91					Z	2					
Glass door saddle plate for TS 92		2	2	7							

xx	Colour
01	Silver
11	White (RAL 9016)
09	Special colour
	TS 92 also available in matching "Design" finishes
04	Stainless steel
05	Polished brass

* "Design" refers to the surface finish of the products

- xx Colour
- Closer separate
- □ Slide channel assembly separate
- \triangle Optional accessory

SPECIFICATION TEXT

TS 92 B/G

Cam-action door closer, CERTIFIRE approved (CF 119), in Contur design with linear drive and rapidly decreasing opening resistance/torque, adjustable closing speed in two independent ranges and mounting backplate with universal fixing hole pattern; closing force infinitely variable between size EN 1 and EN 4. Non-handed. Approved to EN 1154.

TS 91 B

Cam-action door closer, CERTIFIRE approved (CF 119), in Contur design with linear drive and rapidly decreasing opening resistance/torque, adjustable closing speed in two independent ranges and mounting backplate with universal fixing hole pattern; closing force EN 3. Non-handed.

Approved to EN 1154.

Model

□ TS 92 B □ TS 92 G

Accessories

- □ Hold-open unit
- □ Cushioned limit stay
- □ Mounting backplate (30 mm) for G-N
- □ Mounting backplate (40 mm) for G-NN
- □ Angle bracket for G-N
- □ Saddle plate for toughened
 - glass doors

Accessories

- □ Hold-open unit □ Cushioned limit stay
- □ Mounting backplate
- (30 mm) for G-N
- □ Mounting backplate (40 mm) for G-N
- □ Mounting backplate for TS 91

Colour □ silver □ white (sim. to RAL 9016) □ stainless steel □ polished brass □ special colour (sim. to RAL)

Make DORMA TS 92 B

DORMA TS 92 G

□ silver □ white (sim. to RAL 9016) □ special colour (sim. to RAL)

Colour

Make DORMA TS 91 B





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TS 90 IMPULSE EN 3/4

Cam-action door closer

HIGH-TECH FOR THE GLOBAL MARKET

The TS 90 Impulse combines technical superiority with outstanding value, and unites advanced design with convenient functionality – all on the basis of its heart-shaped cam.

Benefits

For the trade

- Unique DORMA cam action technology for the entry-level segment, compliant with EN 1154.
- Complete package for easy stocking.
- Sets new standards to open up new markets.

For the installer/fabricator

- Easy to fix without mounting backplate.
- Non-handed.

Force profiles

Nm

40

30

20

10

0

0

- Four installation arrangements with one model.
- Proven DORMA quality for long service life.

With its installation versatility and inherent functional reliability, it is ideal for virtually any application. TS 90 Impulse: Certified to ISO 9001

For the architect/specifier

- Proven technology of the heart-shaped cam.
- Cost-efficient slide channel door closer for interior doors.

For the user

- Convenient, low-resistance opening with fully controlled closing.
- Two regulating valves for precise adjustment of closing speed.
- Available with hold-open and cushioned limit stay options.

Data and features		TS 90 Impulse
Closing force	Size	EN 3/4
Standard doors ¹⁾	≤ 1100 mm	•
External doors, outward opening ¹⁾		•
Fire and smoke check doors ¹⁾		•
Non-handed		•
Slide channel		•
Two independent valves for closing sp	eed adjustment	•
Cushioned limit stay (mechanical)		0
Delayed action		_
Hold-open		0
Weight in kg		1.7
Dimensions in mm	Length	246
	Overall depth	46
	Height	57
Door closer compliant with EN 1154		٠
€ -mark for construction products		•
• voo no O ontion		

● yes - no ○ option

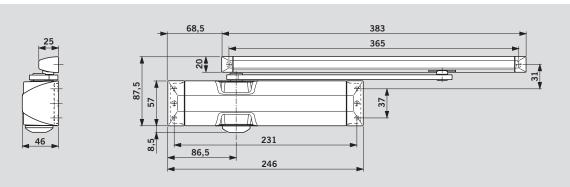
¹⁾ In the case of particularly heavy doors and doors that have to close against wind pressure, we recommend the DORMA TS 93.

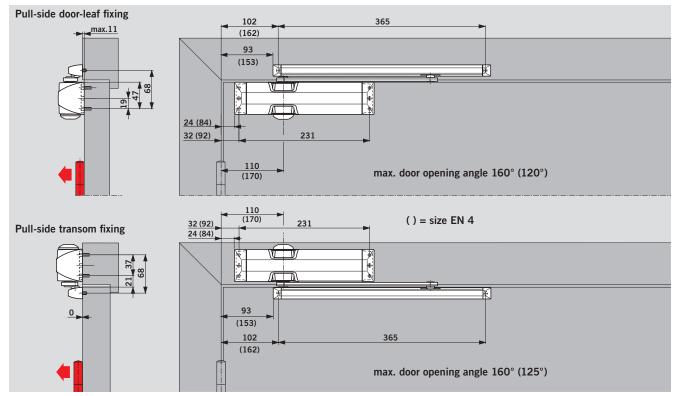


The heart-shaped cam and the linear drive mechanism of the TS 90 Impulse ensure that the resistance encountered decreases almost instantly with the door opening action – so even children, the elderly and people with disabilities have no problem in opening the door. User-friendly and reliable closing is also ensured by the delayed increase in the actuating torque at the "latching" end of the sweep.

Force profile

TS 90 Impulse (Spring strength: EN 3) Opening force Closing force

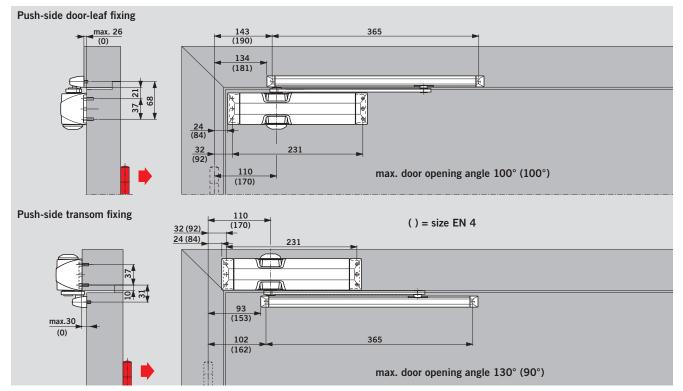




PULL-SIDE FIXING (example: LH/ISO 6 door; mirror image for RH/ISO 5 door)

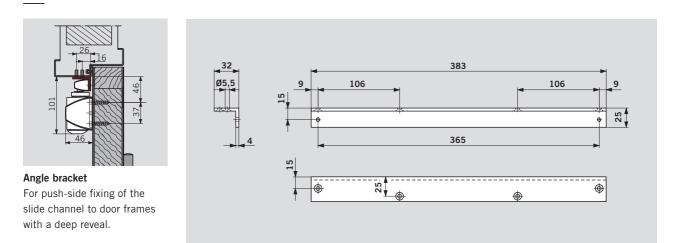
Depending on the structural conditions, the door opening angle is likely to be limited. It is recommended to install the cushioned limit stay or position a door stop at this point. A door stop must be installed in the case of fire and smoke check doors.

PUSH-SIDE FIXING (example: RH/ISO 5 door; mirror image for LH/ISO 6 door)



Depending on the structural conditions, the door opening angle is likely to be limited. It is recommended to install the cushioned limit stay or position a door stop at this point.

ACCESSORIES



STANDARD EQUIPMENT AND ACCESSORIES

	Cam-action door closer TS 90 Impulse	Angle bracket	Cushioned limit stay	Mechanical hold-open device
		time in the second s	BD	
	Size EN 3/4	100030xx	10002000	10002100
Slide channel				
	■□ 102004xx	Δ	Δ	Δ
Order No.:	Colour	xx		
■□ = Closer body with slide channel, comple △ = Accessory	silver te white (sim. to RAL	01 9016) 11		

SPECIFICATION TEXT

Universal cam-action door closer with linear drive and rapidly decreasing opening torque; closing speed adjustable in two independent ranges. Closing force = Size EN 3/4. Non-handed. Compliant with EN 1154.

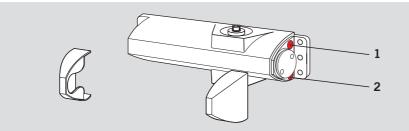
Accessories

Angle bracket
Hold-open device
Cushioned limit stay

Colour □ silver □ white (sim. to RAL 9016) Make DORMA TS 90 Impulse EN 3/4

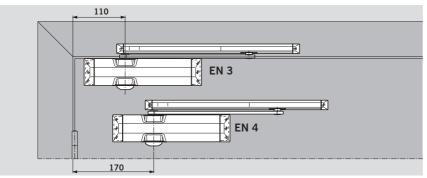
STANDARD AND OPTIONAL FUNCTIONS

Closing speed

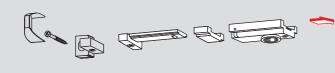


The closing speed of the TS 90 Impulse is adjustable in two independent ranges at the valves indicated.

Closing force settings EN 3/EN 4



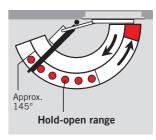
Mechanical hold-open device



The hold-open device enables doors to be precisely held without any fall-back up to an

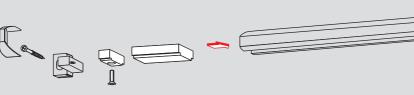
The hold-open device is suitable for both LH and RH doors and is designed for retrofitting to the slide channel.

Not for fire and smoke doors.



opening angle of approx. 145°.

Cushioned limit stay

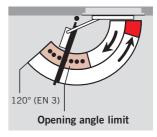


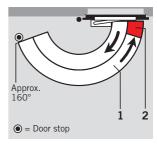
Cushioned limit stay for retrofitting by insertion in the slide channel.

Adjustable between 80° and max. 120°.

Use of the cushioned limit stay helps to prevent a normally opened door from colliding with adjacent walls.

The cushioned limit stay is not an overload protection device and in many cases is no substitute for a door stop. Only for the use of TS 90 Impulse size EN 3.





- 1 Infinitely variable closing speed in the range 160° - 15°
- 2 Infinitely variable closing speed in the range $15^{\circ} - 0^{\circ}$

Door width	size setting
≤ 950 mm	EN 3
≤ 1100 mm	EN 4

The TS 90 Impulse size setting is selected for the door width by the closer.





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Door Closer

EASY TO INSTALL AND WITH ADJUSTABLE CLOSING FORCE, BACKCHECK AND DELAYED ACTION

Easy to fix and even easier to adjust. The door closer for almost every door size and application.

Decades of experience have gone into the development of the DORMA TS 83. The result is user comfort coupled with outstanding versatility. It can be adjusted to suit almost all types of door. It can even be supplied

Plus points

For the trade

- Low inventory costs and reduced stocking requirement thanks to streamlined product range.
- Practical and effective solutions to meet special applications thanks to comprehensive choice of accessories.

For the user

- Optimum wall and door protection thanks to "thinking" backcheck.
- Closing speed virtually unaffected by temperature fluctuations.
- Proportionately low opening resistance thanks to high mechanical efficiency.

with additional anti-corrosion protection for exposed applications or aggressive conditions.

Fixing couldn't be easier – and last but not least – it's engineered for excellence.

Certified to ISO 9001

For the installer

- Easy to fix.
 Con bo "toiloro
- Can be "tailored" to the requirements of the door by simple adjustment.
- Just one model for RH (DIN-R, ISO 5) and LH (DIN-L, ISO 6) doors, and for standard and frame/ lintel fixing.
- Spring strength range EN 3–6 to suit virtually every application.

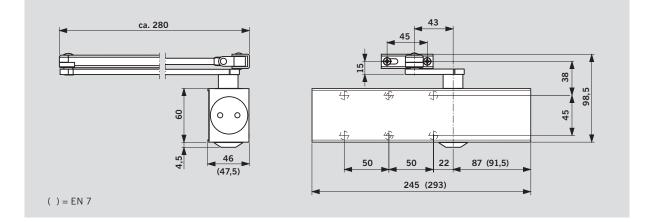
For the specifier/architect

- Compact closer design and sturdy flat-form arm assembly.
- Wide range of standard
- functions supplemented by optional extras.
- Suitable for fire doors.

Data and features TS 83 Variable ΕN Spring ΕN closing force strength 3-6 7 Standard doors1) ≤ 1400mm ≤ 1600mm External doors ≤ 1400mm . outward opening1) ≤ 1600mm Fire and smoke ≤ 1400mm • check doors1) < 1600mm • Non-handed . Arm assembly type Standard 0 0 Flat-form Slide channel Closing force variable by means of adjustment screw . 180° - 70° Closing speed 70° - 15° adjustable at 3 separate valves 15° - 0° Closing speed variable by means of valve adjustment Adjustable latching action by arm • Backcheck self-regulating . adjustable at valve Delayed action variable at valve Hold-open 0 0 3.3 Weight in kg 1.7 Dimensions in mm Length 245 293 Overall depth 46 47.5 Height 60 60 Door closer tested to EN 1154 . • **(€** mark for construction products • Approved to AS1905 Part1 Fire Resistant Doors . •

• Yes - no o Option

¹⁾ For applications involving particularly heavy or wide doors, and doors which have to close against wind resistance, the next highest closer size or a higher spring strength should be applied.



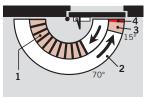
STANDARD AND OPTIONAL FUNCTIONS

With "thinking" backcheck -Model BC/ÖD

Thanks to an innovative design concept, the resistance developed by this backcheck system as the door is opened beyond approx. 70° is directly proportional to door acceleration. It is almost imperceptible when the door is opened slowly. However, if the door is opened hastily, the backcheck responds in equal measure.

And if the door should be flung open at speed - whether deliberately, thoughtlessly, accidentally or as a result of a gust of wind - the backcheck reacts at full strength, protecting the wall and door from damage.





- 1 Self-regulating backcheck
- 2 Infinitely variable closing speed in the range $180^{\circ} - 70^{\circ}$ 70° – 15°
- 3 Infinitely variable closing speed in the range $15^{\circ} - 0^{\circ}$
- 4 Adjustable latch range (by arm)

With additional delayed action -Model BC/ÖD + DC/SV

This model with its additional, integrated delayed action enables the closing cycle to be retarded within an adjustable range from $180^{\circ} - 70^{\circ}$ so that disabled persons, mothers with prams and people carrying bulky items are able to pass through the door without difficulty.

This model can also be used for fire doors.



- 1 Adjustable delayed action
- 2 Fully controlled closing with adjustable speed

With hold-open – Model with hold-open arm

Combining the TS 83 with a hold-open arm enables the door to be held open at an appropriate angle (up to approx. 150°).

The hold-open function in the standard hold-open arm can be switched on and off by the user by simply pressing a switch.



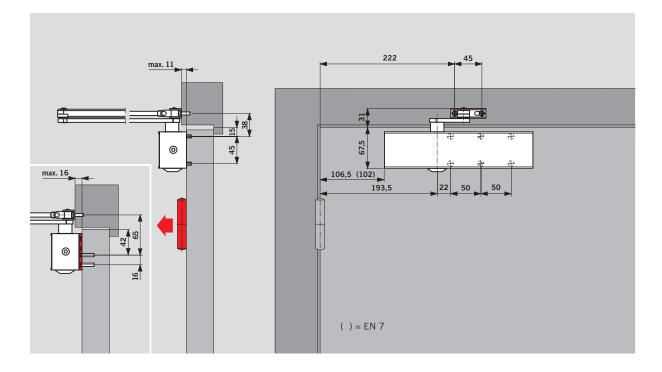
1 Hold-open range

Hold-open arms are not approved for fire and smoke check doors.

DORMA

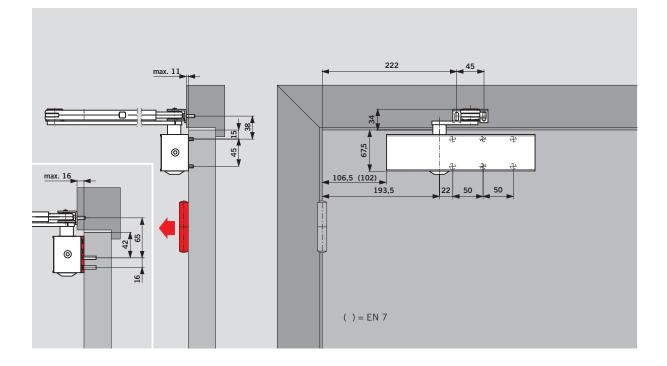
DOOR LEAF FIXING, PULL SIDE

(example shows LH (ISO 6) door; RH (ISO 5) doors mirrored arrangement)



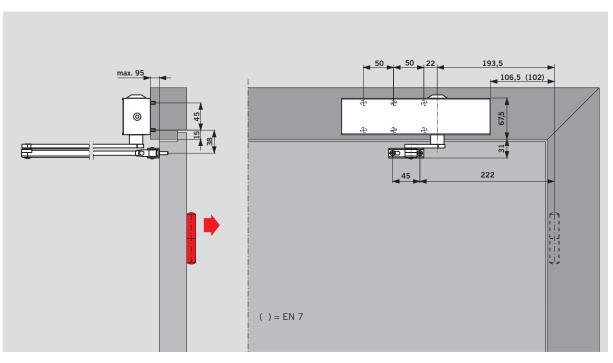
DOOR LEAF FIXING WITH HOLD-OPEN ARM

(example shows LH (ISO 6) door; RH (ISO 5) doors mirrored arrangement)



TRANSOM FIXING, PUSH SIDE

(example shows LH (ISO 6) door; RH (ISO 5) doors mirrored arrangement)



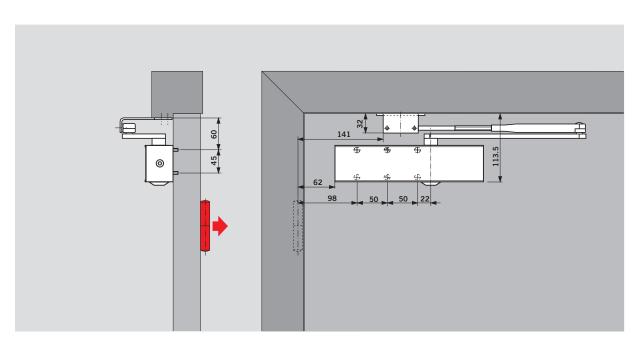
In the case of fire doors, door closers may only be transom-fixed where appropriate approval has been obtained in the form of a certificate or test report issued by an accredited testing agency.

Transom fixing:

With transom-fixed closers, the backcheck only responds at between 85° and 90°, depending on the depth of reveal and type of door hinge involved; the delayed action, on the other hand, releases the door at an earlier point in its closing sweep.

DOOR LEAF FIXING, PUSH SIDE, PARALLEL ARM INSTALLATION

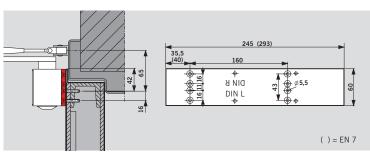
(example shows RH (ISO 5) door; LH (ISO 6) doors mirrored arrangement)



ACCESSORIES

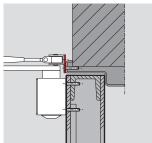
Mounting backplate TS 73 V / TS 83

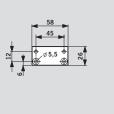
For use with fire and smoke check doors and also as an intermediate plate when direct fixing to the door is not possible; with fixing hole pattern to EN 1154, supplement 1.



Arm bracket adapter plate TS 73 V / TS 83

For fixing the arm bracket to particularly narrow door frames.

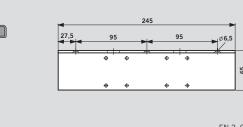




Angle bracket TS 73 V / TS 83

For frame/lintel fixing of the closer on the push side of doors with deep reveals.

On fire and smoke check doors, proof of suitability required in relation to the individual door concerned.





90

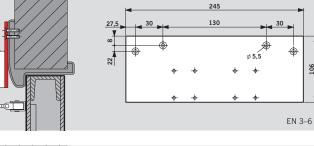
Drop plate TS 73 V / TS 83

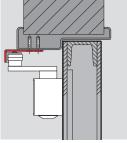
For installation on frame when direct fixing of closer is not possible.

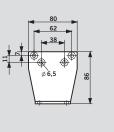
On fire and smoke check doors, proof of suitability required in relation to the individual door concerned.

Parallel arm bracket TS 73 V / TS 83

For parallel arm installation on the push side (see fixing instructions for dimensions).

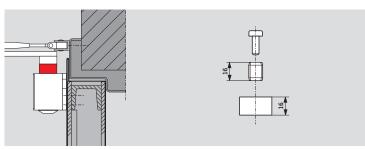






Spindle extension TS 73 V / TS 83

For increasing the distance between the closer and the arm assembly in the case of doors with a high overlap; 16 mm high.



SUPPLY AND ACCESSORIES INFORMATION

Supply and accessory information

Closer body TS 83	Standard arm	Standard arm anti- corrosive type (AC)	Flat-form arm	Hold-open arm with on/off switch	Mounting backplate	Arm bracket adapter plate	Angle bracket	Drop plate	Parallel arm bracket	Spindle extension 16 mm
	220023xx		830001xx	220030xx	EN 3 - 6 380001xx EN 7 830011xx	830014xx	EN 3 - 6 380003xx	EN 3 - 6 380002xx	280066xx	©↓ () () () () () () () () () ()
Size EN 3 – 6 BC/ÖD+DC/SV 380201xx					#	#	#	#	#	#
Size EN 3 – 6 BC/ÖD		■□ yy 38030301	(incl P.A.) y ≢ ⊐ 380208xx	(incl P.A.) y ≡ ⊡ 380233xx	#	#	#	#	#	#
Size EN 7 BC/ÖD 830501xx	_ []	y ⊡ 83060201			#	#			#	#

Ord	er No.:	Colour*)	XX
	Body only	silver	01
	Arm only	gold	02
	Closer with arm,	other	09
	complete		

Model

(AC)

□ anti-corrosion protected

 \Box with standard arm

□ with flatform arm

□ with hold-open arm

Optional accessory

Specification text TS 83 EN 3 - 6

DORMA TS 83 rack and pinion door closer; with adjustable power size EN 3 – 6, according to EN 1154, carries the CE mark, integral self-regulating backcheck and adjustable delayed action; closing speed adjustable in three independent ranges and adjustable latch action. Non-handed.

Specification text TS 83 EN 7

DORMA TS 83 rack and pinion door closer; with power size EN 7, according to EN 1154, carries the CE mark, integral selfregulating backcheck; adjustable closing speed and adjustable latch range. Non-handed.

7

Model

with standard arm
with flatform arm
with hold-open arm

Accessories

Accessories

Colour i silver other (sim. RAL ____)

* Anti-corrosion protected closers and arms available in silver (01)

only.

Colour

y □ silver

TS83

□ gold y □ other

(sim. RAL ____

Model make DORMA TS 83

)

Model make DORMA TS 83 TS83





DORMA Australia P/L Head Office 46-52 Abbott Road HALLAM Victoria 3803 Phone 1800 675 411 info.au@dorma.com www.dorma.com.au DORMA NZ Limited Head Office Building P 61-69 Patiki Road AVONDALE Auckland 1026 Phone 0800 436 762 info.nz@dorma.com





Door Closer

THE INEXPENSIVE COMPACT QUALITY SOLUTION FOR STANDARD DOORS ASSURED

With the TS 79, DORMA has developed a door closer that rounds off its ClassicLine series perfectly. The ease and speed with which it can be fixed, the fact that its spring strength can be so easily adapted to the door size – by simply turning round the closer arms power shoe and changes in template position **Plus points**

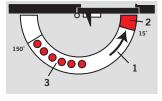
For the trade

- Increased stocking flexibility thanks to the standard ClassicLine series arm.
- Complements the ClassicLine series as a competitive model for standard doors

For the installer

- Non-handed design.
- Easy and quick to fix.

Functions



- 1 Closing speed adjustable in the range $180^{\circ} 15^{\circ}$.
- **2** Closing speed adjustable in the range $15^{\circ} - 0^{\circ}$.
- **3** Hold-open range for model with hold-open arm model (optional extra).

Closing force settings

Door width	Size setting
≤ 850	EN 2
≤ 950	EN 3
≤ 1100	EN 4

The TS 79's size setting is selected for the door width by moving the closer body and/or turning the arm power shoe. allows an easy selection of the closing force to suit various door sizes. Its competitive price should make it the ideal choice for your application.

Certified to ISO 9001

For the specifier/architect

- Competitive and reliable.
- Compact construction
- combined with classic design. For the user
- Constant closing action virtually unaffected by temperature fluctuations.
- Optimum closing speed
- adjustment with two regulating valves.
- Reliable closing with adjustable latching action.

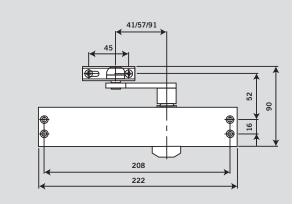
Approx. 280

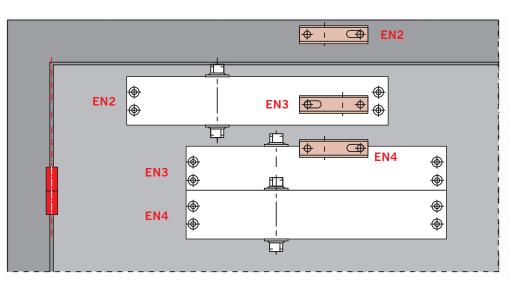
30

2

Data and features		TS 79
Spring strength (adjustable by size by power shoe and templating position)	Size g	EN 2/3/4
Standard doors	$\leq 1100 \text{ mm}^1$	٠
External doors, opening outwards		٠
Fire doors		٠
Non-handed		٠
Arm type standard scissor arm		٠
Closing speed adjustable at 2 seperate valves	180° – 15° 15° – 0°	٠
Backcheck		٠
Delayed action		-
Hold-open		0
Weight in kg		1.7
Dimensions in mm	Length Overall depth Height	222 41 44
Approved to AS1905 Part 1 Fire Resistant Doors (Backcheck model only)		•

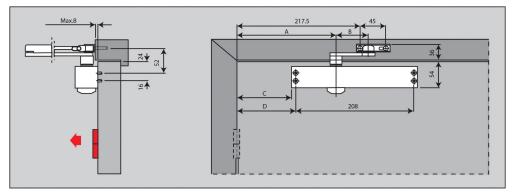
• Yes - no o Option





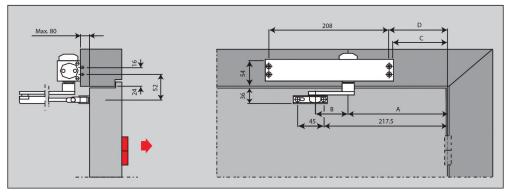
DOOR-LEAF FIXING, PULL SIDE

	EN 2	EN 3	EN 4
A	141	191	191
В	91	57	41
С	62	112	112
D	70	120	120

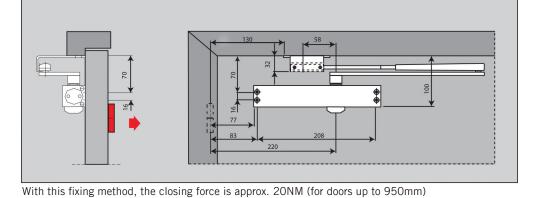


TRANSOM FIX (OVERHEAD FRAME INSTALLATION), PUSH SIDE

	EN 2	EN 3	EN 4
A	141	191	191
В	91	57	41
С	62	112	112
D	70	120	120



PARALLEL ARM FIXING, PUSH SIDE



Standard equipment

Order number:

Closer body and arm
 Arm assembly separate
 Accessory

Colour	хх
Silver	01
Special colour	09

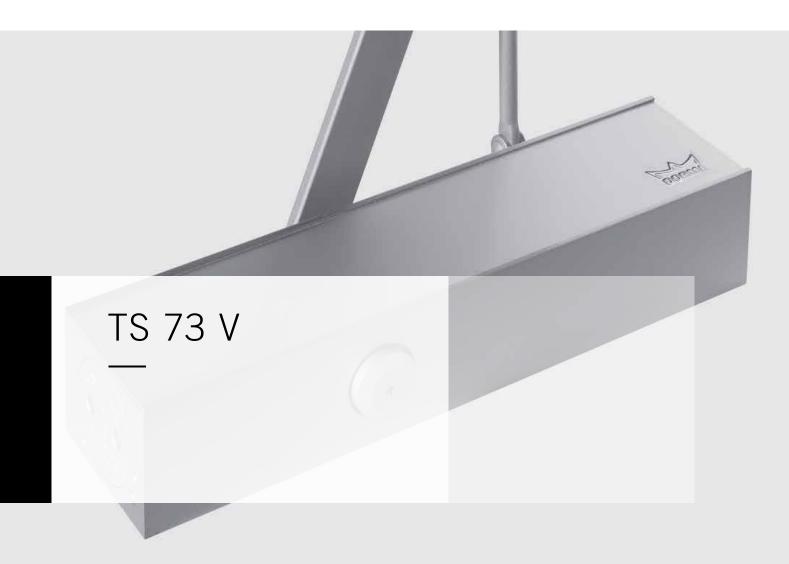
Closer body with arm	Standard arm	Hold-open arm	Parallel arm bracket
Size EN 2/3/4 223157xx Std arm DC223155xx H/O	■ 220023xx	■ 220025xx	# 280066xx





DORMA Australia P/L Head Office 46-52 Abbott Road, Hallam, Victoria 3803 Telephone (03) 8795 0666 Facsimile (03) 8795 0280 Toll Free Facsimile 1800 333 309 DORMA NZ Limited Head Office Building P 61-69 Patiki Road Avondale Auckland 1026 Telephone (09) 830 2052 Facsimile (09) 820 4909





Door Closer

EASY TO FIT, ECONOMICAL AND WITH ADJUSTABLE CLOSING FORCE

Simple, easy installation, and guaranteed quality. Tested to EN 1154 Specially designed for internal doors, including fire doors, the DORMA TS 73 V is a universal solution for doors of differing designs and styles.

Plus points

For the trade

- One model for all applications.
- Really practical solutions for special installation situations, thanks to the wide range of accessories.

For the installer

- Quick and simple to fit. Closing force, closing speed, and latching action all set with just a few manual adjustments.
- Only one design for DIN-L and DIN-R doors, and for standard and framefixing.

The flat and compact format of the TS 73 V means that there are practically no problems with installation; and tried and trusted quality is your assurance of reliability.

Certified to ISO 9001

For the designers

- Compact format in timeless design.
- Attractively-priced solution with optimum reliability.
- Wide range of applications.
- Anti-corrosive design for moist and damp areas.

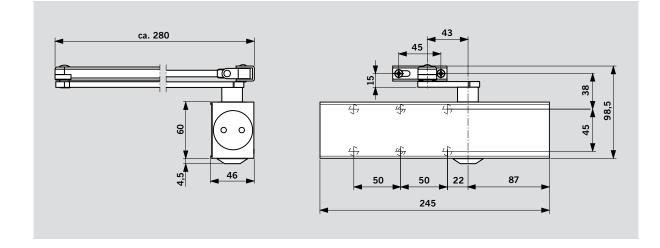
For the user

- Optimum wall and door protection thanks to "thinking" backcheck.
- Constant closing speed virtually unaffected by temperature fluctuations, with adjustable latch action.
- Smooth door action thanks to high mechanical efficiency.

Data and features		TS 73 V
Closing force adjustable	Size	EN 1-4
Standard doors ¹⁾	≤ 1100 mm	•
External doors, opening outwards ¹⁾		_
Fire and smoke control doors ¹⁾	≤ 1100 mm	•
Non-handed		٠
Arm	Standard	٠
	Flat form	0
	Slide channel	-
Closing force variable by means of adjustment screw		•
Closing speed adjustable at 3 seperate valves	180° – 70° 70° – 15° 15° – 0°	• •
Backcheck	self-regulating adjustable valve	•
Adjustable latching action	by arm	•
Delayed action		•
Hold-open		0
Weight in kg		1.7
Dimensions in mm	Length Overall depth Height	245 46 60
Door closer tested to EN 1154		•
CE mark for construction products	•	
Approved to AS1905 Part 1 Fire Re	esistant Doors	•

• Yes - No Option

¹⁾ For high and heavy doors, extenal doors, and for doors required to close against high wind pressure, we recommend DORMA TS 83.



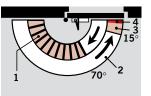
FEATURES AND OPTIONAL FUNCTIONS

With "thinking" backcheck (BC/ÖD)

Thanks to an innovative design concept, the resistance developed by this backcheck system as the door is opened beyond approx. 70° is directly proportional to door acceleration. It is almost imperceptible when the door is opened slowly. However, if the door is opened hastily, the

backcheck responds in equal measure. And if the door should be flung open at speed - whether deliberately, thoughtlessly, accidentally or as a result of a gust of wind - the backcheck reacts at full strength, protecting the wall and door from damage.



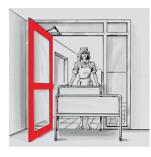


- 1 Self-regulating backcheck
- 2 Infinitely variable closing speed in the range 180° - 70° 70° – 15°
- 3 Infinitely variable closing speed in the range $15^{\circ} - 0^{\circ}$
- 4 Adjustable latch range (by arm)

With additional delayed action -Model BC/ÖD + DC/SV

This model with its additional, integrated delayed action enables the closing cycle to be retarded within an adjustable range from $180^{\circ} - 70^{\circ}$ so that disabled persons, mothers with prams and people carrying bulky items are able to pass through the door without difficulty.

This model can also be used for fire doors.



1 Adjustable delayed action 2 Fully controlled closing with adjustable speed

With hold-open arm

Combining the TS 73 V with a hold-open arm enables the door to be held open at an appropriate angle (up to approx. 150°).

Hold-open arm with switch: The hold-open function can be switched on and off by the user by simply pressing a switch.



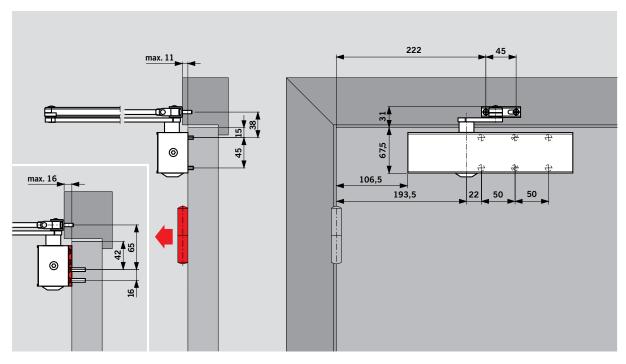


1 Hold-open range

Hold-open arms are not permitted on fire doors

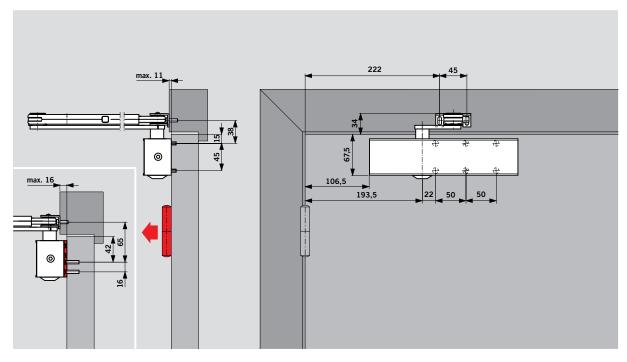
3

DOOR LEAF FIXING, PULL SIDE



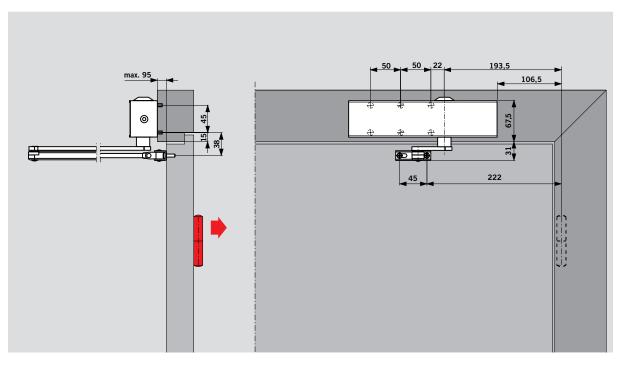
(example shows LH (ISO 6) door; RH (ISO 5) doors mirrored arrangement)

DOOR LEAF FIXING WTH HOLD OPEN ARM



(example shows LH (ISO 6) door; RH (ISO 5) doors mirrored arrangement)

TRANSOM FIXING, PUSH SIDE

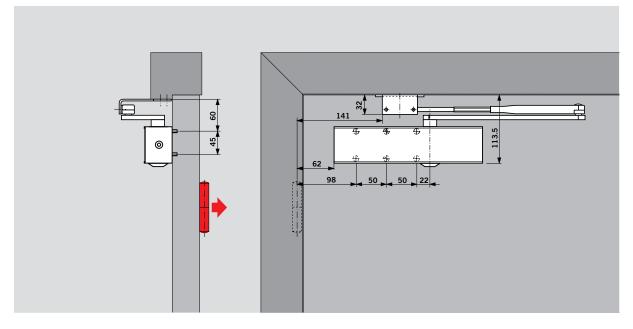


(example shows LH (ISO 6) door; RH (ISO 5) doors mirrored arrangement)

Door closers may only be fitted on the frame of fire doors if proved suitable for the individual door by the issue of an approval certificate from a recognised testing institution. Transom fixing:

With transom-fixed closers, the backcheck only responds at between 85° and 90°, depending on the depth of reveal and type of door hinge involved; the delayed action, on the other hand, releases the door at an earlier point in its closing sweep.

DOOR LEAF FIXING, PUSH SIDE, PARALLEL ARM INSTALLATION



(example shows RH (ISO 5) door; LH (ISO 6) doors mirrored arrangement)

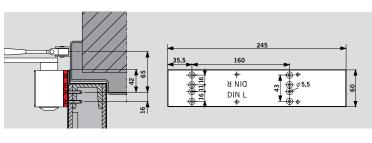
ACCESSORIES

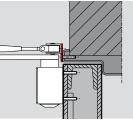
Mounting plate TS 73 V/TS 83

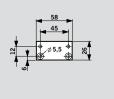
For fitting the door closer to fire doors and to doors where direct fitting is not possible. Hole group according to EN 1154, supplement 1.

Hinge plate TS 73 V/TS 83

For securing the arm to particularly narrow door frames.







245

Angle bracket TS 73 V/TS 83

For overhead fitting on the push side, for deep-set door lintels. On fire doors, proof of suitability required in relation to the individual door concerned.

Drop plate TS 73 V/TS 83

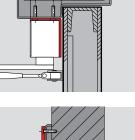
For use where the closer cannot be fitted directly to the door. On fire doors, proof of suitability required in relation to the individual door concerned.

Parallel arm bracket TS 73 V/TS 83

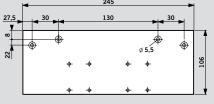
For parallel arm installation (see installation instructions for fitting dimensions).

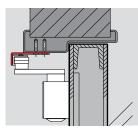


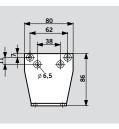
For increasing the distance between the closer and the arm assembly in the case of doors with a high overlap; 16 mm high.

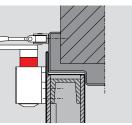


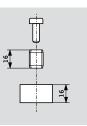








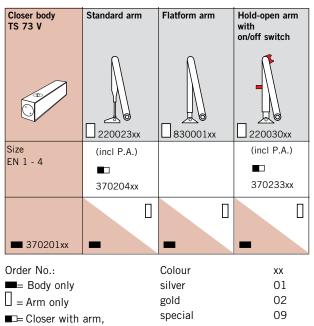




RANGE OF EQUIPMENT AND OPTIONAL ACCESSORIES

Accessories

Range of equipment



Mounting plate	Hinge plate	Angle bracket	Drop plate
Pri e	e 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
380001xx	830014xx	380003xx	380002xx
Parallel arm bracket	Spindle extension 16 mm		
0 00			
280066xx	83003705		

Specification text

complete

DORMA TS 73 V rack and pinion door closer; with adjustable power size EN 1 – 4, according to EN 1154, carries the CE mark, integral self-regulating backcheck and adjustable delayed action; closing speed adjustable in three independent ranges and adjustable latch action. Non-handed. Model

with standard arm
with flatform arm
with hold-open arm
with on/off switch

Accessories _____

Colour Silver White (sim. RAL 9016) Special _____ (sim. RAL ____) Make: DORMA TS 73 V

DORMA 7



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Queensland Telephone (07) 3394 6810 Facsimile (07) 3394 2953 New Zealand Dorma NZ Limited Building P 61-69 Patiki Road Avondale Auckland 1026 Telephone (09) 830 2052 Facsimile (09) 820 4909

South Australia & Northern Territory Telephone (08) 8337 4064 Facsimile (08) 8365 8572

Western Australia Telephone (08) 9228 2322 Facsimile (08) 9228 2422 Newcastle Telephone (02) 4960 2606 Facsimile (02) 4960 2544

ACT Telephone (02) 6203 0323 Facsimile (02) 6260 1810

Tasmania Telephone (03) 6225 4117







Door Closer

THE IDEAL COST-EFFICIENT SOLUTION FOR DOORS UP TO 1100MM WIDE, TESTED AND APPROVED TO EN 1154

The DORMA TS 72 is the ideal multi-purpose door closer for all standard door designs and constructions. Without a backplate, it is particularly easy and quick to fix. The spring strength can be individually adapted to the door size by means of an adjusting screw.

Certified to ISO 9001

Plus points

For the trade

- Just one model for all standard doors.
- Increasing stocking flexibility thanks to use of the standard ClassicLine series arm.

For the user

- Constant closing action virtually unaffected by temperature fluctuations
- Optimum closing speed adjustment with two regulating valves.
- Reliable closing with adjustable latching action.

For the installer

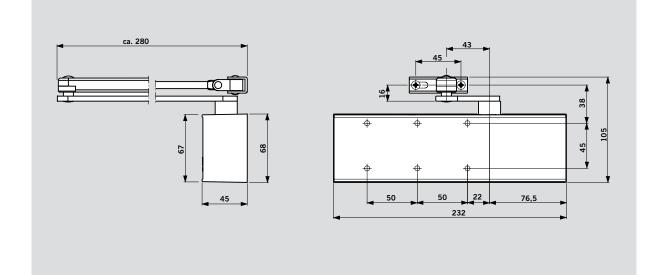
- Non-handed unit.
- Closing force, closing speed and latching action adjustable in just a few movements.

For the specifier/architect

- Outstanding value for money.
- Compact construction combined with timeless design.

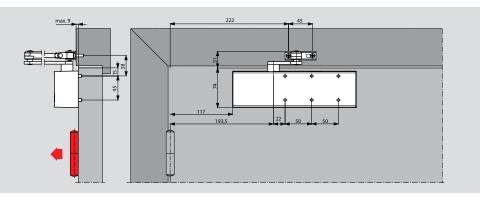
Data and features		TS 72
Selectable closing force (variable via arm power shoe and templating	Size	EN 2-4
Door width	$\leq 1100 \text{ mm}^{1)}$	•
External doors, opening outward	ls	
Fire doors		•
Non-handed		٠
Arm	Standard	٠
	Slide channel	
Closing speed adjustable at 2 seperate valves	180° – 15° 15° – 0°	٠
Latching action adjustable (by a	•	
Backcheck		٠
Delayed action		
Hold-open		0
Weight in kg		1.2
Dimensions in mm	Length	232
	Overall depth	45
	Height	68
Door closer tested and approved	٠	
(mark for building products		٠
Approved to AS1905 Part 1 Fire Resistant doors		

 $^{1)}$ With parallel arm fixing, the closing force is approximately 20Nm (for doors up to 950mm)



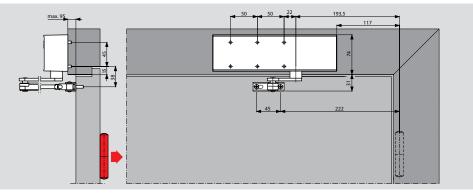
DOOR-LEAF FIXING, PULL SIDE

(Example refers to left-hand (ISO6) door; mirror image applies to right-hand (ISO5) door)



TRANSOM FIXING (OVERHEAD FRAME INSTALLATION), PUSH SIDE

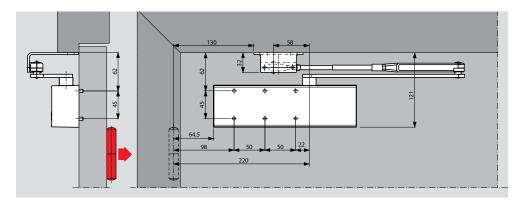
(Example refers to left-hand (ISO6) door; mirror image applies to right-hand (ISO5) door)



PARALLEL ARM FIXING, PUSH SIDE

(Example refers to left-hand (ISO6) door; mirror image applies to right-hand (ISO5) door)

With this fixing method, the closing force is approximately 20Nm (for doors up to 950mm)

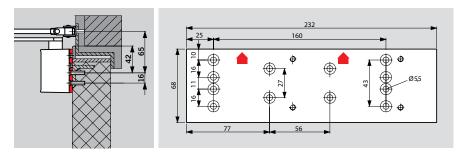


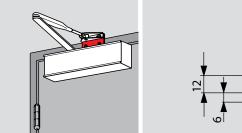
Mounting backplate

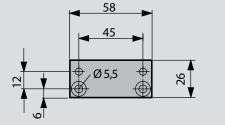
For fixing to doors on which the closer cannot be directly installed. Drilled hole pattern as per EN 1154, Supplement 1.

Upstand hinge bracket

For fixing the arm to particularly narrow door frames.

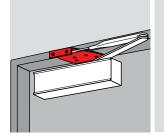


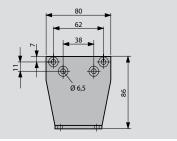




Fixing bracket

For the parallel-arm configuration.





Closer body TS 72	Standard arm	Hold-open arm	Mounting backplate	Hinge plate	Parallel-arm
			• • • • § • • § • • • •	۵ •	
Size EN 2/3/4	220023xx	220025xx	220021xx	830014xx	280066xx
222521xx			#	#	#
	222523xx	222525xx			

ΧХ

01

09

Standard equipment

Order number: Colour Silver Body only White (sim. to RAL 9016) 11 Closer with arm complete Special colour

Arm assembly separate

Accessory

Specification text

Rack-and-pinion door closer with adjustable closing force, size EN 2 – 4, closing speed adjustable in two independent ranges, with adjustable latching action.Non-handed. Tested and approved to EN 1154.

Mode

□ with standard arm □ with hold-open arm

Accessories

□ mounting backplate □ upstand hinge plate

- □ fixing bracket for parallel-
- arm assembly

Colour

Make DORMA TS 72

□ silver □ brown

□ white (similar to RAL 9010)

□ white (similar to RAL 9016)

□ black (similar to RAL 9005)

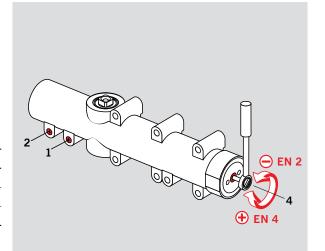
□ special colour

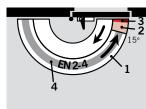
The closing speed of the DORMA TS 72 is variable in two independent ranges by separate valves. In addition, the latching action can be adjusted at the closer arm.

The closing force (size)

setting for the door width concerned is variable at the adjustment screw located at the end face of the TS 72 closer body.

Closing force settings			
Door width	Size setting		
≤ 8 50	EN 2		
≤ 950	EN 3		
≤ 1100	EN 4		

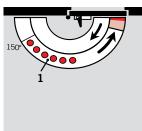




- 1 Adjustable closing speed in the range $180^{\circ} 15^{\circ}$.
- 2 Adjustable closing speed
- in the range $15^{\circ} 0^{\circ}$. 3 Latching action (variable at arm).
- 4 Adjustable closing force.

If the DORMA TS 72 is installed with a hold-**open arm**, the doors can be held open at any desired point (up to approx. 150°).





1 Hold-open range



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Newcastle

Telephone (02) 4960 2606 Facsimile (02) 4960 2544

ACT

Telephone (02) 6203 0323 Facsimile (02) 6260 1810

Tasmania Telephone (03) 6225 4117







Door Closer

THE IDEAL LOW-COST SOLUTION FOR STANDARD DOORS

With the TS 68, DORMA has developed a low-cost door closer which can be universally used on all common door types. It is particularly quick and easy to install — and does not require a mounting

Plus points

For the trade

- Low-cost solution for standard doors.
- Just one model for all mounting positions.

For the user

• Two valves for optimum closing speed and reliable latching action

Functions	
150°	1 1 2 15°

- 1 Adjustable closing speed in the range $180^{\circ} 15^{\circ}$.
- **2** Adjustable closing speed in the range $15^\circ 0^\circ$.
- **3** Hold-open range with hold-open arm model (optional extra).

Closing force settings

Door width	Size setting		
≤ 850	EN 2		
≤ 950	EN 3		
≤ 1100	EN 4		

The TS 68's size setting is selected for the door width by moving the closer body and/or turning the arm power shoe. backplate. The closer arm's power shoe and changes in templating allow easy selection of closing force to suit various door sizes.

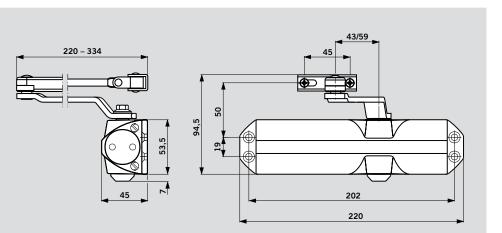
Certified to ISO 9001

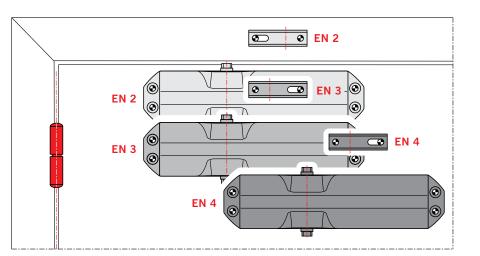
For the installer

- Non-handed unit.
- Quick and easy to install.
 Fixes perfectly to all door types without the need for a mounting backplate.
- For the specifier/architect
- Compact design.
- Inexpensive, proven reliability.

Data and features		TS 68
Selectable closing force (variable via arm power shoe and templating	Size	EN 2/3/4
Door width	≤ 1100 mm	•
External doors, opening outwards		-
Non-handed		٠
Arm	Standard	•
	Slide channel	-
Closing speed adjustable at 2 seperate valves	180° – 15° 15° – 0°	•
Backcheck		0
Delayed action		_
Hold-open		0
Weight in kg		1.4
Dimensions in mm	Length Overall depth Height	220 45 53.5
Approved to AS1905 Part 1 Fire Resistant Doors (Backcheck model only)		•

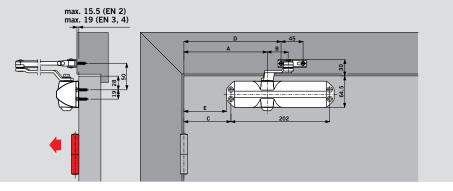
• Yes - No o Option





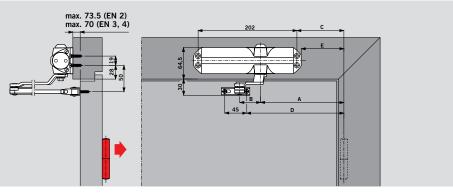
DOOR-LEAF FIXING, PULL SIDE

	EN 2	EN 3	EN 4
A	170	170	250
в	59	43	43
С	96	96	176
D	198.5	198.5	278.5
Е	87	87	167

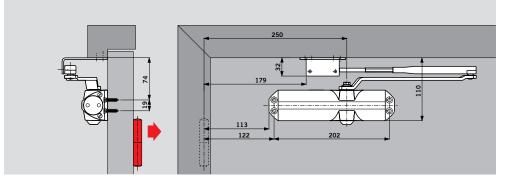


FRAME FIXING, PUSH SIDE

	EN 2	EN 3	EN 4
A	170	170	250
в	59	43	43
С	96	96	176
D	198.5	198.5	278.5
Е	87	87	167



PARALLEL ARM FIXING, PUSH SIDE



Standard equipment and accessories

Order-Number ■ = Closer with # = Accessory

XX 01

02

03

11

Colour	Door closer TS 68	Standard arm	Hold-open arm	Parallel arm bracket
silver brass dark brown				
white er-Number	Size EN 2/3/4	■ 664105xxBC ■ 664005xxNBC	■ 664008xx	660005xx #
= Closer with arm, complete = Accessory				
cification text				

Specification text Rack and pinion door closer with selectable closing force, size EN 2, 3 and 4 and adjustable closing speed in two independent ranges. Non-handed.

Model $\hfill\square$ with standard arm $\hfill\square$ with hold-open arm

Colour □ silver □ brass

□ dark brown

□ white (similar to RAL 9016)

Make DORMA TS 68



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Tasmania Telephone (03) 6225 4117





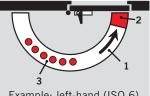


Door Closer

THE BUDGET DOOR CLOSER FOR STANDARD DOORS

- The economical solution for standard doors.
- Non-handed, suitable for standard, parallel arm and frame installation.

Functions



Example: left-hand (ISO 6) door, pull side fixing

- Fully controlled closing cycle.
- Backcheck version available for door and wall protection.

1 Fully controlled closing with

adjustable speed between

2 Adjustable latching action

3 Hold-open range if equipped

with hold-open arm (optional

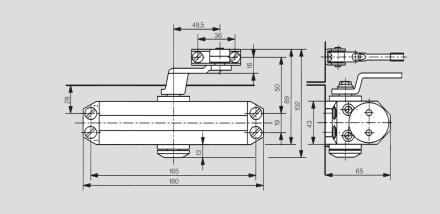
between 20° and 0°

180° - 20°

extra)

Data and features TS 77 Closing force Size EN 2 EN 3 EN 4 Standard doors 850 mm _ • _ 950 mm • ≤ 1100 mm _ • External doors, opening outwards _ Non-handed • • • Arm type standard scissor arm • • . Closing force variable at adjustment screw Closing speed variable by valve adjustment • • • Backcheck 0 0 0 Delayed action _ _ _ Hold-open 0 0 0 1.7 1.7 1.7 Weight in kg 180 Dimensions in mm Length Overall depth 65 43 Height

● Yes - no ○ Option



Specification text

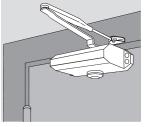
Rack-and-pinion door closer with hydraulically fully controlled closing cycle, non-handed.

Model:

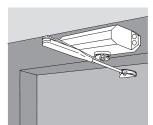
□ Size 2
□ Size 3
□ Size 4
□ With hold-open arm

Accessories: ____

Closer Colour: i silver Make: DORMA TS 77



ON THE PULL SIDE — Door leaf fixing (standard)



ON THE PUSH SIDE

Transom fixing (overhead installation)



WITH HOLD-OPEN ARM ASSEMBLY

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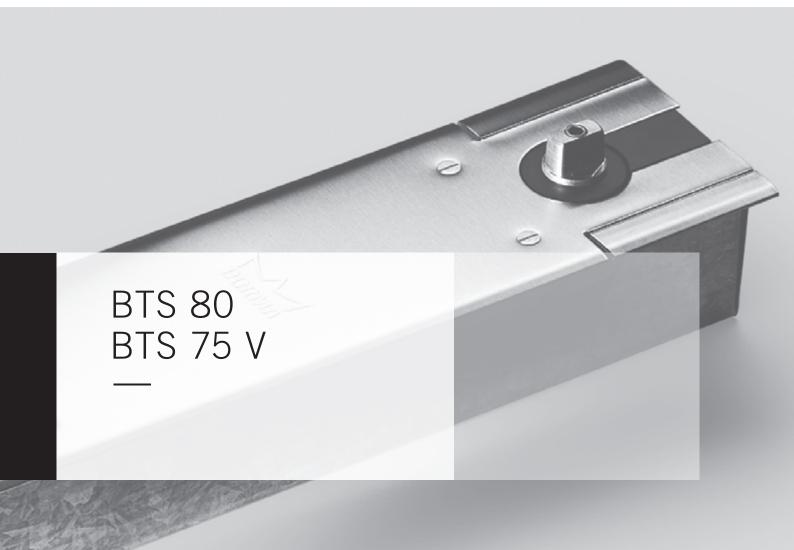
PARALLEL ARM

for parallel arm assembly (for installation dimensions, see fixing instructions)

> DORMA NZ Limited Head Office Building P 61-69 Patiki Road Avondale Auckland 1026 Telephone (09) 830 2052 Facsimile (09) 820 4909







Floor Springs

UNIVERSAL APPLICATION, INDIVIDUAL FUNCTIONS AND ASSURED QUALITY

Whether standard, narrow or wide, whether LH, RH, or single or double action – BTS 80 and BTS 75 V door springs are designed for all types of door. A comprehensive program of accessories ensures that they can be used successfully with a wide variety of door constructions and floor coverings. Thanks to a wide range of functions, which can be individually selected to suit different requirements, BTS 80 and BTS 75 V floor springs offer maximum reliability and quality.

Certified to ISO 9001.

Data and features		E	BTS 80 BTS				
Spring strength (EN)		3	4	6	1–4		
Spring strength adjustme	ent	_	-	_	•		
Standard and	≤ 950 mm	•	-	_	-		
external doors ¹⁾	≤ 1100 mm	_	•	_	•		
	≤ 1400 mm	_	-	٠	-		
For fire and smoke check	doors	-	-	-	•		
Max. leaf weight (kg)		300		120			
Non-handed, suitable					-		
for single and double act	ion doors		•		•		
Closing force variable by	means						
of adjustment screw			_				
Closing speed	175° – 0°		•		-		
adjustable by valve	175° – 15°		•				
	$15^{\circ} - 0^{\circ}$		_		•		
Backcheck, mechanical			٠		•		
Delayed action adjustable	e by valve						
(selectable alternative			•		-		
to the hold-open feature)							
Hold-open	Adjustable		•		-		
	Fixed 90°		_		•		
	Fixed 105°		_		•		
Coverplate secured to	cement box		-		_		
	floor spring		٠		•		
Weight in kg			7.1		3.0		
Dimensions in mm	Length		341		285		
	Overall depth		78		82		
		60		50			
Floor spring tested to EN		٠		•			
C€ mark for building prod	ucts						
(products with factory-fit	ted hold-open do		-		•		
not carry a CE mark)							

• yes - no

¹⁾ For particularly heavy doors and doors which have to close against wind resistance, we recommend the DORMA BTS 80.

Plus points

For the trade

- Reduced stock requirements because of separate, interchangeable spindles.
- Slim product range offering all key functions.

For the installer

- Suitable for installation with LH or RH single and double action doors.
- Interchangeable spindles enable easy adaptation to structural conditions – even when retrofitted.

For the architect/specifier

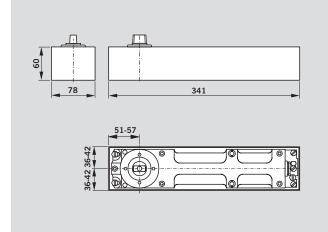
- Concealed installation for maximum visual elegance
- All essential functions provided
- Proven, robust design capable of withstanding leaf weights of up to 300 kg (BTS 80).

For the user

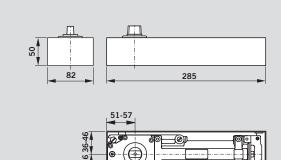
convenience.

- Constant, temperatureindependent closing cycle.
- Highly efficient mechanism gives maximum user

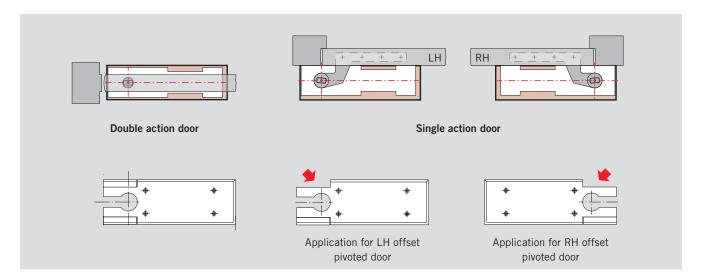
BTS 80



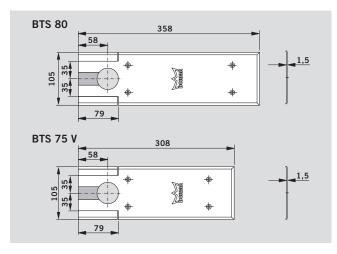
BTS 75 V



APPLICATION AND INSTALLATION



ACCESSORIES



Calculating the necessary length of spindle extension: Extension = X – Floor clearance (normally 8 mm) Collar height Z of the extended spindle inserts = Spindle extension length + 3 mm (collar height of the standard spindle insert)

Universal cover plate

Adaptable to right or left hand single action applications by simply snapping off the appropriate pre-blanked corner sections. For double action doors, the corner sections remain in place. The universal cover plate is available in stainless steel or satin brass (material thickness 1.5 mm).

Spindles

A range of interchangeable spindles is available to provide greater floor clearance if required (e.g. doors with thresholds, carpeted floors etc). Special spindles available on application: e.g. with flat face profile and 3° offset or square section; spindles for non-DORMA-specific accessories are also available.

DORMA 2300 sealing compound

For filling cavities between the floor spring body and the cement box to protect against moisture penetration. Information about other accessories such as **door straps and top centres** can be found in the "Accessories for DORMA BTS Floor Springs" leaflet

STANDARD EQUIPMENT AND ACCESSORIES

BTS 80 Floor spring	BTS 75 V Floor spring	Spind	lles		9				A		F					Sealing compound,
		Ð		Ę	Ţ			U	U						2300	
		normal	5	7,5	E 10	xtende 12,5	ed spi 15	ndle i 20	nserts 25	exte 28	nsion 30	in mr 35	n) 40	45	50	0.5 kg
		45200401	45200402	45200403	45200404	45200419	45200405	45200406	45200407	45200414	45200408	45200409	45200410	45200411	45200412	45090086
Including cement box and standard spindle																
EN 3	EN 1-4															
80120000	61701000	•	\triangle	\triangle	\triangle	\bigtriangleup	\triangle	\bigtriangleup	Δ	\bigtriangleup	\triangle	\bigtriangleup	\triangle	\triangle	Δ	Δ
EN 4 80110000	EN 1–4 with hold-open at 90° 61701200	•	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
EN 6 80130000	EN 1-4 with hold-open at 105° 61701300	•	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Including cement b	ox without spindle	_														
EN 3	EN 1-4															
80120001	61701001	\bigtriangleup	\triangle	\bigtriangleup	\triangle	\bigtriangleup	\bigtriangleup	\bigtriangleup	\triangle	\bigtriangleup	\triangle	\bigtriangleup	\triangle	\bigtriangleup	\triangle	Δ
EN 4 80110001	EN 1-4 with hold-open at 90° 61701201	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
EN 6 80130001	EN 1-4 with hold-open at 105° 61701301	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
	Universal cover plate															
46700000	46700059	Stair	less s	teel												
46700100	46700159	Satir	bras	S	5			5					Δ	7		

• Floor spring with spindle \triangle Accessories

SPECIFICATION TEXT

BTS 80

Universal non-handed floor spring conforming to DIN EN 1154 for single and double action doors up to max. 300 kg leaf weight. With adjustable closing speed and closing action from approx. 175°, with hydraulically fully controlled closing cycle and backcheck. With integral pressure compensation feature for temperature-independent hold-open between 75° and 175° (removable). With adjustable hold-open start point and delayed action (end of delayed action range adjustable between 75° and 105°). Including cement box.

Size□ EN 3 □ EN 4 □ EN 6

Accessories

- □ Spindle □ standard
- \Box ... mm extension
- □ special model ...
- □ Universal cover plate
 - (1.5 mm thick)
 - □ stainless steel
 - □ satin brass
- \Box Sealing compound

Make DORMA BTS 80

BTS 75 V

Universal floor spring conforming to DIN EN 1154, non-handed unit suitable for LH and RH single and double action doors up to 120 kg leaf weight, with adjustable spring strength (size EN 1 - 4) and closing speed, with closing action operational from approx. 175°. Featuring hydraulically fully controlled closing cycle and backcheck. Including cement box.

Models

- □ With spindle
- \Box Without spindle
- \Box Fixed hold-open at 90°
- □ Fixed hold-open at 105°

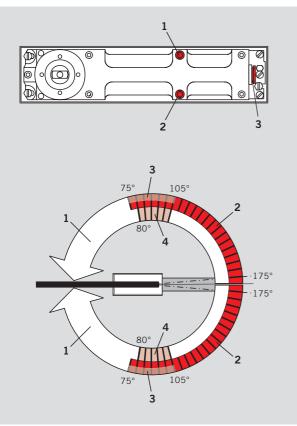
Accessories

- □ Spindle □ standard
 - \Box ... mm extension
- □ special model ...
- □ Universal cover plate (1.5 mm thick)
- □ stainless steel
- □ satin brass
- □ Sealing compound

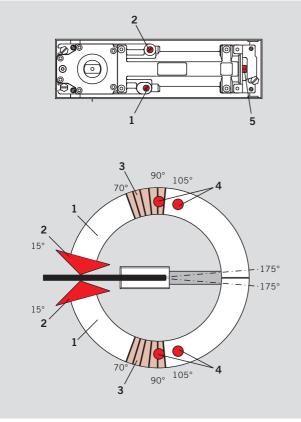
Make DORMA BTS 75 V

STANDARD AND OPTIONAL FUNCTIONS

BTS 80



BTS 75 V



- 1 Adjustable closing speed
- 2 Hold-open range or delayed action range
- **3** Adjustment range point at which hold-open begins, or end of delayed action range (approx. 75° to 105°).
- 4 Mechanical backcheck (from approx. 80°)

Hydraulic hold-open

The integrated hold-open function allows the door to be held open at any angle between 75° and 175°. The angle at which the hold-open function begins can be adjusted in the range of 75° to 105°.

Backcheck

The integrated mechanical backcheck function protects the wall and door from damage caused by excessively vigorous opening.

- 1 Adjustable closing speed in the range 175° – 15°.
- **2** Adjustable closing speed in the range $15^{\circ} 0^{\circ}$.

Closing speed

With two independently adjustable closing ranges $(175^{\circ} - 15^{\circ} \text{ and } 15^{\circ} - 0^{\circ})$ the DORMA BTS 75 V is ideally adaptable to different structural conditions.

Backcheck

The integrated mechanical backcheck function protects the wall and door from damage caused by excessively vigorous opening.

Delayed action

The delayed action function slows the door closing speed, thereby allowing disabled persons, mothers with pushchairs, staff with trolleys or hospital gurneys etc. to pass through the door without problem.

- **3** Mechanical backcheck (from approx. 70°).
- 4 Fixed hold-open at 90° or 105° (option).
- **5** Adjustable spring strength (EN 1–4).

Fixed hold-open (option)

With the fixed hold-open function the door can be held open at an angle of 90° or 105°, depending on model.

Not suitable for use on Fire doors.

certifire

The DORMA BTS 75 V is CERTIFIRE approved (Certificate No. 127) for door types ITT 60 and IMM, IMN 240.





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BTS 80 F/EMB/FLB/BSR

Floor spring system

DOOR CLOSER SYSTEM FOR SINGLE- AND DOUBLE-LEAF DOORS

The door closer system BTS 80 perform its function discreetly yet still meet exacting convenience and safety criteria and is suitable for doors up to 300 kg. The technique of floor spring is almost invisible placed in the ground.

The BTS 80 system with its 3 model variants BTS 80 F (Floor spring for fire and smoke check doors), BTS 80 EMB (with electro-hydraulic hold open), BTS 80 FLB (with freeswing function) and the wide range of accessories allows effective adaptability to various door desingn and -functions. In conjunction with the doorcoordinator BSR, a use at double-leaf doors is possible.





CONTENTS

BTS 80		
F/EMB/FLB/BSR	Features and functions	4
BSR	Door co-ordinator	6
BTS 80 System	Accessories	8
	Range of equipment and optional accessories	9
	Specification texts	10

WIDE RANGE OF FUNCTIONS, CONCEALED ASSEMBLY, ASSURED QUALITY

DORMA floor springs offer the perfect combination between freedom of creation and greatest reliability by their concealed floor mounting, providing a multitude of functions at the same time. Just as the requirements of preventive fire protection, the desire for barrier-free usage convenience and specific functions, like electrohydraulic hold-open and free-swing, is fulfilled. Long-term engineering experience and a manufacture certified according to ISO 9001 give the certainty of an assured and high quality.

Technical data		BTS 80 F	BTS 80 EMB	BTS 80 FLB
Closing force Size	up to 1100 mm	EN 4	EN 4	EN 4
Standard doors	up to 1250 mm	EN 5	EN 5	EN 5
	up to 1400 mm	EN 6	80 EMB 80 EN 4 E EN 5 E EN 6 E EN 5 E EN 6 E EN 6 E O 0 </td <td>EN 6</td>	EN 6
Closing force Size	up to 1100 mm	EN 4	EN 4	EN 4
Fire and smoke check doors	up to 1250 mm	EN 5	EN 5	EN 5
	up to 1400 mm	EN 6	EN 6	EN 6
Handed model	LH (ISO 6)	•	•	•
	RH (ISO 5)	٠	•	•
	Universal	•	٠	-
Closing speed vari by valve adjustme		•	•	•
Latching action va by valve adjustme		•	•	-
Backcheck, mecha	anical	•	•	_
Delayed action		-	-	_
Hold-open, electro Hold-open point s between 75 and 1	electable	-	•	_
Free swing 0–180	0	-	-	•
Weight in kg		7,1	7,7	7,7
Dimensions	Length	341	341	341
in mm	Overall depth	78	78	78
	Height	60	60	60
Power input in W		-	2,3	2,3
Operating voltage residual ripple ma		-	24	24
Rated for continue	ous duty	_	100	100
Door closer tested		•	•	•
to EN 1154				
	s tested	-	•	•

Plus points

For the trade

- Complete range for every application.
- Simple stock holding thanks to identical accessories being used throughout the DORMA BTS range.

For the installer

- Easy to install.
- Interchangeable spindle inserts, available to suit site conditions.
- For doors up to 300 kg in weight.

For the architect/specifier

- Concealed installation.
- Range of functions to suit all applications.
- Proven, robust unit for doors weighing up to 300 kg.
 All models tested and quality assured, and approved by the Institute for Building

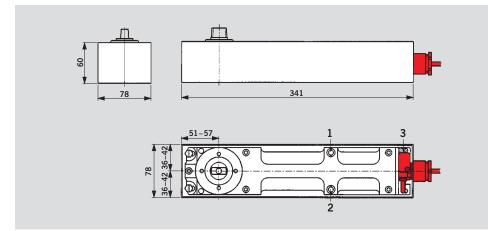
Technology, Berlin. For CERTIFIRE approvals see certificate no. 127 (BTS 80 F, EMB).

For the user

Reliable and fail safe.

- Closing speed unaffected by changes in temperature.
- Easy door operation thanks to high mechanical efficiency.

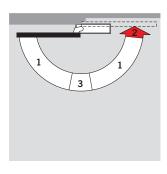
● Yes – No ○ Option



- 1 Closing speed adjustment valve
- 2 Latching speed adjustment valve (not available with the BTS 80 FLB)
- 3 Plug connector with cable for EMB and FLB power supply

BTS 80 F

Floor spring



1 Fully controlled closing with adjustable speed

- 2 Adjustable latching action
- 3 Mechanical backcheck

Example shows LH (ISO 6) door; mirrored arrangement applies to RH (ISO 5) door.

BTS 80 F can be used on fire and smoke check doors. The doors must be especially designed for the use with the floor spring (distance to door hinge pivot 36 mm). An additional approval of suitability in connection with the particular fire and smoke check door is required. For the use on legally approved fire door assemblies, the regulations of the respective notice of approval must be complied with.

F Approval certification

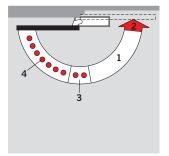
BTS 80 F has been approved, and is subject to third-party verifi-cation, by the State Material Testing Agency (MPA), /Dortmund, Germany.



CERTIFIRE approved for fire doors; Cert. no. 127

BTS 80 EMB

Floor spring with electromagnetic hold-open



- 1 Fully controlled closing with adjustable speed
- 2 Adjustable latching action
- 3 Mechanical backcheck
- 4 Hold-open range (fall back approx. 3°)

Example shows LH (ISO 6) door; mirrored arrangement applies to RH (ISO 5) door.

BTS 80 EMB can be used on fire and smoke check doors. The doors must be especially designed for the use with the floor spring (distance to door hinge pivot 36 mm).

An additional approval of suitability in connection with the particular fire and smoke check door is required. For the use on legally approved fire door assemblies, the regulations of the respective notice of approval must be complied with.

F Approval certification

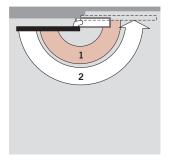
BTS 80 EMB has been approved by the Institute for Building Technology, Berlin, for use in combination with all common smoke detector systems. Acceptance inspection of the system is mandatory.



CERTIFIRE approved for fire doors; Cert. no. 127

BTS 80 FLB

Floor spring with free-swing feature (electro-hydraulically controlled spring detent)



- 1 Free-swing range
- 2 Fully controlled closing in the event of an alarm or interruption of the power supply

Example shows LH (ISO 6) door; mirrored arrangement applies to RH (ISO 5) door.

BTS 80 FLB can be used on fire and smoke check doors. The doors must be especially designed for the use with the floor spring (distance to door hinge pivot 36 mm). An additional approval of suitability in connection with the particular fire and smoke check door is required. For the use on legally approved fire door assemblies, the regulations of the respective notice of approval must be complied with.

F Approval certification

BTS 80 FLB has been approved by the Institute for Building Technology, Berlin, for use in combination with all common smoke detector systems. Acceptance inspection of the system is mandatory.

Certifire

CERTIFIRE approved for fire doors; Cert. no. 127

BSR

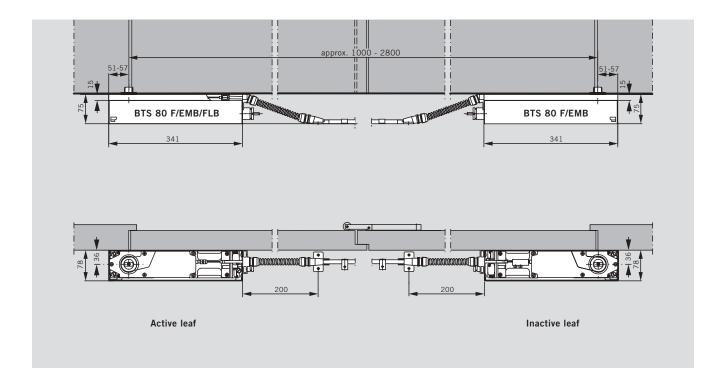
Door co-ordinator

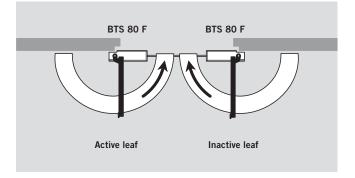
The BSR door co-ordinator ensures that, in double doors, the active leaf always closes after the inactive leaf. In the case of doors with full emergency escape hardware, the inactive leaf must be equipped with a carry bar.

F Approval certification

BSR is approved in Germany for use in combination with double fire and smoke doors by the State Material Testing Authority, Dortmund.

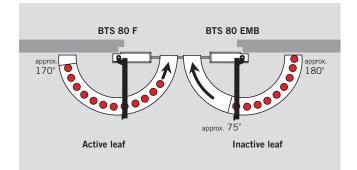
Further fire approvals exist or are pending in other countries. Additional approval certification of the relevant fire and smoke doors may be necessary.





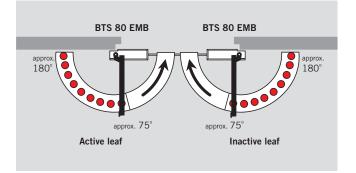
BSR

The door co-ordinator operates independently of the hydraulics of the floor springs and consists of two mechanisms, one for the active and one for the inactive leaf, which are inter-connected by a Bowden cable. BSR door co-ordinator is non-handed and is combined with BTS 80 F/EMB/FLB floor springs.



BSR EMB 1

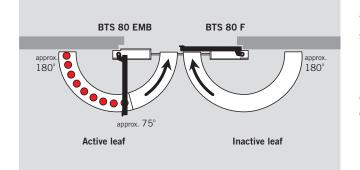
With just one hold-open device for the inactive leaf, this door co-ordinator enables both door leafs to be held open. The inactive leaf can be held open at a point between approx. 75° and 180° (fall-back approx. 3°), while the active leaf is held open by the door co-ordinator at any desired an



BSR EMB 2

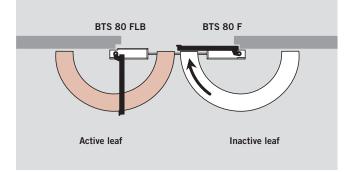
With this door co-ordinator, the active leaf can be held open independently of the inactive leaf.

The hold-open points of both leaves lie between approx. 75° and 180° (fall-back approx. 3°).



BSR EMB 1 G

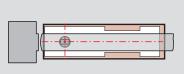
With this door co-ordinator for special door designs incorporating, for example, fixed side panels, or a narrow inactive leaf in asymmetric double door sets, etc., the active leaf can be held open separately. The hold-open point lies between approx. 75° and 180° (fall-back approx. 3°).



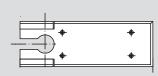
BSR FLB 1 G

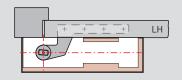
This door co-ordinator with integral free-swing function for the active leaf can also be installed where the doors are to remain free-moving but must nevertheless close.

APPLICATION AND INSTALLATION

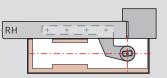


Double action door





Application for LH (ISO 6) offset pivoted door

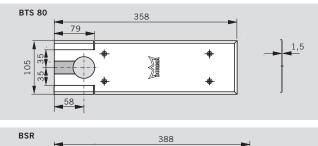


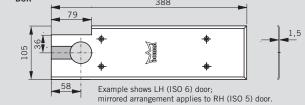
Single action door

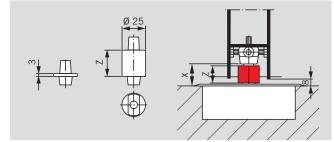


Application for RH (ISO 5) offset pivoted door

ACCESSORIES







Calculating the necessary length of spindle extension: Extension = X – Floor clearance (normally 8 mm) Collar height Z of the extended spindle inserts = Spindle extension length + 3 mm (collar height of the standard spindle insert)

Universal cover plate

Adaptable to right or left hand single action applications by simply snapping off the appropriate pre-blanked corner sections. For double action doors, the corner sections

Cover plate BSR

The cover plate in the version for LH- or RH-doors is available in stainless steel or satin brass (material thickness 1.5 mm).

Spindles

A range of interchangeable spindles is available to provide greater floor clearance if required (e.g. doors with thresholds, carpeted floors etc). Special spindles available on remain in place. The universal cover plate is available in stainless steel or satin brass (material thickness 1.5 mm).

application: e.g. with flat face profile and 3° offset or square section; spindles for non-DORMA-specific accessories are also available.

DORMA 2300 sealing compound

For filling cavities between the floor spring body and the cement box to protect against moisture penetration. Information about other accessories such as door straps and top centres can be found in the "Accessories for DORMA BTS Floor Springs" leaflet.

STANDARD EQUIPMENT AND ACCESSORIES

Floor s BTS 8	pring 0 F/EMB/FLB		Spind	les						17		A					Sealing compound,
	ing cement box		Ð		Ð		Ð							U			2300
withou	t spindle		lal								<i>,</i> .						
			normal	5	7,5	10	Extenc 12,5	led sp 15	indle i 20	nserts 25	(exter 28	nsion i 30	n mm 35) 40	45	50	
			45200401	45200402	45200403	45200404	45200419	45200405	45200406	45200407	45200414	45200408	45200409	45200410	45200411	45200412	45090086
BTS 80																	
EN 4	LH (ISO 6) RH (ISO 5) Universal	80220101 80220201 80220001		Δ	\bigtriangleup	Δ	\bigtriangleup	\triangle	Δ	Δ	\bigtriangleup	Δ	\bigtriangleup	Δ	\bigtriangleup	Δ	Δ
EN 5	LH (ISO 6) RH (ISO 5) Universal	80210101 80210201 80210001		Δ	\bigtriangleup	\bigtriangleup	\bigtriangleup	\bigtriangleup	\bigtriangleup	Δ	\bigtriangleup	Δ	\bigtriangleup	Δ	\bigtriangleup	\triangle	Δ
EN 6	LH (ISO 6) RH (ISO 5) Universal	80230101 80230201 80230001		Δ	Δ	Δ	Δ	Δ	Δ	Δ	\bigtriangleup	Δ	\bigtriangleup	Δ	Δ	Δ	Δ
BTS 80) EMB																
EN 4	LH (ISO 6) RH (ISO 5) Universal	82224101 82224201 82224001	Δ	Δ	\triangle	\triangle	\bigtriangleup	\triangle	\triangle	Δ	\triangle	\triangle	\triangle	Δ	\triangle	\triangle	Δ
EN 5	LH (ISO 6) RH (ISO 5) Universal	82214101 82214201 82214001	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
EN 6	LH (ISO 6) RH (ISO 5) Universal	82234101 82234201 82234001	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
BTS 80) FLB																
EN 4	LH (ISO 6) RH (ISO 5)	82124101 82124201		Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
EN 5	LH (ISO 6) RH (ISO 5)	82114101 82114201	Δ	Δ	\triangle	Δ	Δ	Δ	Δ	Δ	\triangle	Δ	Δ	Δ	Δ	Δ	Δ
EN 6	LH (ISO 6) RH (ISO 5)	82134101 82134201	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Univers	Iniversal cover plate																
	ss steel	46700000	-										Δ				
Satin b	rass	46700100	1														

Door co-ordinator B	SR	Floor spring	ç		Spindles			Cover Plates	
	A COL				Ð	Ð	Ĵ	LH (ISO 6)	
The second se					normal	Exter in r 5	nsion mm 25	Stainless steel Satin brass	46700080 46700280
Variant	45700900	BTS 80 F	BTS 80 EMB	BTS 80 FLB	45200470	45200471	45200477	RH (ISO 5) Stainless steel Satin brass	46700081 46700281
BSR	1 x	2 x							
BSR-EMB 1	1 x	1 x	1 x						Δ
BSR-EMB 2	1 x		2 x		Δ	\triangle	\triangle	1 x	LH
BSR-EMB 1 G	1 x	1 x	1 x		2 x	2 x	2 x	1 x	RH
BSR-FLB 1 G	1 x	1 x		1 x					

 \bigtriangleup Accessory

SPECIFICATION TEXT

BTS 80 F

Floor spring to EN 1154, with CE mark, with fully hydraulic control of the closing action from 180°, adjustable latching action and backcheck. Including cement box.

Size

Model □ LH (ISO 6) □ RH (ISO 5) □ Universal

BTS 80 EMB

Floor spring to EN 1154, with CE mark, with electro-hydraulic hold-open, to EN 1155 and integrated pressure compensation for constant, adjustable, temperature-immune hold-open between door opening angles of approx. 75° and 180°. With adjustable closing speed under full hydraulic control, adjustable latching action and backcheck.

BTS 80 FLB

Floor spring to EN 1154, with CE mark, with electro-hydraulic free-swing function to EN 1155 between door opening angles of 0° and $180^\circ\text{, closer function}$ (non-powered) effective from 180°, and with backcheck (non-powered). Including cement box.

BTS 80 BSR

Floor spring to EN 1154, with CE mark, with fully hydraulic control of the closing action from 180°, adjustable latching action, backcheck and door coordination function conforming to EN 1158, operating independently of the closer hydraulics, comprising an active leaf and an inactive leaf mechanism interconnected by a bowden cable.

Including cement box. Operating voltage: 24vDC Power input: 2.3 W Approved by the German Institute for Building Technology, Berlin, for use in hold-open systems. Acceptance inspection of the system is mandatory.

Operating voltage: 24vDC Power input: 2.3 W Approved by the German Institute for Building Technology, Berlin, for use in hold-open systems. Acceptance inspection of the system is mandatory.

Including cement box,

non-handed.

Size □ EN 4 □ EN 5 $\Box EN 6$

Model

Size

□ EN 4

□ EN 5

 $\Box EN 6$

□ RH (ISO 5)

□ EN 4 □ EN 5 $\Box EN 6$

> Size □ EN 4 □ EN 5 □ EN 6

Model □ LH (ISO 6) □ RH (ISO 5) □ Universal

□ LH (ISO 6)

Accessories

□ Universal cover plate (1.5 mm thick) □ stainless steel □ satin brass □ Spindle □ standard \Box . . . mm extension

□ Sealing compound

Make:

DORMA BTS 80 F

Accessories

□ Universal cover plate (1.5 mm thick) □ stainless steel □ satin brass □ Spindle \Box standard □...mm extension □ Sealing compound

Make:

DORMA BTS 80 EMB

Accessories

□ Universal cover plate (1.5 mm thick) □ stainless steel □ satin brass □ Spindle □ standard \Box . . . mm extension □ Sealing compound

Make:

DORMA BTS 80 FLB

Accessories

□ Cover plates (1.5 mm thick) □ stainless steel □ satin brass □ Spindle □ standard □...mm extension □ Sealing compound

Make:

DORMA BTS 80 BSR

BTS 80 BSR-EMB 1

Floor spring to EN 1154, with CE mark, with electro-hydraulic hold-open to EN 1155 at the inactive leaf and integrated pressure compensation for constant, adjustable, temperatureimmune hold-open between door opening angles of approx. 75° and 180°. With adjustable closing speed under full hydraulic control, adjustable latching action, backcheck and door co-ordination function conforming

BTS 80 BSR-EMB 2

Floor spring to EN 1154, with CE mark, with electro-hydraulic hold-open to EN 1155 at the inactive and active leaf and integrated pressure compensation for constant, adjustable, temperature-immune hold-open between door opening angles of approx. 75° and 180°. With adjustable closing speed under full hydraulic control, adjustable latching action, backcheck and door co-ordination function

BTS 80 BSR-EMB 1G

Floor spring to EN 1154, with CE mark, with electro-hydraulic hold-open to EN 1155 at the active leaf and integrated pressure compensation for constant, adjustable, temperatureimmune hold-open between door opening angles of approx. 75° and 180°. With adjustable closing speed under full hydraulic control, adjustable latching action, backcheck and door coordination function conforming

BTS 80 BSR-FLB 1G

Floor spring to EN 1154, with CE mark, with electro-hydraulic free-swing function at the active leaf between door opening angles of approx. 0° and 180°, closer function (non-powered) effective from 180°, with backcheck (non-powered) and door co-ordination function conforming to EN 1158, operating independently of the closer hydraulics, comprising an active leaf and an inactive leaf to EN 1158, operating independently of the closer hydraulics, comprising an active leaf and an inactive leaf mechanism interconnected by a bowden cable. Including cement box, non-handed.

conforming to EN 1158,

box, non-handed.

to EN 1158, operating

independently of the closer

leaf and an inactive leaf

box, non-handed.

box, non-handed.

hydraulics, comprising an active

mechanism interconnected by a

bowden cable. Including cement

mechanism interconnected by a

bowden cable. Including cement

operating independently of the

active leaf and an inactive leaf

mechanism interconnected by a

bowden cable. Including cement

closer hydraulics, comprising an

Operating voltage: 24vDC Power input: 2.3 W Approved by the German Institute for Building Technology, Berlin, for use in hold-open systems. Acceptance inspection of the system is mandatory.

Size □ EN 4

□ EN 4 □ EN 5 □ EN 6

Operating voltage: 24vDC Power input: 4.6 W Approved by the German Institute for Building Technology, Berlin, for use in hold-open systems. Acceptance inspection of the system is mandatory.

Size

□ EN 4 □ EN 5 □ EN 6

Operating voltage: 24vDC Power input: 2.3 W Approved by the German Institute for Building Technology, Berlin, for use in hold-open systems. Acceptance inspection of the system is mandatory.

Size

□ EN 4 □ EN 5 □ EN 6

Operating voltage: 24vDC Power input: 2.3 W Approved by the German Institute for Building Technology, Berlin, for use in hold-open systems. Acceptance inspection of the system is mandatory.

Size □ EN 4 □ EN 5 □ EN 6

Accessories

□ Cover plates

 (1.5 mm thick)
 □ stainless steel
 □ satin brass
 □ Spindle
 □ standard
 □ . . . mm extension
 □ Sealing compound

Make: DORMA BTS 80 BSR-EMB 1

Accessories

Cover plates

 (1.5 mm thick)
 stainless steel
 satin brass

 Spindle

 standard
 ... mm extension
 Sealing compound

Make: DORMA BTS 80 BSR-EMB 2

Accessories

Cover plates

 (1.5 mm thick)
 stainless steel
 satin brass

 Spindle

 standard
 ... mm extension
 Sealing compound

Make: DORMA BTS 80 BSR-EMB 1G

Accessories

Cover plates

 (1.5 mm thick)
 stainless steel
 satin brass

 Spindle

 standard
 ... mm extension
 Sealing compound

Make: DORMA BTS 80 BSR-FLB 1G





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Floor Spring

THE ECONOMIC DOUBLE ACTION FLOOR SPRING

Special shallow design optional hold-open.

The DORMA BTS 84 is a double action floor spring which has been specially developed for the aluminium and toughened glass door industries.

This unit is intended to complement our internationally acclaimed RTS concealed overhead door closer by giving the shopfitting industry the option of a DORMA quality

Plus points

For the trade

- Outstanding value for money.
- Also available with stronger and weaker springs for special requirements.

For the installer

- Easy installation thanks to shallow design.
- Easy to adapt to individual requirements with dual valve control 130° to 0° and 130° to 20°.
- Interchangeable spindle inserts available to suit site conditions.

floor spring designed for their particular purpose. The BTS 84 has many of the features of the other DORMA BTS closers with the addition of reduced depth and an array

of accessories designed for the aluminium door fabricator and toughened glass door manufacturer.

Certified to ISO 9001.

For the architect/specifier

- Concealed unit for invisible installation.
- Minimum floor recess dimension.
- Proven, robust unit for door weights up to 100 kg.

For the user

- Thermoconstant smooth operation.
- High mechanical efficiency for easy door opening.
- Optional single point
- hold-open

			BTS 84	
		EN 2	EN 3	EN 4
up to	850 mm	•	-	_
	950 mm	_	•	-
	1100 mm	-	-	•
			•	
			•	
			-	
			-	
			0	
			5.0	
Leng	th		306	
Width	า		108	
Heigh	nt		40	
N 1154			٠	
itted		-	•	٠
	Leng Width Heigh N 1154 ducts itted	950 mm 1100 mm Length Width Height N 1154 ducts	up to 850 mm • 950 mm - 1100 mm - Length Width Height N 1154 ducts - itted	EN 2 EN 3 up to 850 mm - 950 mm - - 1100 mm - - - - - <

● Yes - No ○ Option

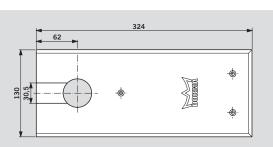
¹⁾ For applications involving particularly high or heavy doors, and doors which have to close against wind or draught conditions, the next larger closer size or the DORMA BTS 80 should be selected.

²⁾ Max. opening 130°.

Door stop necessary for doors which can open further than $130^\circ\!.$

- 巾 유 306 51-58 19-54 80
- 1 Valve for closing speed adjustment 130° – 0°
- 2 Valve for increasing closing speed 130° - 20°

Universal cover plate available in stainless steel or satin brass.



Standard and optional functions

Closing ranges

The floor spring has two controlled closing ranges: Valve 1: $130^{\circ} - 0^{\circ}$ sweep Valve 2: Increases the closing speed between 130° and 20° .

Hold-open

With the hold-open (optional extra), the door can be held at an angle of 90° .

Accessories

Applications and fixing instructions, door straps and top centres

See Technical Information "Floor spring accessories".

DORMA 2300 Sealing Compound

For filling the cavities between the floor spring body and the cement box to prevent moisture penetration Note

Closer and bottom strap must be

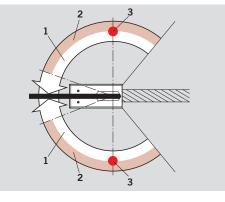
installed per fixing instructions

for door clearances shown to be

valid. Closers with extended

spindle inserts are used with

(mandatory according to e.g. VOB regulations for wet rooms).



- 1 First adjusting closing range
- (130° 0°)
- 2 Second adjusting closing range (130° – approx. 20°)
- **3** Hold open at 90° (optional extra)

tresholds, carpeted floors, terazzo pans or in cases where more clearance between door and floor is required. Surface finish: Zinc plated.

Extended spindle insert											
Spindle	Dimension "X"										
Extension	(Door Clearance)										
(mm)	(mm)										
Standard	8.0										
5.0	13.0										
7.5	15.5										
10.0	18.0										
12.5	20.5										
15.0	23.0										
20.0	28.0										
25.0	33.0										
30.0	38.0										
35.0	43.0										
40.0	48.0										
45.0	53.0										
50.0	58.0										

Sta	Standard equipment and accessories																		
			nal														Universal	cover plate	Sealing
B	oor spring TS 84 cluding	Floor spring BTS 84 including	O normal	5	7,5		nded 12,5	·	dle ir 20	nserts 25	s (ext 28	ensic 30	on in 35	mm) 40	45	50	Stainless steel	Satin brass	compound 2300 0.5 kg
st	ement box and andard vindle insert	cement box without spindle insert	45200401	45200402	45200403	45200404	45200419	45200405	45200406	45200407	45200414	45200408	45200409	45200410	45200411	45200412	46700022	46700023	45090086
Sta	Standard																		
EI	N 2 81125002	EN 2 81125001	\triangle	Δ	\triangle	Δ	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\bigtriangleup	\triangle	\bigtriangleup
EI	N 3 81110002	EN 3 81110001	\triangle	Δ	\triangle	Δ	\triangle	\triangle	Δ	Δ	\triangle	Δ	\triangle	Δ	\triangle	\triangle	\triangle	\triangle	\bigtriangleup
EI	N 4 81100002	EN 3 81100001	\triangle	Δ	\triangle	Δ	\triangle	\triangle	Δ	Δ	\triangle	Δ	\triangle	Δ	\triangle	Δ	Δ	Δ	\triangle
wit	h hold-open 90°)																	
EI	N 2 81225002	EN 2 81225001	\triangle	Δ	\triangle	Δ	\triangle	\triangle	Δ	Δ	Δ	Δ	\triangle	Δ	Δ	Δ	\triangle	Δ	\bigtriangleup
EI	N 3 81210002	EN 3 81210001	\triangle	Δ	\triangle	Δ	\triangle	Δ	\triangle	\triangle	\triangle	Δ	\triangle	Δ	\triangle	Δ	\triangle	\triangle	\bigtriangleup
EI	N 4 81200002	EN 4 81200001	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	\triangle	Δ

 \triangle Accessory

Specification text

Floor spring for double action doors, with hydraulic fully controlled closing from approx. 130°; including cement box and removeable spindle insert.

Size EN 2 EN 3 EN 4 Models Standard Hold-open 90°

Accessories

Universal cover plate
 Stainless steel
 Satin brass
 Extended spindle insert,
 ... mm extended
 Sealing compound

Make: DORMA BTS 84





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Floor spring

THE ECONOMIC FLOOR SPRING SPECIALLY DESIGNED FOR DOUBLE ACTION DOORS

Special shallow design **Optional hold-open**

Plus points

For the trade

For the installer

shallow design.

130° to 20°.

conditions.

Successfully tailored to satisfy the special requirements governing floor springs for double action doors, the BTS 65 also offers a particularly shallow design and thus all the advantages of a reduced installation depth.

Outstanding value for money.

Wide range of accessories

to accommodate various

Easy installation thanks to

Easy to adapt to individual

control 130° to 0° and

Interchangeable spindle

inserts available to suit site

requirements with dual valve

installation situations.

With two closing ranges and a choice of models, the BTS 65 can fulfil virtually any application requirement while providing all the reliability associated with assured quality from DORMA.

Certified to ISO 9001.

Technical Data		BTS 65					
Spring strength	Size	EN 3	EN 4				
Standard	≤ 950 mm	•	_				
and external doors ^{1) 2)}	≤ 1100 mm	-	•				
Max. door weight in kg		100	100				
Closing speed variable by valve adjustment		•	٠				
Backcheck		-	_				
Delayed action		-	-				
Hold-open point 90°		0	0				
Weight in kg, approx.		4.0	4.0				
Dimensions in mm	Length	276	276				
	Width	108	108				
	Height	40	40				
Door closer tested to EN 1154		•	•				
CE mark for building products (products with factory-fitted		•	•				

hold-open do not carry a CE mark)

● Yes - No ○ Option

 $^{\mbox{\tiny 1)}}$ For applications involving particularly high or heavy doors, and doors which have to close against wind or draught conditions, the next larger closer size or the DORMA BTS 80 should be selected.

1 Infinitely variable closing

speed in the range 130° – 0°.

2 Second closing range 130° – 20°.

3 Hold open at 90°

(optional extra).

130°

²⁾ Max. opening 130°.

Door stop necessary for doors which can open further than 130°.

Standard and optional functions

Closing ranges

The floor spring has two controlled closing ranges: Valve 1: 130° - 0° sweep Valve 2: Increases the closing speed between 130° and 20°.

Hold-open

• = Door stop

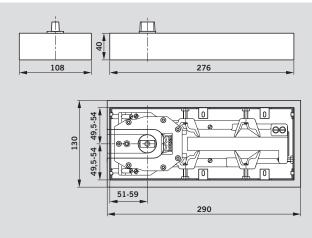
With optional integrated singlepoint hold-open at 90°.

2

90° 3 130° 20 20°

> 90° 3

Measurements



For the architect/specifier

- Minimum floor recess dimension.
- Rugged construction for door weights up to 100 kg.
- DORMA quality.

For the user

- Smooth closing operation virtually temperatureimmune.
- Low effort requirement ensures easy door operation.
- Optional integrated single-point hold-open at 90°.

2 DORMA

Applications and installation

The practical clamp fixing system of the BTS 65 ensures a secure and high-precision fit in the cement box.

The adjustment range in the cement box is as follows: Transverse 9 mm Longitudinal 8 mm Vertical 6 mm

Accessories

Applications and fixing instructions, door straps and top centres

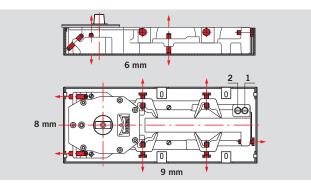
See Technical Information "Floor spring accessories DORMA BTS".

DORMA 2300 Sealing Compound

For filling the cavities between the floor spring body and the cement box to prevent moisture penetration (mandatory according to e.g. VOB regulations for wet rooms).

1 Valve for 130° – 0° closing speed adjustment

2 Valve for increasing the 130° – 20° closing speed

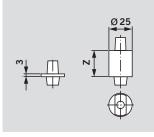


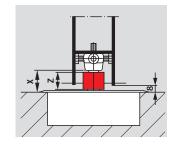
Spindle inserts

The floor clearance can be adjusted as required by simply replacing the insertion spindle with another size. Special spindle designs available on request – e.g. wide flats with 3° offset, square and spindle inserts for non-DORMA-specific accessories.

Universal cover plate

Available in stainless steel or satin brass.





Calculating the necessary length of spindle extension: Extension = X - Floor clearance (normally 8 mm)

Collar height Z of the extended spindle inserts = Spindle extension length + 3 mm (collar height of the standard spindle insert)

Options and accessories																		
Floor spring BTS 65	Floor spring BTS 65	normal			Exte	nded	spin	dle ir	serts	s (ext	ensio	on in	mm)				cover plate	compound
including cement box and	including cement box	0	5	7,5	10	12,5	15	20	25	28	30	35	40	45	50	Stainless steel	Satin brass	2300 0.5 kg
standard spindle insert, not pre-assembled	without spindle insert	45200401	45200402	45200403	45200404	45200419	45200405	45200406	45200407	45200414	45200408	45200409	45200410	45200411	45200412	46700086	46700186	45090086
Standard																		
EN 3 25030101	EN 3 25030100	\bigtriangleup	Δ	\triangle	Δ	\bigtriangleup	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
EN 4 25040101	EN 4 25040100		Δ	Δ	Δ	\triangle	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
With hold-open 90°																		
EN 3 25130101	EN 3 25130100	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
EN 4 25140101	EN 4 25140100	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
																		△ Accessory

Specification text

Floor spring for double action doors, with hydraulic fully controlled closing from approx. 130°; including cement box and removeable spindle insert.

Size □ EN 3 □ EN 4

Models

□ Standard □ Hold-open 90°

Accessories

Universal cover plate
 Stainless steel
 Satin brass
 Extended spindle insert,
 ... mm extended
 Sealing compound

Make DORMA BTS 65





DORMA Australia P/L Head Office 46-52 Abbott Road, Hallam, Victoria 3803 Telephone (03) 8795 0666 Facsimile (03) 8795 0280 Toll Free Facsimile 1800 333 309 DORMA NZ Limited Head Office Building P 61-69 Patiki Road Avondale Auckland 1026 Telephone (09) 830 2052 Facsimile (09) 820 4909





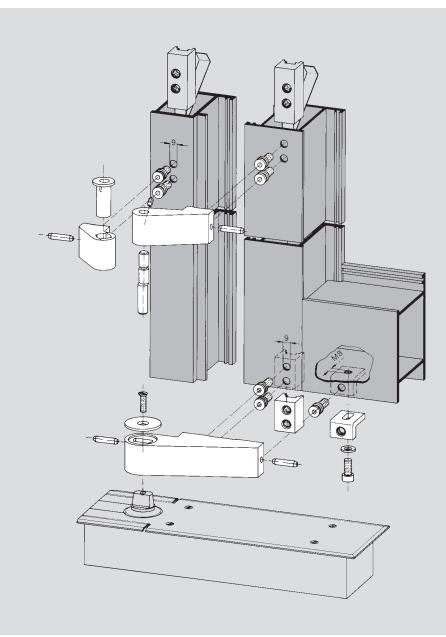
Floor Spring Accessories

FOR SINGLE ACTION ALUMINIUM DOORS

Aluminium door straps

Typical installation

- For flush-closing single action aluminium doors of various types
- Door width up to 1200 mm, door weight up to 120 kg
- Non-handed
- Easy to fix no milling or routing necessary, only 4 holes to drill
- Fast and simple installation with lock-pin arrangement
- Robust and secure installation with backplates and reinforcing angle bracket on door strap
- Steel insert press-fitted in aluminium door strap gives close tolerance connection to spindle.



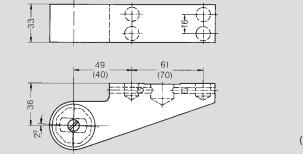
DORMA aluminium hinge, 36 mm, and DORMA aluminium door strap with BTS floor spring (or alternatively DORMA pivot bearing).

DORMA aluminium door strap

Art. No. 7459 Silver (EV 1, Euras C-0): Order No. 45010409 Special colours on request.

DORMA aluminium door strap

Art. No. 7459 B Silver (EV 1, Euras C-0): Order No. 45010482 Special colours on request.



() = Dimensions for 7459 B

Drill jig for aluminium hinges

For standard hinges (9 mm dia.), for IK (insulated construction) hinges (11 mm dia.) and also for 2 and 3-part hinges; indicate dimensions x and y or the profile.

Universal drill jig for aluminium door strap

Art. No. 7459 L Adjustable to suit various profile systems; for normal doors (9 mm dia.) and also for insulated doors, external fixing (11 mm dia.). Standard design: Order No. 45090074 B-type: Order No. 45090075

Universal drill jig for direct screw-fixing of aluminium door strap

Art. No. 7459 L/D Adjustable to various profile systems for direct fixing; for normal doors (9 mm dia.) and also for insulated doors, external fixing (11 mm dia.). Standard design: Order No. 45090077 B-type: Order No. 45090078

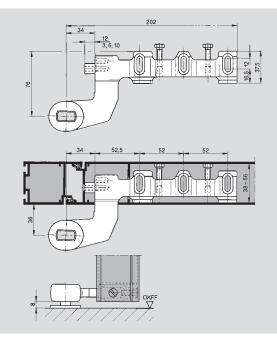
<image>

Door strap

Art. No. 7456/1 Drop forged steel; adjustable to various profile systems, non-handed. Order No. 45010006

Cover caps

See pages 4 and 5, Art. No. 7481 and 7482.



FOR SINGLE ACTION TIMBER DOORS (FLUSH-CLOSING)

Top centres

Door strap Art. No. 7411/56

zinc-plated.

Art. No. 7432 Stainless steel

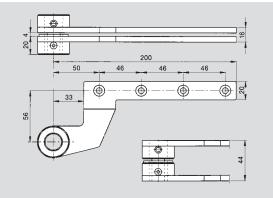
Drop forged steel,

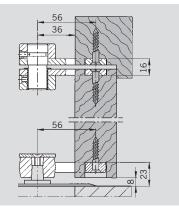
Order No. 45010003

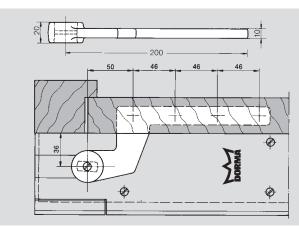
Order No. 45090030

Top washer for door strap

Art. No. 7411 K/56 Zinc-plated steel; with eccentric pin and bush for adjustment after hanging the door; non-handed. Order No. 45300016

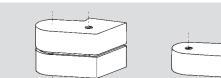






Cover caps

For top centres and door strap



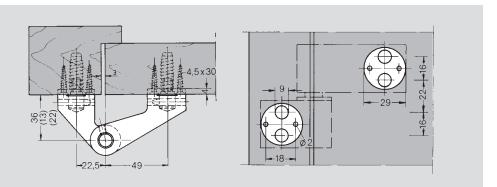
Order No. for cover caps	
for top centres, two parts	for door strap, single

	LH (ISO 6)	RH (ISO 5)
45500301	45055300	45051300
45500401	45055400	45051400
		45500301 45055300

LM pivot hinges with fixing for non-rebated timber doors

Туре

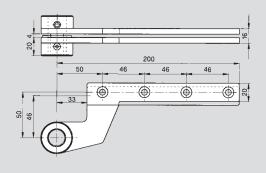
Offset in mm	Art. No.						
36	A-36.10						
22	A-22.10						
13	A-13.10						

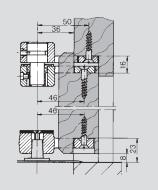


FOR SINGLE ACTION TIMBER DOORS (REBATED)

Top centres

Art. No. 7411 K/46 Zinc-plated steel; with eccentric pin and bush for adjustment after hanging the door; handed. LH (ISO 6) door Order No. 45305015 RH (ISO 5) door Order No. 45301015



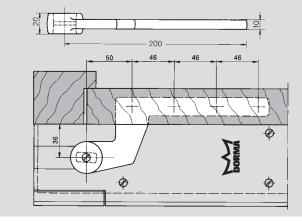


Door strap

Art. No. 7411/46 Drop forged steel, zinc-plated. Order No. 45010000

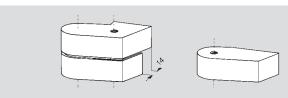
Top washer for door strap

Art. No. 7432 Stainless steel Order No. 45090030

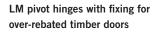


Cover caps

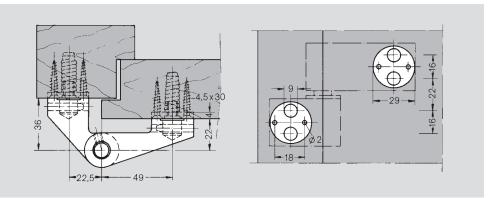
For top centres and door strap



Туре	Order No. for cover caps						
	for top centre	s, two parts	for door strap, single				
	LH (ISO 6)	RH (ISO 5)	LH (ISO 6)	RH (ISO 5)			
Die cast aluminium Art. No. 7483/7481							
Silver (EV 1, Euras C-0)	45505400	45501400	45055401	45051401			



Drill jig for flush closing and over-rebated doors Dimension x = 50.5 mm, Dimension y = 3 mm

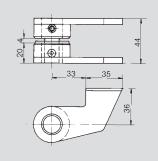


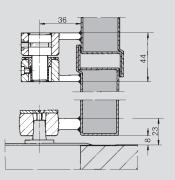
FOR SINGLE ACTION STEEL DOORS

Weld-on accessorie

Top centres

Art. No. 7431 K Steel, primed; with eccentric pin and bush for adjustment after hanging the door; non-handed. Order No. 45300012





Door strap Art. No. 7431 Drop forged steel, primed Order No. 4501000

Top washer for door strap Art. No. 7432

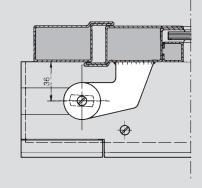
Stainless steel Order No. 45090030

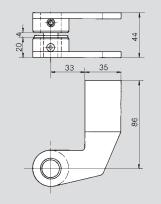
Cover caps see pages 4 and 5

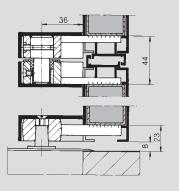
Weld-on accessorie

Top centres

Art. No. 7441 K Steel, primed; with eccentric pin and bush for adjustment after the door is hung; non-handed. Order No. 45300014





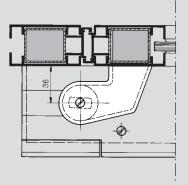


Door strap Art. No. 7441 Drop forged steel, primed Order No. 45010007

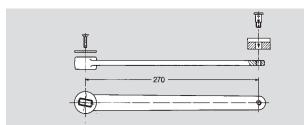
Top washer for door strap

Art. No. 7432 Stainless steel Order No. 45090030

Cover caps see pages 4 and 5



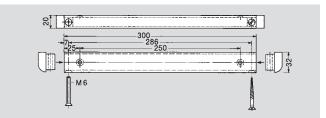
FOR BUTT HUNG DOORS



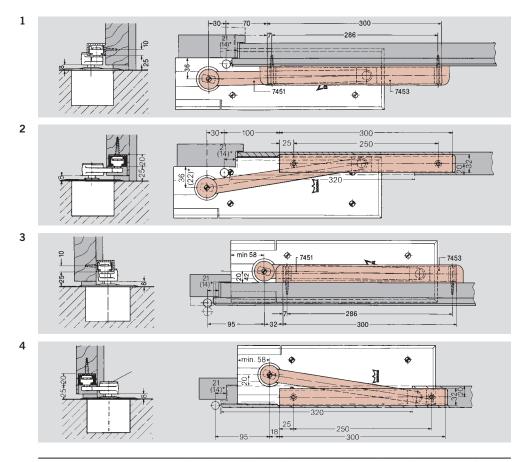
Swing lever Art. No. 7451 N Drop forged steel, including top washer 7432. Order No. 45090070

Example installations

()* = Offset for non-rebated doors



Guide housing Art. No. 7453 N Aluminium, anodised, silver (EV 1, Euras C-0). Order No. 45090053



Max. opening angle, backcheck activation angle and hold-open angle

			•		•	-					
			Door thickness in mm								
			0	Over-rebated door				Flush closing door			
	Inst	tallation	39	50	60	70	39	50	60	70	
Door opening* in °, max.	1			100				100			
	2		100			100					
	3		125	116	108	102	114	105	98	92	
	4		135	137	140	140	132	135	135	120	
Hold-open for BTS 80,	1	1 78			78						
and backcheck for BTS 75	2			85			85				
and BTS 80 in $^\circ$	3		60			60					
	4		52			52					
Hold-open for BTS 75 in °	1	105		95			100				
for following settings in $^\circ$	ettings in ° 2 90 90		0		90						
	3	105	83	85	87	90	86	90	92	95	
		120	102	105	107	112	108	111	115	120	
	4	105	73	75	77	79	76	78	80	83	
		120	90	93	95	98	95	100	102	105	

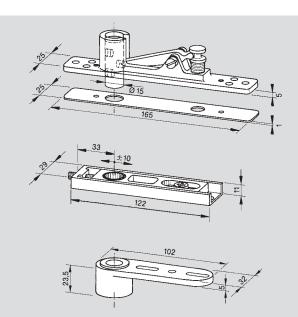
* Set door stop at maximum door opening. Owing to the differing pivot points of the floor spring and hinges, the backcheck is activated earlier, i.e. at an opening angle less than 85°.

This type of installation reduces the floor spring's power. To minimise this effect, make sure that the door is correctly hung and freerunning on its hinges. Detailed installation drawing available on request.

FOR DOUBLE ACTION STEEL, ALUMINIUM AND TIMBER DOORS

Adjustable top centres (zinc die-cast)

comprising an frame portion with adjustable pin for deep profiles up to max. 20 mm, and door portion with needle bearing (8067 with plastics bearing). For deeper profiles, the top centre assembly can be supplied with pins extended by 10 mm.



Frame portion 8062/8067 Order No. 46020031

Cover plate 8064 Order No. 46020044

Door portion 8062 Order No. 46020033

Door portion 8067 Order No. 46020011

Top centres complete

(Frame- and door portion) 8062 Order No. 46300003 8067 Order No. 46300005

Frame portion 8066 Order No. 46020036 Frame portion 7461* Order No. 46020050

Cover plate 8064 Order No. 46020044

Door portion 8066 Order No. 46020047

Door portion 7461 A* Order No. 46020048

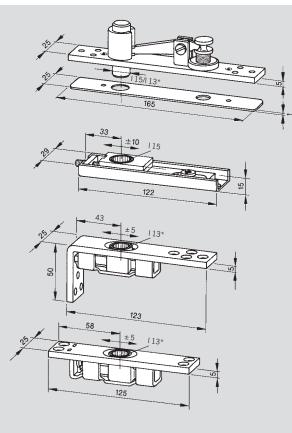
Door portion 7463 B* Order No. 46020049

Top centres complete (Frame- and door portion) 8066 Order No. 46300006

Adjustable top centres (steel)

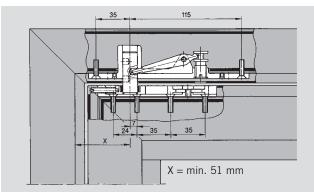
comprising an frame portion with adjustable pin for deep profiles up to max. 16 mm, and door portion with needle bearing. For deeper profiles, the top centre assembly can be supplied with pins extended by 10 mm.

* For door portions 7461 A and 7463 B, use frame portion 7461 with 13 mm dia. pin.

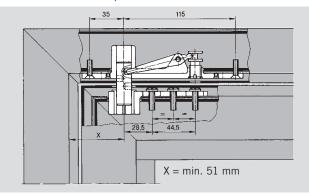


Typical installations

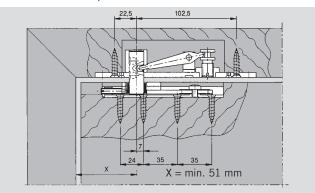
For aluminium doors Top centre 8062



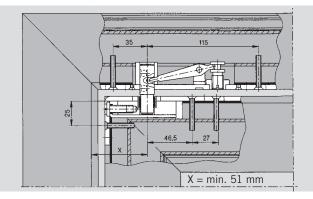
For aluminium doors Top centre 8067



For timber doors Top centre 8066

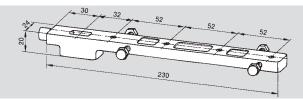


For steel doors Top centre 7461



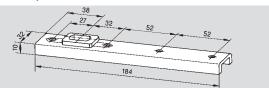
Bottom straps

Universal bottom strap Art. No. 7422



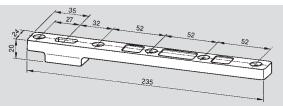
Drop forged steel, zinc-plated; adjustable to various frame profiles. Order No. 46010002

Bottom strap Art. No. 8021

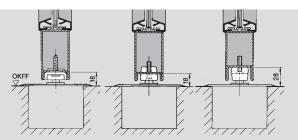


Zinc-plated steel; for door weights up to 100 kg. Order No. 45010410

Bottom strap Art. No. 7421

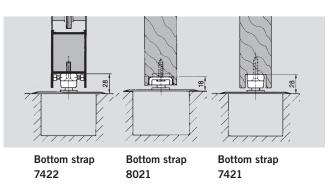


Drop forged steel, zinc-plated for door weights up to 300 kg. Order No. 46010001



Bottom strap 8021 Bottom strap 7421 with milled hole





PIVOT BEARINGS

Floor pivot beairng

Art. No. 7471 K with thrust roller bearing, load capacity max. 200 kg. Order No. 45070001

Art. No. 7471 AX with angular contact roller bearing, load capacity max. 300 kg. Order No. 45070002

Cover plate 7471 K/AX

Art. No. 7475 AX with angular contact roller bearing, load capacity max. 300 kg. Order No. 45070003

Also available in stainless steel. Art. No 8560 GE Order No. 65540059

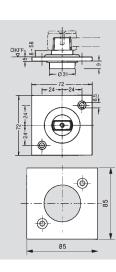
Weld-on pivot bearing

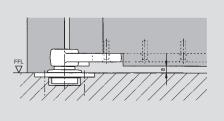
Art. No. 7472 K with thrust roller bearing, load capacity max. 200 kg, and door strap 7431 (see page 6) non-handed, bearing can be inserted from either side. Order No. 45070011

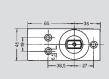
Weld-on pivot bearing

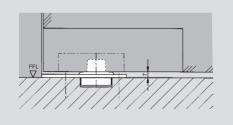
Art. No. 7474 K with thrust roller bearing, load capacity max. 200 kg, and welded-on reinforcing plate. LH (ISO 6) door: Order No. 45075007 RH (ISO 5) door: Order No. 45071007

AX model available on request (300 kg capacity).



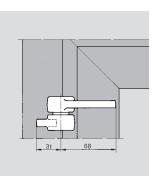


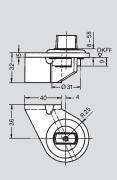




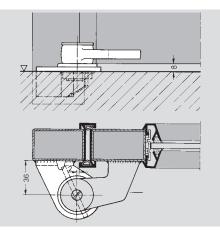
Weld-on hinge Art. No. 7472 M

Used as intermediate pivot and upper hinge; with eccentric pin and bush for adjustment after hanging the door; non-handed bearing can be inserted from either side. Order No. 45900008



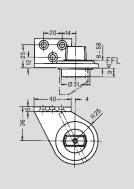


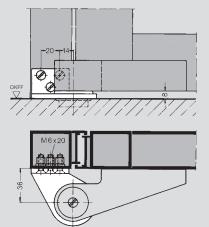
68



Screw-on pivot bearing

Art. No. 7473 K with thrust roller bearing, load capacity max. 200 kg. Suitable for timber, steel and aluminium doors. LH (ISO 6) door: Order No. 45075005 RH (ISO 5) door: Order No. 45071005





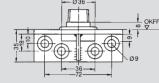
Art. No. 7476 AX with angular-contact roller bearing, load capacity max. 300 kg. Order No. 45070012

Spindle inserts, zinc-plated, for DORMA BTS floor springs

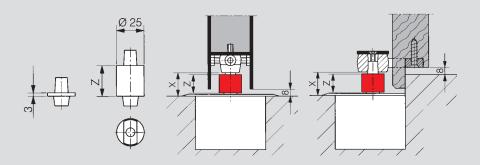
Length in mm	Order No.
Standard	45200401
+ 5.0	45200402
+ 7.5	45200403
+ 10.0	45200404
+ 12.5	45200419
+ 15.0	45200405
+ 20.0	45200406
+ 25.0	45200407
+ 28.0	45200414
+ 30.0	45200408
+ 35.0	45200409
+ 40.0	45200410
+ 45.0	45200411
+ 50.0	45200412

Note

Closer and bottom strap must be installed per fixing instructions for door clearances shown to be valid. Closers with extended spindle inserts are used with thresh-olds, carpeted floors, terazzo pans or in cases where more clearance between door and floor is required. Surface finish: Zinc plated.







Calculating the necessary length of spindle extension

Extension = \mathbf{X} – Floor clearance (normally 8 mm)

Collar height **Z** of the extended spindle inserts = Spindle extension length + 3 mm

(collar height of the standard spindle insert)

	Order No.
Sealing compou 2300	nd
0.5 kg	45090086
Cement boxes for floor springs	
BTS 80	45090056
BTS 75V 61701xxx	45090054
BTS 75V 61801xxx	45090055
BTS 84	1418700000





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Transom concealed door closer

DISAPPEARS INTO THE FRAME

Ideal for shopfitting. For both double and single action doors. Elegant, versatile, practical and quality assured.

The RTS 85 offers a solution for installations where door control must be provided without disturbing the aesthetic appearance of the door. The majority

Plus points

For the trade

- Just one body for all types of fixing.
- Low inventory costs and minimal stocking requirement thanks to unit packs for closer body and accessories.

For the fabricator

- Can be used for double action doors, or left and right hand single action doors.
- Installation and setting adjustment possible before fixing the doorset on site.
- No floor preparation necessary.
- Positive "zero" position for double action doors – easy to adjust.
- Comprehensive range of accessories.

of preparation can be accomplished by the fabricator prior to installation, leaving minimal on-site work. A complete line of accessories is available to accommodate virtually any door and frame configuration.

Certified to ISO 9001.

For the architect/specifier

- Aesthetically impressive solution – especially with toughened glass doors.
- Ideal for shopfitting applications.

For the user

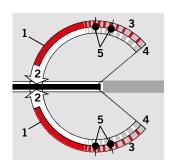
- No cluttering of door or floor appearance.
- Backcheck to prevent door contact with the frame.
- Smooth closing with adjustable closing speed.

Technical Data				RTS 85		
Closing force			EN 3	EN 4	EN 5	
Internal doors up	to	950 mm	•	-	-	
and external doors ¹⁾		1100 mm	-	•	-	
		1250 mm	-	-	•	
Same model for double acti	Same model for double action doors,					
RH (ISO 5) and LH (ISO 6)				•	•	
Closing speed			•	•	•	
variable by valve adjustmen	t			•	•	
Final closing speed			•		•	
variable by valve adjustmen	t		•	•	•	
Backcheck, progressive, me	chai	nical	•	•	•	
Backstop, mechanical			•	٠	•	
Hold-open		105°	0	0	0	
		90°	0	0	0	
Extended spindle		5 mm	0	0	0	
		10 mm	0	0	0	
Reduced pivot point			0	0	0	
for tempered glass doors		(65 mm)	0	0	0	
Weight in kg			4.7	4.8	4.9	
Dimensions in mm		Length	323	323	323	
		Width	90	90	90	
		Height	38	38	38	
Door closer tested to EN 11	54		•	•	•	

● Yes - No ○ Option

¹⁾ Max Door weight 110 kg

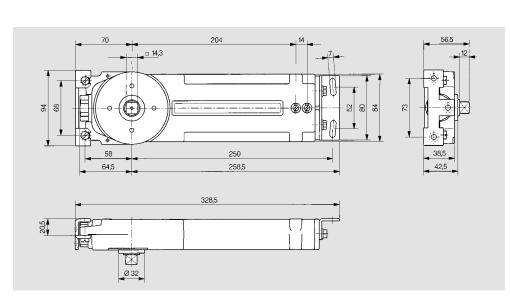
For applications involving particularly heavy or wide doors, and doors which have to close against wind resistance, the next highest door closer size should be selected.



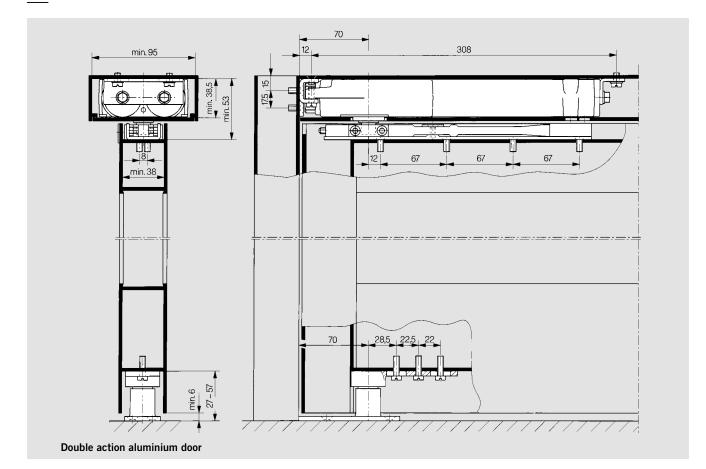
Standard and optional functions

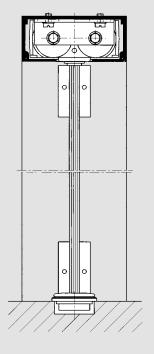
- 1 Fully controlled closing with adjustable speed
- 2 Adjustable final closing
- 3 Progressive mechanical backcheck
- 4 Mechanical backstop**
- 5 Hold-open points depending on model (optional) 105° or 90°

**Door opening angle max. 130° on both sides; in the case of heavy doors which can be opened further, door stops must be used. In the case of single action doors, the opening angle may be reduced depending on the door design.

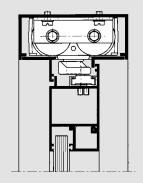


TYPICAL APPLICATIONS

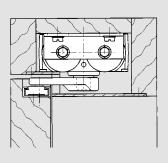




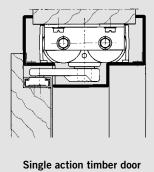
Double action tempered glass door with aluminium frame



Single action double rebated aluminium door



Single action timber door



in a steel frame

Detailed installation drawings on a scale of 1:1 will be provided on request.

ACCESSORIES FOR DOUBLE ACTION AND CENTRE PIVOTED SINGLE ACTION DOORS (70 MM PIVOT POINT)

Side-load installation

Side-load installation is achieved by offering the door in the closed position, onto the floor pivot. The closer arm, fitted in the upper door rail, is connected to the spindle and secured with a clamping piece.

1 Closer arm with arm channel

Art.-No. 8530 for top rails with min. 15 mm channel depth and 38 mm width.

2 Floor pivot set, total height 27 mm

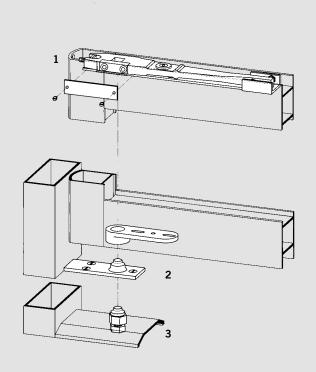
Art.-No. 8550 for bottom rails with channel depth of 18–20 mm. Floor portion of pivot is fitted directly to floor.

Floor pivot set, total height

57 mm Art.-No. 8551 for bottom rails with channel depth of 18–50 mm. (Floor portion may be shortened to suit bottom rail.) Floor portion of pivot is fitted directly to floor.

3 Threshold pivot set

Art.-No. 8554 for bottom rails with channel depth of 25 mm. Floor clearance: 5 mm. Floor portion is fitted directly to threshold. (Upper portion same as 2).



End-load installation

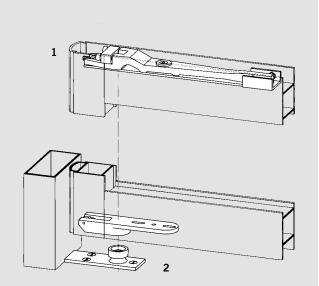
End-load installation is achieved by offering the door, in the open position, onto the floor pivot and spindle simultaneously. The floor pivot locks automatically, connection to spindle is secured with a clamping piece.

1 Closer arm with arm channel Art.-No. 8534

for top rails with min. 21 mm channel depth and 35 mm width.

2 Floor pivot set, total height 27 mm

Art.-No. 8552 for bottom rails with channel depth of 18–20 mm. Floor portion of pivot is fitted directly to floor.



ACCESSORIES FOR BUTT HUNG OR OFFSET PIVOTED SINGLE ACTION DOORS

Single action doors hung on butt hinges or offset pivots can be connected to the closer with slide arm and channel assemblies. Please note that this application may reduce the maximum opening angle available on the door. Similarly, if a hold-open model has been selected, the hold-open point will be altered: eg instead of 105°, the position will lie between 90° and 100°, depending on door thickness.

Note:

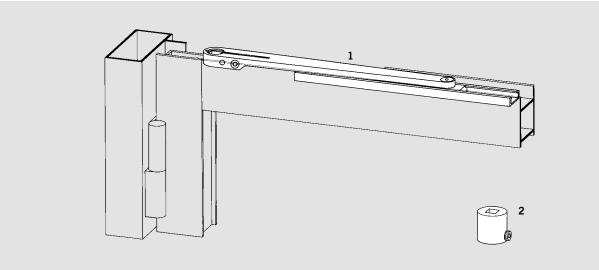
Maximum door opening with slide arm and channel assemblies –105°. Consult our Technical Service Department giving specific details for slide arm and channel assemblies. Drawings of door and frame details must be submitted together with the

pivot centre of the hinge.

1 Slide arm and channel Art.-No. 8510

2 Weld-on extension

Art.-No. 8521 For steel doors, 40 mm long (can be shortened), 38 mm dia.



ACCESSORIES FOR TEMPERED GLASS DOORS (65 MM PIVOT POINT)

For tempered glass doors, the RTS 85 is used with a special fixing bracket, Art.-No. 8520 G, giving a 65 mm pivot point. The standard patch fittings can thus be used with appropriate inserts.

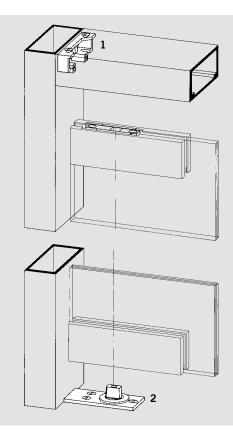
(Patch fittings with insert available from DORMA-Glas range of products).

1 Fixing bracket

Art.-No. 8520 G For fixing the RTS in the transom.

2 Floor pivot bearing with flat-tapered spindle

Art.-No. 8560 G With sealed roller bearing assembly, rust-protected, for max. door weights of 110 kg. The floor pivot bearing combined with appropriate bottom straps from the accessories range for DORMA BTS floor springs is also suitable for aluminium, steel and timber doors.



RTS 85 FOR DOUBLE AND SINGLE ACTION DOORS

Door closer RTS 85	Standard model	Standard model with hold-open 105°	Standard model with hold-open 90°	with spindle insert 5 mm extended	with spindle insert 5 mm extended and at 105°	with spindle insert 5 mm extended and at 90°	with spindle insert 10 mm extended	with spindle insert 10 mm extended and at 90°
EN 3	85311101	85313101	85312101	85311102			85311103	85312103
EN 4	85321101	85323101	85322101	85321102	85323102	85322102	85321103	85322103
EN 5	85331101	85333101	85332101	85331102			85331103	85332103
Accessories	Closer arm with bracket	Floor pivot set, height 27 mm	Floor pivot set, height 57 mm	Threshold pivot set 1″			Closer arm with channel for single action doors	Weld-on extensions
Side-load installation	85210005	65310300	65410300	65510400			85210001	85110001
End-load installation	85210009	65320300						

RTS 85 FOR TEMPERED GLASS DOORS

Door closer RTS 85 G	Standard model	Standard model with hold-open 90°	with spindle insert 5 mm extended
EN 3	85311301	85312301	85311302
EN 4	85321301	85322301	85321302

Accessories	Floor pivot set	Floor pivot set 5 mm extended	Floor pivot set 10 mm extended	Floor pivot set 15 mm extended	Floor pivot set stainless steel
for RTS 85 G	65540000	85210025	85210026	85210027	65540059

SPECIFICATION TEXT

Transom concealed door closer
with built-in cushion backcheck,
adjustable closing speed and
sweep range.

Model

For both single and double action doors

 (pivot point 70 mm)

 For tempered glass doors

 (pivot point 65 mm)

Make: DORMA RTS 85

Size □ EN 3

□ EN 4 □ EN 5

 Non hold-open
 Hold-open at 105°
 Hold-open at 90°
 With spindle insert 5 mm extended
 With spindle insert 10 mm extended □ Closer arm Art.-No. _____ □ Floor pivot set Art.-No. _____





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Transom Concealed Door Closer

THE TRANSOM CLOSER SOLUTION FOR DOORS WITH ELECTRONIC SECURITY INSTALLED

Ideal for shopfitting for single action security doors, the RTS 84 provides a concealed, versatile, practical and quality assured solution. The DORMA RTS 84 overcomes the common problem associated with transom concealed closers and electronic security installations. Combining a 3° offset spindle to the RTS 84 removes the threat of inefficient door closing due to the non positive pressure associated with pivot mechanisms.

Plus points

For the trade

- Available on request with weaker spring for special requirements
- Just one body for all types of fixings
- Retrofitable in place of most standard transom closers

For the installer

- No floor preparation necessary
- Comprehensive range of accessories
- Installation and setting adjustment possible before fixing the door set on site

Especially designed for single action pivot doors utilising electronic security, the RTS 84 maintains the aesthetic appearance of the door or floor surface. The majority of preparation can be accomplished by the fabricator prior to installation, leaving minimal on-site work. A complete line of accessories is available to accommodate virtually any door and frame.

Data and features		RTS	84
Spring strength		EN	EN
		2	4
Standard doors	up to 850mm	0	-
	1100mm	-	•
Single action doors	(ISO5 handing)	*	*
	(ISO6 handing)	*	*
Closing speed variable by		•	•
valve adjustment			
Backcheck		-	-
Delayed action		-	-
Hold open point 90°		0	0
Weight in kgs		5	5
Dimensions in millimetres	Length	315	315
(body and fixing brackets	Width	94	94
only)	Height	38.5	38.5

● Yes - No ○ Option * Handed product

For the specifier/architect

- Ideal for shop fitting and office door applications with electronic security installed
- Concealed unit for invisible installation

For the user

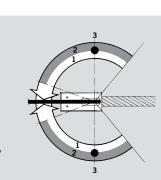
- No cluttering of door or floor appearance
- Optional single point hold open
- Peace of mind knowing that your electronic security will engage by having the right transom closer installed for secure applications

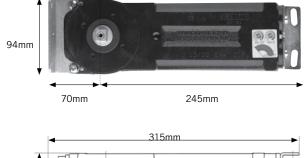
1) Maximum door opening angle 130° Door stop necessary for doors which can open further than 130°

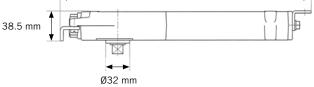
2) Maximum door weight for floor pivot -

8550 and 8551 - 90kgs 8560G with 7421 or 7422 bottom strap - 200kgs

- 1 First adjusting closing range (130° - 0°)
- 2 Second adjusting closing range (130° - 20°)
- 3 Hold Open at 90° (optional extra)







The 3° offset spindle supplied as standard with all RTS84 transom closers provides for dependable positive pressure, securing doors against installed electronic security locks. (ISO5 handing shown)



ACCESORIES FOR SINGLE ACTION CENTRE PIVOTED DOORS WITH SIDE LOAD INSTALLATION (70MM PIVOT POINT)

Art.-No. 8530

Side load installation is achieved by offering the door in the closed position, onto the floor pivot. The closer arm, fitted in the upper door rail, is connected to the spindle and secured with a clamping piece.

1 Closer arm with arm channel

For top rails with a minimum 15mm channel depth and 38mm width. Minimum timber door thickness 48mm.

2 Closer arm side load Art.-No. D080.12 For timber doors with a minimum door thickness of 35mm. For doors above 48mm use Art.-No. 8530 Closer arm with arm channel.

3 Floor pivot set, total height 27mm Art.-No. 8550 For bottom rails with channel depth of 18-20mm. Floor portion of pivot is fitted directly to floor. Typical bottom pivot for timber door application.

4 Floor pivot set, total height 57mm Art.-No. 8551 For bottom rails with channel depth of 18-50mm. (Floor portion maybe shortened to suit bottom rail). Floor portion of pivot is fitted directly to floor. Typical bottom pivot for aluminium door application.

5 Floor pivot bearing with flat tapered spindle Art.-No. 8560G With sealed roller bearing assembly, rust protected, for maximum door weights of 200kg when used with the RTS84, 7421 or 7422 bottom strap. Special pivots also available with extended spindles of 5, 10, 15, 20 and 50mm. Also available with standard spindle height for special environments (e.g. wet rooms) in stainless steel; Art.-No. 8560GE. Furthermore suitable for use on frameless glass doors when combined with DORMA bottom patch fittings and rails.

Art.-No. 7422 6 Bottom strap for Aluminium door Drop forged steel, zinc plated; adjustable to various frame profiles, for use with the 8560G bottom pivot.

7 Bottom strap for Timber door Art.-No. 7421 Drop forged steel, zinc plated door strap, for use with the 8560G bottom pivot.

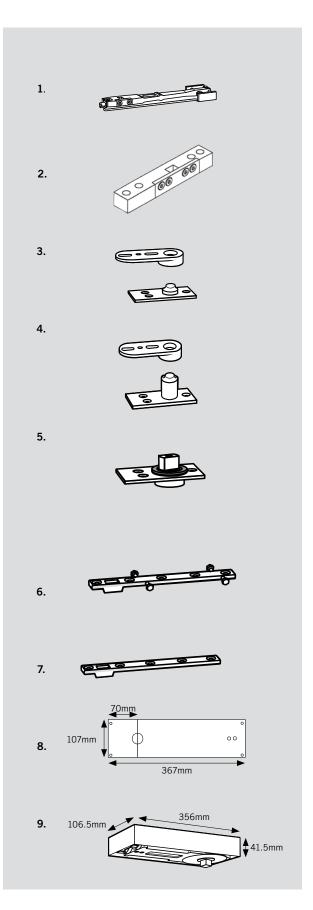
8 Cover plate

Art.-No. RTS84S

Cover plate for concealing transom closer in pressed metal or timber frames or plaster ceiling installations.

9 Metal box

Art.-No. RTS85MB Designed for ease of installation as a weld in option for pressed metal door frames or for mounting to steel or timber support structures in the ceiling. The metal box is pre prepared for the supplied fixing brackets and screw on cover plate.







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Concealed cam-action door closer system

DORMA ITS 96



Uncompromising technical sophistication

The DORMA ITS 96 has ushered in a new era in door closer technology. The closer body and slide channel are so compact that they can be installed out of sight in doors and their frames. These devices offer the same high quality expected of DORMA door closers, as characterised by their ease of operation for the user, and wide range of functions. Thanks to the exceptionally

slender dimensions of the unit, the DORMA ITS 96 can be installed in virtually all doors with thicknesses of 40 mm or more, and offers all the advantages of quality assured manufacture with third-party auditing.



Plus points

For the trade

- Low inventory costs and reduced stocking requirements thanks to streamlined modular system and separate packaging of closer body and slide channel assemblies.
- Tailor-made applications with special accessories.

For the installer

- Non-handed system.
 Can be incorporated within the door pre-fabrication
- process, allowing complete installation in the factory.
- Easy adjustment of the closing strength, closing speed and latch action after hanging of the doors.

For the specifier/architect

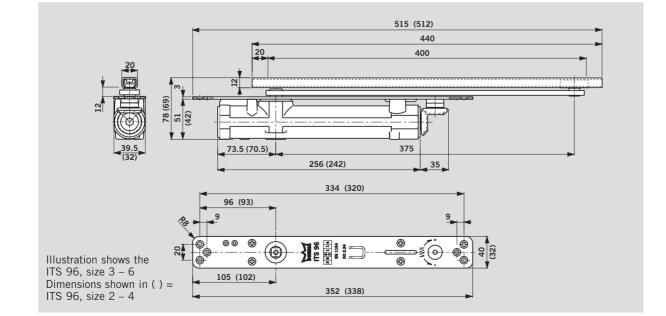
- Unblemished appearance of prestige doors thanks to concealed installation.
- Ideal for doors integral to the interior design.

For the user

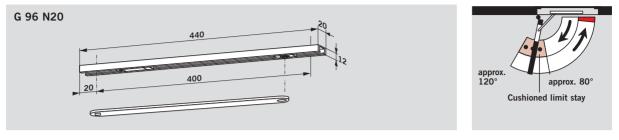
- Optimum protection against vandalism thanks to the concealed installation.
- Enhanced user convenience and fully controlled, reliable closing with
- adjustable latch action.
 Cushioned limit stay with progressive damping for protection of wall and door.

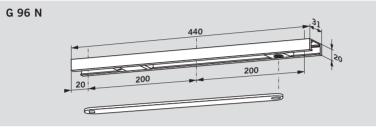
Data and features		ITS	96
Variable closing force	Spring strength	EN 2-4	EN 3–6
Standard doors	up to 1100 mm up to 1400 mm	•	•
External doors, outward oper	ning	_	_
Fire and smoke check doors	up to 1100 mm up to 1400 mm	•	•
Door leaf thickness	equal to/greater than 40 mm equal to/greater than 50 mm	•	-
Max. door leaf weight in kg		100	180
Non-handed design		•	٠
Arm	Slide channel	•	٠
Closing force variable by mea of adjustable screw	ans	•	•
Closing speed adjustable by	means of valve	•	•
Latching speed adjustable by means of valve		•	•
Cushioned limit stay, mechai	nical	•	•
Delayed action		-	-
Hold-open		0	0
Max. door opening angle (depends on door design)		approx	к.120°
Weight in kg		1.3	2.5
Dimensions in mm	Length Width Height	277 32 42	291 39.5 51
Door closer tested to EN 115	U	•	•
• Yes - No Option			

• Yes – No • Option



Slide channels





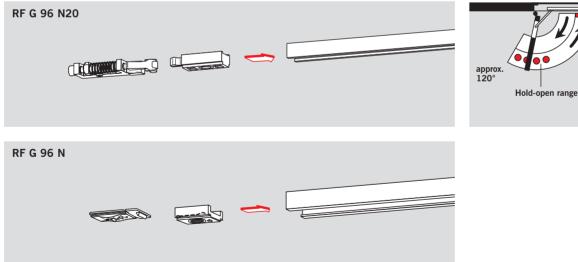
The **DORMA G 96 N20** resp. **G 96 N** slide channel pack includes the arm, slide channel, slide block, cushioned limit stay and fixing screws, and can be combined with both door closer sizes in the DORMA ITS 96 range. The slide channel is non-handed.

F Approval certification

The G 96 N20 and G 96 N slide channel is tested to EN 1154 A in conjunction with the DORMA ITS 96. Additionally, it has CERTIFIRE approval for use on timber FD30 and FD60 doors (code ITT), when installed with

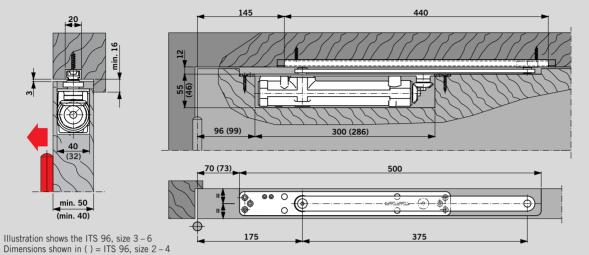
the approved intumescent gasket set for FD30 or FD60 supplied by DORMA UK. The length, width and high of mortice for the slide channel must be increased by 2 mm to accommodate the gasket.

Hold-open units

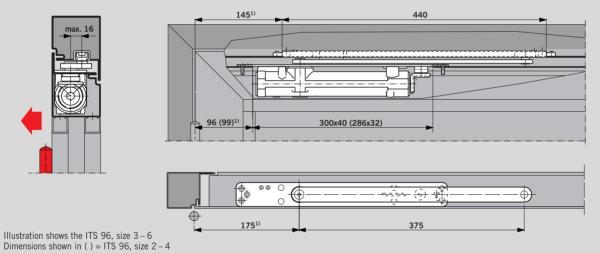


The **DORMA RF** hold-open unit enables doors to be securely held without any fall-back at precisely the required position up to an opening angle of approx. 120°. The hold-open function can be easily switched on and off by the user (only RF G 96 N), and the release force can be adjusted to the door type concerned. The DORMA RF mechanism is non-handed and has been specifically designed for retrofitting to the G 96 N slide channel. Not for fire and smoke check doors.

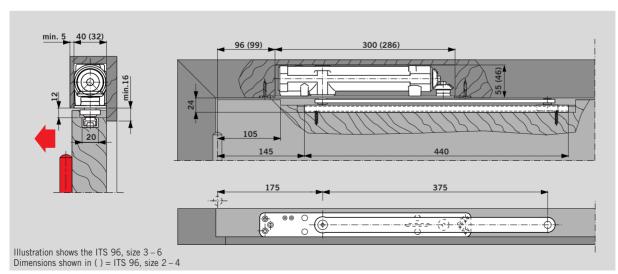




DORMA ITS 96 door closer with DORMA G 96 N20 slide channel in a **timber door** Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.



DORMA ITS 96 door closer with DORMA G 96 N20 slide channel in an aluminium framed door Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors. ¹⁾ Add 25 mm for aluminium profile frames with corner-angle reinforcement.



DORMA ITS 96 door closer with DORMA G 96 N20 slide channel in a timber door-transom fixing Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.



Adjustment of settings

The functions of the DORMA ITS 96 can be individually adapted to the local conditions of each application. The closing strength can be easily varied in accordance with the door width via the adjustment screw accessible from the top. The closing speed and the latch action can likewise be modified at any time using adjustment screws at the top, even after the door has been hung.

Cushioned limit stay

The integrated mechanically cushioned limit stay of the DORMA ITS 96 is progressively damped to protect the wall and doors from the damage arising from the door being opened too wide (under conditions of normal usage). It can be adjusted to an opening angle between approx. 80° and max. 120°. The cushioned limit stay feature is not an overload protection device and in many cases cannot replace a doorstop.

1 Screw for adjusting the closing strength 2 Valve for adjusting the closing speed 3 Valve for adjusting the latching speed

| approx. | 80° approx 120° Ż

2 Fully controlled closing with adjustable speed

3 Adjustable latch action 4 Cushioned limit stay

approx. 120° approx. 80° 4

Approval certification

The DORMA ITS 96 is approved by the State Material Testing Authority, Dortmund, in accordance with EN 1154 A. Additionally, the model size EN 2 – 4 and EN 3 – 6 has CERTIFIRE approval for use on timber FD30 and FD60 doors (code ITT), when installed with the approved intumescent gasket set for FD30 or FD60 supplied by DORMA UK.

The length, width and hight of mortice for the body and slide channel must be increased by 2 mm to accommodate the gasket.



⁴ Cushioned limit stay



Standard equipment and acce	essories					
	ITS 96	RF Hold-open open unit for G 96 N20	RF Hold- open unit for G 96 N	Fixings for G 96 N on timber doors	Fixings for G 96 N on aluminium doors	Fixings for G 96 N20 on aluminium doors
						5 67
	EN 2 – 4 52430150					
	EN 3 – 6 52290150	52005600	52003600	52000105	52000205	52000405
G 96 N20		#				#
520039xx ¹⁾		#				#
G 96 N			#	#	#	
Fixing plates for ITS 96	#					
 Closer body separate Slide channel separate Optional accessory 	Colour ¹⁾ silver Stainless steel	xx 01				
	"Design" finish Polished brass special colour	17 15 09				
	¹⁾ only arm					

Specification text

Cam-action door closer integrated in the door leaf or frame, tested to EN 1154 A, with rapidly decreasing opening torque/force. Closing strength, closing speed and latch action adjustable. Non-handed.

DORMA Door Controls Ltd.

DORMA Trading Park Staffa Road GB-London E10 7QX Phone: +44 208/5 58 84 11 Fax: +44 208/5 58 61 22 E-mail: hardware@dorma-uk.co.uk

DORMA Door Controls Ltd. 19, Sandyford Office Park Foxrock IRL-Dublin 18 Phone: +3531/2958280-82 Fax: +3531/2958584 E-mail: dormadublin@dorma.com

Size

□ EN 2-4 □ EN 3-6

Slide channel

□ G 96 N20 □ G 96 N

DORMA Door Controls Pte. Ltd. No. 2, Jalan Terusan Jurong Singapore 619285 Phone: +65 62 68/76 33 Fax: +65 62 65/79 95

DORMA Door Controls Pty. Ltd. P.O. Box 1092 Narre Warren Vic 3805 52 Abbott Road Hallam/Victoria 3803 Australia Phone: +61 3/97 96 35 55 Fax: +61 3/97 96 39 55

DORMA Gulf Door Controls FZE Jebel Ali Free Zone Roundabout 8 Unit VC 02, P.O. Box 17268 Jebel Ali Dubai, United Arab Emirates Phone: +97148/839014 Fax: +97148/839015

Accessories

□ Fixing plates

□ Hold-open unit

□ RF G 96 N

□ Fixings for

G 96_

□ RF G 96 N20

DORMA Door Controls (Pty.) Ltd. Kings Court 4A Mineral Crescent ZA-2000 Crown/Gauteng Johannesburg Phone: +27 11/8 30 02 80 Fax: +27 11/8 30 02 91

Make DORMA ITS 96

LITS 96/2-4 ITS 96/3-6

DORMA GmbH + Co. KG

Division Door Control Postfach 4009 D-58247 Ennepetal Breckerfelder Straße 42-48 D-58256 Ennepetal Tel. +49(0)23 33/7 93-0 Fax +49(0)23 33/79 34 95 www.dorma.com WN 051 974 51532, 07/03, GB(UK), x, xx/CtP. 08/03

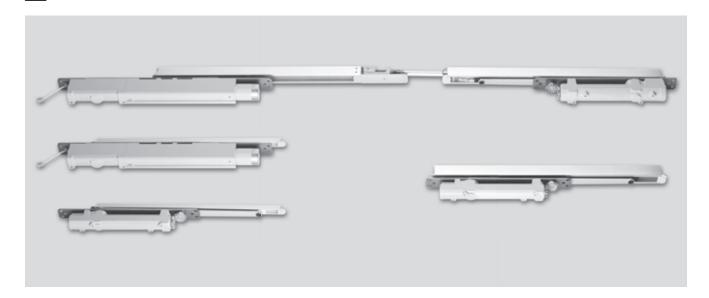
Subject to change without notice





Concealed cam-action door closer system

CONCEALED CAM-ACTION DOOR CLOSER SYSTEM



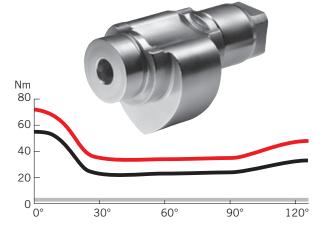
THE INTEGRATED SOLUTION FOR PRESTIGE DOORS

Because of its compact design, the ITS 96 system can be concealed for virtual invisibility within the door and frame, integrating inconspicuously with the overall architectural ambience.

Following the further development of the ITS 96 system to create the ITS 96 FL, the same advantages have now been complemented with a free-swing function for fire and smoke check doors up to a passage width of 1400 mm and a weight of 180 kg. This enhanced convenience also contributes to providing barrier-free access in a building.

Offering proven EASY OPEN technology, the free-swing

function ensures exceptionally light door opening. DORMA cam-action door closers with EASY OPEN technology feature a heart-shaped cam that significantly reduces the opening resistance that has to be overcome, almost as soon as the door is operated. Children, seniors and the physically disabled can thus open the door without undue effort. However, it is not only this group of users that benefits from the advantages of the rapidly decreasing opening force required – because this technology also generally ensures a significant reduction in effort for maximum user friendliness.



Force profile of an ITS 96 cam-action door closer (Size EN 3 – 6, max. closing strength setting)

- Opening force
 - Closing force
- ITS 96 FL free-swing door closer

CONTENTS

ITS 96 / ITS 96 FL	Features and functions	4				
	Application and installation	8				
Slide channel	G 96 N20					
for single doors	Slide channel					
0	RF					
	Hold-open unit	11				
	G 96 EMF					
	Slide channel with electro-mechanical hold-open	14				
Slide channel	G 96 GSR					
door co-ordinator	Slide channel door co-ordinator					
for double doors	G 96 GSR-EMF					
	Slide channel door co-ordinator with electro-mechanical					
	hold-open	18				
	G 96 GSR					
	Slide channel door co-ordinator with free-swing function					
	at the active leaf	24				
Smoke detectors	RMZ,					
	RM-N	30				
Accessories		32				
Hold-open systems	Regulations and information	35				
Range of equipment and	ITS 96	36				
optional accessories	ITS 96 FL	38				



ENGINEERING AT ITS BEST

The closer and slide channel of the ITS 96 are of such compact design that they can be installed for complete visual concealment in the door and frame. At the same time, they offer the same level of user convenience expected from high-quality door closers, combined with a wide range of functionality. Its compactness means that the ITS 96 system can be installed in virtually all doors with a leaf thickness of 40 mm or more.

Plus points...

... for the trade

- Low inventory costs and reduced stocking requirements thanks to streamlined modular system and separate packaging of closer body and slide channel assemblies.
- Same slide channels and accessories for the ITS 96 and ITS 96 FL.

... for the installer

- Non-handed system.
- Apart from the length, the installation dimensions of the ITS 96 EN 3-6 and the ITS 96 FL EN 3-6 are identical.
- Easy adjustment of the closing strength, closing speed and latch action after hanging of the doors.

The ITS 96 FL (hold-open device with free-swing function) is ideally combinable with the existing slide channels and accessories generally available for the ITS 96, which means that the existing portfolio of add-ons can be utilised without any change. The area of application for this model extends to the protection of fire and smoke check doors and also general doors in senior homes, centres for the disabled, and hospitals.

... for the specifier/architect

- Unblemished appearance of prestige doors thanks to concealed installation.
- Compliance with statutory requirements for barrier-free building.
- Universally suitable for single or double doors.

...for the user

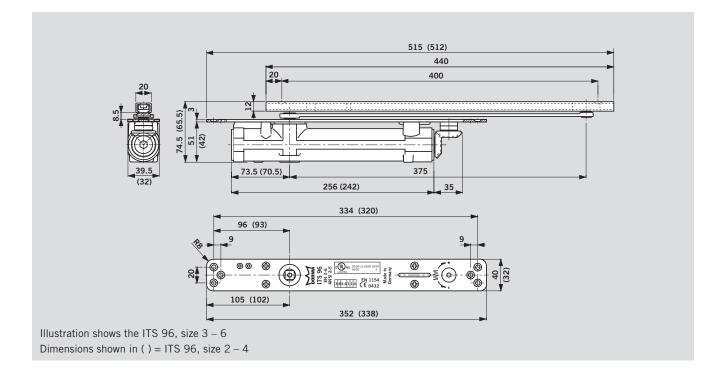
- Optimum protection against vandalism thanks to the concealed installation.
- Enhanced user convenience and fully controlled, reliable closing with adjustable latch action.
- Free-swing function from a door angle >0°, resulting in virtually resistance-free opening of the doors in applications requiring passive fire protection.

Data and features			ITS 96		ITS 96 FL
Variable			EN	EN	EN
closing force	Spring stren	gth	2–4	3–6	3–6
Standard doors ¹⁾	up to 1100 up to 1400		•	•	•
External doors, outward opening			_		
Fire and					
smoke check doors ¹⁾	up to 1100 up to 1400		• _	•	•
Door leaf thickness		mm mm	•	•	- •
Max. door leaf weight in kg			130	180	180
Non-handed design (closer)			•	•	•
Arm	Slide chann	iel	•	•	•
Closing force variable by means of adjustable screw			•	•	•
Closing speed adjustable by means of valve			•	•	•
Latching speed adjustable by means of valve			•	•	•
Cushioned limit stay, mechanical			•	•	•
Delayed action			_	_	_
Hold-open			0	0	_
Max. door opening angle (depends on door design)			approx. 120°		
Input voltage			_	_	24 V DC ± 15 %
Power consumption				_	3 W
Weight in kg			1.3	2.5	4.2
Dimensions in mm	Length Width Height		277 32 42	291 39.5 51	476 39.5 51
Door closer tested to EN 1154				•	•
Hold-open devices tested to EN 1155			•	•	
Door co-ordinators tested to EN 1158			•	•	
CE mark for building products			•	•	
Suitable for barrier-fre DIN 18040 and DIN (CEN/TR 15894)	e building to			•	•
ANSI 156.4				•	

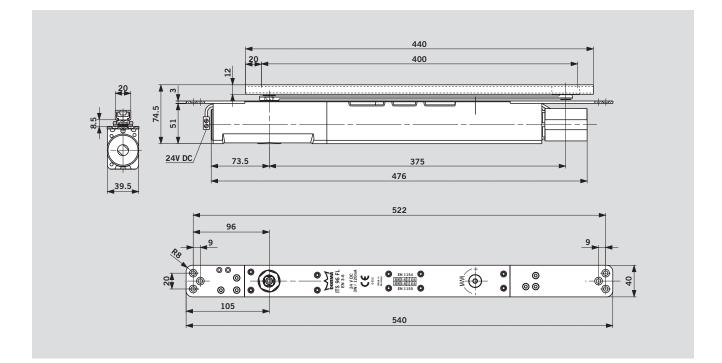
● Yes - No ○ Option

 For applications involving particularly heavy or wide doors, and doors which have to close against wind resistance, the next highest door closer size should be selected, or the closing force adjusted to a higher setting.

ITS 96



ITS 96 FL



ITS 96 CAM-ACTION DOOR CLOSER

Adjustment of settings

The functions of the DORMA ITS 96 can be individually adapted to the local conditions of each application. The closing strength can be easily varied in accordance with the door width via the adjustment screw accessible from the top. The closing speed and the latch action can likewise be modified at any time using adjustment screws at the top, even after the door has been hung.



The DORMA ITS 96 is approved by the State Material Testing Authority, Dortmund, in accordance with EN 1154. Additionally, the model size EN 2 - 4 and EN 3 - 6 has CERTIFIRE approval for use on timber FD30 and FD60 doors (code ITT), when installed with the approved intumescent gasket set for FD30 or FD60 supplied by DORMA UK. The length, width and height of mortice for the body and slide channel must be increased by 2 mm to accommodate the gasket.

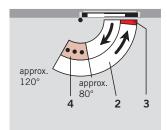
Screw for adjusting the closing strength
 Valve for adjusting the closing speed

3 Valve for adjusting the latching speed

Specification text

Cam-action door closer to EN 1154 for integration in the door leaf or frame, with rapidly decreasing opening resistance, for easy door opening action to DIN SPEC 1104. Closing force, closing speed and latch action infinitely variable. Non-handed, with slide channel... (see pages 10 – 29). Size □ EN 2 - 4 □ EN 3 - 6

Make DORMA ITS 96



- 2 Fully controlled closing with adjustable speed
- 3 Adjustable latch action
- 4 Cushioned limit stay

ITS 96 FL CAM-ACTION DOOR CLOSER WITH FREE SWING FUNCTION

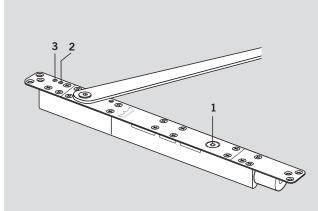
Adjustment of settings

As the door is opened, the freeswing function is activated from an opening angle of >0°. This feature ensures that the door is particularly easy to use, with the only opening resistance emanating from the hinges. In the event of a fire or power failure, the door is safely closed by the door closer. The closing force can be readily adapted to the door width using an adjustment screw accessible from above. The closing speed and the latch action are likewise adjustable from above, again with the closer in situ and the door remaining hung.

F Approval certification

The ITS 96 has been tested to EN 1154 and EN 1155 by the State Material Testing Authority, Dortmund.

An approval certificate of the fire and smoke check door to be used is additionally necessary in combination with the ITS 96 FL.



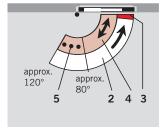
1 Screw for adjusting the closing strength

- 2 Valve for adjusting the closing speed
- 3 Valve for adjusting the latching speed

Specification text

Cam-action door closer, spring strength 3-6 to EN 1154, for integration in the door leaf or door frame, with CE marking, with rapidly decreasing opening resistance, with electro-hydraulic hold-open, 24 V DC, tested to EN 1154, and with free-swing function from a door opening angle >0°. Closing speed and latch action variable, nonhanded, with slide channel ... (see pages 10 – 29). Suitable for barrier-free building to DIN 18040 and DIN SPEC 1104 (CEN/TR 15894). General building approval granted by DIBt, Berlin, for use in a hold-open system. Acceptance inspection of the system is mandatory in Germany.

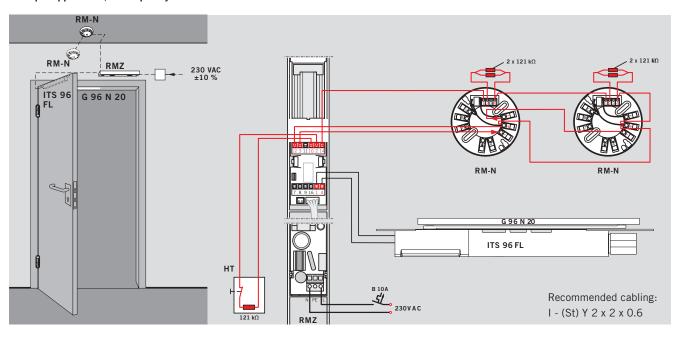
Make DORMA ITS 96 FL



- 2 Fully controlled closing with adjustable speed (non-powered)
- **3** Adjustable latch action (non-powered)
- 4 Free-swing range
- 5 Cushioned limit stay

Regulations and information

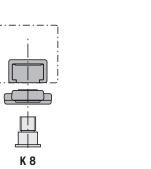
The use of hold-open devices may be subject to certain conditions – see page 35.



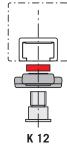
Example application, hold-open system

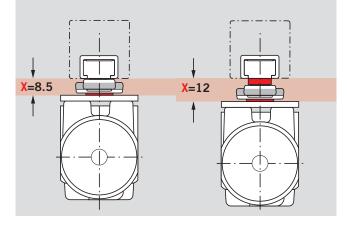
APPLICATIONS AND INSTALLATION

The DORMA ITS 96 / ITS 96 FL concealed cam-action door closer system is suitable for various door designs and different rebate clearance dimensions. This is achieved through the combination of different spindle lengths available with the closer and the universal K8/K12 slide channel.

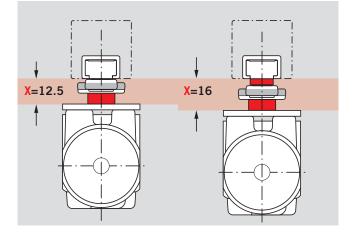


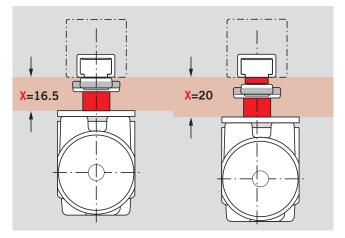
G 96 ...



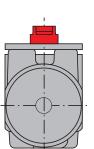


ITS 96 2–4 ITS 96 3–6 ITS 96 FL 3–6





ITS 96 2-4 ITS 96 3-6 ITS 96 FL 3-6 with 4 mm extended spindle



H

ITS 96 2–4 ITS 96 3–6 ITS 96 FL 3–6 with 8 mm extended spindle

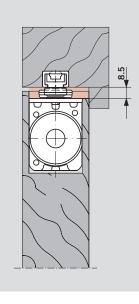
Timber door, flush-closing, clearance 8.5 mm, with ITS 96/ITS 96 FL EN 3–6 and slide channel G 96 N20 K8.

Tubular steel frame door, flush-

closing, clearance 12 mm, with

ITS 96/ITS 96 FL EN 3-6 and

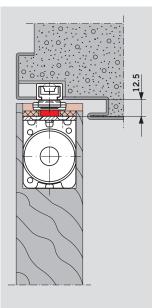
slide channel G 96 N20 K12.



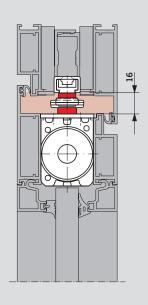
12

Timber door with steel frame, flush closing, clearance 12.5 mm, with ITS 96/ITS 96 FL EN 3–6, 4 mm extended spindle and slide channel G 96 N20 K8.

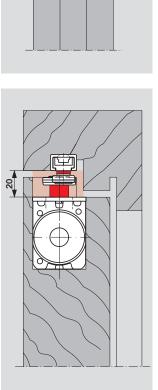
Please check dimensions carefully



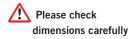
Aluminium tubular frame door, flush-closing, clearance 16 mm, with ITS 96/ITS 96 FL EN 3–6, 4 mm extended spindle and slide channel G 96 N20 K12.

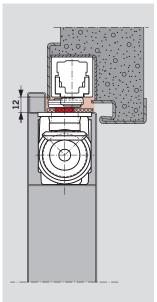


Timber door with solid frame, double-rebated, clearance 20 mm, with ITS 96/ITS 96 FL EN 3–6, 8 mm extended spindle and slide channel G 96 N20 K12.



Hollow steel door with steel frame, over-rebated, clearance 12 mm, with ITS 96 EN 3–6, 4 mm extended spindle and slide channel G 96 EMF K8.





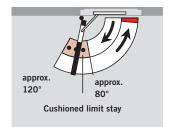
G 96 N20 SLIDE CHANNEL



The DORMA G 96 N20 slide channel pack includes the arm, slide channel, slide block, cushioned limit stay and fixing screws, and can be combined with both door closer sizes in the DORMA ITS 96 range. The DORMA G 96 N20 slide channel is adjustable to K8/K12.



The G 96 N20 slide channel is tested to EN 1154 in conjunction with the ITS 96.



Specification text

DORMA ITS 96 ... door closer (see pages 4 and 7) with slide channel G 96 N20

Version

□ LH (ISO 6) K8/K12 □ RH (ISO 5) K8/K12

Make

DORMA ITS 96 N20 ITS 96 FL N20

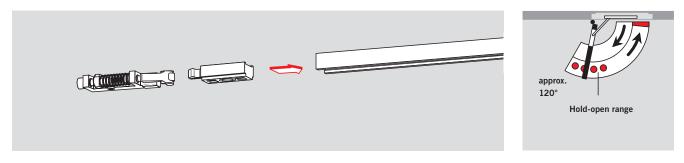
Cushioned limit stay

The integrated mechanically cushioned limit stay of the DORMA ITS 96 is progressively damped to protect the wall and doors from the damage arising from the door being opened too wide (under conditions of normal usage). It can be adjusted to an opening angle between approx. 80° and max. 120°.

The cushioned limit stay feature is not an overload protection device and in many cases cannot replace a doorstop.

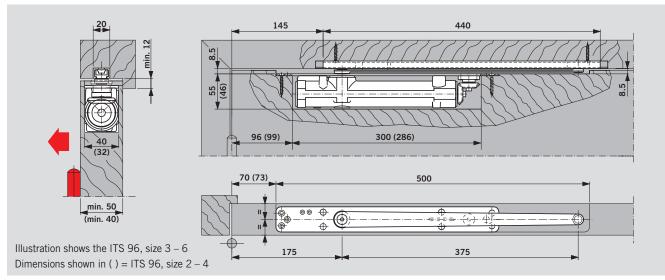


HOLD-OPEN UNIT



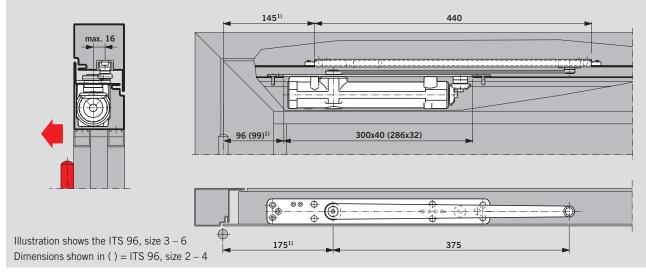
The RF hold-open unit enables doors to be securely held without any fall-back at precisely the required position up to an opening angle of approx. 120°. The pull-off force can be adjusted to any door situation. The RF mechanism is non-handed and has been specifically designed for retrofitting to the G 96 N20 slide channel. Not for fire and smoke check doors.

Accessories □ Hold-open unit DORMA RF G 96 N20

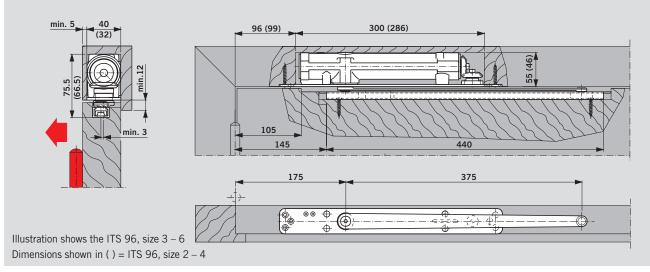


ITS 96 door closer with DORMA G 96 N20 slide channel in a timber door.

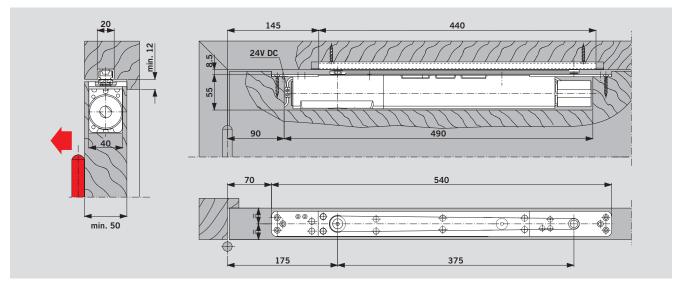
Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.



ITS 96 door closer with DORMA G 96 N20 slide channel in an **aluminium framed door.** Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors. ¹⁾ Add 25 mm for aluminium profile frames with corner-angle reinforcement.

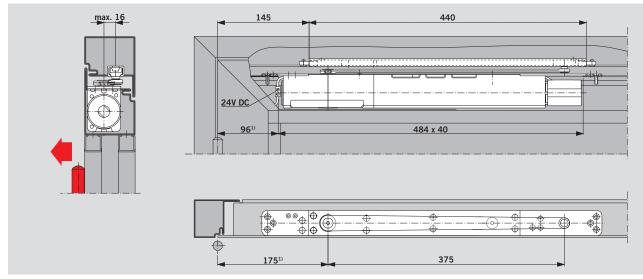


ITS 96 door closer with DORMA G 96 N20 slide channel in a timber door transom fixing. Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.

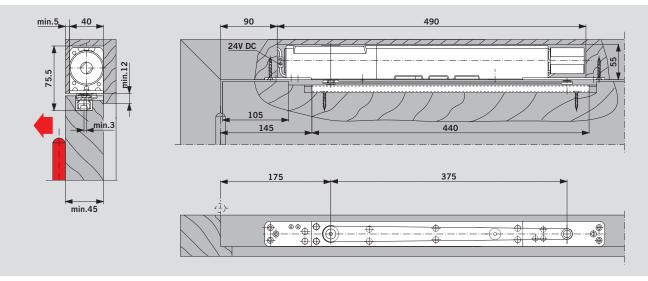


ITS 96 FL door closer with DORMA G 96 N20 slide channel in a timber door.

Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.

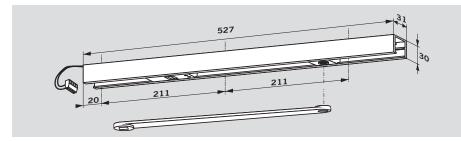


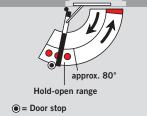
ITS 96 FL door closer with DORMA G 96 N20 slide channel in an **aluminium framed door.** Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors. ¹⁾ Add 25 mm for aluminium profile frames with corner-angle reinforcement.



ITS 96 FL door closer with DORMA G 96 N20 slide channel in a timber door transom fixing. Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.

G 96 EMF SLIDE CHANNEL WITH ELECTRO-MECHANICAL HOLD-OPEN





The slide channel assembly enables the door to be held open securely at a pre-selected position without fall-back. The hold-open point can be adjusted within an opening angle of approx. 80° and 120°.

Note:

The hold-open point also constitutes the max. door opening angle (position door stop accordingly). In the event of an alarm or a fault in the power supply, the hold-open is released and the door is closed by the door closer. The release is triggered by a signal from external smoke detectors (e.g. RMZ).

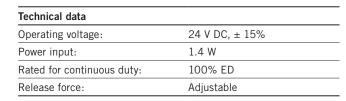
The release force for the holdopen mechanism can be adjusted without tools and is rated to ensure that the door can also be easily released manually. The G 96 EMF slide channel assembly comprises the arm, slide channel, slide block, electro-mechanical hold-open unit and fixing screws, and can be combined with both door closer sizes in the ITS 96 range. In the case of particularly large and heavy doors (over 1250 mm), we recommended that EM holdopen magnets be employed instead of the electro-mechanical hold-open unit. • = Door stop Specification text ITS 96 ... door closer (see pages 4 and 5) with G 96 EMF K8/K12 slide channel assembly, with integrated 24 V DC electromechanical hold-open, tested to EN 1155. Hold-open point (80° – 120°) and release force

adjustable. Approved by the Institute for Building Technology, Berlin, for general use in hold-open systems. Acceptance inspection of the system is mandatory in Germany.

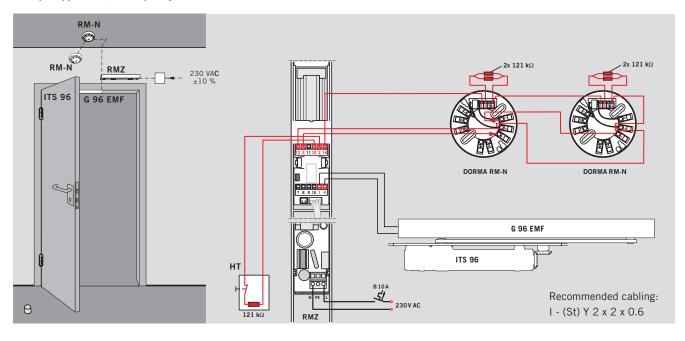
Version

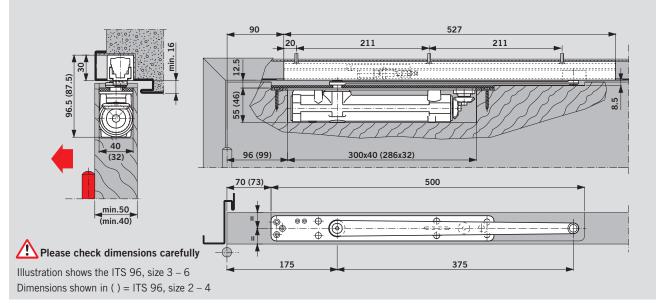
□ LH (ISO 6) K8/K12 □ RH (ISO 5) K8/K12

Make DORMA ITS 96 EMF

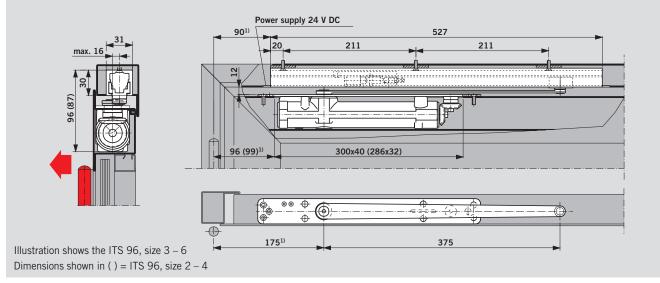


Example application, hold-open system





ITS 96 door closer with DORMA G 96 EMF slide channel assembly in a **timber door**. Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.



ITS 96 door closer with DORMA G 96 EMF slide channel assembly in an **aluminium framed door**. Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors. ¹⁾ Add 25 mm for aluminium profile frames with corner-angle reinforcement.

F Approval certification

The ITS 96 EMF has been tested by the State Material Testing Authority, Dortmund, to EN 1155, Electrically Powered Hold-open Devices.

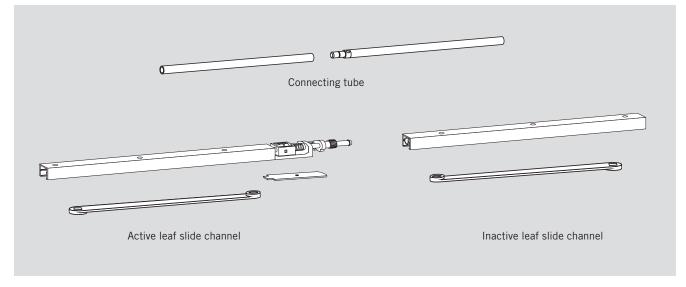
Regulations/Information

The use of hold-open devices may be subject to certain conditions – see page 35.

G 96 GSR SLIDE CHANNEL DOOR CO-ORDINATOR

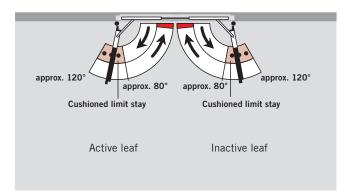
The slide channel with integral door co-ordinator for pairs of doors ensures that the active leaf always closes after the inactive leaf. The G 96 GSR slide channel door co-ordinator features a push rod clamping system. As this system operates independently of door closer hydraulics, it offers maximum safety and reliability. An overload release protects the door co-ordinator and the door set from damage. The G 96 GSR can be combined with both door closer sizes of the DORMA ITS 96 and ITS 96 FL range.

Version/Function	Door width (mm)	Door leaf thickness min. (mm)	Closer size ITS 96	
GSR				
Door co-ordinator	1450 – 2200	40	2 – 4	
	1450 – 2800	50	3 – 6	



A G 96 GSR slide channel door co-ordinator encompasses an active leaf and an inactive leaf slide channel with cushioned limit stay, a connecting tube, a cover for the co-ordinator mechanism on the active leaf slide channel, and two arms. **F** Approval certification

The ITS 96 GSR has been tested to EN 1158, Door Co-ordinator Devices, by the State Material Testing Authority, Dortmund/Germany.

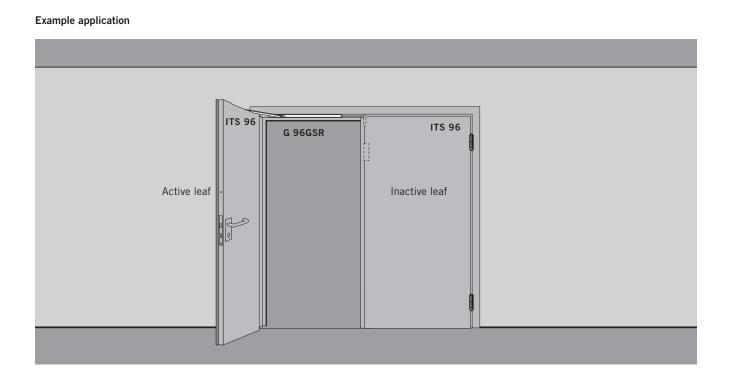


Specification text

ITS 96 ... door closer (see pages 4 – 6) with G 96 GSR K8/K12 slide channel, featuring integrated mechanical door co-ordinator using a push rod clamping system with overload release which operates independently of the closer hydraulics. Standard design – door leaves with no hold-open. Tested to EN 1158. Approved by the Institute of Building Technology, Berlin, for general use in conjunction with fire and smoke check doors.

Make

DORMA ITS 96 GSR



G 96 GSR-EMF SLIDE CHANNEL DOOR CO-ORDINATOR WITH ELECTRO-MECHANICAL HOLD-OPEN

This door co-ordinator not only ensures the correct closing sequence of pairs of doors, but also allows the door leaves to be individually held open by an electro-mechanical device. The hold-open point for both door leaves lies between approx. 80° and 120°.

Note:

The hold-open point also constitutes the max. door opening angle – position door stop accordingly. In the event of an alarm or a fault in the power supply, the hold-open is released and the door is closed by the door closer. The release is initiated by a signal from external smoke detectors (e.g. RMZ) or other fire alarm.

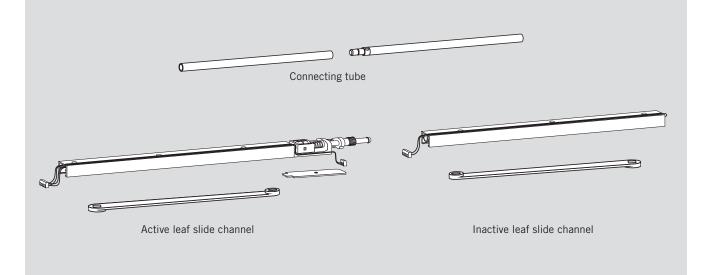
The release force for the holdopen mechanism can be adjusted without tools and is rated to ensure that the door can also be easily released manually. The G 96 GSR-EMF slide channel door co-ordinator can be combined with both door closer sizes of the DORMA ITS 96 range.

In the case of particularly large and heavy doors (over 2500 mm), we recommended that EM hold-open magnets be employed instead of the electromechanical hold-open unit.

Regulations/Information

The use of hold-open devices may be subject to certain conditions – see page 35.

Version/Function	Door width (mm)	Door leaf thickness min. (mm)	Closer size ITS 96
GSR-EMF			
Door-coordinator and	1450 – 2200	40	2 – 4
hold-open in both leaves	1450 - 2800	50	3 – 6

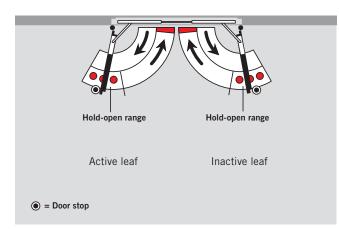


A G 96 GSR slide channel door co-ordinator encompasses an active leaf and an inactive leaf slide channel with electromechanical hold-open, a connecting tube, a cover for the co-ordinator mechanism on the active leaf slide channel, and two arms.

Technical data		
Operating voltage:	24 V DC, ± 15%	
Power input:	2.8 W	
Rated for continuous duty:	100% ED	
Release force:	adjustable	

F Approval certification

The ITS 96 GSR-EMF has been tested by the State Materials Testing Authority, Dortmund, to EN 1158, Door Co-ordinator Devices, and EN 1155, Electrically Powered Hold-Open Devices.



Specification text

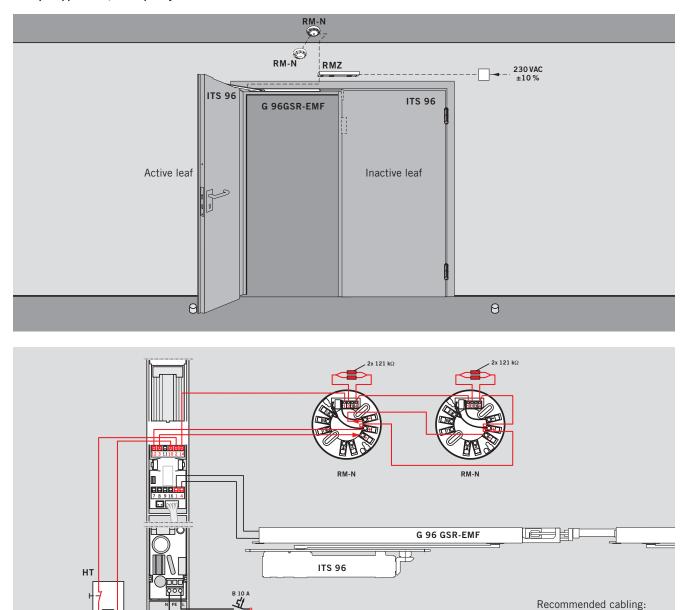
ITS 96 ... door closer (see pages 4 - 6) with G 96 GSR-EMF K8/K12 slide channel, featuring integrated mechanical door co-ordinator using a push rod clamping system with overload release which operates independently of the closer hydraulics, with integrated electro-mechanical hold-open, 24 V DC. Hold-open point $(80^{\circ} - 120^{\circ})$ and release force adjustable.

Tested to EN 1158 and EN 1155. Approved by the Institute of Building Technology, Berlin, for general use in hold-open systems. Acceptance inspection of the system is mandatory in Germany.

Make

DORMA ITS 96 GSR-EMF

Example application, hold-open system



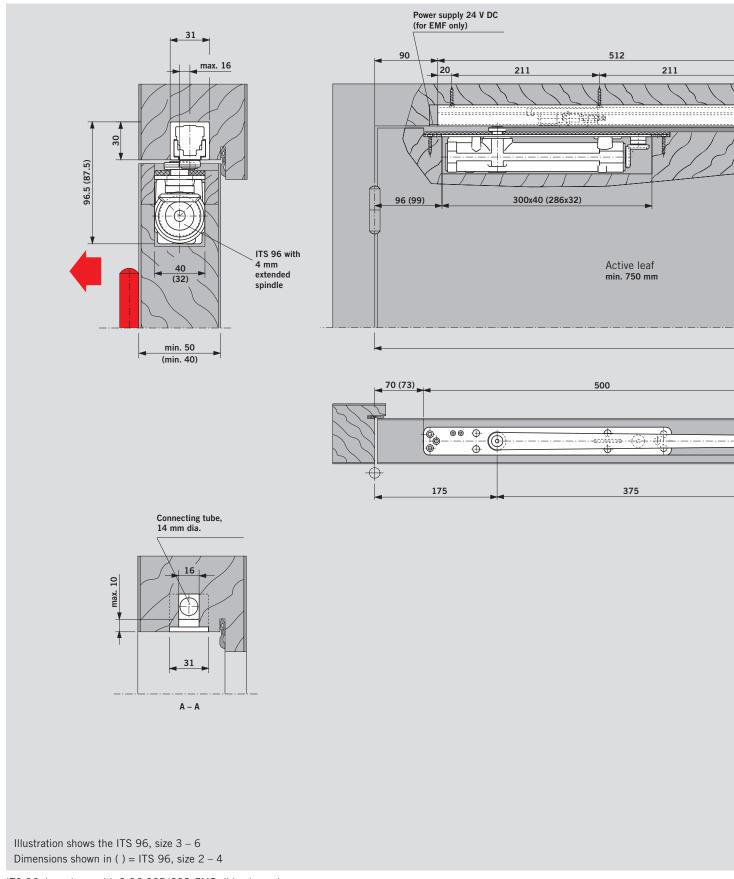
230 V AC

RMZ

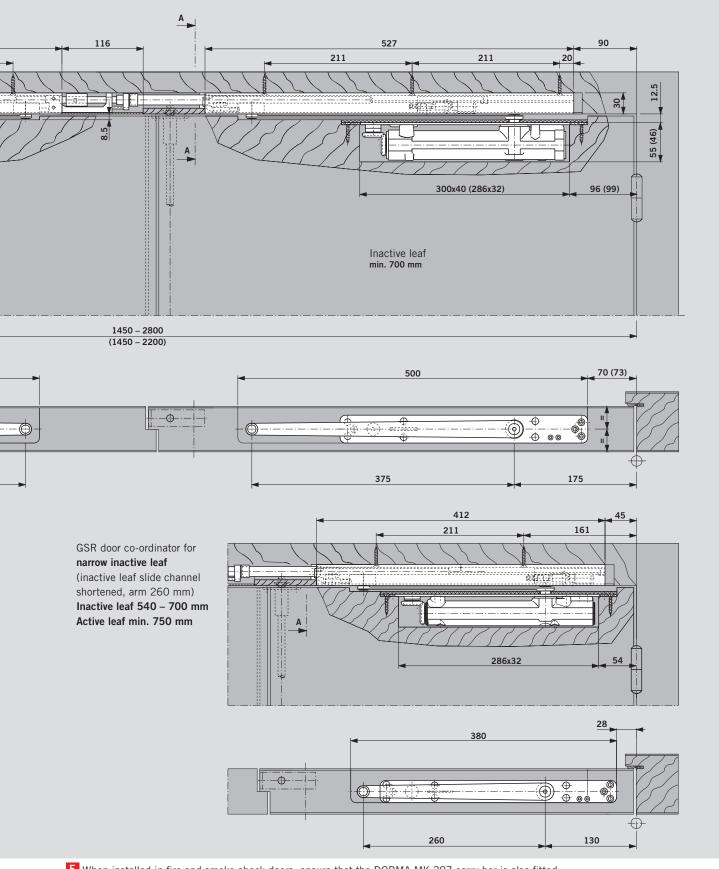
Recommended cabling:

I - Y (St) Y 2 x 2 x 0.6

INSTALLATION IN A TIMBER DOOR

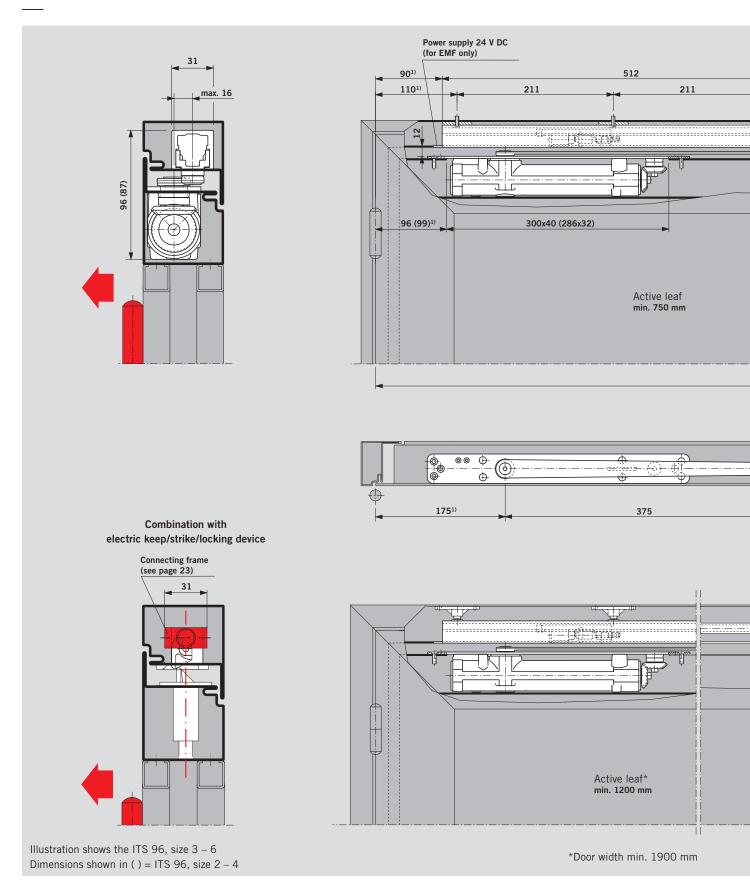


ITS 96 door closer with G 96 GSR/GSR-EMF slide channel. Example: Anticlockwise-closing (ISO 6) active leaf; mirror image applies to clockwise-closing (ISO 5) active leaf.



F When installed in fire and smoke check doors, ensure that the DORMA MK 397 carry bar is also fitted.

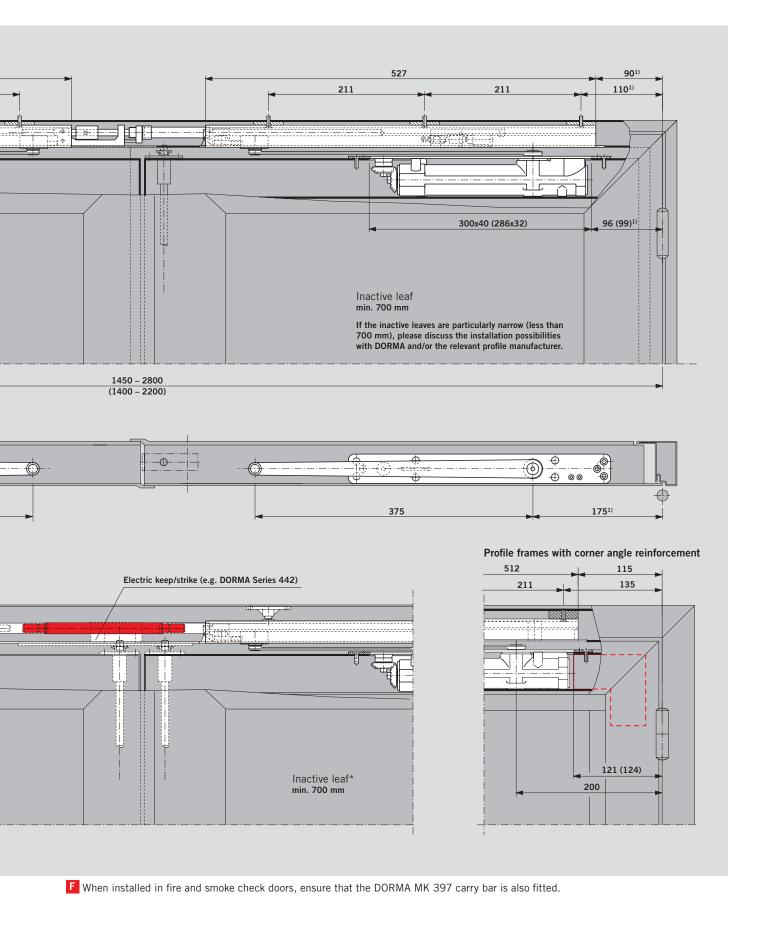
INSTALLATION IN AN ALUMINIUM FRAMED DOOR



ITS 96 door closer with G 96 GSR/GSR-EMF slide channel.

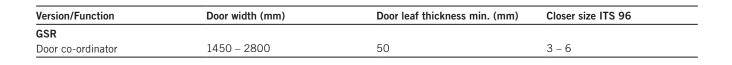
Example: Anticlockwise-closing (ISO 6) active leaf; mirror image applies to clockwise-closing (ISO 5) active leaf. ¹⁾ Add 25 mm for aluminium profile frames with corner-angle reinforcement.

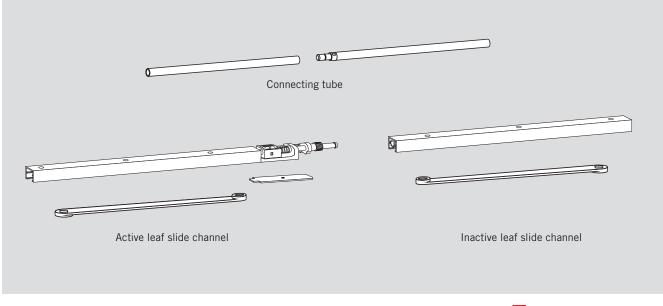
22 DORMA



G 96 GSR SLIDE CHANNEL DOOR CO-ORDINATOR WITH FREE SWING FUNCTION AT THE ACTIVE LEAF

The ITS 96 system also allows the fitting of an ITS 96 FL on the active leaf of pairs of doors. As the door is opened, the freeswing function is activated for the active leaf from a door opening angle $>0^{\circ}$. The slide channel with integral door co-ordinator for pairs of doors ensures that the active leaf always closes after the inactive leaf. The G 96 GSR slide channel door co-ordinator features a push rod clamping system. As this system operates independently of door closer hydraulics, it offers maximum safety and reliability. An overload release protects the door co-ordinator and the door set from damage. The G 96 GSR can be combined with the ITS 96 FL at the active leaf.

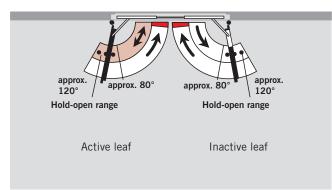




A slide channel door co-ordinator encompasses an active leaf and an inactive leaf slide channel with cushioned limit stay, a connecting tube, a cover for the co-ordinator mechanism on the active leaf slide channel, and two arms.

F Approval certification

The ITS 96 GSR has been tested to EN 1158, Door Co-ordinator Devices, by the State Material Testing Authority, Dortmund/Germany.



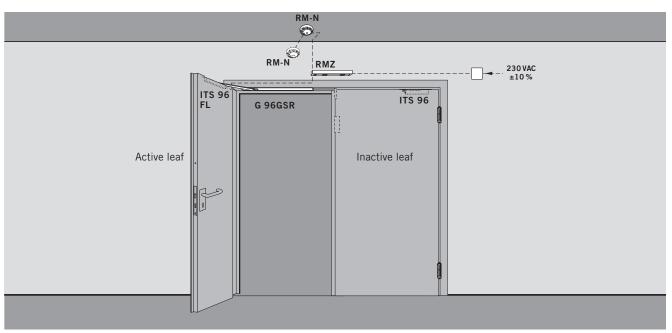
Specification text

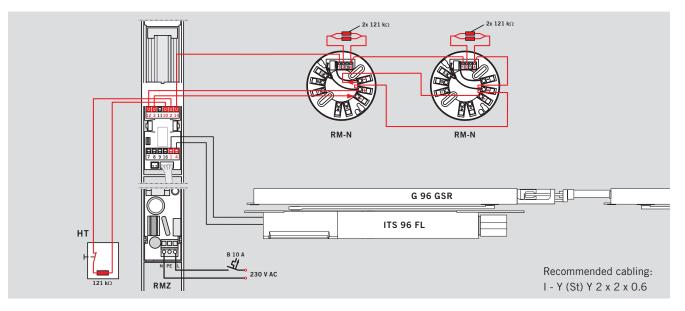
ITS 96 FL / ITS 96 door closer (see pages 4 – 7) with G 96 GSR K8/K12 slide channel, featuring integrated mechanical door co-ordinator using a push rod clamping system with overload release which operates independently of the closer hydraulics. Tested to EN 1158. Approved by the Institute of Building Technology, Berlin, for general use in conjunction with fire and smoke check doors.

Make

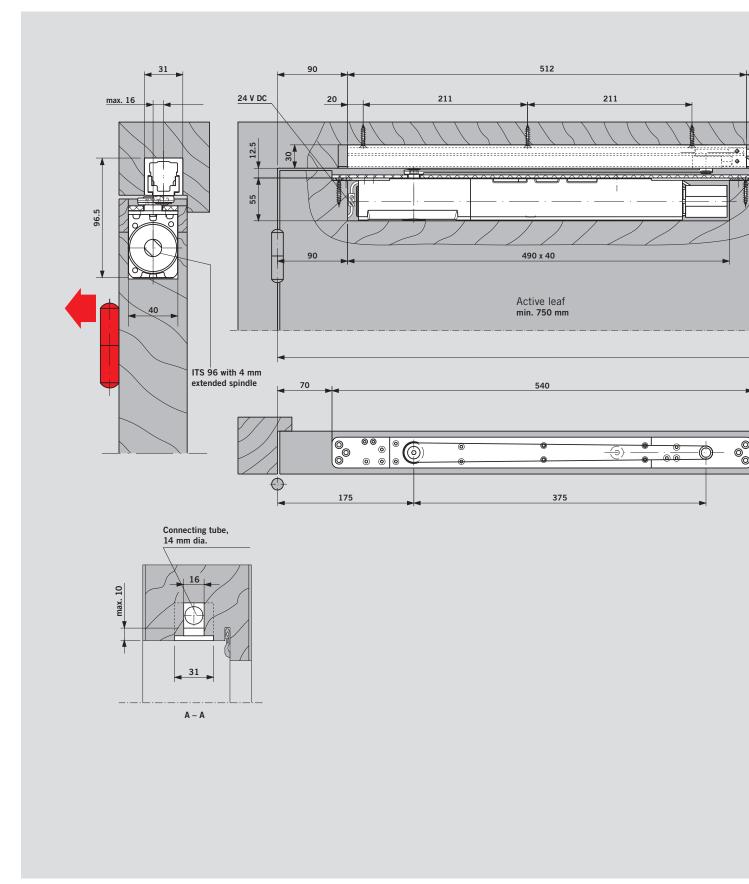
DORMA ITS 96 FL GSR

Example application, hold-open system

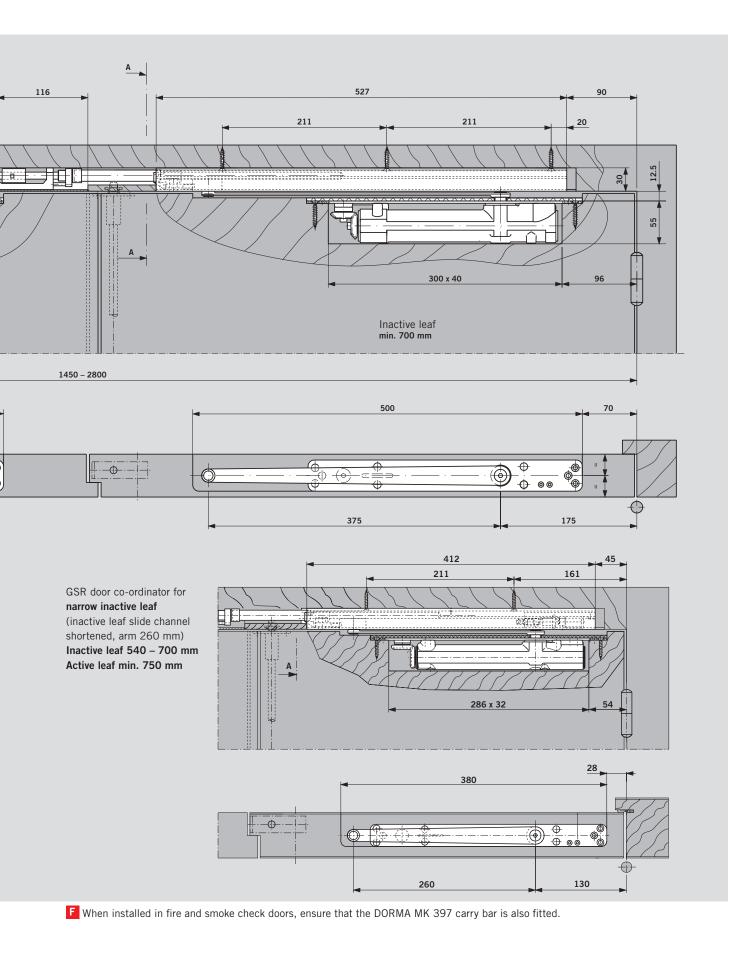




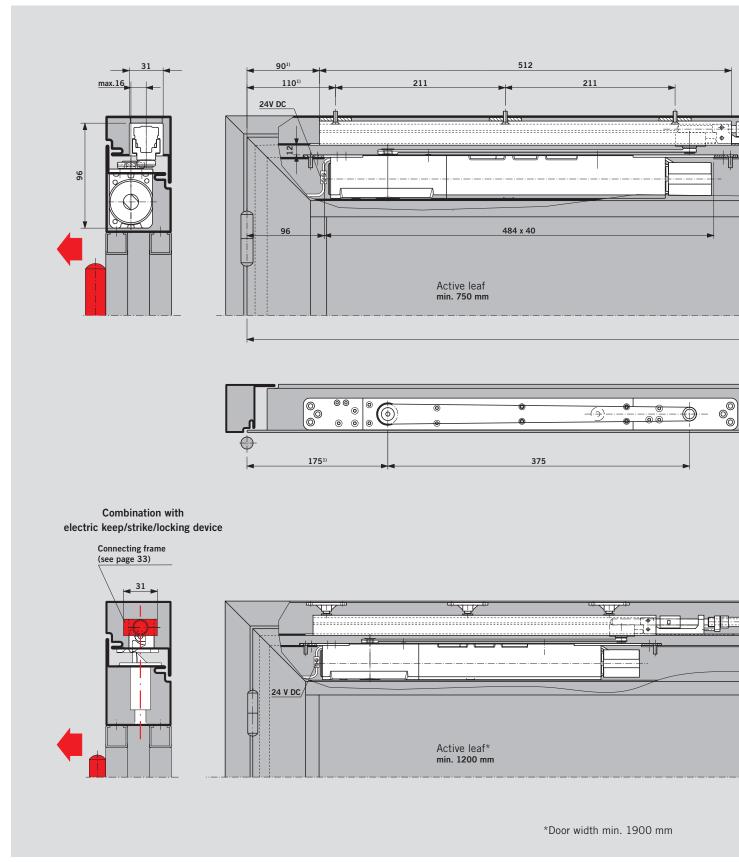
INSTALLATION IN A TIMBER DOOR



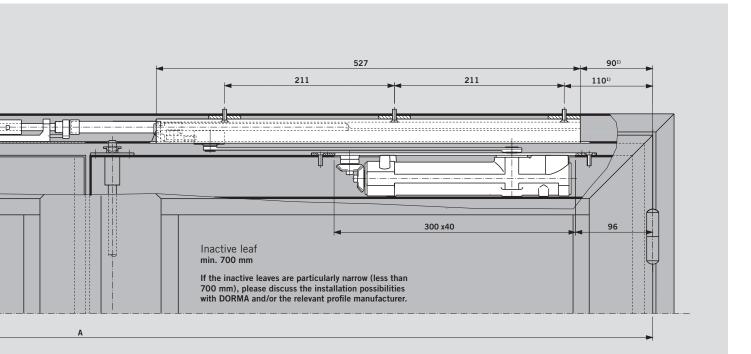
ITS 96 FL door closer at the active leaf and ITS 96 door closer at the inactive leaf with DORMA G 96 GSR slide channel. Example: Anticlockwise-closing (ISO 6) active leaf; mirror image applies to clockwise-closing (ISO 5) active leaf.

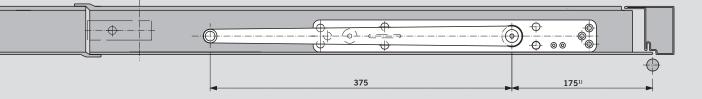


INSTALLATION IN AN ALUMINIUM FRAMED DOOR

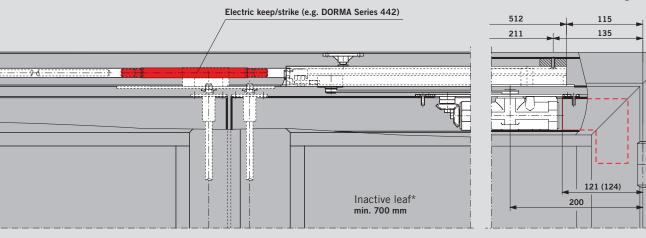


ITS 96 FL door closer at the active leaf and ITS 96 door closer at the inactive leaf with DORMA G 96 GSR slide channel. Example: Anticlockwise-closing (ISO 6) active leaf; mirror image applies to clockwise-closing (ISO 5) active leaf. ¹⁾ Add 25 mm for aluminium profile frames with corner-angle reinforcement.





Profile frames with corner angle reinforcement



F When installed in fire and smoke check doors, ensure that the DORMA MK 397 carry bar is also fitted.

SMOKE DETECTORS

The RMZ in the Contur design and RM-N smoke detectors provide the ideal complement to the ITS 96 system for passive fire protection.

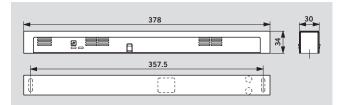
They are designed in accordance with the latest codes issued by the German Institute for

RMZ

The RMZ smoke detector in the Contur design provides a 24 V DC supply for all the hold-open devices connected to it. In the event of an alarm or power failure, it de-energises the devices (release function). It has an automatic reset which can be switched to manual mode if required.

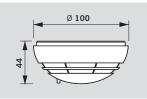
A floating (no-volt) change-over contact and connections for both further detectors and for Building Technology and ensure perfect interaction between all the devices employed for holding open fire and smoke check doors – whatever the situation.

an external manual release device are also provided. The unit is available in the RMZ version with a stabilised power pack, or in the RMZ DCW version without a power pack for integration in building management and control systems via a DCW bus and the DORMA TMS door management system.



RM-N

The DORMA RM-N smoke detector ensures the early detection both of smouldering fires and open fires with smoke evolution. It can be connected to all DORMA hold-open systems.



Specification text

RMZ

Smoke detector in the Contur design, with standby and maintenance due indicators, integral power pack and optical smoke sensor for transom/lintel fixing. For release activation of DORMA hold-open devices. A floating (no-volt) alarm contact and connections for further detectors and external manual release devices are provided. Can be switched to manual reset. One-piece cover. Overall height 30 mm. General building approval granted by DIBt, Berlin, for use in a hold-

open system. Acceptance inspection of the system is mandatory in Germany.

Model

- □ RMZ with integrated power pack. Power supply 230 V AC, operating voltage 24 V DC
- RMZ DCW. Smoke detector without power pack for connection to DCW bus.
- Optional integral alarm module adding an audible signal to the visual indicator.

Data and features		RMZ	RM-N
Functions	Smoke detector	•	•
	Release device	•	-
	Power supply unit	•	-
Smoke detection	Scattered light prin-		•
	ciple (optical sensor)		
Fixing	Lintel or transom-	•	
	mounted	•	
	Ceiling-mounted		•
Connection of othe	er detectors	•	
Total installed load	d (max.) for hold-open	9.8	_
device and other c			
Power consumptio	on of internal	1.2	0.65
detectors in W		1.2	0.00
LED	Alarm	•	•
indicators	Standby	•	-
	Maintenance due	•	—
	Contaminated	•	
Input voltage		230 V AC	24 V DC
		± 10 %	+15%, -10%
Output voltage		24 V DC	-
Detector operating	g voltage	24 V DC +15%, -10%	24 V DC
Input current (max	x.) in mA	75	20
Floating (no-volt)	change-over contact	24 V	30 V
Safety extra low vo	oltage (SELV)	AC/DC	AC/DC
		2 A	1 A
Reset	Automatic	•	•
	Can be changed		
	to manual reset ¹⁾	•	_
Functional check	Smoke detection	•	•
Connection termin	als		
for external manua	al release	•	-
Degree of protecti	on	IP 30	IP 43
Ambient temperat		-20, +40	-10, +60
Weight in kg		0.25	0.15
Dimensions	Length	379	ø 100
in mm	Overall depth	34	Ø 100
	Height	30	44
Compliant with EN	1 54 Part 7	•	•
CE mark for buildi	ng products	•	•

• Yes – No

¹⁾ Necessary in conjunction with the ITS 96 FL free-swing door closer

Colour

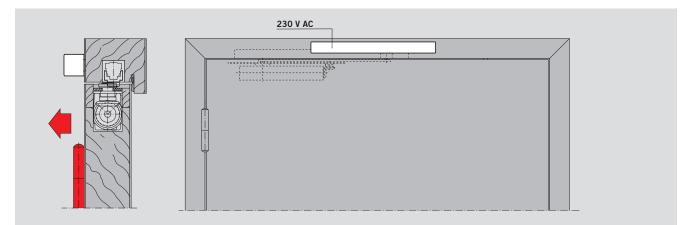
 Silver
 White (sim. to RAL 9106)
 Stainless steel "Design"
 Special colour (sim. to RAL ____)

Make

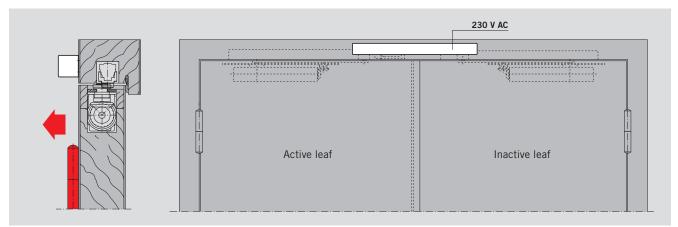
DORMA RMZ DORMA RMZ DCW

RM-N

Optical smoke detector, 24 V DC, for ceiling fixing. For use as second and third triggering detector on all DORMA hold-open systems. With floating (no-volt) change-over contact. General building approval granted by DIBt, Berlin and the VdS, Cologne; compliant to EN 54, Part 7. Acceptance inspection mandatory in Germany. **Colour** U White (sim. to RAL 9106) **Make** DORMA RM-N

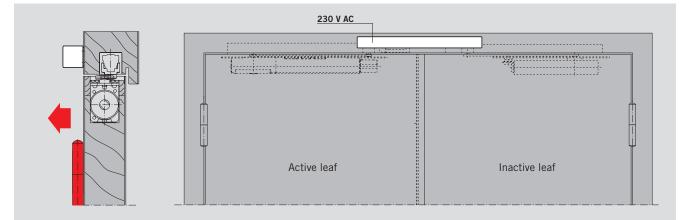


RMZ frame-mounted smoke detector on the pull side connected to an ITS 96 EMF. Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.



RMZ frame-mounted smoke detector on the pull side connected to an ITS 96 GSR-EMF.

Example: Anticlockwise-closing (ISO 6) active leaf; mirror image applies to clockwise-closing (ISO 5) active leaf.



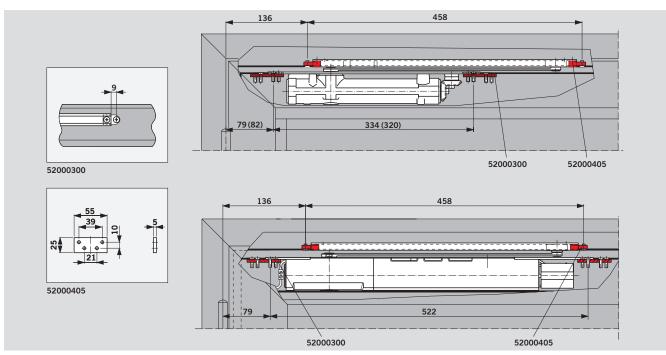
RMZ frame-mounted smoke detector on the pull side connected to an ITS 96 FL GSR.

Example: Anticlockwise-closing (ISO 6) active leaf; mirror image applies to clockwise-closing (ISO 5) active leaf.

F Approval certification

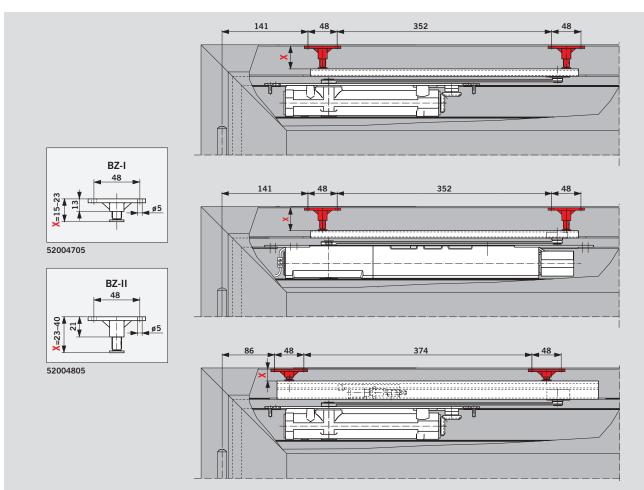
DORMA RMZ in the Contur design and DORMA RM-N smoke detectors have been granted general building approval by the German Institute for Building Technology, Berlin; acceptance inspection mandatory in Germany.

ACCESSORIES



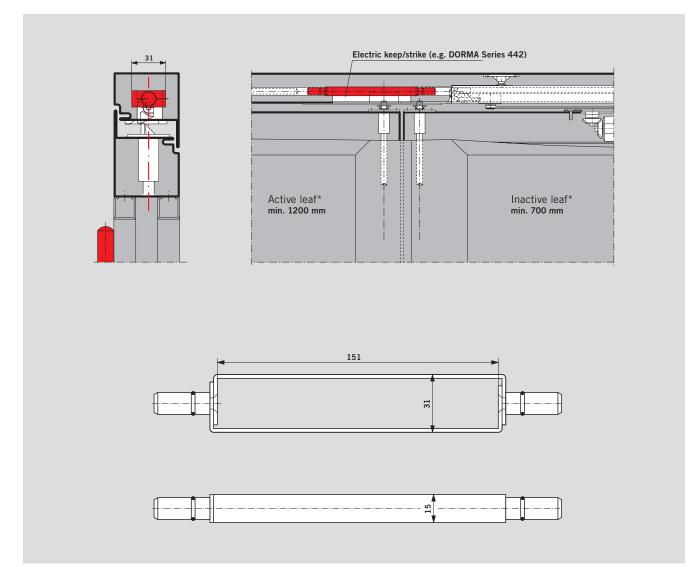
Fixings for G 96 N20 and mounting plate for ITS 96.

Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.



Fixings for height adjustment in relation to G 96 N20, EMF, GSR.

Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.



Connecting frame for G 96 GSR door co-ordinator for use on doors with electric keep/strike or overhead electro-mechanical locking device *Door width min. 1900 mm

ACCESSORIES

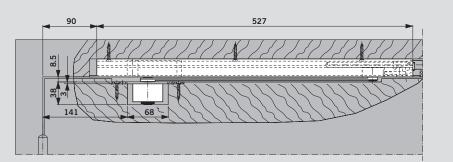
If the G 96 GSR door co-ordinators are required to operate independently of the ITS 96 door closers, e.g. in combination with the ED 200 automatic swing door operator, the connection between the door co-ordinator and the door leaf is provided by means of GSR pivot blocks.

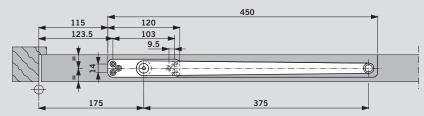
Specification text

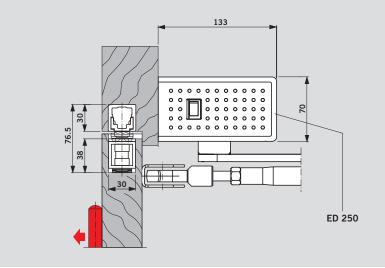
Pivot bearing for closer-independent door co-ordination with G 96 GSR door co-ordinators.

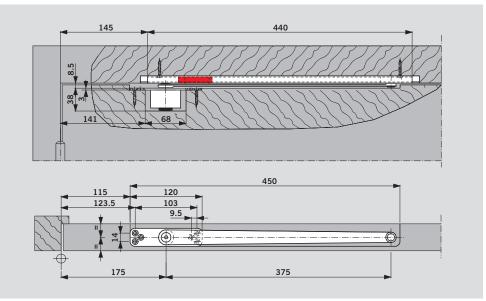
MAKE

DORMA ITS GSR pivot block









The pivot bearing used in conjunction with the G 96 N20 slide channel also acts as a **cushioned limit stay.**

HOLD-OPEN SYSTEMS REGULATIONS / INFORMATION

The use of hold-open systems is subject to special regulations based on official approval requirements. These relate in particular to the final inspection (acceptance), continuous monitoring and maintenance. The regulations and instructions provided below are intended as an aid, pursuant to statutory regulations that apply e.g. in Germany, to ensure that all participants are properly informed of the most important requirements that relate to the installation and operation of hold-open systems.

Further information can be found in the following documents:

- Richtlinien f
 ür Feststellanlagen des Deutschen Instituts f
 ür Bautechnik, Berlin [Code of practice relating to hold-open systems issued by the German Institute for Building Technology, Berlin]
- General building regulations pertaining to the approval of the hold-open system concerned
- EN 1155
- EN 14637

1. General

1.1 In the case of fire doors (and similar shutters/closures/ barriers) that are held open by hold-open systems, the sweep area necessary for the closing operation must be kept constantly clear. This area must be clearly identified by lettering, floor markings or similar. Where necessary, structural measures must also be implemented to ensure that cables, leads, lines,

2. Commissioning

2.1 In Germany and countries governed by DIN regulations: Following on-site installation of the operable hold-open system, its functional integrity and quality of installation must be confirmed by an acceptance inspection procedure. The acceptance inspection may only be performed by skilled personnel of manufacturers of monitoring

3. Routine Inspection

3.1 The hold-open system must be kept by the operator in a constantly good operating condition, and inspected at least once a month to ensure that it is functioning properly. pipes, stored/deposited goods or components (e.g. false ceilings or other overhead items/ elements) are reliably prevented from falling into the sweep area.

1.2 Wherever possible, smoke detectors should be used for hold-open systems. For hold-open systems for fire doors in emergency escape routes, smoke detectors must be used.

1.3 Each hold-open device must also be capable of being released by hand, without adversely affecting the functional capabilities of the automatic release device. In the case of door closers with electro-magnetic hold-open, the manual release may be performed by a small tug applied to the door leaf. If holding electromagnets or free-swing door closers are used, a pushbutton must be provided to facilitate manual release. The manual release pushbuttons employed for this purpose must be red and carry the wording "Close Door" or equivalent. The pushbutton must be located in the immediate vicinity of the door and must not be concealed by the door when this is held open.

and/or hold-open devices, skilled personnel authorized by same, or skilled personnel from an accredited inspection agency.

2.2 In Germany and countries governed by DIN regulations: Once the acceptance inspection has been successfully completed, the operator shall permanently fix on the wall, in the

immediate vicinity of the door, a plate supplied by the manufacturer of the hold-open system measuring 105 mm x 52 mm and carrying the inscription Hold-open system

Inspected by... (company logo with month and year of acceptance inspection) or equivalent **2.3** The operator is to be provided with a certificate detailing the successful acceptance inspection; this certificate must be retained by the operator.

3.2 In addition, the operator is obliged at least once a year, or at shorter intervals if specified in the approval certificate, to inspect all the devices to ensure that they are operating and interacting properly and without

fault, and to carry out or instigate adequate maintenance. The associated test, inspection and the maintenance work may only be performed by an expert or an appropriately trained person. **3.3** The scope, result and time of the periodic inspection are to be recorded. These records must be retained by the operator.

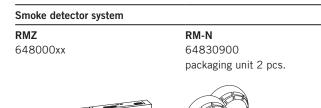
ITS 96 RANGE OF EQUIPMENT AND OPTIONAL ACCESSORIES

				ITS 96		ITS 96 with 4 mr extended spindle		ITS 96 with 8 m extended spindle		
					150 150	EN 2 - 4 524101 EN 3 - 6 52260	50	EN 2 - 4 52420 EN 3 - 6 52270)150	
For specification text/product description, see pa	age			(6	(5	6	5	
G 96 N20	.8/K12 -	L 🗆 52003701	10				•		-	
		R □ 52003801					•		-	
G 96 EMF	.8/K12 -	L 🗆 52001501	14		•		•		•	
	0/112	R □ 52001601			•		•		•	
G 96 GSR	.8/K12 -	□ 52001801	16		2x 🔳		2x 🔳		2x 🔳	
	260 ¹⁾	□ 52004001			2x 🔳		2x 🔳		2x 🔳	
G 96 GSR-EMF	.8/K12 -	□ 52001701	18		2x 🔳		2x 🔳		2x 🔳	
	260 ¹⁾	□ 52004201			2x 🔳		2x 🔳		2x 🔳	
Fixing plates for ITS 96		52000300	32	Δ	Δ	Δ	Δ	Δ	Δ	

¹⁾ GSR door co-ordinator for inactive leaf of 540–700 mm (inactive leaf slide channel shortened, arm 260 mm)

²⁾ Pivot bearing with 4 mm and 8 mm extended spindle available on request

RF hold-open unit for G 96 N20	RF hold-open unit for G 96 GSR, inactive leaf	Fixing BZ I for narrow-stile/ alu-framed doors	Fixing BZ II for narrow-stile/ alu-framed doors	Fixings for mounting the G 96 N20 aluminium doors	Connecting frame for G 96 GSR	Pivot bearing	Carry bar MK 397
K8/K12	K8/K12			en F			
52005600	52003500	52004705	52004805	52000405	52004400	52003400 ²⁾	470029xx
11	-	32	32	32	33	34	-
Δ		Δ	Δ	Δ		Δ	
Δ		Δ	Δ	Δ		Δ	
		Δ	Δ				
		Δ	Δ				
	Δ	Δ	Δ		Δ	Δ	Δ
	Δ	Δ	Δ		Δ	Δ	Δ
		Δ	Δ		Δ		Δ
		Δ	Δ		Δ		Δ



For specification text/product description, see page 30 $\,$

D

хх	Colour
01	Silver
11	White (RAL 9016)
09	Special colour
	Also available in matching "Design" finishes
04	Stainless steel
05	Polished brass
	MK 397
00	Galvanised
30	Special colour

- LH/anticlockwise closing (ISO 6)
- R RH-clockwise closing (ISO 5)
- xx Colour

L

- Closer body separate
- □ Slide channel separate
- \triangle Accessory

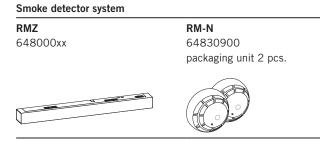
ITS 96 FL RANGE OF EQUIPMENT AND OPTIONAL ACCESSORIES

			ITS 96 FL		ITS 96 FI with 4 mr extended spindle		ITS 96 F with 8 m extended spindle	ım	
			EN 3 – 6 ■ 52630	150	EN 3 – 6 ■ 52640	150	EN 3 – 6 ■ 52650		
For specification text/product description, see page			-	7		7	-	7	
G 96 N20	L 🗆 52003701	10		-		-			
e NO/12	R 🗆 52003801			-		-		-	
G 96 GSR	□ 52001801	24		1x 🗖		1x 🗖		1x 🗖	
	□ 52004001			1x 🔳		1x 🔳		1x 🔳	
Fixing plates for ITS 96/ITS 96 FL	52000300	32	Δ	Δ	Δ	Δ	Δ	Δ	
Manual release pushbutton	HT-UP 35901531 HT-AP 35901532	_	Δ	Δ	Δ	Δ	Δ	Δ	

 $^{\scriptscriptstyle 1)}$ GSR door co-ordinator for inactive leaf of 540–700 mm

(inactive leaf slide channel shortened, arm 260 mm)

ITS 96		ITS 96 with 4 mn extended spindle	ı	ITS 96 with 8 mm extended spindle	ı	Fixing BZ I for narrow-stile/ alu-framed doors	Fixing BZ II for narrow-stile/ alu-framed doors	Fixings for mounting the G 96 N20 aluminium doors	Connection frame für G 96 GSR	Carry bar MK 397
EN 2 – 4 52400 EN 3 – 6 52250	150	EN 2 – 4 524101 EN 3 – 6 522601		EN 2 – 4 524201 EN 3 – 6 522701		52004705	52004805	52000405	52004400	470029xx
	4	Ĺ		Ĺ		32	32	32	33	_
						Δ	Δ	Δ		
						Δ	Δ	Δ		
	1x 🔳		1x 🔳		1x 🗖	Δ	Δ		Δ	Δ
	1x 🔳		1x 🔳		1x 🗖	Δ	Δ		Δ	Δ
Δ	Δ	Δ	Δ	Δ	Δ					



For specification text/product description, see page 30 $\,$

xx	Colour
01	Silver
11	White (RAL 9016)
09	Special colour
	Also available in matching "Design" finishes
04	Stainless steel
05	Polished brass
	MK 397
00	Galvanised
30	Special colour

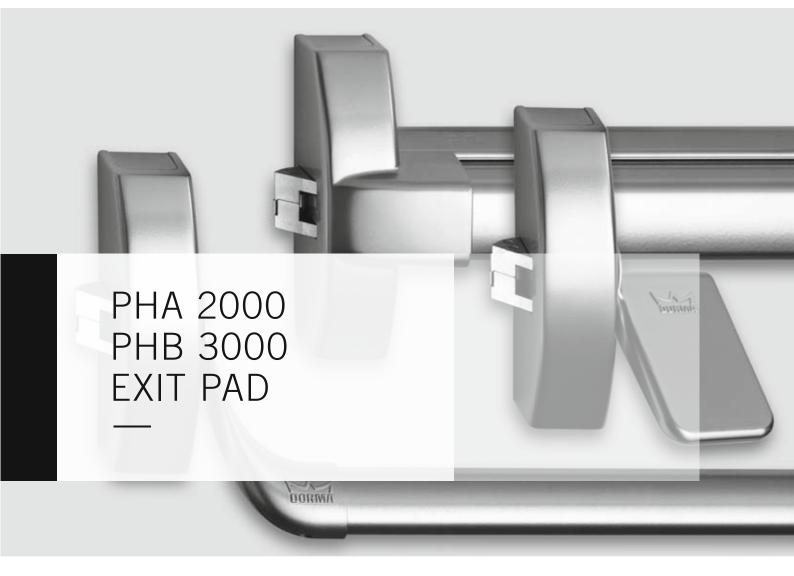
- L LH/anticlockwise closing (ISO 6)
- R RH-clockwise closing (ISO 5)
- xx Colour
- Closer body separate
- □ Slide channel separate
- \triangle Accessory





DORMA Australia P/L Head Office 46-52 Abbott Road, Hallam, Victoria 3803 Telephone (03) 8795 0666 Facsimile (03) 8795 0280 Toll Free Facsimile 1800 333 309 DORMA NZ Limited Head Office Building P 61-69 Patiki Road Avondale Auckland 1026 Telephone (09) 830 2052 Facsimile (09) 820 4909

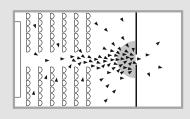




Panic Hardware in Contur Design

THE MODULAR DORMA PANIC HARDWARE-SYSTEM IN CONTUR DESIGN

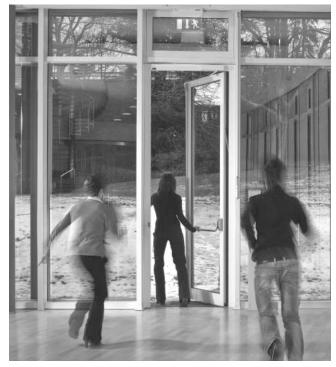
Prior knowledge of how to open the escape door is not expected.
DANGER OF PANIC



EN 1125 Panic exit devices operated by a horizontal bar

PHB 3000

PHA 2000



Approval certification

The Panic Hardware products of the series PHA 2000 and PHB 3000 have been tested to and certified compliant with EN 1125. All products meet the requirements of Annex ZA to EN 1125 and are therefore qualified to bear the CC mark of conformity.



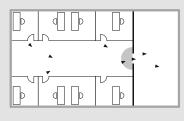




JANUS DE L'INDUSTRIE

ADVANCED, HIGH-SPEC FITTINGS FOR EMERGENCY EXIT DOORS

Prior knowledge of how to open the escape door is expected. NO DANGER OF PANIC



EN 179 Emergency escape devices with exit pad With this system, DORMA is able to offer a comprehensive range of high-quality panic hardware fittings with horizontal and vertical locking for doors in emergency exits and escape routes – applications in which safety, reliability and aesthetic attractiveness are indispensable requirements. DORMA's PHA and PHB products cover in full the hardware requirements that arise in public-frequented facilities such as hospitals, universities and schools, concert halls, shopping malls, hotels and administrative buildings. Whether office suites or apartment blocks, in buildings where there is generally no public pedestrian traffic, the Exit Pad provides the ideal answer. For both series, the same external DORMA PHT fittings are used.

CONTENTS

PHA 2000/PHB 3000	Features and functions	4
PHA 2000	Dimensions	6
	Applications and fixing details	7
PHB 3000	Dimensions	8
	Applications and fixing details	9
PHA 2000/PHB 3000	Components	10
Exit Pad	Features and functions	16
	Dimensions	18
	Applications and fixing details	19
	Components	20
Glass Kit	Features and functions	22
	Applications and fixing details	23
	Components	28
PH Accessories	Applications and fixing details	30
	Components	32
РНТ	External fittings	34

Exit Pad



Approval certification

The emergency exit devices of the Exit Pad series are tested to and certified compliant with EN 179. All products meet the requirements of Annex ZA to EN 179 and are therefore qualified to bear the **C€** mark of conformity.

PHA 2000 / PHB 3000 PRACTICAL PANIC HARDWARE FOR MANY DOOR SITUATIONS

With the series PHA 2000 crossbar and the series PHB 3000 pushbar combined with the universally applicable PHT external

fittings, DORMA is able to offer a range suitable not only for narrow-stile doors but also timber and similar full-face doors. The wide security latchbolt engages in a keeper that is normally mounted on the frame. This ensures that the latch is extremely easy to mount and that the door is also securely locked.

Benefits

For the trade

- Modular system for reduced storage costs
- Non-handed
- Universal use of PHT external fittings

For the installer

- Straightforward fixing
- Easy adjustment to different door widths and heights

For the architect/specifier

- For horizontal and vertical panic lock mechanisms
- External fitting with DORMA lever handle or knob
- Electrical functions for special applications

For the user

- Simple operation
- Excellent quality ensures long lifespan
- Universal electric strike

Data and features			PHA 2000)	PHB 3000			
		1-point	2-point	3-point	1-point	2-point	3-point	
Modular system		•	٠	٠	•	•	٠	
Standard (non-expandable)		_	•	_	•	_	_	
Standard doors (single-leaf/do	uble-leaf)	•	٠	•	•	٠	•	
Fire and smoke check doors (s	ingle-leaf/double-leaf) F	•	•	•	•	•	•	
Glass doors		•	•	•	_	-	_	
Door width	≤ 1000 mm	•	٠	•	•	•	•	
	≤ 1300 mm	•	٠	٠	٠	٠	٠	
Door height	≤ 2270 mm	_	٠	٠	-	•	•	
	≤ 3400 mm ¹⁾	-	•	٠	-	•	•	
Max. door leaf weight in kg		200	200	200	200	200	200	
Non-handed design		•	٠	٠	٠	•	٠	
Dogging device ²⁾		•	٠	•	•	٠	•	
Security anti-thrust latch	for standard doors	_	-	_	_	-	-	
	for fire and smoke check doors	•	•	٠	•	•	٠	
Unlocking via electric strike		0	0	0	0	0	0	
Monitoring switch on actuating	; bar	0	0	0	0	0	0	
PHT external fittings								
For standard doors and fire and		•	•	•	•	•	•	
For door leaf thicknesses up to								
Extended handle spindle and b thicknesses of $60 - 105 \text{ mm}$	polts for door leaf	0	0	0	0	0	0	
Approved to EN 1125		•	•	•	•	•	•	
CE mark for construction produ	cts	•	٠	•	•	٠	٠	

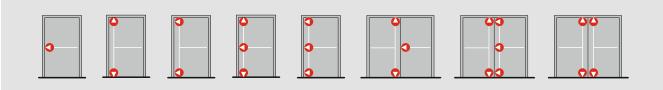
● Yes - No ○ Option

¹⁾ Doors higher than 2500 mm lie outside the scope of EN 1125.

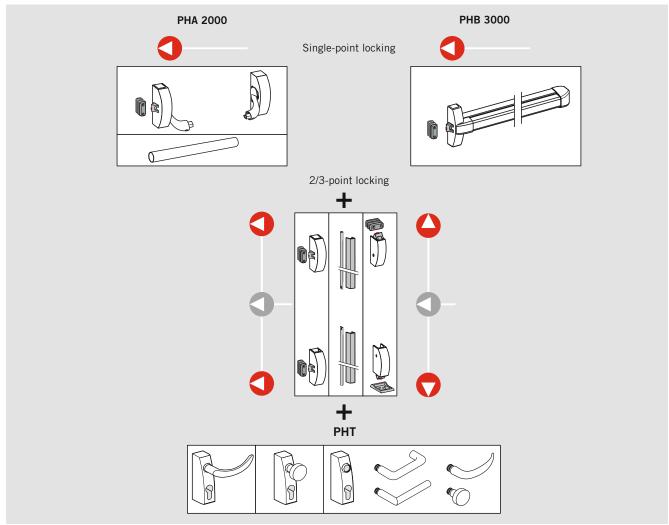
²⁾ Not for Fire and smoke check doors.

F Approval certification

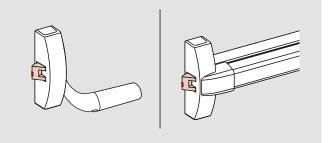
The panic hardware products marked with an **I** are approved for use with fire and smoke check doors. Approval certification for the fire and smoke check door in conjunction with the DORMA panic hardware product is additionally required in some countries – check local regulations.



The modular panic hardware system

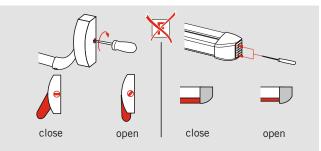


Security anti-thrust latch



The security anti-thrust latch prevents the latch from being pushed back by unauthorised means when it is in the closed position.

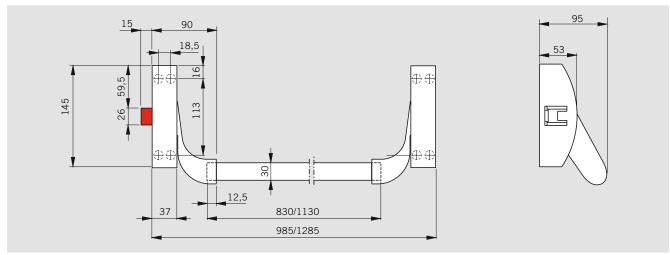
Dogging device



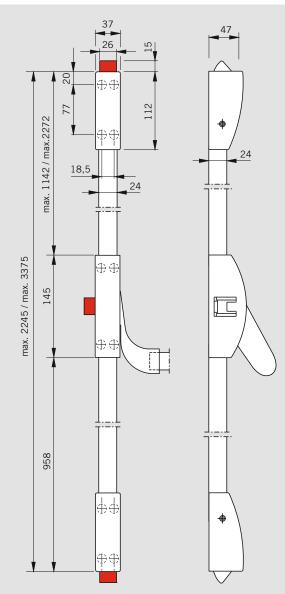
The dogging device serves to hold the latch in its retracted position so the door is freely accessible.

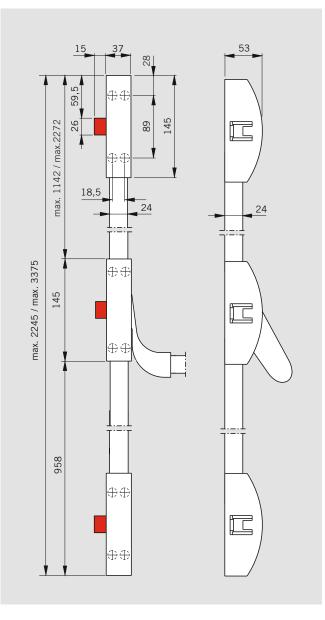
PHA 2000

Single-point locking

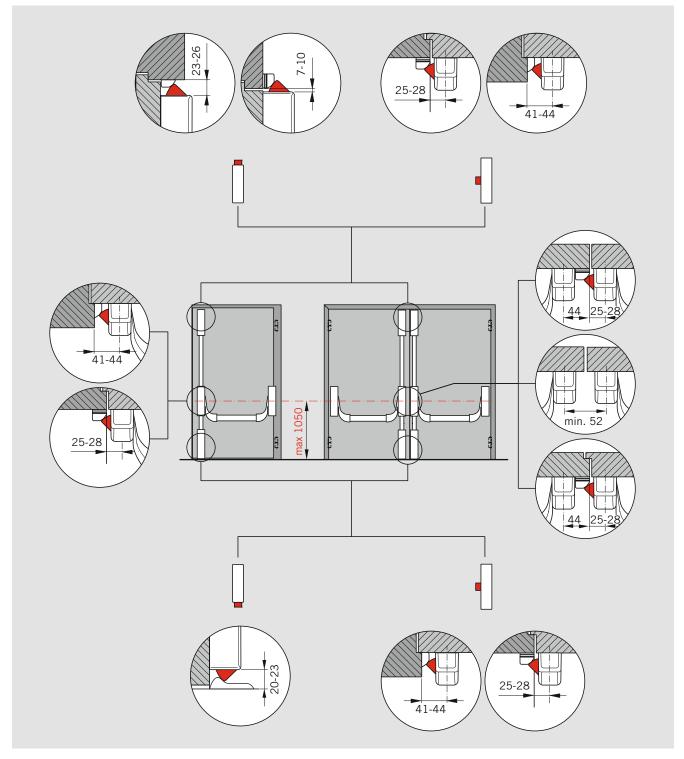


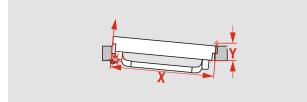
2/3-point locking





Applications and fixing details



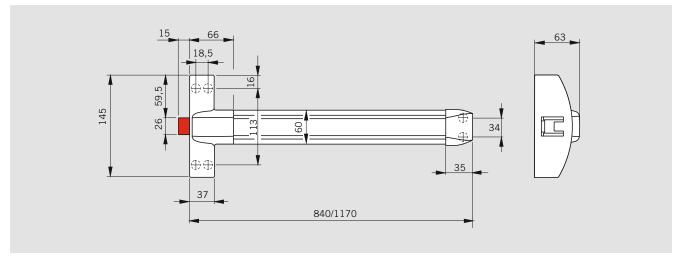


Note

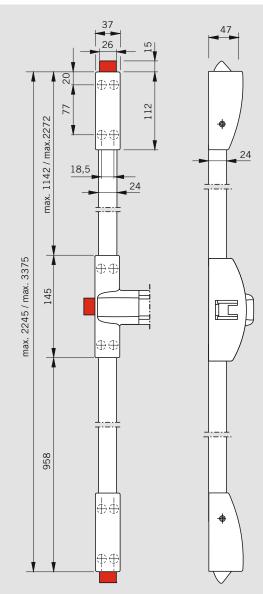
It may be the case that the exit device cannot be installed based on standard measurements where the door situation is extreme, e.g. with a door width X < 1000 mm combined with a hinge offset Y > 90 mm. DORMA will be glad to provide you with installation suggestions on request.

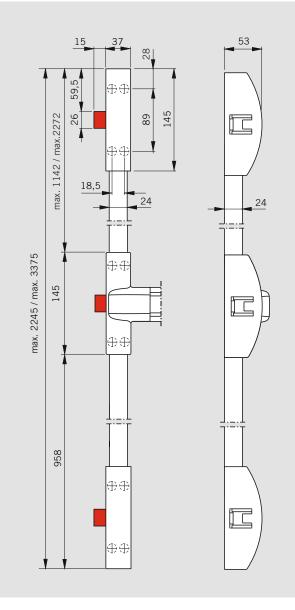
PHB 3000

Single-point locking

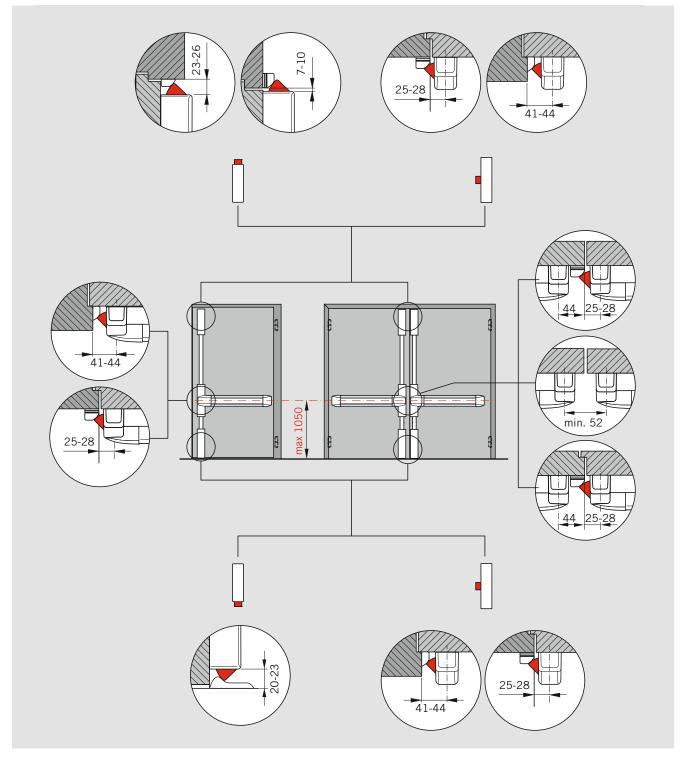


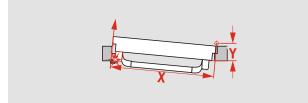
2/3-point locking





Applications and fixing details





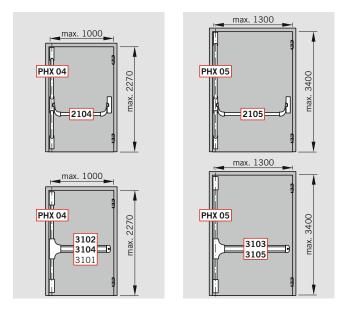
Note

It may be the case that the exit device cannot be installed based on standard measurements where the door situation is extreme, e.g. with a door width X < 1000 mm combined with a hinge offset Y > 90 mm. DORMA will be glad to provide you with installation suggestions on request.

PHA 2000 / PHB 3000

Components on single-leaf doors

				•	0	3	0 0	0 0
Standard doors	Modular		2101	٠	٠	٠	٠	•
	Standard		2201		0	0		
			2104/05	٠	٠	٠	٠	•
	Modular		3102/03	٠	٠	٠	٠	•
	Standard		3101	0				
			PHX 04/05		•	•	•	•
		Ŭ Ū	PHX 02		٠		٠	
			PHX 06			٠		•
Fire and smoke check doors F	Modular		2102	٠	•	•	•	•
	Standard		2201		0	0		
			2104/05	٠	٠	٠	٠	•
	Modular		3104/05	•	•	•	•	•
			PHX 04/05		•	•	•	•
		9	PHX 03		٠		•	
			PHX 07			٠		•



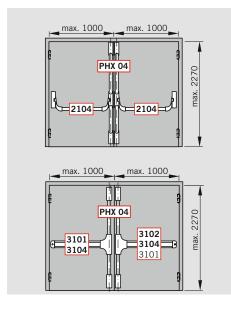
F Approval certification

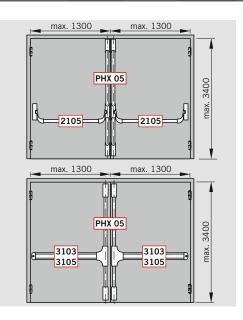
The panic hardware products of the series PHA 2000/ PHB 3000 in the Contur design marked with the symbol have been approved for use on fire and smoke check doors. In some countries, approval certification of the fire and smoke check doors to be used is additionally required. The panic hardware products of the series PHA 2000/ PHB 3000 in the Contur design carry the CC mark of conformity.

optional

For external fittings, see page 34

Components on do	ouble-leaf door	'S			Over-reb	ated door		Flush clo	sing door
					0		0 0		
				Inactive leaf	Active leaf	Inactive leaf	Active leaf	Inactive leaf	Active leaf
Standard doors	Modular		2101	•	•	•	•	•	•
	Standard		2201	0		0		0	0
			2104/05	•	•	•	•	•	•
	Modular		3102/03	•	•	٠	•	•	•
	Standard		3101		0				
			PHX 04/05	•		•	•	•	•
		0 0	PHX 02	•		•		•	•
			PHX 06				•		
Fire and smoke check doors	Modular		2102	•	•	•	•	•	•
F	Standard	ED. D	2201	0		0		0	0
			2104/05	•	•	•	•	•	•
	Modular		3104/05	٠	•	•	•	•	•
			PHX 04/05	•		•	•	•	•
		Ŭ Ū	PHX 03	•		•		•	•
			PHX 07				•		





O optional For external fittings, see page 34

Note

According to EN 1125, the effective length of the operating bar has to be at least 60% of the door width. Doors higher than 2500 mm lie outside the scope of EN 1125.

PHA 2000

Specification text	Order No.
PHA 2000 Panic exit device tested in accordance with EN 1125, for door widths up to 1300 mm, door heights up to 2270 (in accordance with EN 1125) or 3400 mm; non-handed. Can be unlocked electrically via electric strike. All products of the PHA 2000 series carry the C mark.	
PHA 2101 Single-point locking, modular, for standard doors, without security anti-thrust latch, with dogging device. Zinc die-cast latch, zinc latch keeper with spacer plates, plastic mounting backplate. I silver finish I black	35014 21011001 35014 21011002
 white PHA 2102 I Single-point locking, modular, for fire and smoke check doors, with security anti-thrust latch and dogging device. Steel latch, steel latch keeper with spacer plates, plastic mounting backplate. silver finish 	35014 21011010 35014 21021001
 □ black □ white □ stainless steel finish PHA 2201 	35014 21021002 35014 21021010 35014 21021004
Two-point locking only, with dogging device. Plastic mounting backplate. silver finish black white	35014 22011001 35014 22011002 35014 22011010
PHA 2104 Connecting rod 830 mm (for door widths up to 1000 mm) silver finish red black white	35014 21040001 35014 21040002 35014 21040019 35014 21040010
PHA 2105 Connecting rod 1130 mm (for door widths up to 1300 mm) silver finish red black white stainless steel finish	35014 21050001 35014 21050002 35014 21050019 35014 21050010 35014 21050004

See page 30 for accessories such as adjustable keepers, electric strikes or micro switches for signal actuation.

PHB 3000

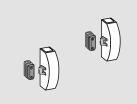
	Specification text	Order No.
	PHA 3000 Panic exit device tested in accordance with EN 1125, for door widths up to 1300 mm, door heights up to 2270 mm (in accordance with EN 1125) or 3400 mm, non-handed. Can be unlocked electrically via electric strike. All products of the PHB 3000 series carry the C mark.	
	PHB 3101 Single-point locking, standard, for standard doors with a door width up to 1000 mm, without security anti-thrust latch, with dogging device. Zinc die-cast latch, steel latch keeper with spacer plates. I silver finish white	35014 31011001 35014 31011010
	PHB 3102 Single-point locking, modular, for standard doors with a door width up to 1000 mm, without security anti-thrust latch, with dogging device. Zinc die-cast latch, steel latch keeper with spacer plates.	35014 31021001
	 white PHB 3103 Single-point locking, modular, for standard doors with a door width up to 1300 mm, without security anti-thrust latch, with dogging device. Zinc die-cast latch, steel latch keeper with spacer plates. silver finish 	35014 31021010 35014 31031001
	□ white PHA 3104 ■ Single-point locking, modular, for fire and smoke check doors with a door width up to 1000 mm, with security anti-thrust latch and dogging device. Steel latch, steel latch keeper with spacer plates.	35014 31031010
	□ silver finish □ white □ stainless steel finish	35014 31041001 35014 31041010 35014 31041004
	PHA 3105 Single-point locking, modular, for fire and smoke check doors with a door width up to 1300 mm, with security anti-thrust latch and dogging device. Steel latch, steel latch keeper with spacer plates.	
O	□ silver finish □ white □ stainless steel finish	35014 31051001 35014 31051010 35014 31051004

PHA 2000 / PHB 3000

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	Specification text	Order No.
	PHX 02 Top and bottom lock combination, without security anti-thrust latch. Zinc die-cast latch, zinc top latch keeper with spacer plates, steel bottom latch keeper. silver finish black white	35014 22021001 35014 22021002 35014 22021010
	PHX 03 ^[] Top and bottom lock combination, for fire and smoke check doors, with security anti-thrust latch. Steel latch, steel top latch keeper with spacer plates, steel bottom latch keeper. silver finish black white stainless steel finish	35014 22031001 35014 22031002 35014 22031010 35014 22031004
	PHX 06 Top and bottom locking combination with lateral latch, without security anti-thrust latch. Die-cast zinc latch, steel latch keepers with spacer plates. silver finish black white	35014 22061001 35014 22061002 35014 22061010
	 PHX 07 Top and bottom locking combination with lateral latch, for fire and smoke check doors, with security anti-thrust latch. Steel latch, steel latch keepers with spacer plates. silver finish black white 	35014 22071001 35014 22071002 35014 22071010

35014 22071004



□ stainless steel finish

Specification text	Order No.
 PHX 04 I Connecting rod set with cover for door heights up to 2270 mm. Steel latch keeper with spacer plates for double doors. silver finish black white stainless steel finish 	35014 22041001 35014 22041002 35014 22041010 35014 22041004
 PHX 05 Connecting rod set with cover for door heights up to 3400 mm. Steel latch keeper with spacer plates for double doors. silver finish black white stainless steel finish 	35014 22051001 35014 22051002 35014 22051010 35014 22051004

EXIT PAD EMERGENCY EXITS PROTECTED IN ACCORDANCE WITH EN 179

The fittings of the Exit Pad series are high-quality emergency exit devices for doors in escape routes and can be combined with the components of the PHA 2000/PHB 3000 series. They are used in buildings with no public pedestrian traffic. It is expected that people using the building are familiar with the exits and their fittings, avoiding the likelihood of a panic situation developing. All products of the Exit Pad series have been tested to and certified compliant with EN 179. They correspond to the requirements of Annex ZA to EN 179 and can therefore carry the CC mark of conformity.

Benefits

For the trade

- All-in-one packaging for easy stocking
- Non-handed
- Universal use of PHT external fittings

For the installer

- Straightforward fixing
- Easy adjustment to different door widths and heights

For the architect/specifier

- High-quality appearance with no visible fixings
- Connecting rods with metal covers
- External fitting with DORMA lever handle or knob

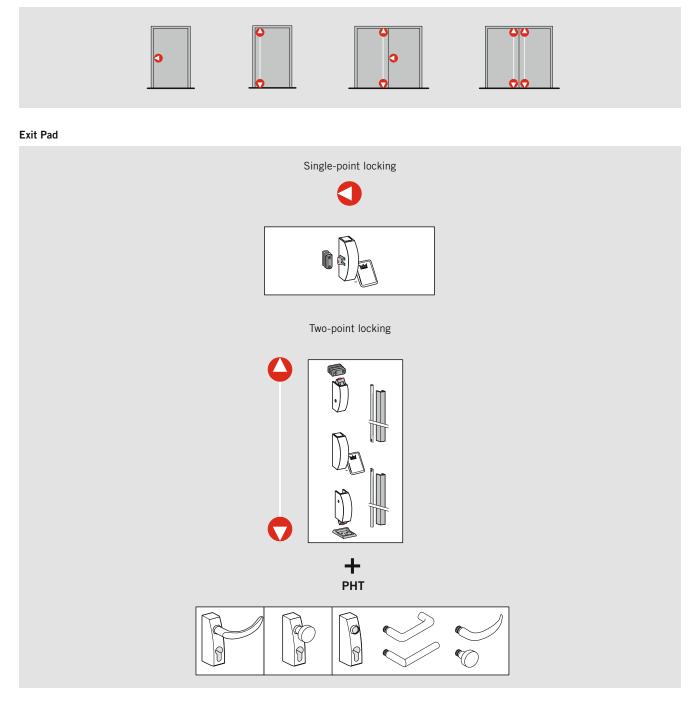
For the user

- Simple operation
- Excellent quality ensures long lifespan

Data and features		Exit	Pad ¹⁾
		1-point	2-point
Standard doors (single-leaf/double-leaf)		•	٠
Fire and smoke check doors (single-leaf/double-leaf)		•	٠
Glass doors		•	٠
Door width	≤ 1300 mm	•	-
Door height	≤ 2270 mm	_	•
Max. door leaf weight (in kg)		200	200
Non-handed		•	•
Security anti-thrust latch	for standard doors	-	-
	for fire and smoke check doors	•	•
Unlocking via electric strike		0	0
External fittings PHT			
For standard doors and fire and smoke check doors		•	•
For door leaf thicknesses up to 60 mm			
Extended handle spindle and bolts for door leaf thicknesses o	f 60 – 105 mm	0	0
Approved to EN 179		•	٠
CE mark for construction products		•	٠
● Yes – No ○ Option			

● Yes – No ○ Option

¹⁾ To achieve a three-point locking system, the Exit Pad can be used as a modular single-point locking device in combination with the PHX components from the PHA 2000/PHB 3000 series. In conjunction with PHX 05 door height max. 3400 mm (Doors higher than 2500 mm lie outside the scope of EN 179).



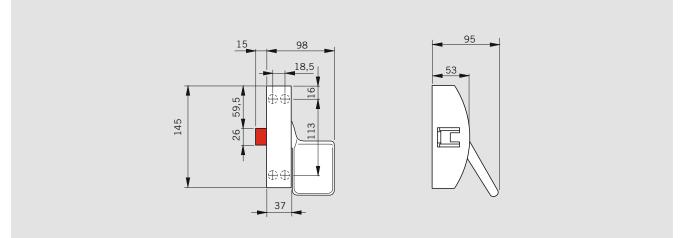
Security anti-thrust latch



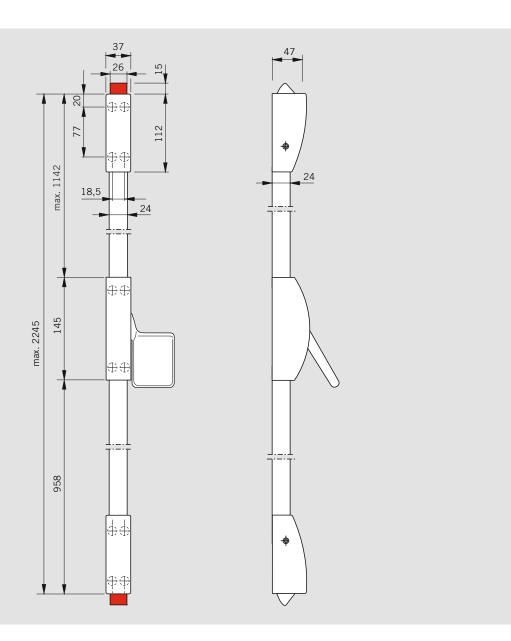
The security anti-thrust latch prevents the latch from being pushed back by unauthorised means when it is in the closed position.

EXIT PAD

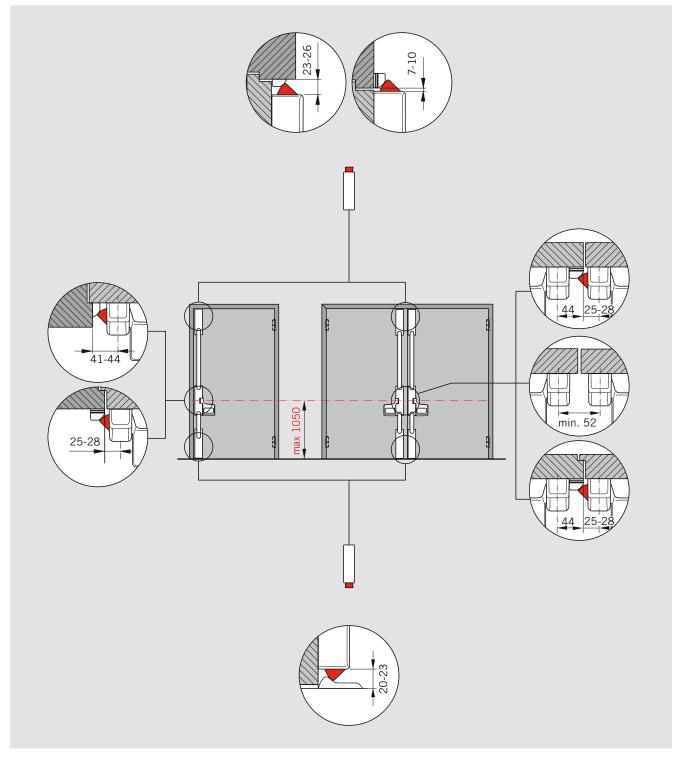
Single-point locking

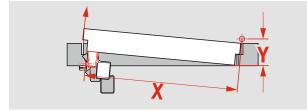


Two-point locking



Applications and fixing details





Note

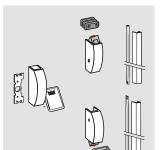
It may be the case that the exit device cannot be installed based on standard measurements where the door situation is extreme, e.g. with a door width X < 1000 mm combined with a hinge offset Y > 90 mm. DORMA will be glad to provide you with installation suggestions on request.

EXIT PAD

F

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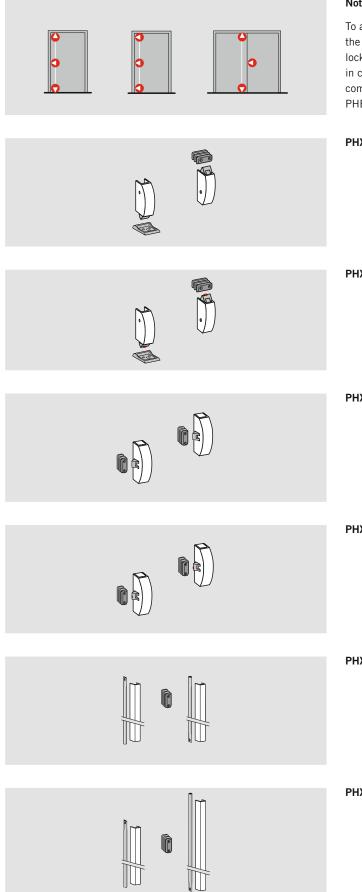
	Specification text	Order No.
	Specification text	Order No.
	Exit Pad Emergency exit device tested and approved to EN 179, non-handed. Can be unlocked electrically via electric strike. All products of the Exit Pad series carry the C€ mark of conformity.	
	Exit Pad Single-point locking, modular, for all standard doors, without security anti-thrust latch. Zinc die-cast latch, zinc latch keeper, with spacer plates, plastic mounting bracket.	
	□ silver finish	35014 21111001
	Exit Pad F Single-point locking, modular, for fire and smoke check doors, with security anti-thrust latch. Steel latch, steel latch keeper with spacer plates, plastic mounting bracket.	35014 21121001
	□ white	35014 21121010
	□ stainless steel finish	35014 21121004
)	Exit Pad 2P Two-point locking for standard doors, door heights up to 2270 mm, without security anti-thrust latch. Zinc die-cast latch, zinc latch keeper with spacer plates, plastic mounting bracket.	
	□ silver finish	35014 22111001



Exit Pad F 2P 🖪

Two-point locking, for fire and smoke check doors, door heights up to 2270 mm, with security anti-thrust latch. Steel latch, steel latch keeper with spacer plates, plastic mounting backplate.

□ silver finish	35014 22121001
□ white	35014 22121010
□ stainless steel finish	35014 22121004



Note

To achieve three-point locking, the modular single-point locking Exit Pad can be used in conjunction with the components of the PHA 2000/ PHB 3000 series.

PHX 02

PHX 03

PHX 06

PHX 07

PHX 04

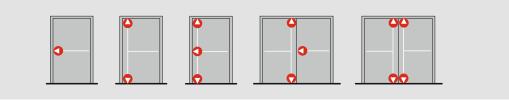
PHX 05

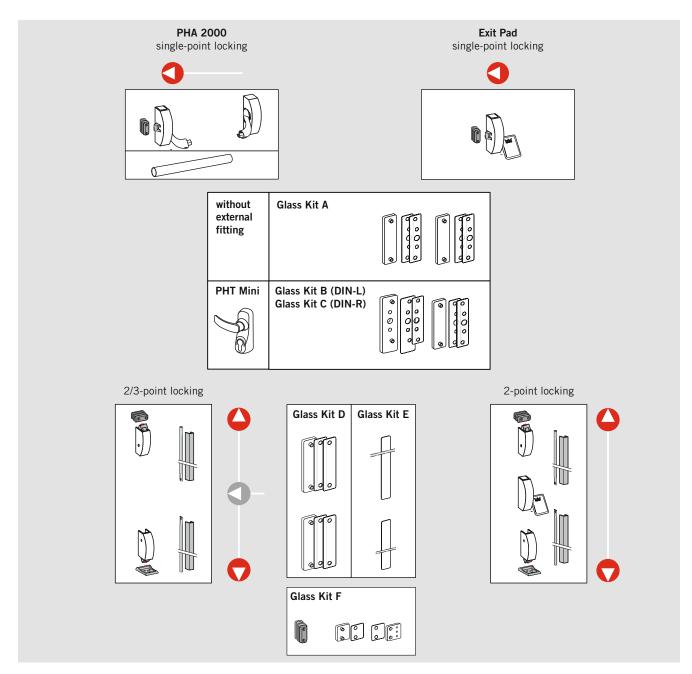
DORMA 21

GLASS KIT

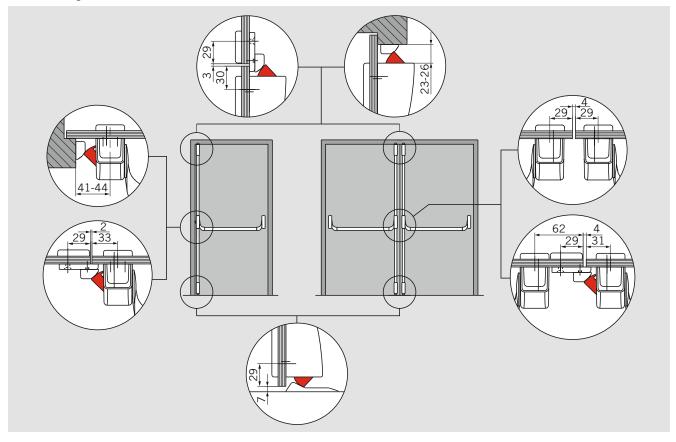
DORMA's PHA 2000 and Exit Pad devices can be fitted to a wide range of toughened glass doors.

- For doors in all glass or framed assemblies.
- For single and double doors.
- Single or multi-point Locking.
- Suitable for combination with external glass door mini-fittings.
- For 8 to 10 mm toughened safety glass (single panel).
- Maximum leaf width: 1,300 mm.
- Maximum leaf height: 2,500 mm.
- Standard stainless steel design.

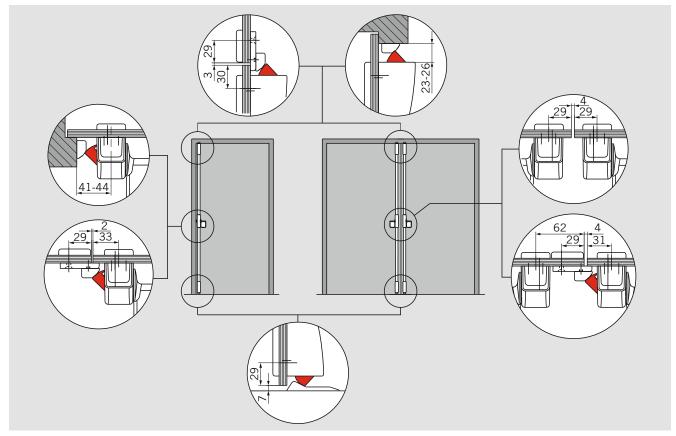




PHA 2000 on glass doors



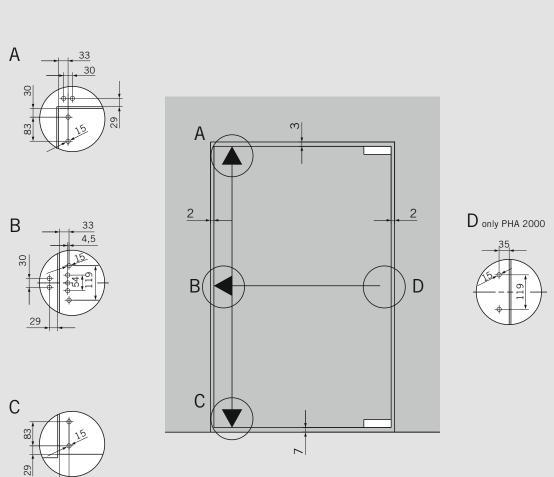
Exit Pad on glass doors



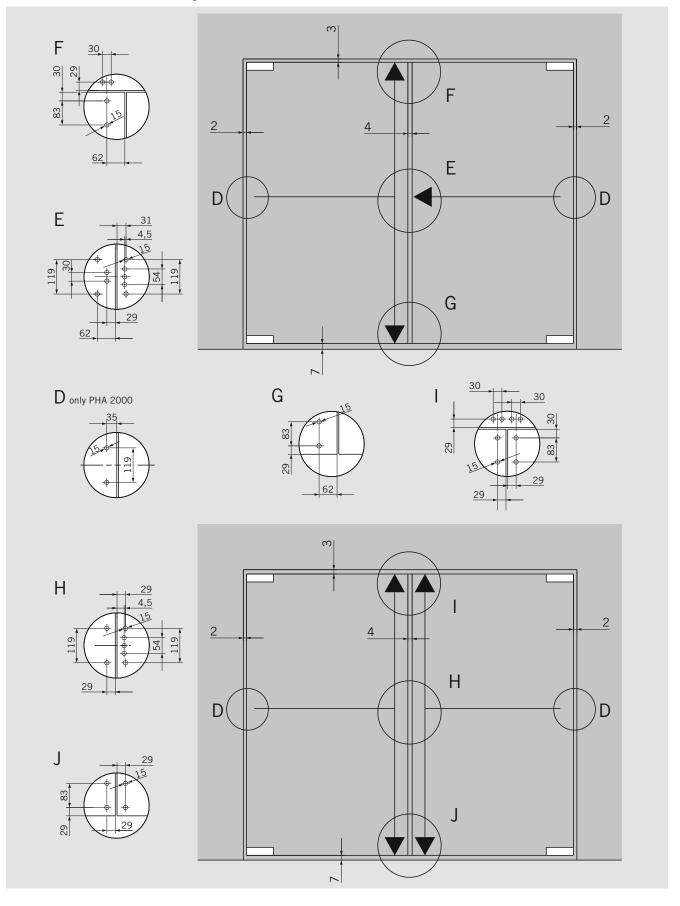
GLASS KIT

PHA 2000 / Exit Pad on single leaf all glass doors

33

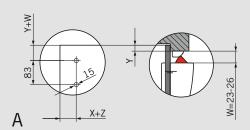


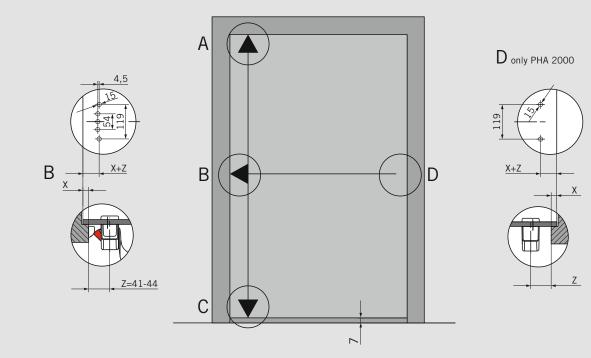
PHA 2000 / Exit Pad on double leaf all glass doors

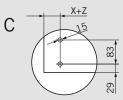


GLASS KIT

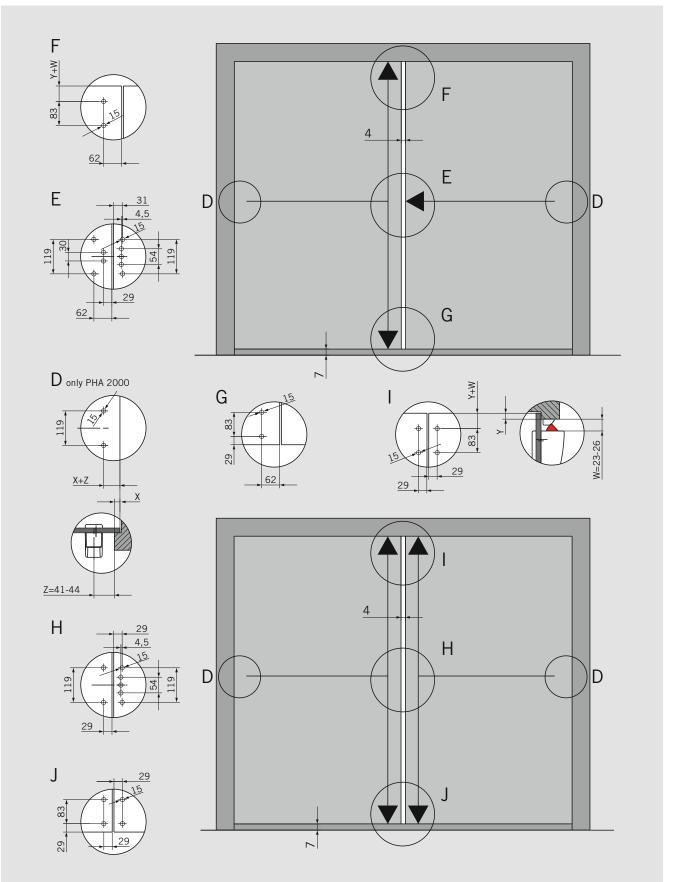
PHA 2000 / Exit Pad on single leaf glass doors with frame







PHA 2000 / Exit Pad on double leaf glass doors with frame

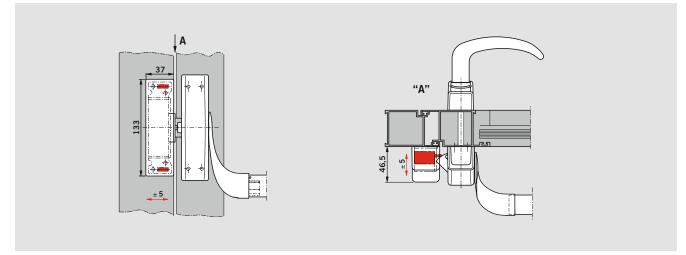


GLASS KIT

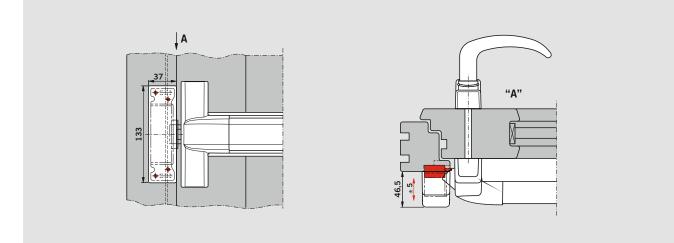
 Specification text	Order No.
PHA Glass Kit A Installation set for PHA 2000, Single-point locking, without external fitting. Stainless steel finish	35014 24011004
PHA Glass Kit B Installation set for LH (ISO 6), for PHA 2000, Single-point locking, without external fitting. Stainless steel finish	35014 24021004
PHA Glass Kit C Installation set for RH (ISO 5), for PHA 2000, Single-point locking, without external fitting. Stainless steel finish	35014 24031004
PHA Glass Kit D Installation set for PHA 2000, Top and bottom locking, vertical. Stainless steel finish	35014 24041004
PHA Glass Kit E Covering profiles for top and bottom connecting rod. Stainless steel finish	35014 24051004
PHA Glass Kit F Mounting plate for steel latch keepers, for single and double-leaf doors. Stainless steel finish	35014 24061004
PHA Glass Kit Mini External fitting Stainless steel finish	35014 24071004

ACCESSORIES

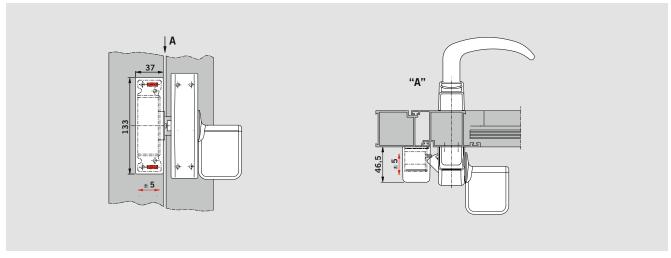
PHX 50 – Electric Strike



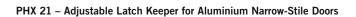
Application example for PHX 50 with PHA 2000 in the Contur design on an aluminium framed door

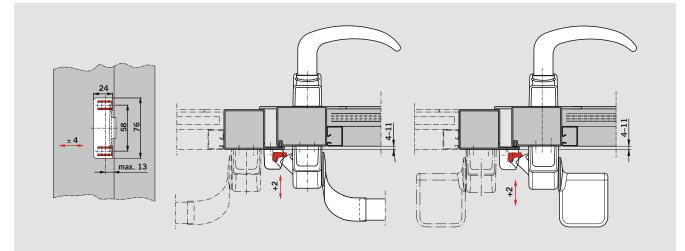


Application example for PHX 50 with PHB 3000 in the Contur design on an aluminium framed door

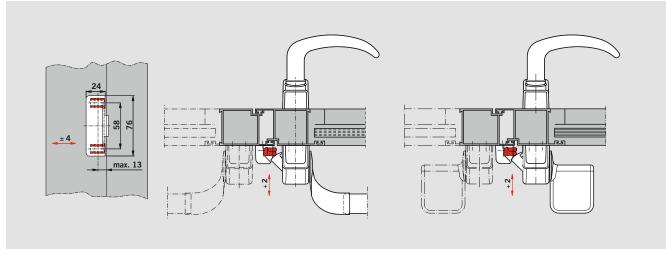


Application example for PHX 50 with Exit Pad in the Contur design on an aluminium framed door



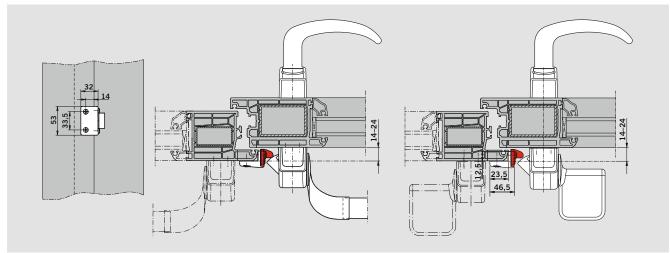


Application example of a PHX 21 on an over-rebated door, universal applicability for single-leaf and double-leaf doors



Application example of a PHX 21 on a door with flush meeting stiles, universal applicability for single-leaf and double-leaf doors

PHX 22 – Adjustable Latch Keeper for PVC Profile Doors



Application example of a PHX 22 on an over-rebated door, universal applicability for single-leaf and double-leaf doors

ACCESSORIES

	Specification text	Order No.
	PHX 50 Electric Strike	
	In combination with PHA/PHB for use on standard doors with a	
	rebate overlap of up to 24 mm.	
\square	Zinc die-cast latch engaging device.	
	12 V AC, 50 Hz, 15 W	
	12 V AG, 50 HZ, 15 W	
	□ silver finish	35014 24501001
		35014 24501002
		35014 24501002
	□ stainless steel finish	35014 24501004
		55014 24501004
	PHX 21 Adjustable Keeper	
	For standard aluminium narrow-stile doors, single- and double-leaf,	
~	flush or over-rebated (0–11 mm)	
	Zinc die-cast latch (in packs of 5)	
	□ silver finish	35014 24210101
E	□ black	35014 24210102
	□ white	35014 24210110
	□ stainless steel finish	35014 24210104
	PHX 22 Adjustable Keeper	
	For standard PVC profile doors, single and double leaf,	
	over-rebated (14–24 mm)	
	Zinc die-cast latch (in packs of 5)	
	\Box silver finish	35014 24220101
	□ black	35014 24220102
	□ white	35014 24220110
	□ stainless steel finish	35014 24220104
	PHA Microswitch	
Ĺ	For actuation of visual or audible signals.	
Ne	Contact rating: max. 48 V DC, max. 3 A	35014 25200060
	PHB Microswitch	
	For actuation of visual or audible signals.	
	Contact rating: max. 48 V DC, max. 3 A	35014 35201061

	Specification text	Order No.
ଞ (୦) ୧.୬	PHX Mounting Backplate Steel, galvanised (in packs of 10) for factory pre-installation to simplify field installation	35014 25200050
ଟି ବି ୦ (୧.୫	PHX Mounting Backplate Steel, galvanised (in packs of 10) for factory pre-installation to simplify field installation	35014 25200051

PHT EXTERNAL FITTING

Specification text

PHT

	External fitting with lever handle or knob, suitable for use with PHA 2000 and PHB 3000. All PHT external fittings and non-handed and carry the CE mark.
	 PHT 01 External fitting with lever handle, for standard doors with a leaf thickness of up to 60 mm, prepared for installation of a Europrofile single cylinder. With lever handle spindle and two cylinder fixing bolts. silver finish black white
	 PHT 03 External fitting with lever handle, for standard doors with a leaf thickness up to 60 mm, non-lockable. With lever handle spindle. silver finish black white
R	PHT 05 External fitting with lever handle for fire and smoke check doors with a leaf thickness up to 60 mm. With integrated ring gasket. Prepared for installation of a Europrofile single cylinder. With lever handle spindle and two cylinder fixing bolts.

35014 39051001
35014 39051002
35014 39051010
35014 39051004

Order No.

35014 39011001 35014 39011002 35014 39011010

35014 39031001 35014 39031002 35014 39031010

PHT 06

External fitting with knob, non turnable, for standard doors with a door thickness up to 60 mm, prepared for the installation of a Europrofile single cylinder. With lever handle spindle and two cylinder fixing bolts.

□ silver finish	35014 39061001
🗆 black	35014 39061002
□ white	35014 39061010



8

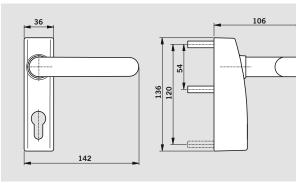
PHT 07 🖪

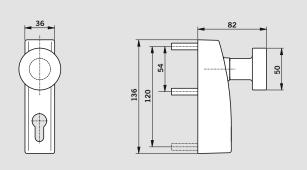
External fitting, suitable for combination with lever handles or knobs for fire and smoke check doors. With lever handle spindle and two cylinder fixing bolts.

□ silver finish	35014 39071001
□ black	35014 39071002
□ white	35014 39071010
□ stainless steel finish	35014 39071004

	Specification text	Order No.
	PHT S 05 Extended Spindle 8 mm square, incl. fixing screws for door leaf thicknesses of 60 – 105 mm.	35014 39200050
	Gasket Set For external fitting and PHA / PHB exit devices fixed to fire and smoke check doors.	35014 39200060
30 10	TL-Z 03 Single Europrofile cylinder with 3 keys, for PHT 01, 05, 06, 07	35014 56510300

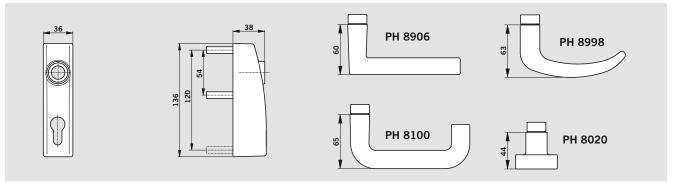
PHT – External Fitting



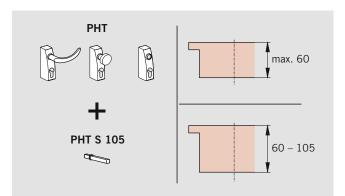


PHT 01, 03, 05 - External fitting with lever handle





PHT 07 – External fitting, modular



$|\mathbf{F}|$

When using the DORMA PHT external fitting in conjunction with the PHA/PHB panic hardware series or Exit Pad on fire and smoke check doors, it must be ensured that the appropriate set of gaskets is used. The panic hardware products of the DORMA PHT series carry the CC mark of conformity.





DORMA Australia Head Office 46-52 Abbott Road HALLAM Victoria 3803 Phone 1800 675 411 info.au@dorma.com www.dorma.com.au DORMA NZ Limited Head Office Building P 61-69 Patiki Road AVONDALE Auckland 1026 Phone 0800 436 762 info.nz@dorma.com

PHA 2000 PHB 3000 Exit Pad

Dependable safety – now in the Contur design



DORMA



Whether in airports, schools or hospitals – DORMA panic hardware ensures reliable emergency exit and escape route safety.



EN 1125

Maximum safety not an option.



Systematic protection compliant with EN 1125.

The correct and dependable functioning of emergency exits and escape routes is vital to the safety of users. The optimum solution: DORMA modular panic hardware systems, tested and certified to the highest specification class in accordance with EN 1125. Ensuring ease of egress in the event of an emergency, they serve to protect life and limb. Today buildings such as airports and hospitals depend on such products. Equipped with a horizontal actuation bar, they offer a high level of safety compliant with EN 1125. All buildings will benefit from the quality and reliability of these emergency exit devices.



The DORMA PHA 2000 and PHB 3000 modular systems in the Contur design.

A customised solution for every building – for safety without comprise.

DORMA's modular panic hardware system comprises a complete range of highquality fittings with horizontal and vertical locks for emergency exits and escape route doors in public buildings such as schools, hospitals and hotels. Aligned to the application, DORMA offers the PHA 2000 version with crossbar actuation and the PHB 3000 version with pushbar actuation – both compliant with EN 1125. The PHA 2000 and PHB 3000 are complemented by the PHT external hardware series with elegant lever handles or knobs that can be mixed and matched as required. For enhanced safety and with characteristic end caps in the elegant DORMA Contur design.

Dependable protection – when it matters.

The DORMA quality standard offers dependable operation in the event of an emergency and thus the reliable protection of human life.

PHA 2000 with crossbar actuation.







DORMA PHA 2000 and PHB 3000 in the Contur design

PHB 3000 with pushbar actuation.

DORMA in the Contur design – for visual consistency throughout.



reddot design award visual style. Clean, clear e.g. for the TS 97 in the Contur design and elegant, its essential



e.g. for the PORTEO and the PHA 2000/PHB 3000 in the Contur design

Design perfection.

The DORMA Contur design embodies an unmistakable visual style. Clean, clear and elegant, its essential attributes are both distinctive and appealing, with each and every product a perfect interplay of homogenous proportions, cubic styling and handcrafted quality. This characteristic design ensures that DORMA products harmonise elegantly with the building as a whole while contributing to a consistent visual appearance to reinforce its aesthetic clarity. Products in the DORMA Contur design have been recognised with a number of accolades including the reddot design award and the Janus de l'Industrie.





A perfect combination of form and function: the DORMA TS 97 in the Contur design is an outstanding architectural solution in every respect.



Panic hardware that also looks good.

The PHA 2000 and PHB 3000 modular panic hardware systems in the modern Contur design.

The unmistakeable appearance of emergency exits is particularly important. For safety reasons, they must be immediately identifiable should the worst occur. In visual terms, however, they should also contribute to the building's individual character – national and international airports are a case in point. The PHA 2000 and PHB 3000 modular panic hardware systems also satisfy such requirements. The DORMA Contur design is typified by its distinctive cubic styling. Its characteristic lines are the epitome of elegance and quality, confirmed by the brand logo stamped on the base profile.

Stainless steel finish for a first-class appearance.

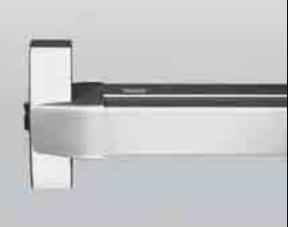
Quality is also expressed by the choice of the material used. The PHA 2000 and PHB 3000 modular panic hardware systems are available in a stainless steel finish, in addition to the standard colours, further underlining the unique commitment to design excellence inherent in this system.



PHA 2000 and PHB 3000: cubic styling with clean lines.



PHB 3000 with end caps in the DORMA Contur design.



PHB 3000

PHA 2000





face < 100 mm

Proven technology, dependable, straightforward operation – the PHA 2000 and PHB 3000.

Elegant: standard projection from face < 100 mm.

The high-quality DORMA PHA 2000 Crossbar and PHB 3000 Pushbar modular systems unite protection of human life with improved technology that includes a standard projection of < 100 mm from the door face. The many benefits at a glance:

- Standardised range of accessories for top and bottom locks and exterior hardware for reduced stocking costs
- Safety-tested to EN 1125
- **(**E marked
- Excellent reliability
- Choice of lock options
- Award-winning DORMA Contur design
- No visible fixings

- Dogging device as standard
- Rapid, professional installation and easy adaptation to different door widths and heights
- Straightforward, dependable handling
- Excellent durability
- Quality assurance to
- ISO 9001
- Suitable for fire, smoke check and standard doors





PHB 3000



Safe and elegant – integrated PHB 3000 technology concealed from view.



Versatile in use – e.g. the PHA 2000.

Different profile types and arrangements require different solutions. With adjustable latch keepers and our universal electric strike, the DORMA PHA 2000 panic hardware system is ideal for narrow-framed doors, while the PHB 3000 system is highly suited to solid timber doors.

PHB 3000 – with concealed fixings and dogging device.

Safety in a thoroughly elegant package. The cubic styling and signature perforated end caps of the PHB 3000 panic fitting in the DORMA Contur design conceal the components necessary for dependable operation. The fixings and the dogging device, provided as standard, thus remain attractively concealed. The PHB 3000 also clearly conveys its safety function through its visual appearance. Whether on timber, narrowframed or glazed doors, the DORMA panic hardware system always fits perfectly.









Flexible in service with precision built in.

Fit for purpose -

from timber doors to

multi-point locking.

dependability and can be

tailored for use in almost

any application.

All the lock types can be used for every type of door - RH or LH, narrow-framed or solid timber, single or The DORMA PHA 2000 double, and with flush or Crossbar and PHB 3000 over-rebated meeting stiles. Pushbar panic hardware Modular expansion from offer uncompromising single-point to two-point and

available.

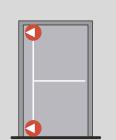
multi-point locking is also



Customised applications - for single-point, two-point and multi-point locking.

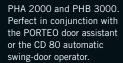




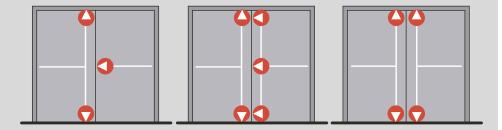


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Mix and match with a variety of DORMA products – for a consistent safety system.

Through their quality, DORMA products deliver truly excellent system solutions – which means they can always be relied upon to work as an efficiently functioning whole. That includes the PHA 2000 and the PHB 3000. For instance, in conjunction with the PORTEO door assistant or the CD 80 automatic swing door operator, they afford an appropriate level of door safety in accordance with German standard DIN 18650.

All the benefits of a modular system.

DORMA'S PHA 2000 Crossbar and the PHB 3000 Pushbar panic hardware systems come with a standardised range of accessories – for reduced stocking, increased efficiency and fewer worries.



DORMA Exit Pad. Safety to EN 179.

Emergency exits protected per EN 179.

European standard EN 179 allows the use of emergency exit devices with a lever handle or push pad in buildings such as private dwellings and non-public offices that are occupied by people familiar with the use of this type of door furniture. Here too DORMA's tested and certified panic hardware systems offer the right kind of individual solution for an exceptionally wide range of applications.

Opening the door with effortless ease – the DORMA Exit Pad.

DORMA panic hardware can also be fitted with an optional exit pad compliant with EN 179. It is installed on the surface of the door leaf. The latch is secured within a keeper on the door frame. And the Exit Pad also comes in the elegant DORMA Contur design for styling consistency. It can likewise be combined with external fittings of the PHT hardware range.

For easier opening. The Exit Pad complies with EN 179.



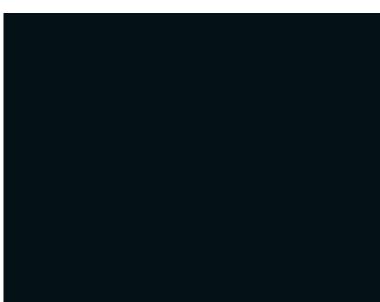
The ideal complement – quality accessories and PHT external hardware.

Accessories that integrate perfectly.

- Top/bottom locks and connector rods
- Universally applicable for PHA 2000/PHB 3000/ Exit Pad systems
- Versions with vertical and horizontal latch
- Latch models in steel or die-cast zinc
- In the elegant DORMA Contur design (electric strike as well)

PHT external hardware series – for a safe whole.

To ensure a consistent overall appearance, the PHA 2000, PHB 3000 and Exit Pad can be ideally complemented with our various interchangeable PHT external fittings – also typified by the DORMA Contur design. An integral appearance is achieved with – for example – our 8830 standard-design lever handle or 8020 K knob, for a system offering visual harmony as well as a high level of safety and quality.



Knobs and lever handles available for system integration.







DORMA worldwide

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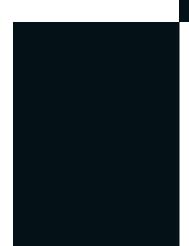
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http://www.dorma.com/ panic-hardware/en



Door Control







Glass Fittings and Accessories



Security/Time and Access Control (STA)



Movable Walls





Hold-open system

THE PROVEN SOLUTION FOR CONTROLLED HOLD-OPEN OF FIRE AND SMOKE CHECK DOORS

Universal application capability, stable hold-open point and assured quality. The TS 73 EMF is a combination of hydraulic door closer and electro-magnetic hold-open unit. In conjunction with a smoke detection system (e.g. DORMA RMZ), the TS 73 EMF can be used as a hold-open system for fire and smoke check doors. The hold-open of the door is performed under electromagnetic control. In the event of a fire, the door is reliably closed by the integral hydraulic closer. The closing cycle is also initiated by manual door operation or automatically in the event of a power failure.

Certified to ISO 9001

For the specifier/architect

Attractive, compact design

Wide range of applications

approx. 75° and 180°

For the user

closer

Hold-open possible between

• To hold open, the door simply

has to be opened to the required point and released

· Free selection of the hold-

without the need for

open point (opening angles

over 75°); variable at any time

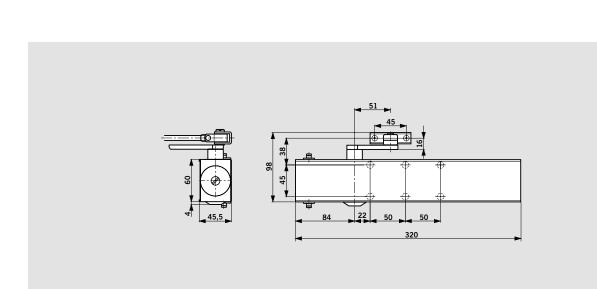
adjustment of setting controls

Convertible to free-swing door

Data and features TS 73 EMF							
Closing force	Spring strength						
		4	5	6			
Standard doors ¹⁾	$\leq 1150 \text{ mm}$	•	-	-			
	≤ 1250 mm	-	•	-			
	≤ 1400 mm	-	-	•			
Fire and smoke check doors ¹⁾	≤ 1150 mm	•	-	-			
	≤ 1250 mm	-	•	-			
	≤ 1400 mm	-	-	•			
Non-handed			•				
Arm	Standard		•				
	Slide channel		-				
Closing speed variable by valve			•				
Latching speed variable	by arm		•				
	by valve		_				
Backcheck			-				
Delayed action			-				
Hold-open point variable							
(opening angles between 75° and	nd 180°)		•				
Free-swing arm assembly			0				
Input voltage		24 V	DC ±	l5 %			
Power input max. in W			2				
Weight in kg			3.4				
Dimesions in mm	Length		320				
	Overall depth		45.5				
	Height		60				
Door closer compliant with EN	1154		•				
Hold-open device compliant wit	th EN 1155		•				
$c\epsilon$ mark for construction produc	ts		•				
Yes − No ○ Option							

● Yes – No ○ Option

¹⁾ For applications involving particularly high or heavy doors, and doors which have to close against wind or draught conditions, the next larger closer size should be selected.



Benefits

For the trade

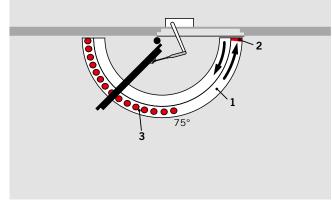
- Efficient stocking thanks to non-handed, modular system
- Range of arm assemblies and accessories to provide an ideal solution even for special applications

For the fabricator/installer

- Easy to fix
- No adjustment of the hold-open point necessary
- Optimum adaptability thanks to adjustable latching action

STANDARD AND OPTIONAL FUNCTIONS

The **closing speed** of the TS 73 EMF is infinitely variable by means of a valve. In addition, the latching action can be adjusted via the closer arm. The electro-magnetic hold-open device is integrated in the hydraulic door closer. The hold-open point (available from an opening angle of 75°) is freely selectable. The door merely has to be opened to that angle required and then released. Depending on the door width and the size of the opening angle, a degree of fall-back of between 1° and 3° is possible.



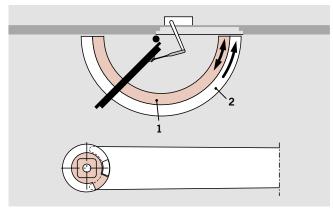
- 1 Infinitely variable closing speed
- 3 Hold-open range
- 2 Infinitely variable latching action (adjustable at arm)

Free-swing arm assembly (option)

Equipped with a free-swing arm assembly, the TS 73 EMF can also be employed where doors are required to operate normally – functioning in the same way as doors without a door closer. If the door leaf is opened wide (min. 75°), the closer spindle is held in this position by the electro-magnetic hold-open device in the hydraulic closer body. However, the door can be freely operated by virtue of the free-swing function integrated in the arm. In the event of a fire or power failure, the door is reliably and securely closed automatically by the hydraulic door closer. Typical applications include fire and smoke check doors in senior citizen homes, homes for the disabled and hospitals etc.

Note

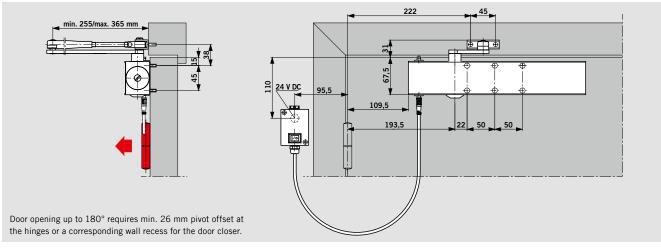
In the case of double doors, the free-swing function may only be used on the active leaf.



1 Free-swing range

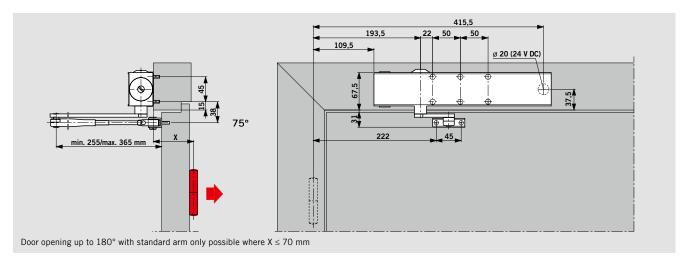
2 Fully controlled closing (de-energised)

DOOR LEAF FIXING, PULL SIDE

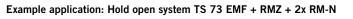


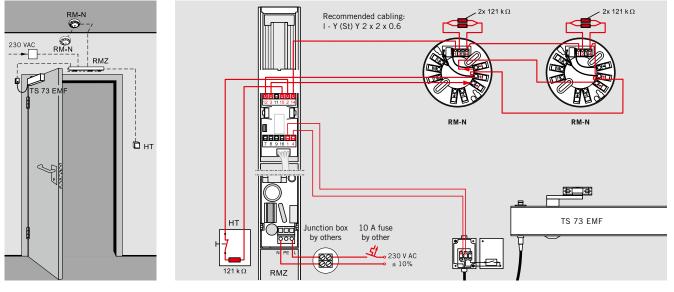
Example: LH/ISO 6 door; mirror image for RH/ISO 5 door.

TRANSOM FIXING, PUSH SIDE

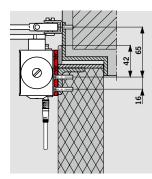


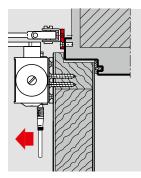
Example: RH/ISO 5 door; mirror image for LH/ISO 6 door.

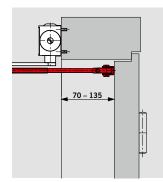


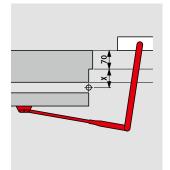


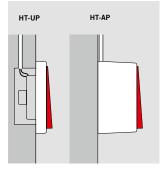
ACCESSORIES

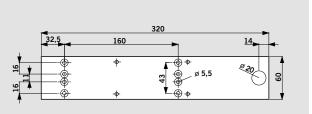












Mounting backplate

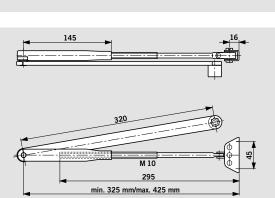
For pull and push side fixing. For mounting the TS 73 EMF to fire and smoke check doors and also doors in which no direct fixing is possible; with hole group per Supplement 1 to EN 1154.

Hinge plate

For pull-side installation of the arm on particularly narrow door frames.

Extended adjustable arm

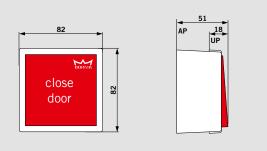
For push side fixing. For adapting the TS 73 EMF to door sets with frame reveal depths between 70 and 135 mm.



M 10 295 min. 305 mm/max. 420 mm

145

250



Extended arm assembly

For push side fixing. For increasing the door opening to 180° in door sets with a frame reveal depth of max. 70 mm and where X < 70 mm.

HT manual switch

According to the code of practice for hold-open systems issued by the DIBt, Berlin, a manual release switch must be installed in the case of free-swing door closers.

STANDARD EQUIPMENT AND OPTIONAL ACCESSORIES

TS 73 EMF hold-open device Door leaf fixing, pull side	Standa arm	ırd	Free sw arm	wing	Extend adjusta arm		Extend assem		Mounting backplate	Hinge plate	Manual switch HT-UP
											35901531 HT-AP
	Y7540)xx00	Y5300	005xx	Y7540	0xx01	Y7540)xx34	7300xx10	830014xx	35901532
Spring strength EN 4 Y530101xx	Y	Y	Y	Y					Δ	Δ	Δ
Spring strength EN 5 Y530401xx	Y	Y	Y	Y					Δ	Δ	Δ
Spring strength EN 6 Y530701xx	Y	Y	Y	Y					Δ	Δ	Δ
TS 73 EMF hold-open device Transom fixing, push side											
Spring strength EN 4 Y531101xx	Y	Y	Y	Y	Y	Y	Y	Y	Δ		Δ
Spring strength EN 5 Y531401xx	Y	Y	Y	Y	Y	Y	Y	Y	Δ		Δ
Spring strength EN 6 Y531701xx	Y	Y	Y	Y	Y	Y	Y	Y	Δ		Δ
Smoke detector system						xx C	olour			Y Closer	body separate
Smoke detector RMZ			ctor RM- nit 2 pcs				ilver pecial c	olour		•	sembly separate al accessory
)								
648000xx	6483	30900									

SPECIFICATION TEXT

TS 73 EMF

Hold-open device with electrohydraulic hold-open function and integral pressure compensation feature for stable, infinitely variable and temperatureimmune hold-open positions at door opening angles between 75° and 180°. Closing speed and latching action infinitely variable. Non-handed. Operating voltage 24 V DC. General building regulations approval issued by DIBt, Berlin, for use in hold-open systems. Acceptance inspection mandatory.

Installation

Y Door leaf fixing, pull side Y Transom fixing, push side

Spring strength

Y EN 4 Y EN 5 Y EN 6

Arm type

- Y Standard
- Y Free-swing
- Y Extended adjustable arm
- Y Extended arm assembly

Accessories

- Y Mounting backplate
- Y Upstand bracket
- Y Manual switch

Colour

- Y Silver
- Y Special colour (sim. to RAL)

Make

DORMA TS 73 EMF

HOLD-OPEN SYSTEMS REGULATIONS / INFORMATION

The use of hold-open systems is subject to special regulations based on official approval requirements. These relate in particular to the final inspection (acceptance), continuous monitoring and maintenance. The regulations and instructions provided below are intended as an aid, pursuant to statutory regulations that apply e.g. in Germany, to ensure that all participants are properly informed of the most important requirements that relate to the installation and operation of hold-open systems.

1. General

1.1 In the case of fire doors (and similar shutters/closures/ barriers) that are held open by hold-open systems, the sweep area necessary for the closing operation must be kept constantly clear. This area must be clearly identified by lettering, floor markings or similar. Where necessary, structural measures must also be implemented to ensure that cables, leads, lines, pipes, stored/deposited goods or

2. Commissioning

2.1 In Germany and countries governed by DIN regulations: Following on-site installation of the operable hold-open system, its functional integrity and quality of installation must be confirmed by an acceptance inspection procedure. The acceptance inspection may only be performed by skilled personnel of manufacturers of

3. Routine Inspection

3.1 The hold-open system must be kept by the operator in a constantly good operating condition, and inspected at least once a month to ensure that it is functioning properly.

components (e.g. false ceilings or other overhead items/ elements) are reliably prevented from falling into the sweep area.

1.2 Wherever possible, smoke detectors should be used for hold-open systems. For hold-open systems for fire doors in emergency escape routes, smoke detectors must be used.

1.3 Each hold-open device must also be capable of being released by hand, without adversely affecting the functional capabilities of the automatic release device. In the case of door closers with electro-magnetic hold-open, the manual release may be performed by a small tug applied to the door leaf. If holding electro-magnets or freeswing door closers are used, a pushbutton must be provided to facilitate manual release. The manual release pushbuttons employed for this purpose must be red and carry the wording "Close Door" or equivalent. The pushbutton must be located in the immediate vicinity of the door and must not be concealed by the door when this is held open.

monitoring and/or hold-open devices, skilled personnel authorized by same, or skilled personnel from an accredited inspection agency.

2.2 In Germany and countries governed by DIN regulations: Once the acceptance inspection has been successfully completed, the operator shall

permanently fix on the wall, in the immediate vicinity of the door, a plate supplied by the manufacturer of the hold-open system measuring 105 mm x 52 mm and carrying the inscription Hold-open system Inspected by... (company logo with month and year of acceptance inspection) or equivalent 2.3 The operator is to be provided with a certificate detailing the successful acceptance inspection; this certificate must be retained by the operator.

3.2 In addition, the operator is obliged at least once a year, or at shorter intervals if specified in the approval certificate, to inspect all the devices to ensure that they are operating and interacting properly and without

fault, and to carry out or instigate adequate maintenance. The associated test, inspection and the maintenance work may only be performed by an expert or an appropriately trained person. **3.3** The scope, result and time of the periodic inspection are to be recorded. These records must be retained by the operator.





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Hold-open magnets

A MODULAR SYSTEM FOR FIRE AND SMOKE DOORS SETTING NEW STANDARDS FOR HOLD-OPEN MAGNETS

DORMA's new range of EM hold-open magnets provides the perfect complement to a technically and aesthetically advanced range of fire and smoke door products. These new market-orientated developments are characterised by their ease of fixing and

functional elegance. And thanks to comprehensive quality assurance, they also offer maximum reliability and service life.

Certified to ISO 9001

Benefits

For the trade

- Cost-effective modular system offering the advantages of maximum flexibility with minimal stocking levels.
- A further component in the DORMA range for singlesource supply.

For the installer

- Quick and easy to fix.
- Sophisticated accessories suitable for a wide range of applications.

For the architect/specifier

- Uniform appearance common to all models.
- Modular system for application flexibility.

For the user

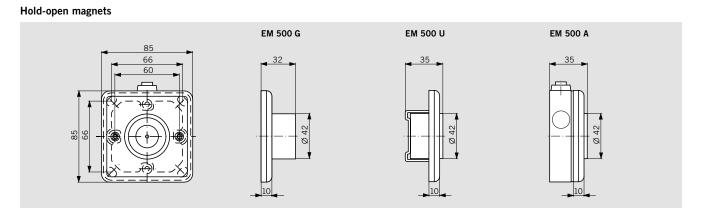
- Unobtrusive. Concealed cable run.
- Optimum holding force with minimum power consumption.

Data and features		500 G	500 U	500 A		
Fixing	Surface-mounted Flush-mounted Floor-mounted ¹⁾	• - •	- • -	• •		
Holding force	400 N	•	•	•		
Anti-remanence pin		• • •				
Test pushbutton – – –						
Polarity reversal protection						
Operating voltage 24 V	AC/DC	• • •				
Power consumption ma	1.5					
On-load factor in %	Dn-load factor in % 100 (rated for continuous set					
Class of protection			IP 40 ²⁾			
Ambient temperature i	n °C		0 – 50			
Weight in kg		0.41	0.42	0.46		
Dimensions in mm	Width Length Depth	85 85 32	85 85 35	85 85 35		
Hold-open devices test	ted to EN1155		•			
C€ mark for building pro	oducts		٠			

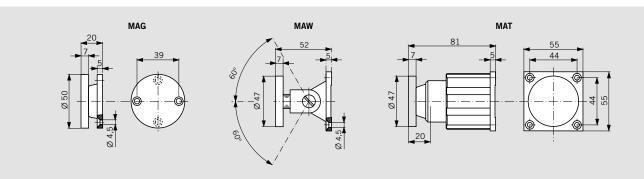
• yes – no

¹⁾ Floor angle bracket required (accessory)

²⁾ EM 500 A in conjunction with floor angle bracket: Class of protection IP 43



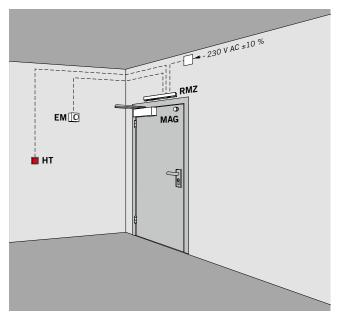
Armature plates

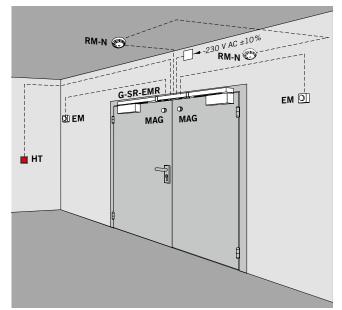


ELECTRO-MAGNETS FOR HOLD-OPEN SYSTEMS

The statutory regulations which apply in many countries allow fire and smoke doors to be held open for a limited period of time by electro-magnetic hold-open devices which, in the event of a fire, are de-energised to release the door so as to enable automatic closing. Such systems consist of a hold-open device, fire/smoke detection and alarm system, power supply and release device, and generally have to be approved by an accredited institute or building authority (in Germany: the German Institute for Building Technology, Berlin). Electro-magnets are devices which hold open fire and smoke doors.

In the event of a fire, the hold-open magnet is de-energised by the release device responding to a signal from the fire detector. The automatic closing action is provided by door closers which, in Germany, must correspond to DIN EN 1154 and be third-party verified. It must also be possible to manually release the hold-open device. According to the guidelines for hold-open systems applicable to Germany, a manual release pushbutton is necessary when employing electro-magnets in such applications. The pushbutton employed must be red, carry the wording "Close door", be located in the immediate vicinity of the door, and must not be hidden when the door is in its hold-open position.



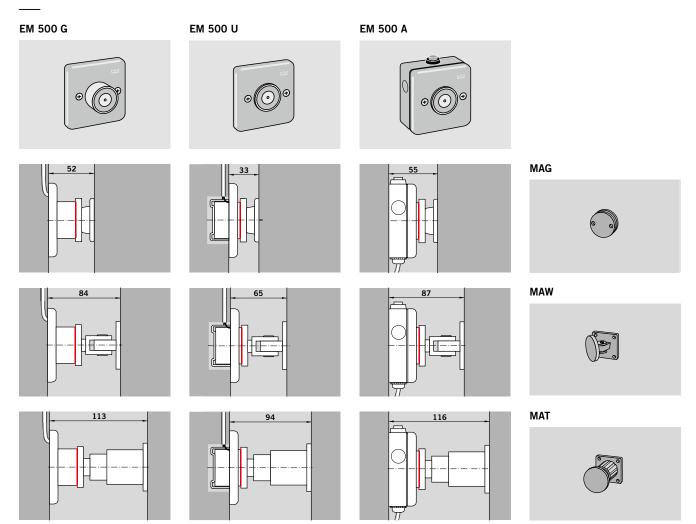


EM	Electro-magnet
нт	Manual release pushbutton
MAG	Armature plate
RM-N	Smoke detector (ceiling-mounted)
RMZ	Smoke detector (lintel-mounted)
G-SR-EMR	Door co-ordinator with integral smoke detector

F Approval certification

Electro-magnets of the series EM 500 for 24v AC/DC are tested and third-party verified by the Verband der Sachversicherer (VdS) e.V., Cologne (Association of Property Insurers), and have been approved by the German Institute for Building Technology (DIBt), Berlin, for use in combination with the DORMA RMZ smoke detector and other reputable smoke detector systems, (e.g. with DORMA RMZ: approval certificate No. Z-6.5-1890). In Germany, inspection and approval of the holdopen system is additionally required.

MODULAR SYSTEM OVERVIEW



SPECIFICATION TEXT

EM 500 G

Hold-open magnet with pole reversal protection for wall or floor mounting* Holding force 400 N 24v AC/DC Generally approved by DIBt-Berlin for use in hold-open systems. (System acceptance inspection may be necessary.) Requisite accessories: Armature plate

Make DORMA EM 500 G

M 500 U

Hold-open magnet with pole reversal protection for flush fixing Holding force 400 N 24v AC/DC Generally approved by DIBt-Berlin for use in hold-open systems. (System acceptance inspection may be necessary.) Requisite accessories: Armature plate

Make DORMA EM 500 U

EM 500 A

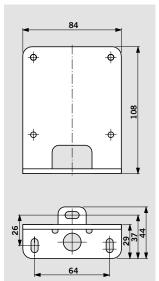
Hold-open magnet with pole reversal protection and integral test pushbutton, for wall or floor mounting* Holding force 400 N 24v AC/DC Generally approved by DIBt-Berlin for use in hold-open systems. (System acceptance inspection may be necessary.) Requisite accessories: Armature plate

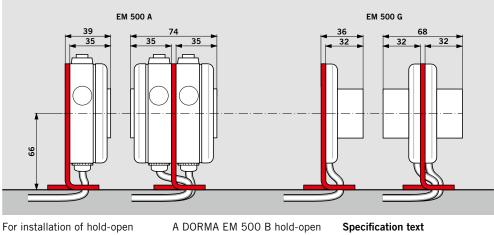
Make DORMA EM 500 A

* in conjunction with floor angle bracket, see Page 5

ACCESSORIES

Floor angle bracket



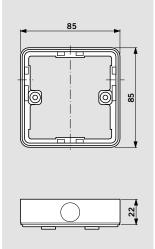


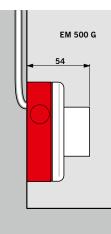
magnets EM 500 G and EM 500 A as floor-mounted units.

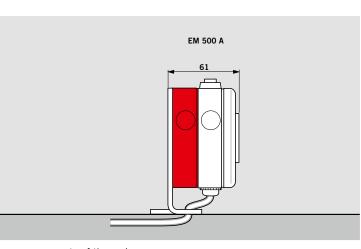
magnet for floor mounting comprises an EM 500 G or EM 500 A hold-open magnet and an associated floor angle bracket.

see Page 4

Adapter frame

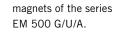


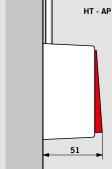




The frame can be combined with the individual hold-open

HT - UP

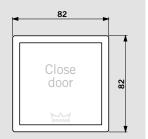


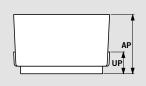


When employing electro-magnets in hold-open systems for fire and smoke doors, a manual switch may have to be provided in accordance with local or

national regulations (e.g. the guidelines of the German Institute for Building Technology (DIBt), Berlin, for German applications).

Separate manual release switch



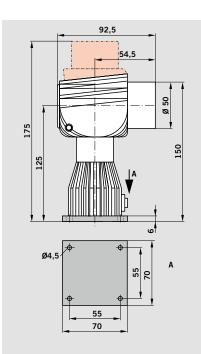


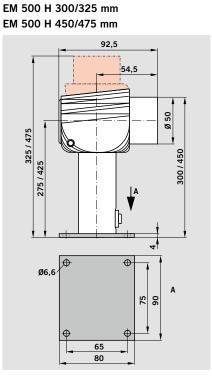
For releasing the hold-open device by hand.

18

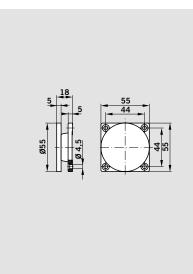
SPECIAL MODELS EM 500 H FOR FLOOR, CEILING AND WALL MOUNTING, WITH INTEGRAL TEST PUSHBUTTON

EM 500 H 150/175 mm









SPECIFICATION TEXT

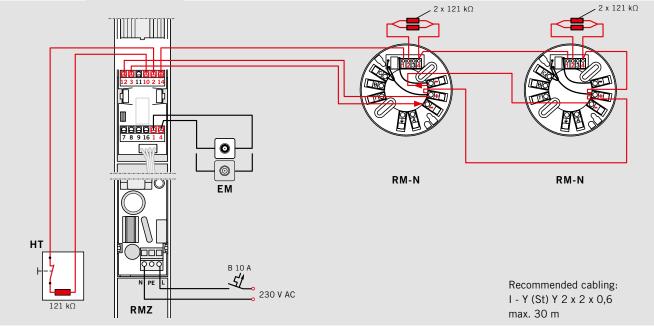
24 V DC hold-open magnet with pole reversal protection and integral test pushbutton for floor, ceiling and wall mounting. Holding force 490 N. Generally approved by the DIBt-Berlin for use in hold-open systems (in Germany). (System acceptance inspection may be necessary.)



Requisite accessories

□ Armature plate

Make DORMA EM 500 H



EM + RMZ + 2x RM-N

STANDARD EQUIPMENT AND ACCESSORIES

		MAG		MAW	-	MAT		MAG I		Floor angle bracket	Adapter frame
		C	•	° Co	Õ	i (
		□ 6902	0110	□ 6902	0111	□ 6902	0112	□ 6902	1113	69011540	690xx541
EM 500 G	24 V AC/DC ■ 690xx511	•		•		•				Δ	Δ
EM 500 U	24 V AC/DC ■ 690xx521	-									Δ
EM 500 A	24 V AC/DC ■ 690xx531	•		•		•				Δ	Δ
EM 500 H 24 V DC	150/175 mm ■ 69015005							-			
EM 500 H 24 V DC	300/325 mm ■ 69015006										
	450/475 mm ■ 69015007										

Separate manual release switch

HT-UP	35901531
HT-AP	35901532

Note

A hold-open magnet for floor mounting comprises an electro-magnet of the type EM 500 G or EM 500 A and the floor angle bracket.

xx Colour

- 11 White (RAL 9016)
- 12 Stainless steel finish
- Hold open magnet separate
- □ Armature plate separate
- \triangle Accessory





DORMA Australia Head Office 46-52 Abbott Road HALLAM Victoria 3803 Phone 1800 675 411 info.au@dorma.com www.dorma.com.au DORMA NZ Limited Head Office Building P 61-69 Patiki Road AVONDALE Auckland 1026 Phone 0800 436 762 info.nz@dorma.com





Door Assistant

PORTEO – THE DOOR ASSISTANT THAT ADDS CONVENIENCE TO DOORS

The PORTEO offers an innovative and convenient way to open doors effortlessly and to close them automatically. With all the elegance of the DORMA Contur design, the PORTEO is specifically suited to interior doors, performing all the functions needed to make life just that little bit easier for all. High-quality DORMA technology makes the PORTEO particularly easy to operate - with minimum noise, high functional reliability and excellent application adaptability. The PORTEO is delivered ready-to-connect and offers much comfort and safety in conjunction with fast mounting thanks to its Plug & Go feature. The system is delivered as complete package with slide channel and mounting plate.

The PORTEO can be further functionalised with original DORMA system accessories to give even more operating convenience, user-friendliness and enhanced safety. In combination with an optional pushbutton and an electric strike, for example, the door can be simply opened with the push of a button. Use the hand-held transmitter "DORMA atent" for even more convenient opening and closing - it doesn't get more flexible than this. The PORTEO is the inexpensive application for opening and closing doors the convenient way. Safe, reliable and easy to upgrade.

Certified to ISO 9001

- Benefits point by point
- Door assistant for swing doors
- Effortless opening and closing of swing doors up to widths of 1100 mm and doorleaf weights of up to 100 kg
- One version for all four ways of mounting: hinge and opposite hinge side, lintel mounting or door-leaf mounting. Compact dimensions 60x530x80 mm (HxWxD), particularly suitable for use in conjunction with narrow-stile and standard profile door systems
- Extremely low installation height of just 60 mm

- Virtually noiseless operation
- Easy installation thanks to ready-to-connect Plug & Go function with mounting plate
- In DORMA Contur design, cubic design, winner of the 2005 red dot design award and "Le Janus de l'Industrie 2007"
- GGT-approved

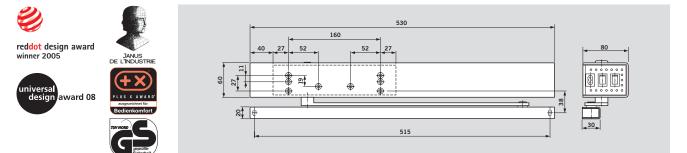


Interior doors, single-leaf	
Door-leaf width	≤1100 mm
Door-leaf weight, max.	100 kg
Technical specifications	
Lintel mounting/door-leaf mounting	
on hinge side/opposite hinge side	•
Non-handed	•
Latching action (de-/activatable)	•
Dimensions H x W x D	60 x 530 x 80 mm
Weight	3.2 kg
Supply voltage	230 V AC, 50/60 Hz
Power supply for external accessories	24 V DC, 300 mA
Class of protection	IP 20
Low-Energy-Function	•
Compliant with DIN 18650	٠
CE marking	•
GS mark, TÜV type-approved	•
Adjustable parameters	
Adjustable opening time (0° – 90°)	5 to 10 sec.
Adjustable closing time (90° – 0°)	5 to 10 sec.
Adjustable hold-open time	5 to 30 sec.*
Adjustable opening angle, max.	110°
* in Powerless Mode 0.5 to 30 sec.	
Standard function programs	
Powerless Mode	•
Push & Go	•

Standard func	tion programs	
Powerless Mod	le	•
Push & Go	•	
PowerMotion	•	
Permanent Op	en	•
Obstruction re	cognition	•
Anti-vandalism	n feature (deactivation of gear)	•
Automatic reco	ognition:	
	Door is locked	•
	Door has an electric strike	•
Prepared for for	ollowing accessories	
Electric strike,	e.g. DORMA Basic type	0
المعربة المماما المعرب		

Licethe strike, e.g. Dortwik basie type	0	
Hand-held transmitter, e.g. DORMA atent	0	
Pushbutton, e.g. DORMA System 55	0	

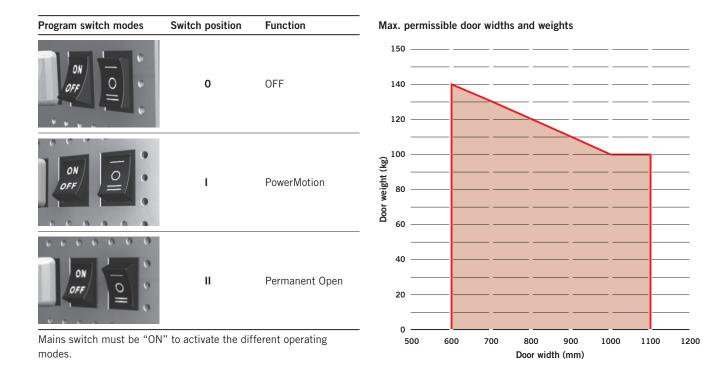
● Standard ○ Option



STANDARD FUNCTIONS

Oneveting mode		Deer environert	Sett	Settings			
Operating mode	Door equipm		Program switch	Potentiometer			
Powerless	Powerless Effortless manual door opening. The door closes automatically on expiry of the individually adjusted hold-open time.	 Standard locking device Lever handle 	I	1 S ^{pee} e X + Powerless Position			
Pusheers	Push & Go Once the door is opened manually by 3°, the automatic door opening function is triggered. The PORTEO then closes the door again auto- matically after the adjusted hold-open time.	 Standard locking device Lever handle 	I	1 - X Adjustable opening and			
POWERHOT	PowerMotion Automatic opening and closing of door in combination with electric strikes and external activators such as the DORMA atent hand-held transmitter, a radio remote control or a trans- ponder. As soon as the signal is transmitted and the electric strike is released, the door auto- matically opens and then closes again on expiry of the adjusted hold-open time.	 Standard locking device Electric strike External activator 	I	closing time. Original setting 10 sec. (max.) 2 5 5 5 5 5 5 5 5 7 4 4 Adjustable hold-open time adjustable			
	Permanent Open This function is designed to keep the door per- manently open. The door opens and is held in this position until another signal is triggered for		II				

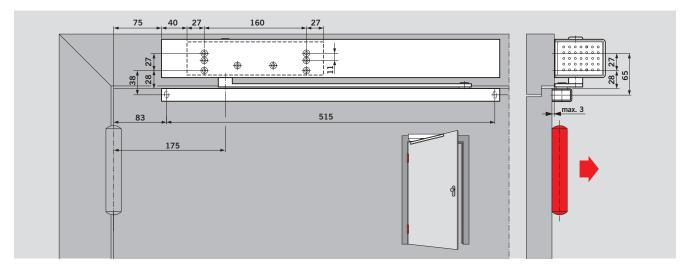
example by the program switch (the locking device must be unlocked) or by a double-click on the hand-held transmitter (flip-flop-function).



DORMA 3

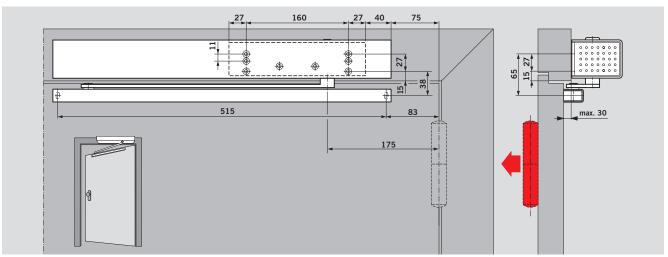
LINTEL MOUNTING ON HINGE SIDE (Example refers to left-handed (ISO 6) door;

mirror image applies to right-handed (ISO 5) door)

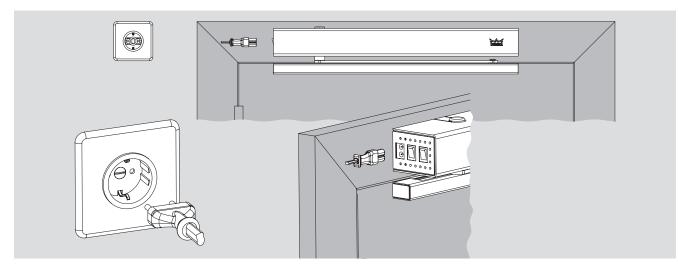


LINTEL-MOUNTING ON OPPOSITE HINGE SIDE (Example refers to left-handed (ISO 6)

door; mirror image applies to right-handed (ISO 5) door)

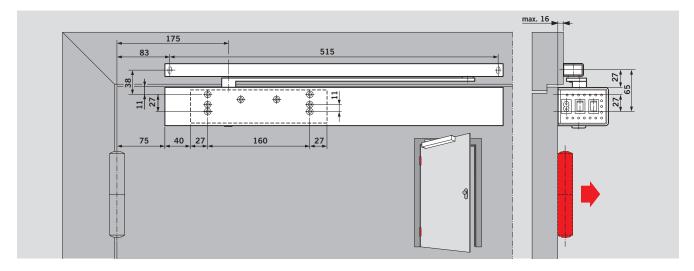


PLUG & GO Mains connection via power plug (Example refers to left-handed (ISO 6) door; mirror image applies to right-handed (ISO 5) door)



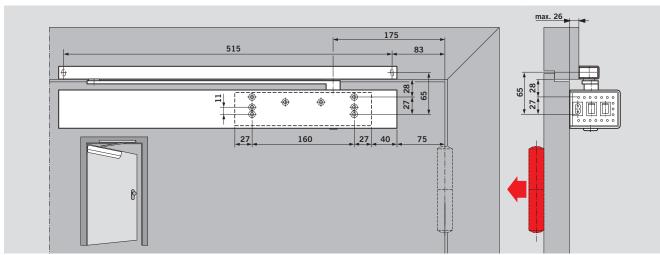
DOOR-LEAF MOUNTING ON HINGE SIDE (Example refers to left-handed (ISO 6) door;

mirror image applies to right-handed (ISO 5) door)

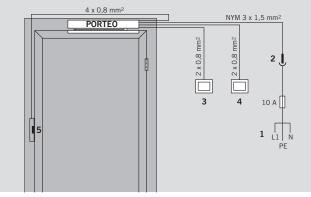


DOOR-LEAF MOUNTING ON OPPOSITE HINGE SIDE (Example refers to left-handed

(ISO 6) door; mirror image applies to right-handed (ISO 5) door)



Wiring diagram



1 Permanent power supply line

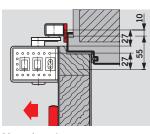
- 2 Two-pole-and-earth socket
- 3 Internal pushbutton
- 4 External pushbutton
- 5 Electric strike

Type 500 flexible cable loop

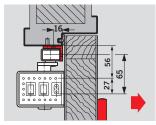


The safe and reliable solution from DORMA for protecting the cables required for door-leaf mounting.

ACCESSORIES



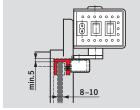
Mounting plate 30 mm or 40 mm For mounting of slide channel at door frames where no direct installation is possible.



Angle bracket

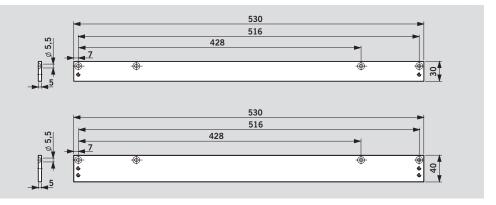
For mounting of slide channel at door frames with a deep lintel and mounting on the opposite hinge side.

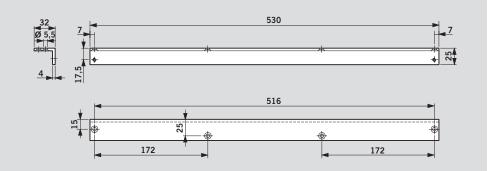
For lintel depths from –20 to +200 mm with optional standard arm.

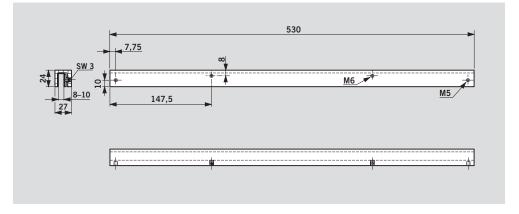


Shoe clip

For mounting the slide channel at full-glass doors – no glass machining necessary. Lintel mounting on the hinge side only.







Optional activators, radio receivers, electric strikes



Manual pushbutton, System 55



Radio hand-held transmitter DORMA atent



Radio receiver BRC-R



Electric strike type Basic

STANDARD EQUIPMENT AND ACCESSORIES

PORTEO 230 V	Angle bracket	Mounting plate 30 mm	Mounting plate 40 mm	Shoe clip	Flexible cable loo type 500	p
		0 0	0 0 0 0			
	600410xx	600411xx	600412xx	600413xx	60041401	
		tric strike				
Y	fail-secure type Basic	fail-safe type Basic-Safe	Strike plate FLM 24	Pushbutton System 55	Radio hand-held transmitter DORMA atent	Radio receiver BRC-R
H			© 0 			
600100xx	15117124	15137124	15180224	19144701170	60041500	29302002

01 Silver-coloured

11 White (sim. to RAL 9016)

19 Black

SPECIFICATION TEXT

Electro-mechanical door assistant operating in Low-Energy-Function (force limitation) to DIN 18650, including slide channel and mounting plate, with CE marking, in DORMA Contur design.

Operating options: Powerless mode (effortless opening, automatic closing) or PowerMotion (automatic opening and closing). Opening and closing speeds, hold-open time and opening angle adjustable. Latching action as standard. Non-handed. Mounting plate with universal fixing hole pattern. For lintel mounting or door-leaf mounting on the hinge or opposite hinge side.

Door parameters

- Single-leaf interior doors, not suitable for fire and smoke doors
- Door-leaf widths: max. 1100 mm (depending on door weight)
- Door-leaf weight per leaf: max. 140 kg (depending on door width)
- Opening angle per door leaf: min. 100° for all ways of mounting
- Operator dimensions:
 60 mm x 530 x 80 mm
 (H x W x D)
- Adjustable operating modes via program switch (0 | II):
 0 = OFF, I = PowerMotion,
 II = Permanent Open

Extended function programs:

- Powerless (adjustable via potentiometer)
- Push & Go (always activated in PowerMotion mode)
- Supply voltage: 230 V AC, 50/60 Hz, complete ready-toconnect system

Version

 Complete package including slide channel and mounting plate suitable for all four ways of mounting

Colour

□ Silver-coloured
 □ White, sim. to RAL 9016
 □ Black

Electric strike

- Option: electric strike in fail-secure design (locked while de-energised)
- □ Option: electric strike in fail-safe design
 - (open while de-energised)

Activator

- Option:pushbutton,Type:
- Option:
- hand-held transmitter, Type:
- Option:
 receiver for hand-held
 transmitter,
 Type:

Tested according to the guidelines for power-operated windows, doors and gates, BGR 232 (German Employer's Liability Insurance Association Rule), DIN 18650-1/2 (German Industrial Standard), EMV (CE-mark), GS-mark (TÜV type-approval) and the German guidelines of the Association for Electrical, Electronic & Information Technologies, latest version in each case. Manufactured to ISO 9001.

Make

DORMA PORTEO





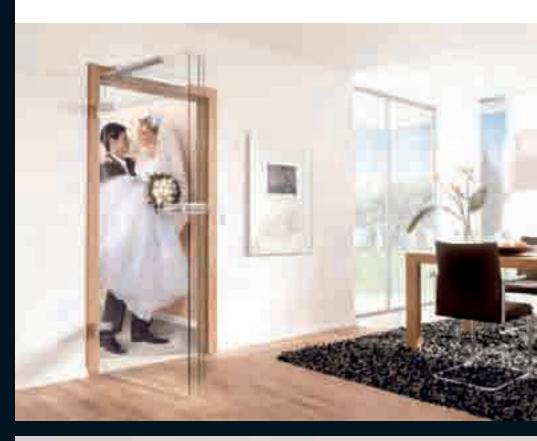
DORMA Australia P/L Head Office 46-52 Abbott Road, Hallam, Victoria 3803 Telephone (03) 8795 0666 Facsimile (03) 8795 0280 Toll Free Facsimile 1800 333 309 DORMA NZ Limited Head Office Building P 61-69 Patiki Road Avondale Auckland 1026 Telephone (09) 830 2052 Facsimile (09) 820 4909



The Plus for the door.

PORTEO

Opening and closing made easy.

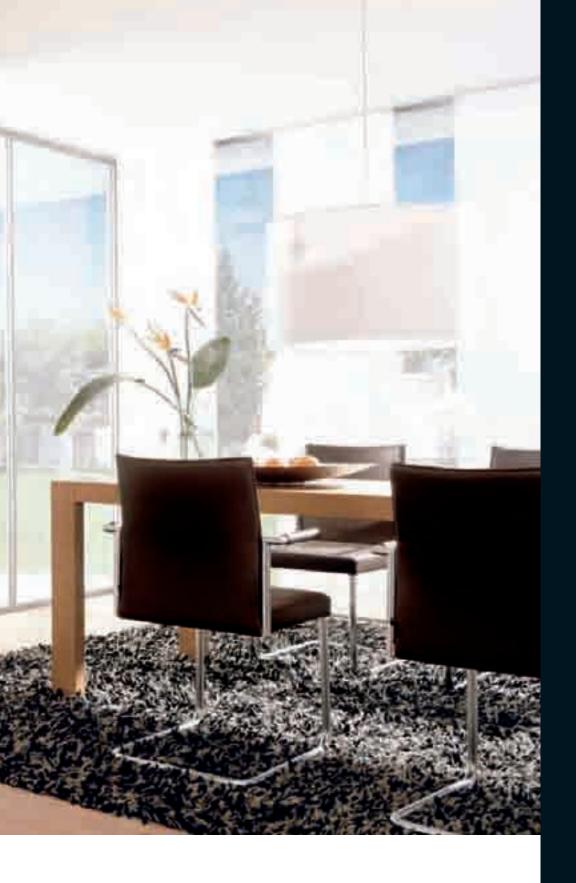






PORTEO. For more door convenience.

The PORTEO is the new, convenient way of getting doors to open effortlessly and then to safely close again. Automatically, quietly, reliably – and at an attractive price. The ideal assistant for everybody day in, day out. Its compact, elegant design is as impressive as its high-tech engineering. And its operation is remarkably easy. The PORTEO can be flexibly adapted to individual requirements. And as a further plus point: all this convenience and safety is easy to install and ready to connect. Thanks to its "Plug&Go" function.









The PORTEO adds character to doors, a plus in aesthetic appeal that harmonises with the overall ambience of modern rooms – all thanks to the DORMA Contur design, winner of the "red dot" design award 2005 and Janus award 2007. The characteristic feature of this special styling is the cubic shape combined with the inboard end caps with their perforated plate appearance. In short: more door convenience, enhanced attractiveness.









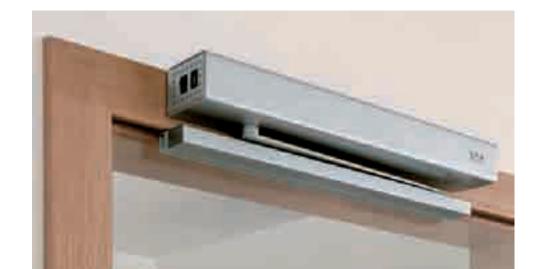


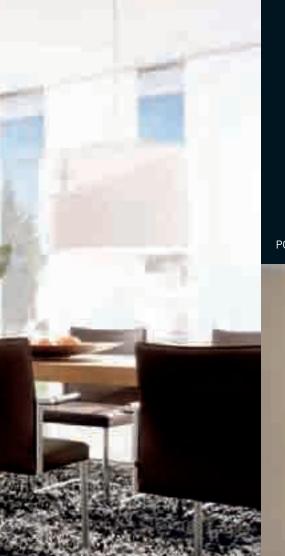


PORTEO – the ideal door assistant for truly enhanced convenience.

PORTEO. With the flexibility to fit in anywhere.

The PORTEO is the epitome of versatility. It provides numerous functions for different room requirements and adaptability to a wide range of door types. Hence the PORTEO is ideal for private usage as well as for other applications. PORTEO – the versatile solution for the ultimate in door opening and closing convenience.







PORTEO – the ideal solution backed up by the best service available.





PORTEO – easy to operate and reliable in every-day usage.

PORTEO. A new dimension in lightness – with individual functions.



PowerLess

The user opens the door for effortless access. The PORTEO then closes the door automatically after the individually preset hold-open time. Ingress and egress with added convenience.



Push&Go

A mere push of the door to 3° open and the PORTEO takes over, automatically opening the door the rest of the way – and then closing it again after the individually adjustable hold-open time. Opening and closing with selfless assistance – making life easier than ever.



PowerMotion

An electric strike integrated in the door frame combines with a manual pushbutton or hand-held transmitter as the optional DORMA accessories that send the signals. The door automatically opens and then, after the individually preset hold-open time, closes again – all without any direct user contact.



PermanentOpen

PORTEO will hold the door open for as long as is required. This mode is activated and deactivated by simply throwing the switch mounted directly on the unit – a practical feature for every-day usage.



Plug&Go

PORTEO – the complete solution. Simply install, switch on and it is ready to provide all that automatic opening and closing convenience. Reliable, low in maintenance – and readily retrofittable.





PORTEO. The convenience package for effortless opening and closing.

The PORTEO is a complete, ready-to-operate solution. And it can be functionally enhanced in accordance with your specific requirements by incorporating original DORMA system accessories, giving even more operating convenience, user friendliness and safety in the PowerMotion mode.



Manual pushbutton Simple opening at fingertip command, e.g. with the DORMA System 55 range. Requires an electric strike to be integrated in the door frame.



Hand-held transmitter As an alternative to the manual pushbutton, the DORMA RC-T HandHeld (for example) is ideal. For convenient, flexible opening and closing with the added benefits of remote control.



The convenient access controller. Can be optionally operated using a DORMA manual pushbutton or hand-held transmitter. On receipt of the opening signal, the frame-integral electric strike releases the latch and PORTEO effortlessly opens the door.



PORTEO. Fully equipped to meet every requirement.

Technical data		
Dimensions (h x w x d)		60 x 530 x 80 mm
Weight		3.2 kg
Colour	Silver	•
	White	•
Single-leaf interior	Door width max.	1100 mm
door requirements	Leaf weight max.	80 kg
Fixing options	Transom-fixed, push side	•
	Transom-fixed, pull side	•
	Leaf-fixed, push side	•
	Leaf-fixed, pull side	•
Power supply data		230 V AC, 50/60 Hz
Power supply to external loads		24 V DC, 300 mA
Plug&Go		•
Standard function modes	PowerLess	•
	Push&Go	•
	PowerMotion	•
	PermanentOpen	•
Adjustable parameters	Opening times (0°-90°)	Adjustable from 5–10 sec.
	Closing time (90°–0°)	Adjustable from 5–10 sec.
	Hold-open time	Adjustable from 5–30 sec.
	Opening angle	Adjustable to max. 110°
Optional accessories in combination with electric strike, e.g. DORMA Typ Basic	Hand-held transmitter, e.g. DORMA RC-T HandHeld	•
	Manual pushbutton, e.g. DORMA System 55	•
Scope of supply	Operator unit incl. slide channel and mounting backplate; power cable 230V; drilling and angles template	
Note	Not suitable for use on fire and smoke check doors	
	All data relates to the PORTEO operating mode	in the "low energy"

DIN 18650



Certified safe

The PORTEO provides door convenience developed in accordance with the very latest safety demands. Certification awards according to strict test standards confirm the high level of safety that it offers.



DORMA worldwide

Central Europe

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DORMA BWN Automatics Pty. Ltd. 46-54, Abbott Road Hallam/Victoria 3803 Australia Phone +61 3979 64111 Fax +61 3979 63767

China/Hong Kong

DORMA Door Controls Co. Ltd. No. 9, Hong Feng Road Suzhou Singapore Industrial Park Suzhou, 215021 P.R. of China Phone +86 512 67612481 +86 512 67614582 Fax

DORMA Door Controls Pte. Ltd. Room 701, Technology Plaza 651 King's Road North Point Hong Kong Phone +852 25034632 +852 28875370 Fax

Emerging Markets DORMA GmbH + Co. KG Breckerfelder Str. 42-48 D-58256 Ennepetal Phone +49 2333 793-0 +49 2333 793-495 Fax

DORMA Door Controls (Pty.) Ltd. Kings Court, 4A Mineral Crescent 7A-2135 Southdale South Africa Phone +27 11 8300280 +27 11 8300291 Fax

Far East

DORMA Door Controls Pte. Ltd. No. 2 Jalan Terusan, Jurong Singapore 619285 Phone +65 6268 7633 +65 6265 7914 Fax

France DORMA France S.A.S. Europarc 42. rue Eugène Dupuis F-94046 Créteil Cédex Phone +33 1 41 94 24 00 +331 41 94 24 01 Fax

DORMA Accueil S.A.S. ZAC de l'Echangeur F-73100 Grésy-sur-Aix Phone +33 4 79348924 Fax +33 4 79348923

Gulf

DORMA Gulf Door Controls FZE Jebel Ali Free Zone Roundabout 8 Unit VC 02, P.O. Box 17268 Jebel Ali, Dubai United Arab Emirates Phone +971 4 8839014 +971 4 8839015 Fax

DORMA Arabia Automatic Doors Ltd. P.O. Box 1633 Dammam 31441 Kingdom of Saudi Arabia Phone +966 38 472394 +966 38 472368 Fax

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DORMA Architectural Hardware Steeleville Division Reamstown, PA 17567, USA Phone +1 717 336-3881 +1 717 336-2106 Fax

DORMA Automatics Inc. 924 Sherwood Drive Lake Bluff, IL 60044, USA Phone +1 847 295-2700 Fax +1 847 295-5288

Scanbalt

DORMA Sverige AB FO Petersons gata 24 SE-42131 Västsa Frölunda Phone +46 31 289520 +46 31 281739 Fax

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DORMA Sistemas de Controles para Portas Ltda. . Av. Piracema, 1400 Centro Empresarial Tambore CEP 06400 São Paulo, Brasil Phone +55 11 46899128 Fax +55 11 46899260

South-East Europe

DORMA Austria GmbH Pebering Strass 22 A-5301 Eugendorf Tel. +43 6225 8636-0 Fax +43 6225 2659-0

DORMA AKS Automatic GmbH Pebering Strass 22 A-5301 Eugendorf Tel. +43 6225 8636-0 Fax +43 6225 2659-0

South Europe

DORMA Italiana S.r.I. Via A. Canova 44/46 I-20035 Lissone (MI) Phone +39 039 244031 +39 039 24403310 Fax

DORMA Ibérica, S.A. Camino San Martín de la Vega, 4 E-28500 Arganda del Rey (Madrid) Phone +34 91 8757850 Fax +34 91 8757881

UK/Irland

DORMA UK Ltd. Wilbury Way, Hitchin GB-Hertfordshire SG40AB Great Britain Tel. +44 1462 477600 Fax +44 1462 477601



Door Control





Glass Fittings and Accessories



Security/Time and Access Control (STA)



Movable Walls



www.dorma.com/porteo







Automatic





Swing door operators in modular design

ED 100 & ED 250 BARRIER-FREE ACCESSIBLE SWING ENTRIES

Planning and designing buildings with foresight means ensuring accessibility and barrier-free entry for all.

The innovative **DORMA ED 100** and **ED 250** Swing door operators offer the perfect solution for all applications, door types and design challenges, offering whisper quite operation within a compact ultra slim design profile (70mm H x 130mm D)

The elegant design profile and combined intelligent door automation provides the perfect solution for sophisticated architectural designs and DORMA's commitment to quality and product longevity ensures that you are investing for the future.

The ED 100 and ED 250 are both Endurance tested to 1

million cycles to ensure reliability and durability of operation and are Independently tested and certified by a NATA accredited facility to Australian standard AS5007.

The heavy duty ED 100 is suitable for doors with a weight of up to 100kg and a door width of 1100mm, whilst the powerful ED 250 is designed for doors of up to 250kg and door width of 1600mm. Both units can be installed to the pull side using slide channel or to the push side using standard scissor arm. The ED 100 and ED 250 fully comply with the latest Australian and New Zealand industry standards and codes including the National Construction Code (NCC).

Barrier-free operation

The ED 100 and ED 250 provide unhindered automated access for people with disabilities. These units meet and comply with the requirements of the NCC -Access for people with a disability and AS1428.1 ensuring automatic swing doors form part of a barrier-free entry providing access for all. Compliant operation of the units can be achieved using various wall switches, sensors, and remote control and further can be incorporated into building security entry requirements.

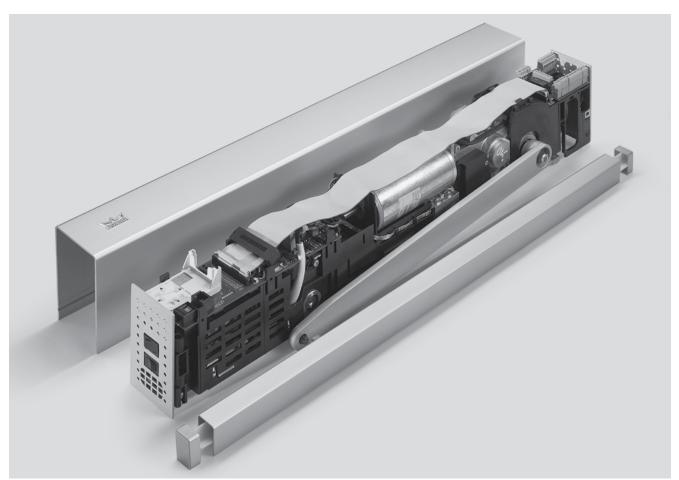
ED 100 & ED 250 Features and Benefits

 Modular, flexible system incorporating 'docking' to quickly upgrade the system to specific project or climatic requirements.

- High torque and yet whisper quiet in full automatic swing operation.
- Powerful and responsive operation with intelligent controls in high wind condition.
- Suitable for single leaf or double leaf with full width slimline cover available.
- Exceptionally simple to install with the quick-fit mounting template.

Accessories

 DORMA has an extensive range of door control and program switches, push buttons, presence/safety sensors, P-E safety beams and a wide choice of signage plates including Braille.



Required operating conditions	
Ambient temperature	–15 to +50 °C
Only suitable for dry environments	Relative humidity max. 93 % (non condensing)
Power supply	240 V AC 50 Hz +/- 10 %
Class of predection	IP 20

General specifications

Dimensions (W x H x D)	685 x 70 x 130 mm
Min. clearance between hinges (double-leaf systems)	1,400 mm
Min. clearance between hinges for ESR (double-leaf systems)	1,450 mm
Weight of single-leaf version	12 kg
Power supply for external accessories	24 V DC +/- 10 %, 1.5 A
Opening angle	Max. 110°
Manufactured to ISO 9001	

Integrated functions		
Hold-open time		30 secs, 180 secs (optional)
Blocking behaviour		Reversing/Door closer function
Wind load control		up to 150 N
Voltage-independent braki	ng circuit	Adjustable via potentiometer
Electronic latching action	pulse	Force adjustable
LED status indicator	green	Operating voltage indicator
	red	Malfunction indicator
	yellow	Service interval indicator
Integrated program switch		OFF
		AUTOMATIC
		PERMANENT OPEN
		EXIT ONLY
		(only for single-leaf systems)
User interface		Status indicator and
with information display		parameterisation
Slot for DORMA Upgrade Cards		Extension of functional range
TMP – Temperature Management		Temperature-related overload
Program		protection
IDC – Initial Drive Control		Driving phase optimisation
Cycle counter		0 - 1,000,000
		(reasonably subdivided)
Power Assist Function		Servo-supported when
		opened manually
Push & Go Function		Door opens when moved
		manually by 4°

Certification

- AS5007 Powered doors for pedestrian access and egress.
- AS1905.1 Australian Standard Part 1 Fire resistant doors.

Inputs, terminals max. 1.5 mm ²	
Potential-free activator	Inside and outside (NO contact)
Energised activator	8 - 24 V DC/AC + 10 %
Night-/Bank (key switch)	NO or NC contact
Safety sensor	Hinge side and opposite hinge side (NC contact)
Test signal for safety sensor	Hinge side and opposite hinge side
Emergency-Off pushbutton/	NC contact

Outputs, terminals max. 1.5 mm²

Potential-free door status	Door closed
contact, alternatively	Door open
	Malfunction

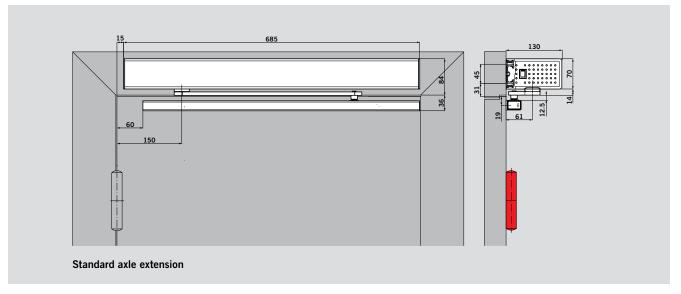
ED 100	
Max. power consumption	120 Watts
Closing force EN 1154	EN 2-4, adjustable
Max. door-leaf weight for lintel depths of up to 300 mm	100 kg
Door-leaf width	700–1,100 mm
Max. opening speed	**50° (27°*)/second
Max. closing speed	**50° (27°*)/second
Axle extension	30/60 mm
Lintel depth for slide channel	+/- 30 mm
Lintel depth for standard arm	0-300 mm

ED 250	
Max. power consumption	240 Watts
Closing force	EN 4-6, adjustable
Max. door-leaf weight for lintel depths of up to 300 mm	250 kg to 1,400 mm Door-leaf width
	190 kg for 1,600 mm Door-leaf width
Max. door-leaf weight for lintel depths from 301 mm to 500 mm	160 kg
Door-leaf width	700 – 1,600 mm
Door-leaf width for fire doors	700 – 1,400 mm
Max. opening speed	60° (27°*)/second
Max. closing speed	60° (27°*)/second
Axle extension	30/60/90 mm
Lintel depth for slide channel	+/- 30 mm
Lintel depth for standard arm	0 – 500 mm
For lintel depths standard arm for Fire Protection	0 – 350 mm

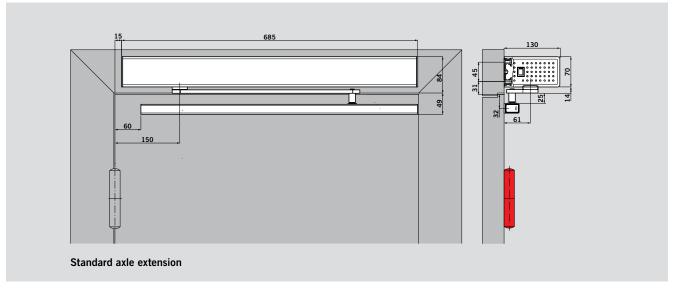
* The values in brackets indicate the maximum speed in Low-Energy Mode without Full-Energy Upgrade Card.

** Depending on the door leaf weight, it is limited automatically in accordance with DIN 18650 and EN 16005, BS 7036-4 and ANSI 156.19.

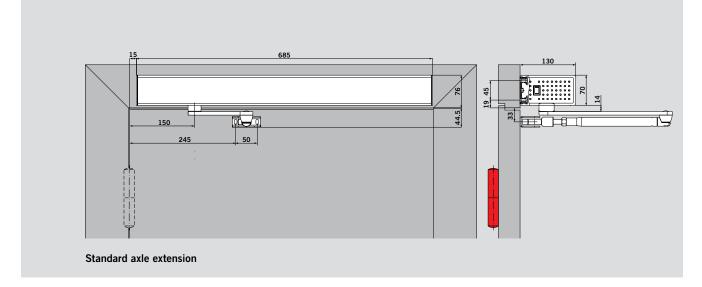
View: BASIC cover, pull-version, 12.5 mm pivot pin



View: BASIC cover, pull-version, 25 mm pivot pin



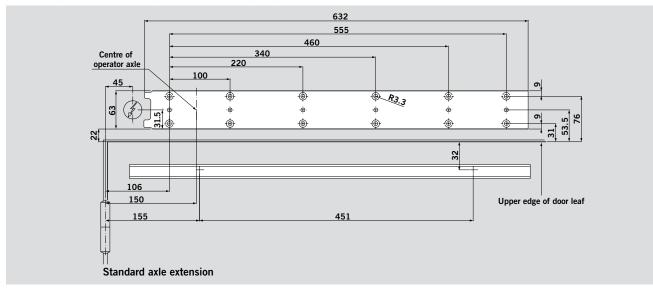
View: BASIC cover, push-version



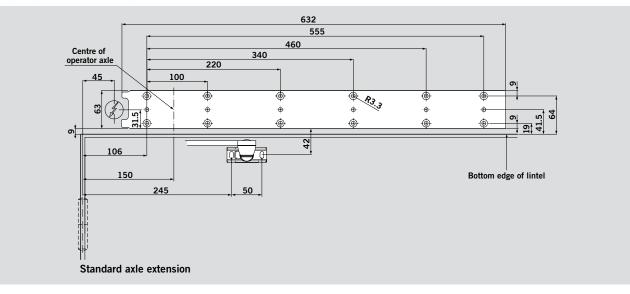
632 555 460 340 Centre of 220 operator axle 100 45 ດຸ ۲ ۲ € R3.3 ۲ ٠ ٠. ٠÷ ٠. 63 ŝ თ 76 ۲ ۲ ۲ 53.5 ۲ ¢ 22 31 19 106 Upper edge of door leaf 150 155 451 Standard axle extension

Drilling template: BASIC cover, pull-version, 12.5 mm pivot pin

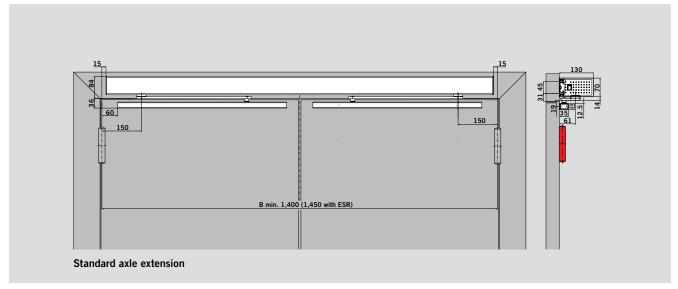
Drilling template: BASIC cover, pull-version, 25 mm pivot pin



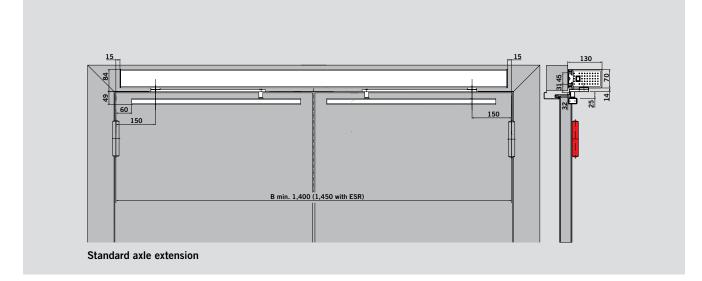
Drilling template: BASIC cover, push-version



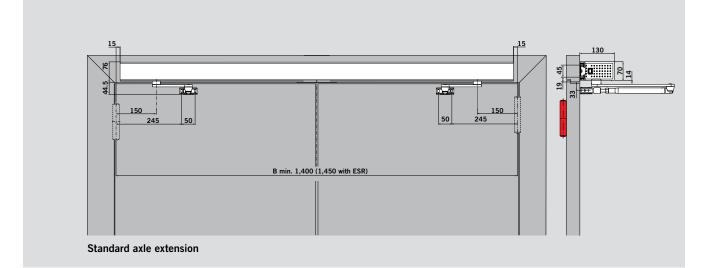




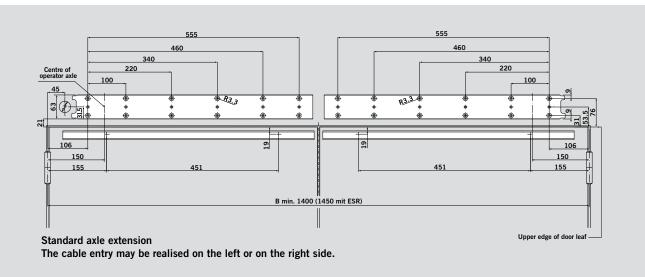
View: FULL WIDTH cover, pull-version, 25 mm pivot pin



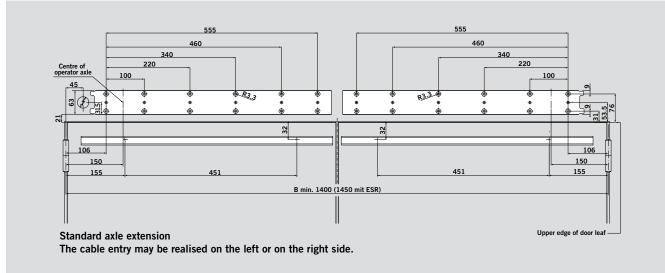
View: FULL WIDTH cover, push-version



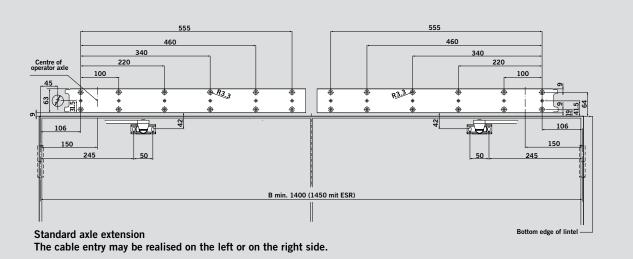
Drilling template: FULL WIDTH cover, pull-version, 12.5 mm pivot pin



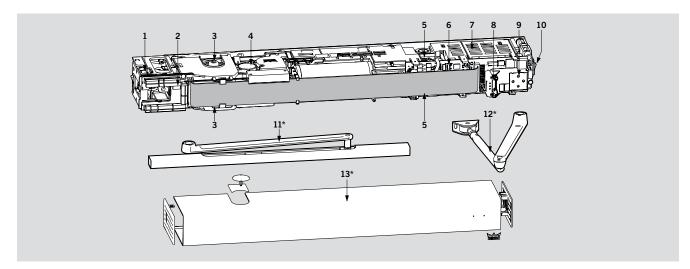
Drilling template: FULL WIDTH cover, pull-version, 25 mm pivot pin



Drilling template: FULL WIDTH cover, push-version



SYSTEM SETUP



The example system is equipped with all available components. It is selected in accordance with the door-leaf width and the door-leaf weight.

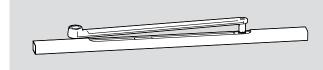
- 1 Mains connection 2 Connection unit
- 5 Adjustment of closing force
- 2 Connection unit6 Control unit3 Axle connection on both sides7 Switching power
 - 7 Switching power supply unit
- 8 Slot for
- DORMA Upgrade Cards
- 9 User interface with information display
- 10 Internal program switch
- 11 Slide channel (set)* 12 Standard arm*
- 13 Complete cover*
- *Supplied separately

ARM

4 Drive system

ED slide channel set

(motor/gear/spring)



Mounting version	Colour	Order No.
Pull-version	silver	D29275001

ED 100 and ED 250: For lintel depths +/- 30 mm

ED standard arm 225

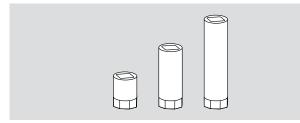


ED 100 and ED 250: For lintel depths 0 – 225 mm

ED standard arm 500

- ED 100: For lintel depths 226 300 mm
- ED 250: For lintel depths 226 300 mm and 250 kg For lintel depths 301 500 mm and 160 kg $\,$

ED axle extensions



Mounting version	Colour	Order No.
Push-version	silver	D29271001

Mounting version	Colour	Order No.
Push-version	silver	D29272001

The axle extensions 30 and 60 mm are suitable for all arm versions of the ED 100 & ED 250. The axle extension 90 mm is only suitable for all arm versions of the ED 250. The axle extensions are available in chromated black.

ED axle extension	Order No.
30 mm	D29278001
60 mm	D29278101
90 mm	D29278201

OPENING AND CLOSING TORQUE

Way of mounting	Lintel mounting on hinge side with slide channel (pull-version)			Lintel mounting on opposite hinge side Standard arm (push-version)				
	ED 100		ED 250		ED 100		ED 250	
	minimum	maximum	minimum	maximum	minimum	maximum	minimum	maximum
Closing force EN 1154	EN 2	EN 4	EN 4	EN 6	EN 2	EN 4	EN 4	EN 6
Manual closing torque (Nm)	13	34	26	65	13	37	26	70
Closing torque in AUTOMATIC mode (Nm)**	20	FE: 150 LE: 67	20	FE: 150 LE: 67	20	FE: 150 LE: 67	20	FE: 150 LE: 67
Manual opening torque (Nm)	30	50	55	85	35	55	60	90
Opening torque in AUTOMATIC mode (Nm)**	20	FE: 150 LE: 67	20	FE: 150 LE: 67	20	FE: 150 LE: 67	20	FE: 150 LE: 67
Opening torque of manually-activated Power-Assist Function (Nm) *	23	23	23	23	23	23	23	23

FE = With Full-Energy **LE** = Low-Energy standard operator without upgrade card

* Power-Assist Function is adjusted to maximum (function is activated at approx. 3° opening width)

** The torque is activated by an automatic opening in AUTOMATIC mode.

DOOR CLOSER MODE & AUTOMATIC MODE

Users may choose between two operation modes: door closer and AUTOMATIC mode. While adjusted to door closer mode (parameter Hd = 1), the system is optimised for manual operation. With its optional Power-Assist Function, the door closer mode is tailored to predominantly manually-operated doors where a door closer function is desired. The AUTOMATIC mode (parameter Hd = 0) in turn is especially suitable for mainly automatic access via motion detector or pushbutton. In addition, the door reverses as soon as it runs into an obstruction while closing. On activation of the AUTOMATIC mode, also the wind load control is available. Although in AUTOMATIC mode, the doors are still ready for manual access. In this case we would recommend the Push & Go function.

environmental influences.

WIND LOAD CONTROL

ED 100 and ED 250 operators are especially suitable for application at exterior doors that are subject to varying wind loads and for interior doors separating rooms where different pressure prevails. While the system is in AUTOMATIC mode, the wind load control monitors the driving speed and adjusts the speed correspondingly if it exceeds or falls below the adjusted value. In conjunction with the Full-Energy Upgrade Card, the operator provides a force of up to 150 N at the main closing edge – which is then used to compensate

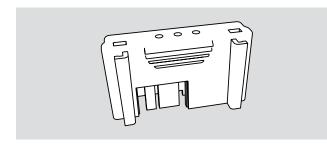
The electronic latching action is activated during the last 5° of the closing cycle in order to support the closing action.

SCAN FOR WIND LOAD TEST VIDEO

POWER-ASSIST FUNCTION

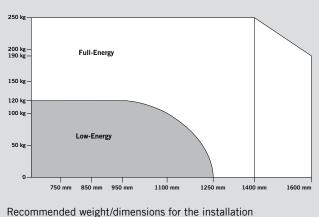
The Power-Assist Function may be activated while the door is in door closer mode (parameter Hd = 1). As soon as a user opens the door by some degrees, the servo function supports the manual opening cycle. In addition, the servo support automatically adapts to the adjusted size of the door closer. The level of servo support is adjustable in order to meet the requirements of DIN 18040, DIN Spec 1104, CEN/TR 15894, BS 8300/2100 and document "M", even up to class EN 6. The smallest adjustable opening torque amounts to 23 Nm/5 lbf – unless the hold-open device is triggered or in the event of a power failure. With the aid of the Power-Assist Function, the system meets the requirements of the European standard EN 1154 and provides barrierfree access during standard operation. However, it is not possible to use the system in conjunction with the Push & Go Function or the wind load control as these functions may affect the easy manual opening of the door.

DORMA UPGRADE CARDS



DORMA Upgrade Cards are designed to increase the functional range of our swing door operators. The installation of the cards is very easy: Just insert the respective Upgrade Card into the proper slot at the control unit and the software will be transferred automatically. DORMA offers different Upgrade Cards, which may either be combined or installed as individual components. Please note that the respective function of the Upgrade Card is only available as long as the card is connected to the control unit.

Upgrade Card Full-Energy – blue



of the Full-Energy Upgrade Card (blue)

All operator systems are supplied as Low-Energy version, which means that the adjustable opening and closing speed range is restricted to a certain limit. The respective limits depend on the prevailing door-leaf width and door-leaf weight and may

Upgrade Card Professional - green

The Upgrade Card Professional provides functions for swing door operators that used to be realised with the aid of external components.

Extended hold-open time of 180 s

The hold-open time of up to 30 seconds, which is already integrated in the basic system, is sufficient for most applications. However, an extended holdopen time of up to 180 seconds may easily be realised with the aid of the Full-Energy Upgrade Card. vary between 1° and 27° per second. These limits furthermore comply with DIN 18650 and EN 16005 (German Industrial Standard), ANSI 156.19 (American Standard) and BS 7036 (British Standard). Depending on their field of

Flip-Flop-Function

In standard mode, the operator opens the door after a Night-/ Bank pulse has been triggered (via the key switch) and closes it on expiry of the hold-open time. When the flip-flop-function is activated, the door opens and remains in PERMANENT OPEN position as soon as the Night-/ Bank function is triggered at the respective input. The door will close when the Night-/Bank function is activated again. The hold-open period in PERMANENT OPEN position is not limited, and the standard hold-open time is available at all other activator inputs. Please

ED Upgrade Card Full-Energy	Colour	Order No.
ED 100	blue	D29251022
ED 250	blue/ transparent	D29251020
ED Upgrade Card Professional	Colour	Order No.

ED Opgrade Card i foressionar	Coloui	
ED Upgrade Card Professional	green	D29253001
ED 100 & ED 250		

application, such swing door operators might not require safety sensors when operated in Low-Energy Mode. If you need a higher driving speed, you will require the respective Full-Energy Upgrade Card. The driving speed may then be increased to a maximum of 50°/second with the ED 100 and to 60°/second with the ED 250. In this case operating in full energy mode the swing path has to be monitored by safety sensors (mounted onto the door leaf).

note that smoke detectors always have priority to the PERMANENT OPEN function.

Nurse-Bed-Function

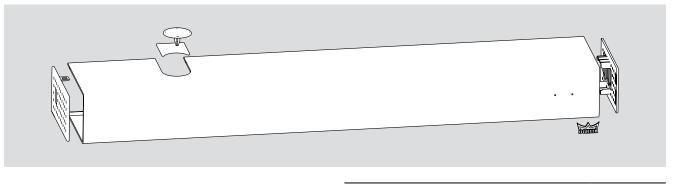
(only for double-leaf door systems) As soon as a pulse is triggered, both door leaves of the double-leaf system will open. Sometimes this may not be necessary, as the full passage width is not required. Whenever this is the case, the Nurse-Bed-Function is perfectly suitable to control the two door leaves separately.

The activator that is connected to the external detector only institutes the active door leaf to open. The resulting passage width is sufficiently big to allow people to use the door. The other activator (the one that is connected to the internal detector) is used to open the door to the full opening width. In this case, both door leaves open so that the full passage width is accessible. This function reduces the energy consumption and may help to avoid draughts and thus heat loss.

COVERS

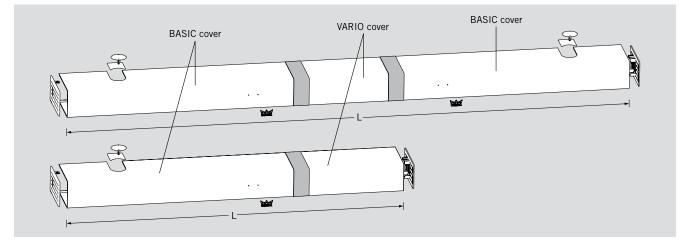
The operator covers are packed separately from the operator system, which makes it easy to select the respectively required cover. DORMA provides covers for single- and double-leaf systems. All covers are designed for on-site mounting and realised in DORMA Contur design. They are furthermore suitable for both the ED 100 and the ED 250 version. When creating double-leaf systems, the four-position internal program switch has to be replaced by a three-position switch, which means that the EXIT ONLY function is only available in combination with the external program switch. Double-leaf systems are required for doors where the clearance between the hinges exceeds 1,400 mm (1,450 mm with ESR).

ED BASIC cover - Aluminium cover for single-leaf swing door systems



	Colour	Order No.
ED BASIC cover	silver	D29241001

ED VARIO cover



This aluminium cover is designed to create a continuous cover for double-leaf swing door systems. In addition to the VARIO cover, you will require two ED BASIC covers, which are mounted on the right and on the left of the operator system. The ED VARIO cover is designed to hide the gap between the two covers and may be cut to the appropriate size on site. With the aid of the VARIO cover, you may also increase the length of single-leaf operators.

The cover may be installed on the left or on the right side and can be cut to the appropriate size on site.

The VARIO cover is a silver finish and available in two versions.

Number of door leaves	Silver-coloure	d Order No.		
single-leaf version		·		
800 mm – 1,600 mm	2200 mm	D29242001		
double-leaf version				
1,500 mm – 2,200 mm	2200 mm	D29242001		

BARRIER-FREE TOILET

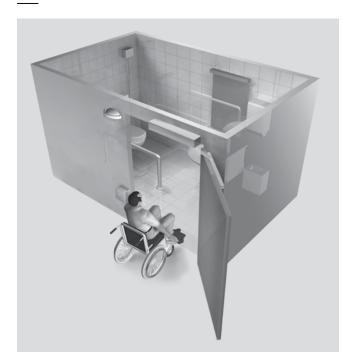


Plate Features

The internal/external mounted PDS plates are designed using a polycarbonate membrane that is vandal resistant, UV stabilised and anti graffiti coated.

The **MLAK-PDS** plate option is an innovative system that enables people with disabilities to gain 24/7 access to a network of public facilities that utilise this system.

PDS operation:

- When vacant green indicator illuminated, press the outside Push to Open button or Insert MLAK Key to activate and open the door
- Once inside press the Push to Lock button to secure the door (outside button switched off and Occupied red indicator is now illuminated)
- To exit simply press the Push to Open button



External Plate

Included on the plate is a solid push button and stainless steel housed red/green indicators providing a wide viewing angle and IP67 rating. (205mm H x 230mm W)



Internal Plate

Included on the plate are solid push buttons and stainless steel housed red/ green indicators providing a wide viewing angle and IP67 rating. (265mm H x 230mm W)



External Plate MLAK (option) Included on the plate is the Prestige Key switch keyed to the MLAK and stainless steel housed red/ green indicators providing a wide viewing angle and IP67 rating. (205mm H x 230mm W)

Barrier-free solutions for people with disabilities (PWD)

Planning and designing buildings with foresight means ensuring accessibility and openness for all and where everyone can use the facilities without restrictions or the need for outside help.

The DORMA Privacy Door System (PDS) provides unhindered automated access for people with impairment. The PDS can be fitted to either swing or sliding door operators depending on the required design applications.

The PDS offers the following features:

- Simple to use (amenities and parent rooms)
- Flexible design (sliding or swing)
- Robust and reliable operation
- Braille and tactile signs
- Surface mount or cavity slide
- Electric lock with door closed function
- Built in or key switch staff override function for use in emergency
- Duress alarm I/O
- MLAK braille plate option

The PDS complies with the following:

- NCC Access for people with a disability
- Braille and tactile signs
- AS5007-2007 Power doors for pedestrian access and egress

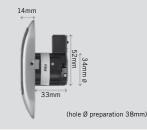
PROGRAM SWITCHES

The DORMA Prestige Key switch range provides an aesthetically pleasing option for key activation of any DORMA automatic sliding or swing door operator. Its low profile modern design and secure cylinder retention along with concealed fixings make this switch the perfect choice for both internal and external applications.

PK Switches Series Key Switches

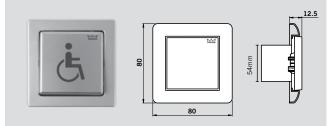


PUSHBUTTONS



Program switchColourOrder No.PK22 modeSAA (silver)A81009002PK44 modeTransparent black/ SAAA81009004PK44 modeTransparent black/ CPA81009014

Pushbutton



	Colour	Order No.
Palm activated rocker button	stainless steel	D19143001170
Handicap symbol	stainless steel	D19143201170
IP44 weather rating		

IP44 weather rating

FURTHER ACCESSORIES

Emergency power supply unit



automated operation even in the event of a power failure an emergency power supply unit can be fitted. Depending on the connected accessories, this unit may keep the system operational for up to one hour by providing emergency power supply for the complete door system. Thus, there is sufficient time for countermeasures and securing the building.

In order to provide full

Dimensions: 160 x 120 x 360 mm (H x W x D) *subject to change depending on model supplied

ESR – Integrated door coordinator

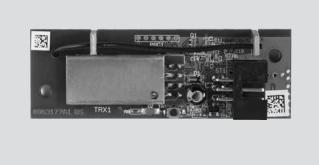
The ESR set is installed inside the double-leaf operator on site. It is available as individual component and easy to install. The system works similar to a drum brake and thereby ensures the proper functioning of the system. Its brake works on the motor shaft of the operator on the active door leaf and transfers the switching signal via a shaft. The system does not require any maintenance.

	Order No.
ED ESR set	D29261001

BRC REMOTE SYSTEM

The new BRC system operates with a bi-directional BidCoS wireless protocol. In contrast to unidirectional systems, the receiver sends a message to the hand-held transmitter that the signal has been received. The hand-held transmitter indicates the prevailing status via a LED. Thus a short keystroke is enough

BRC-R



BRC-W



to trigger an opening pulse in a reliable way within the system's typical field range of 100 meters. The BRC-W and BRC-T transmitters are also of bi-directional design; however, the status indicator is not visible as the transmitters are integrated in pushbuttons.

Receiver

Order No.

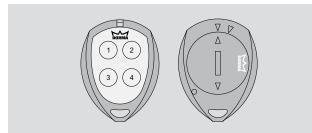
D29302002

The new BRC-R radio receiver may easily be installed inside the operator as its size is adapted to the available space. Simply fix it on the motorgear-unit with two screws. We offer three different types of transmitters. Up to 1024 transmitters may be allocated to a BRC-R.

The battery-operated wall transmitter in 55 mm design is made of white plastic and may easily be adhered to the wall or fixed with screws. It is suitable for light indoor-use.

	Order No.
Wall transmitter	D29301002

BRC-H



Bidirectional hand-held transmitter BRC-H, battery-operated, 4 channels, LED for feedback purposes, shockproofdesign including DORMA key strap, only suitable for applicationwith DORMA BRC-R radio receiver

	Order No.
Hand-held	D29301004
transmitter	

BRC-T



Wireless pushbutton solution -Long life battery operated transmitter designed to connect and operate from a momentary pushbutton.

Order No.

Battery-opera- D29301003 ted transmitter

MOTION DETECTORS

	Designation	Specification	Order No.
	Prosecure	Full-automatic access on pulse activation;	
M	Easy Motion	adjustable inclination angle, inclined field of view and field size,	
Transa	Mono	LED status indicator	
		Ambient temperature –20 °C to 60 °C	
		silver	A86002000
	Prosecure	Adjustable inclination angle, inclined field of view and field size,	
	Easy Motion	direction recognition, cross-traffic suppression, immunity,	
	Stereo	LED status indicator	
		Ambient temperature –20 °C to 60 °C	
		silver	A86012000
Accessories	Designation	Specification	Order No.



	silver	A86012000
Designation	Specification	Order No.
Rain protection cover	For Easy Motion detectors	A86031900

INFRARED SAFETY SENSORS

Safety



Reversing





Infrared safety sensors are active infrared sensors and designed to detect all static and moving obstructions, either people or objects, within their detection range.

On the opposite hinge side, the infrared safety sensor fulfils the function of an activator, which means that the sensor will

institute the door to reverse and open as soon as an obstruction is detected in the course of a closing cycle. Then the holdopen times starts anew. On the hinge side, the infrared safety sensor will interrupt the automatic movement of the door whenever it detects an obstruction; the door closes on expiry of the adjusted hold-open time. Infrared safety sensors are available in different lengths and may be supplied in the same colour as the operator. We offer two different types of infrared safety sensors: The Prosecure Opti Save, which is required for areas where compliance with DIN 18650 (German Industrial Standard) and EN 16005 is essential and the Prosecure Opti Save, a moving infrared safety sensor, which is suitable for areas that are not subject to DIN 18650 and EN 16005.

*Recommended max mounting height 2500mm above FFL.

Designation	Specification	Order No.
IRS 2-33	330mm Safety Sensor	D16521701150
IRS 2-70	700mm Safety Sensor	D16521706150





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ED 100/250 Swing door operators

Reliability even in cold environments.









Cold environments – a challenge for swing door operators.

Swing door operators are characterised by their reliable performance, which makes them energy efficient with a high level of user convenience. However, extremely low temperatures may have a negative effect on their reliability. The viscosity of the hydraulic fluid within the electrohydraulic operators rises, which increases the resistance within the hydraulic system. Therefore the opening and closing speed decreases and the door may not close properly. As a result, precious energy is wasted as the climate barrier between the interior and exterior of the building is no longer provided.

This results in:

- Energy loss from open doors
- Decelerated opening and closing cycles
- Temperature related adjustments required



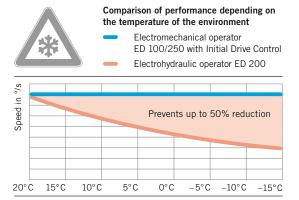
The solution: ED 100/250 with integrated Initial Drive Control.

ED 100 and ED 250 electromechanical swing door operators provide reliable performance even in cold environments. Instead of a closed hydraulic system, these operators are equipped with a multi-stage gear, which only requires a low amount of high-performance grease to provide full performance. Therefore FD 100 and FD 250 operators are extremely durable - even in cold environments. In addition,

their integrated Initial Drive Control (IDC) ensures functional stability as the system detects and compensates for even the slightest irregularities in the door's performance.

Benefits:

- Smooth performance despite low temperatures
- Reliable closing
- No temperature related adjustments required





This is the proof: reliable even north of the Arctic Circle.

This practical example proves: Even the extreme cold weather in the north of Sweden does not impair ED 100 and ED 250 technology. Location: Jukkasjärvi, Lapland, 200 km north of the Arctic Circle. Every year. selected artists build the world-famous "Icehotel" in this location. A cool location packed with art and adventure. It stands to reason that such a special location may only be equipped with intelligent technology. Therefore an electromechanical swing door operator from our ED 100/250 series provides the "Royal Deluxe Suite" with maximum user convenience. Despite an interior temperature of only – 8 °C, the operator moves the door smoothly and ensures reliable closing behaviour.

Please feel free to download the corresponding video at www.dorma.com







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DORMA GmbH + Co. KG DORMA Platz 1 D-58256 Ennepetal Phone +49 2333 793-0 Fax +49 2333 793-4950 www.dorma.com





WN 053 989 51532, GB, 5, BD, 09/10

DORMA GmbH + Co. KG Postfach 4009 D-58247 Ennepetal DORMA Platz 1 D-58256 Ennepetal Phone +49 2333 793-0 Fax +49 2333 793-495 www.dorma.com



ED 100/250 Swing door operators

> Strong against wind.





A challenge for swing door operators.

Swing doors are often exposed to wind loads. Wind acts with full force on exterior door leaves while interior doors are committed to pressure differences caused by air conditioning systems, ventilation systems or the stack effect.

With a surface of around $2-3 \text{ m}^2$, even average sized doors are heavily committed to wind loads, which in turn have a negative effect on the proper driving behaviour of swing doors during their opening and closing cycles.

Especially electrohydraulic operators, which close only via spring force, cannot respond flexibly to the prevailing weather conditions as their closing force is tied to their current spring force adjustment.

This results in:

- Loss of warm or cold air through open doors.
- Unauthorised user access whenever the door does not fall shut.
- Considerably varying driving speeds depending on the prevailing weather conditions.

The solution: The ED 100/250 with integrated wind-load control.

The new electromechanical ED 100 and ED 250 swing door operators are equipped with DORMA wind-load control. This feature is activated with the aid of the Full-Energy Upgrade Card. While adjusted to Automatic mode. the system recognises and compensates wind loads with a force of up to 150 N (maximum admissible force). In addition, the motor supports the spring during closing cycles and the electronic latching action helps to close the door properly. Furthermore,

the wind load control actively changes the driving parameters in opening and closing direction in order to tailor the door's driving behaviour to the prevailing weather conditions.

Benefits:

- Motor-supported closing cycles
- Adjustable electronic latching action
- Less weather effects on the door's driving behaviour



Tested and approved as powerful.

Compared to electrohydraulic swing door operators up to size EN 6, our system provides more than double the closing force for as long as the wind-load control is activated. Thanks to this feature, the operator can easily cope with higher wind loads. 17 m/s – which is the maximum speed this wind tunnel can generate. All tests have been performed at a door with a width of 990 mm and a height of 2,250 mm. Please visit our homepage www.dorma.com to watch the corresponding video documentation.

Tests of an independent testing institute, performed in a wind tunnel, show that the ED 100 is capable of opening and closing a door several times at a frontal wind speed of







DOR

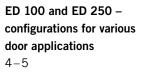
ED 100 ED 250

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Modular swing door operators.

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For controlled access 14–15





ED 100 AND ED 250 – MADE TO MEASURE CONFIGURATIONS FOR VARIOUS DOOR APPLICATIONS.

Individual upgrade packages to meet almost any requirement.

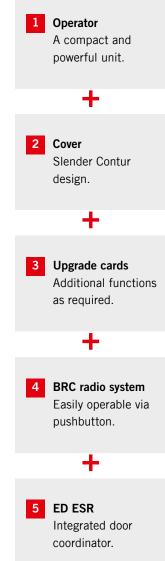
From user to solution.

Our principle.

The field of application mainly determines which features the swing door operator requires. For accessible entrances or fast operation, at fire doors or as an access control system – requirements vary in line with the prevailing conditions. With the ED 100 and ED 250 swing door operators, DORMA provides a modular system whose components can be combined in various ways to facilitate planning. Two basic operators whose only difference is their performance. The field of application determines which additional features the operator needs and then the basic system can be upgraded as required. With different covers and arm versions, DORMA offers operators in a uniform and slender design with a height of only 70 mm – for both single- and double-leaf doors in various configurations.

Our philosophy.

As parts of your buildings, doors and the corresponding operators represent your company. In everyday business, the ED 100 and ED 250 swing door operators excel with intelligent functions, which may respond to user behavior and typical changes within the door's environment. DORMA supports you with sophisticated operators in a slender design and with a broad range of functions. The modular system.





THE MODULAR SYSTEM IN DETAIL.

Modules

1 Operator A compact and powerful unit.	Choose one of the following operator systems according to your individual door-leaf parameters:	ED 100 EN 2–4 for door widths of 700–1,100 mm and a maximum door weight of 100 kg.	ED 250 EN 4–6 for door widths of 700–1,600 mm and a maximum door weight of 250 kg
2 Cover Slender Contur design.	Choose one of the following cover options according to your individual requirements:	Basic (silver-colored/white/ special color) cover for single-leaf door systems. Or: Vario (silver-colored) Center piece with cover to mask the cutting edge, to facilitate double-leaf door systems or to extend one side of the Basic cover. Or: Professional (silver-colored/white/ special color) Seamless cover for extended single- and double-leaf door systems.	The operator cover is sold separately, not together with the operator system, and can thus be ordered individual- ly. We provide a mounting plate with cable channels to facilitate the cable laying process within double-leaf door systems.
3 Upgrade cards Additional functions as required.	Plug-in modules to upgrade the operator system with additional functions:	Upgrade card – Full-Energy High performance for fast operation. Upgrade card – Fire Protection For enhanced safety in case of a fire.	Upgrade card – Professional Designed to open the leaves of a double-leaf door either individually or simultaneously and to extend the adjustable hold-open time. Upgrade card – DCW Centrally managed access control system. Additional function(s) via plug-in module.
4 BRC radio system Easily operable via pushbutton.		BRC-R receiver The receiver can easily be integrated in the standard operator. BRC-H hand-held transmitter Bi-directional system in new design.	BRC-W wireless wall transmitter (pushbutton-type) Extra slim design, suitable for surface mounting. BRC-T transmitter Easy installation in commercial pushbuttons.
5 ED ESR Integrated door coordinator.		ED ESR set Integrated door coordinator, easy mounting and maintenance-free operation.	

BENEFITS





 Less influence from weather conditions on the door's operating behavior

The wind load feature dynamically changes the door's operating parameters in the opening and closing direction to reduce effects caused by weather or pressure fluctuations.

Reliable – even at low temperatures

Initial Drive Control IDC for enhanced functional stability – especially in cold environments. The system detects wear-related irregularities in the door's driving behavior and reduces their negative effects.

Flexible configuration

Thanks to the system's modular design, customers only pay for the functions they actually require.

 Reliable at heavily frequented doors

The TMP Temperature Management Program controls the performance of the operator system in line with the prevailing forces. This feature distinctly helps to avoid operator overloads at heavily frequented doors and extends the system's life cycle.

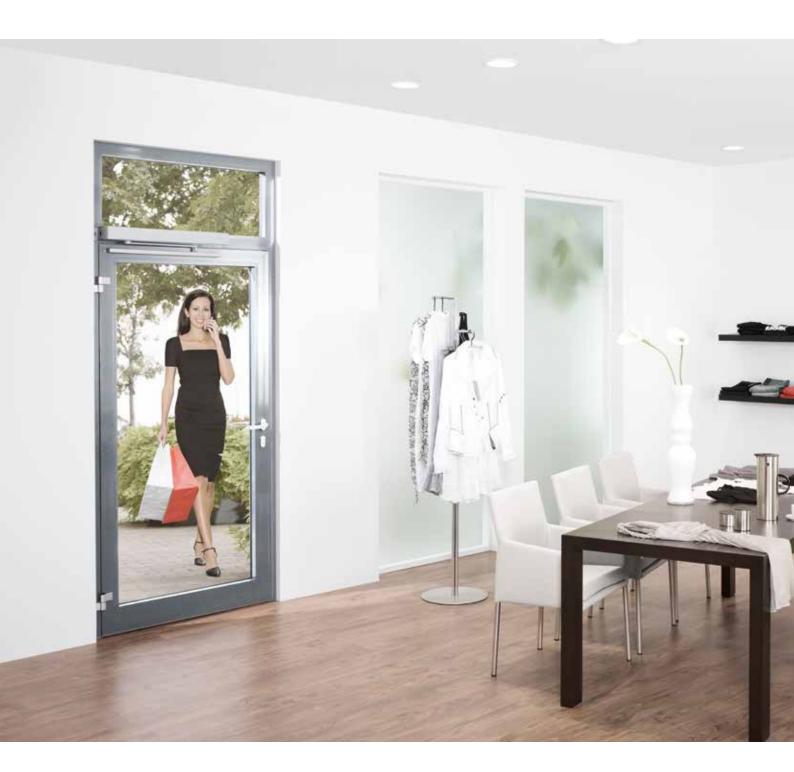
Elegant design

Cover in DORMA Contur design with a projection height of just 70 mm.

Suitable for sensitive areas

Low-noise application thanks to multi-stage gear.

ED 100 AND ED 250 – FOR RELIABLY ACCESSIBLE ENTRANCES AND EASY OPERATION.





2

ED 100/ED 250 operator A compact and powerful unit.

Basic cover Slender Contur design.

The attraction of brands and buildings is defined by their style of presentation. Therefore our solutions unite technology and design, with a focus on their field of application.

Because people matter.

People's perception of something can vary greatly from person to person; therefore they may perceive a door – and the required force to open it – as a barrier. Taking into account the individuality of users, DORMA develops technical solutions that help to remove barriers.

Effortless manual opening.

In door closer mode, ED 100 and ED 250 swing door operators are optimised for manual use. Cam technology provides easy manual access, with a further enhancement also available in the form of the Power-Assist Function. The opening forces meet the requirements of DIN 18040, DIN Spec 1104, CEN/TR 15894, BS 8300/2100 and document "M"; up to the maximum admissible door width and weight for the selected operator. In addition, users can open the door automatically via a pushbutton when the system is in door closer mode.

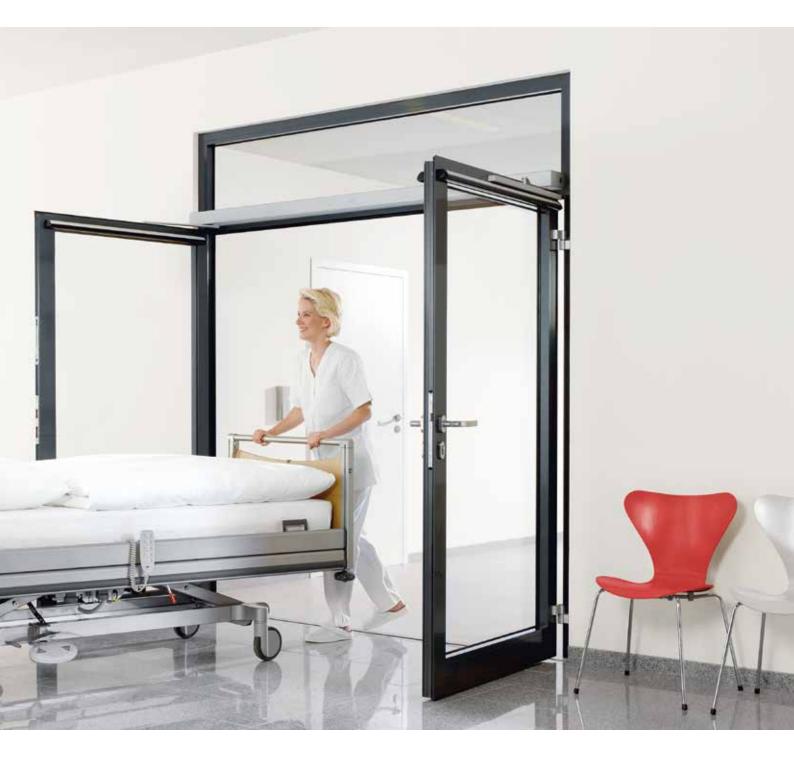
An accessible entrance makes a good impression.

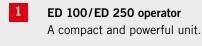
In order to deal with the individuality of users, DORMA has further improved the servo assist for swing door operators. The ED 100 and ED 250 detect how much force a user exerts on the door and adjust the required level of assist accordingly; this gives every user the positive feeling of entering the door effortlessly.



Standards, regulations, availability dates as well as available functions for the operators and modules may vary from country to country. The required and available equipment may thus differ from the examples shown and indicated in this brochure.

THIS SYSTEM COMBINES SPEED AND LOW ENERGY CONSUMPTION.





2

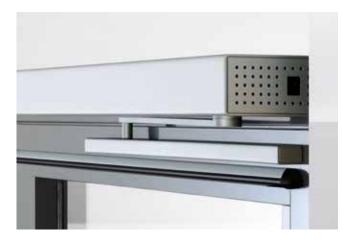
3

Professional cover Slender Contur design.

Full-Energy upgrade card High performance for fast operation.

Professional upgrade card Flexible door-leaf control.





The ED 250 offers automatic opening cycles for fast and trouble-free transfer of hospital beds.

A modern building should be fully operational at any time of the day or night and incur the minimum possible operating costs. Thus every process has to be well thought out. The ED 100 and ED 250 make a considerable contribution to this.

Reliable process support.

Processes and conditions within a building are as individual as people – sometimes fast and busy, then again rather slow and quiet. DORMA therefore offers technical solutions with the ability to detect changing conditions inside buildings that help to improve process efficiency.

Fast operating cycles.

In the automatic mode, the operator is optimized for operation via motion detectors. Whenever doors have to move fast, the Full-Energy upgrade card is required to activate the full performance range of the respective operator and to increase the adjustable opening speed. Inside buildings, variations in temperature affect the door's operating behavior. Here, the IDC Initial Drive Control dynamically adjusts the force parameters to prevailing weather conditions.

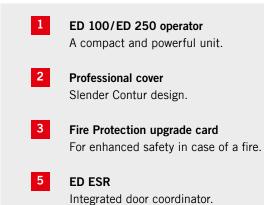
Functional flexibility.

With the Professional upgrade card you can either just activate the active leaf or both door leaves of a double-leaf system - thus you only consume the amount of energy you actually require. If doors have to remain open for more than 30 seconds or whenever an individual control is required, you can use the Professional upgrade card to increase the adjustable holdopen time by to up to 180 seconds, while the flip-flopfunction enables you to open door leaves permanently and to close them again. No matter how flexible your system needs to be, the integrated functions of the upgrade cards will help you to achieve the desired functionality.

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WHERE SAFETY AND FIRE PROTECTION ARE PART OF THE BUSINESS.





People rely on us. Whenever many people are in a building at the same time, safety and functionality are of critical importance. building. During standard operation, doors must close reliably and still be easy to open in the event of an alarm. With its ED 100 and ED 250, DORMA provides solutions to improve the safety of buildings.

A reliable part of the system.

Every component has to work properly to ensure the reliable functioning of the system. Doors play an important part when it comes to coordinating the ingress and egress of visitors and ensuring the safety of the

A powerful operator.

Thanks to its wind load feature, the system will support the door during its closing cycle. While adjusted to the automatic mode, the operator recognizes and compensates wind loads up to the admissible force limit of 150 N. In addition, the electronic latching action helps the door to latch shut. The operators are also well prepared in case of an alarm. If a hold-open device with the Fire Protection upgrade card is selected or as part of the building management system, the operators are ideal for application in emergency exits and escape routes.

A combination of functionality and design.

The mechanical door coordinator ED ESR for double-leaf doors is maintenance-free and ensures that rebated doors close in the correct order. In addition, all components are concealed behind a cover of the DORMA Contur design with a height of only 70 mm.

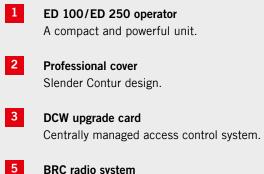


Professional: Seamless cover with a projection height of just 70 mm, especially suitable for narrow-stile doors.

Standards, regulations, availability dates as well as available functions for the operators and modules may vary from country to country. The required and available equipment may thus differ from the examples shown and indicated in this brochure.

RELIABLE ACCESS CONTROL – FOR NUMEROUS ROOMS.





BRC radio system

Convenient access at the touch of a button.

Sometimes you need to be alone to achieve something great. In many buildings, controlled access to rooms is therefore a basic requirement for door control systems.

Reliable locking is a matter of trust.

There are various reasons to lock rooms and control access. No matter what is important to you, you rely on the installed components. This is why DORMA uses matching parts, ensuring that each solution has all the merits of single-source supply.

Controlled security.

The DCW upgrade card allows you to connect DORMA motor locks directly with the DCW interface. Thanks to the easy Plug&Play installation of DORMA motor locks, only a few cables have to be connected while almost automatic parametrization ensures safe operation. In addition, the wind load feature supports the reliable closing behavior of the door system. In the event of a malfunction, the system sends the status of the door system to the security systems of the building so that the security staff will be able to respond specifically to the prevailing situation.

Wireless door management.

You can also link the bidirectional DORMA BRC radio system to the ED 100 and ED 250 swing door operators. We have provided an interface in order to facilitate the installation of the BRC R radio receiver inside the operator. Apart from reliable 4-channel BRC H hand-held transmitters, DORMA also offers flat BRC W wireless wall transmitters and a built-in wireless transmitter for installation in pushbuttons from other suppliers. All components of the BRC radio system allow fast and easy installation without additional cables. Just activate the pushbutton and the operator will perform the desired function.



Easy handling via DORMA BRC radio system.



Reliable access control via keypad.

Standards, regulations, availability dates as well as available functions for the operators and modules may vary from country to country. The required and available equipment may thus differ from the examples shown and indicated in this brochure.



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Heavy Duty Mortice Locks

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DORMA'S ST9600 SERIES II PROVIDE EXCEPTIONAL SECURITY, ENHANCED AESTHETICS, AND OUTSTANDING DEPENDABILITY.

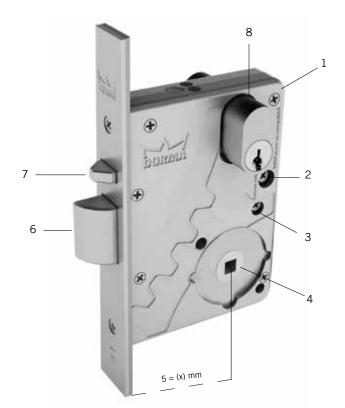
Designed in Australia to meet the needs of the Australasian market these premium performance locksets and latchsets are built with a heavy duty zinc alloy chassis for use in all applications. With a wide variety of lock functions the DORMA ST9600 series II mortice lock will have the right function to meet your hardware specification requirements.

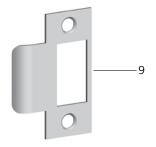
Features

- All DORMA ST9600 Series II mortice locks include advanced design concepts for extreme reliability and are manufactured with the finest materials for exceptional quality.
- The DORMA ST9600 Series II mortice lock range is complete with Nightlatch, Deadbolt, Vestibule, Sliding Deadbolt and Combination Lock functions.
 - 1. Zinc alloy silver finish lock casing
 - 2. Anti Lockout Adjustment
 - 3. Lock Multi Function Set
 - 4. 7.6mm Split Spindle Hubs
 - 5. Backset
 - 6. Low Resistance latch bolt
 - 7. Deadlatch Bolt
 - 8. Lock Cylinder
 - 9. Universal Strike Plate

RECOMMENDED APPLICATIONS

- Offices
- Retail complexes
- Schools and Universities
- Municipal Buildings
- Hotels
- Apartments
- Warehouses
- Airports
- Hospitals and Nursing Homes
- All Dorma ST9600 series II locks include high strength springs to eliminate unsightly sagging levers.
- Lock functions and handing easily changed in the field by the installer.





TECHNICAL DETAILS

- The ST9600 Mortice lock can be easily changed from a vestibule function (inside handle always free) to a combination function (both handles locked) without the need to disassemble the lock.
- Zinc alloy silver finished case providing additional anti corrosion resistance and durability.
- Antilockout as standard on ST9602 and ST9604 lock cases. Can be engaged or disengaged easily on site if function is not desired.
- Fully reversible, low resistance, 304 grade stainless steel 14.5mm latch bolt for left or right handed open in or open out doors.
- 304 grade stainless steel 16mm dead bolt.
- Auxillary 304 grade stainless steel dead latch to prevent manipulation of the mortice lock latch bolt. Door clearance should be 3mm to ensure correct functioning however the deadlatching will operate up to 7mm gap. Deadlatching pin will retract automatically when the main latchbolt is withdrawn.
- 304 grade stainless steel face plate and strike plates (Consult DORMA if special finish required).
- Compatible with most electric strikes.
- Rebate kits to suit standard 13mm rebated meeting stiles.
- High strength 7.6mm alloy steel spindles.
- Accepts an Australian oval cylinder.
- Suits most restricted keying systems available in the Australasian market.
- Cylinder retaining screws provided for more positive holding of oval cylinders to mortice lock case.
- Cylinder cams are non handed and fully reversible.
- Utilises rugged springs manufactured of galvanised spring steel wire rated R2. Mortice door furniture should be sprung when utilising this lock to avoid lever sagging.

Data and tech	nical features	9600	9601	9602	9603	9604
Backset	60mm 89mm 127mm	• CD CD	• CD CD	• CD CD	CD CD	• CD CD
Finishes	Stainless Steel Steel* Polished Stainless Steel* Polished Brass Other finishes on request	• CD CD	• CD CD	• CD CD	• CD CD	• CD CD
Spindle type	2 x Split 7.6mm	-	_	•	_	٠
Fixing holes for door furniture	Diagonal 50.8mm Horizontal 38mm-41mm	•	-	•	-	•
33mm oval cylinder	No cylinder Keyed alike Keyed to differ	• 0	• 0 0	• 0 0	• 0	• 0 0
304 grade Stainless steel Bolt	Latchbolt Deadlatch Deadbolt	•	- - •	•	- - •	•
Door thickness	32-50mm	•	•	•	•	٠
Rebate kits		0	0	0	0	0
Non handed	Fully reversible	•	•	•	٠	•
Anti lockout		-	-	•	-	•

CD consult DORMA • Yes - no Option

* Cylinder finishes are provided in the following manner Satin Stainless Steel Locks – Satin Chrome Plate Cylinder. Polished Stainless Steel Locks – Chrome Plate Cylinder.

SPECIFICATION SERVICE

If you require any technical assistance with this or any other DORMA product, or would like help in preparing your next complete hardware specification please contact your DORMA sales office for a no cost and obligation free hardware specification service.

DORMA ST9600 MORTICE LOCKSETS AND LATCHSETS

DORMA Door Controls reserves the right to alter dimensions, design or specifications to any of this product range without notice.

CERTIFICATION

- DORMA ST9600 series II mortice locks conform to the Australian lock standard AS-4145.2-2008, and the Australian Standard AS-1905 Part 1 Fire resistant doors.
- International Patent application PCT/AU2005/000612
- Design Registration 157225

ORDERING GUIDE

PREFIX	BACKSE	T	DOOR TY	ΈE	FUNCTION		LOCK FUNCTION	HAND	NG	KEYING		FINISH	
ST9	60mm 89mm 127mm	6 7 8	Timber	0	Nightlatch Deadbolt Vestibule Sliding Combination	0 1 2 3 4	A CAM DW CAM DX CAM DZ CAM B CAM Privacy Button Emergency Button Turnbutton Adaptor No Lock Function	Right Left	R	Satin Stainless Steel Polished Stainless Steel Other finishes available on application	SSS PSS	Keyed to Differ Keyed Alike No Cylinder	KD KA NC
ST9	6		0		2		DXT	R		SSS		NC	

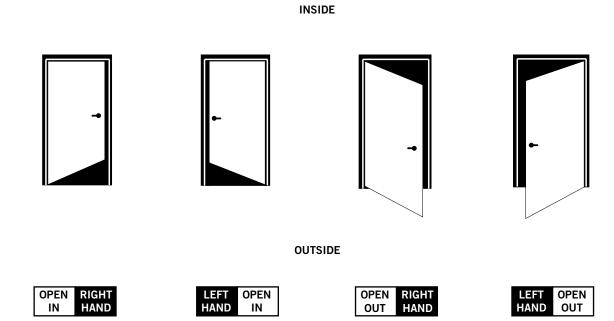
DORMA "ST9600" SERIES II PART NUMBER CONFIGURATION GUIDE - STANDARD BACKSETS

ORDERING PROCEDURE:

1.	Select backset required e.g. 60mm	ST96
2.	Select door material e.g. Timber	ST960
3.	Select function e.g. Vestibule lock	ST9602
4.	Select lock function e.g. Cylinder outside turnsnib inside	ST9602DXT
5.	Select hand e.g. Right hand	ST9602DXTR
6.	Select finish e.g. Satin Stainless Steel	ST9602DXTRSSS
7.	Select cylinder supply required e.g. No Cylinder	ST9602DXTRSSSNC

Note - In the case of mortice locks being ordered with cylinders satin stainless steel mortice locks will be provided with satin chrome plate cylinders and polished stainless steel mortice locks will be provided with chrome plate cylinders in a C4 profile 6 pin cylinder.

HANDING CONFIGURATION



* European ISO handing refer to door controls and glass products

ST9600 SERIES II MORTICE NIGHT LATCH

Mortice night latch functions are operated by key outside and by turn snib or key inside and lock automatically when the door is closed. For all night latch function options specify base mortice lock eg. ST9600SSS. This lock can then be easily adapted to suit function required.

Applications

Cupboards, Risers, Switchboards, Duct doors, Gates.

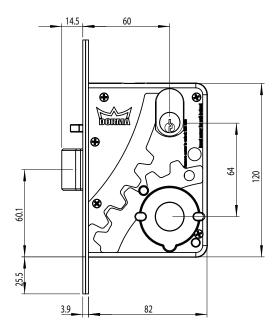
Features

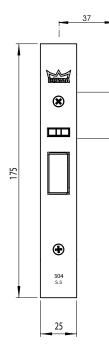
Zinc alloy silver finished case with stainless steel latch, dead latching bolt, face plate and striker plate as standard. No handed components fully reversible. Can be grand master keyed, master keyed, keyed alike or construction keyed in all leading restricted and non-restricted keying systems and key profiles.

Finishes

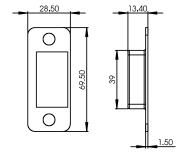
Satin Stainless Steel Polished Stainless Steel Other finishes on application

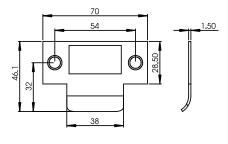


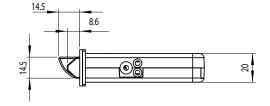




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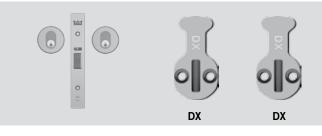
ST9600DXR, ST9600DXL, SINGLE CYLINDER NIGHT LATCH

Latchbolt by key from outside only. Latchbolt automatically deadlatches when door is closed.



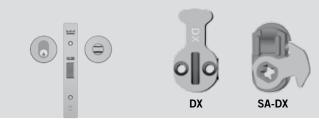
ST9600DXDXR, ST9600DXDXL, DOUBLE CYLINDER NIGHT LATCH

Latchbolt by key from either side. Latchbolt automatically deadlatches when door is closed



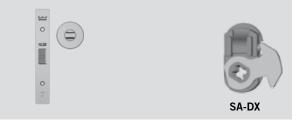
ST9600DXTR, ST9600DXTL, CYLINDER AND TURN SNIB NIGHT LATCH

Latchbolt by either key outside or turn inside, latchbolt automatically deadlatches when door is closed



ST9600TR, ST9600TL, TURN NIGHT LATCH

Latchbolt by turn from inside only. Latchbolt automatically deadlatches when door is closed



ST9601 SERIES I MORTICE DEADBOLT

Mortice deadbolt functions operated by key outside and by turnsnib or key inside. Locked by key or turnsnib when door is closed. For all deadbolt function options specify base mortice lock eg. ST9601SSS. This lock can then be

easily adapted to suit function required.

Applications

Additional security requirement applications, Pivot doors, Gates, Push or Pull plate operated doors.

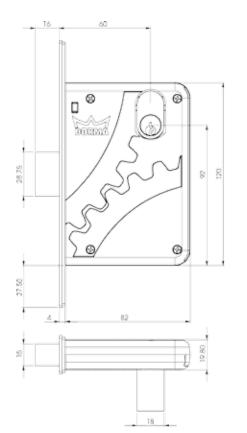
Features

Chrome plated zinc alloy case with stainless steel dead bolt, face plate and striker plate as standard. No handed components fully reversible. Can be grand master keyed, master keyed, keyed alike or construction keyed in all leading restricted and non restricted keying systems and key profiles.

Finishes

Satin Stainless Steel Polished Stainless Steel Other finishes on application







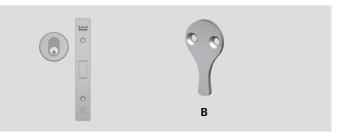






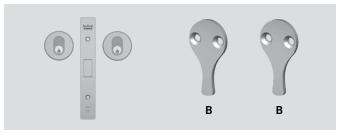
ST9601B, SINGLE CYLINDER DEADBOLT

Bolt is locked or unlocked by key from outside only.



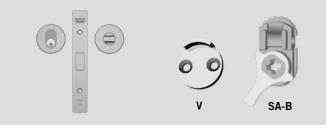
ST9601BB, DOUBLE CYLINDER DEADBOLT

Bolt is locked or unlocked by key from either side.



ST9601VT, CYLINDER AND TURN SNIB DEADBOLT

Bolt is locked or unlocked by either key outside or turn inside.



ST9601T, TURN SNIB DEADBOLT

Bolt is locked or unlocked by turn from inside only.



ST9602 SERIES II MORTICE VESTIBULE LOCK

Mortice vestibule latch functions operated by key, turn or handle outside and by turnsnib, key and handle inside. These vestibule locks allow for single action egress in compliance with building egress codes. For all vestibule function options specify base mortice lock eg. ST9602SSS. This lock can then be easily adapted to suit function required.

Applications

Classrooms, Storerooms, Cupboards, Fire doors, Stairways and all emergency exit applications

Features

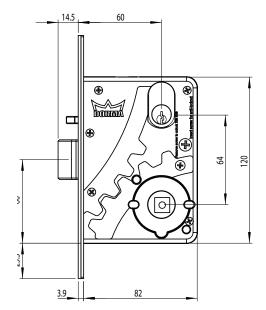
Zinc alloy silver finished case with stainless steel latch, dead latching bolt, face plate and striker plate as standard.

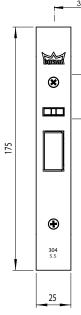
Anti lockout function as standard, that can easily be engaged or disengaged if not required. No handed components fully reversible. Can be grand master keyed, master keyed, keyed alike or construction keyed in all leading restricted and non-restricted keying systems and key profiles.

Finishes

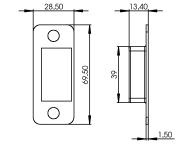
Satin Stainless Steel Polished Stainless Steel Other finishes available on application

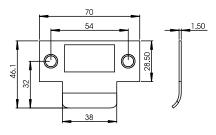


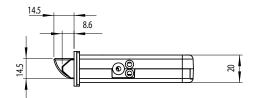




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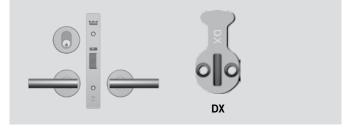






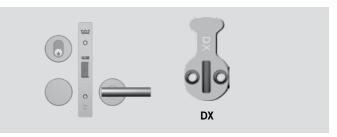
ST9602DXR ,ST9602DXL, STOREROOM LOCK

Latchbolt by inside handle at all times for immediate exit. Key outside retracts latchbolt. Outside handle always rigid. Latchbolt automatically deadlatches when door is closed.



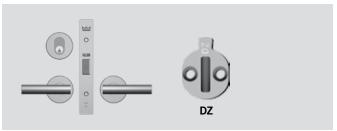
ST9602DXR, ST9602DXL, ESCAPE LOCK

Latchbolt by key from outside and by handle from inside which is always free for immediate exit. Latchbolt automatically deadlatches when door is closed.



ST9602DZR, ST9602DZL, CLASSROOM LOCK

Latchbolt by handle from either side unless outside is made inoperative by key from outside. Inside handle is always free for immediate exit. Latchbolt automatically deadlatches when door is closed.



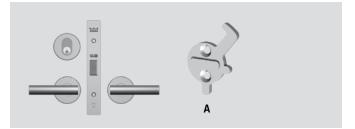
ST9602DZR, ST9602DZL, SINGLE CYLINDER EXIT DOOR LOCK

Latchbolt by handle from either side, except when outside handle has been locked by inside cylinder. Inside handle always free for immediate exit. Latchbolt automatically deadlatches when door is closed.



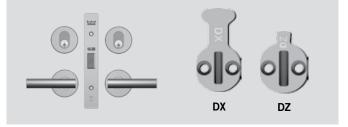
ST9602AR, ST9602AL, DUAL FUNCTION CLASS ROOM LOCK

Latchbolt by handles either side unless outside handle is made inoperative by key from outside. Cylinder has dual function. When turned towards strike, cylinder unlocks outside handle. If turned further cylinder will also retract latchbolt. Inside handle always free to escape. Latchbolt automatically deadlatches when door is closed.



ST9602DXDZR, ST9602DXDZL, DOUBLE CYLINDER EXIT LOCK

Latchbolt by handle either side, unless outside handle is made inoperative by key from inside. Outside cylinder retracts latchbolt. Inside handle always free for immediate exit. Latchbolt automatically deadlatches when door is closed.



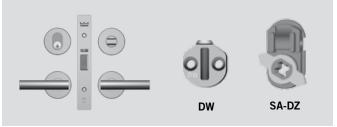
ST9602DZDZR, ST9602DZDZL, COMMUNICATING EXIT LOCK

Latchbolt by handle unless outside handle is made inoperative by key from either side. Unlocking by key from either side, inside handle always free for immediate exit. Latchbolt automatically deadlatches when door is closed.



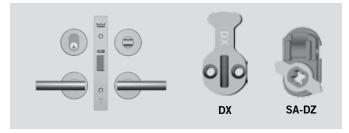
ST9602DWTR, ST9602DWTL, ENTRANCE AND OFFICE LOCK

Latchbolt by handles unless outside handle has been made inoperative by key or inside turn. Unlocking by key or turn. Inside handle always free for immediate exit. Latchbolt automatically deadlatches when door is closed. Has antilockout as standard.



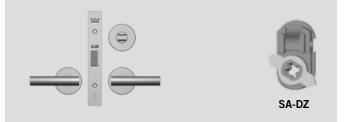
ST9602DXTR, ST9602DXTL, ENTRANCE LOCK

Latchbolt by handles except when outside handle has been made inoperative by inside turn. Cylinder retracts latchbolt. Inside handle always free to escape. Latch bolt automatically deadlatches when door is closed.



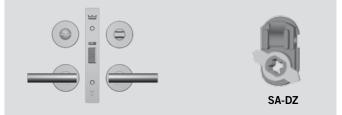
ST9602TR, ST9602TL, TURN EXIT DOOR LOCK

Latchbolt by handle from either side, except when outside handle has been locked by inside turn. Inside handle always free for immediate exit. Latchbolt automatically deadlatches when door is closed.



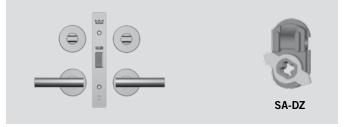
ST9602PTR, ST9602PTL, PRIVACY LATCH

(Toilet, Bedroom and Bathroom doors). Latchbolt by handle from either side unless outside is locked by inside turn. Inside handle always free to escape. Emergency unlocking from outside by slotted emergency turn button (with coin, screwdriver etc). Has antilockout as standard.



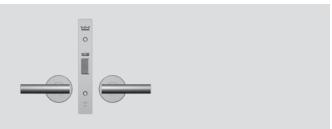
ST9602ETL, ST9602ETR, HOSPITAL PRIVACY LATCH

(Toilet, Bedroom and Bathroom doors). Latchbolt by handle from either side unless outside is locked by inside turn. Inside handle always free to escape. Emergency unlocking by outside turn. Has antilockout as standard.



ST9602R, ST9602L, EXIT DOOR LATCH

Latchbolt operated by inside handle only which is always free for immediate exit. Outside handle always rigid. Latchbolt automatically deadlatches when door is closed.



ST9602R, ST9602L, ANTI-VANDAL EXIT DOOR LATCH

Latchbolt retracted by inside handle only. No outside handle. Latchbolt automatically deadlatches when door is closed.



ST9603 SERIES I MORTICE SLIDING DEADBOLT

Mortice sliding door deadbolt lock functions operated by key or turn outside and by turnsnib or key inside. Locked by key or turnsnib when door is closed. For all deadbolt function options specify base mortice lock eg. ST9603SSS. This lock can then be easily adapted to suit function required.

Applications

Sliding door installations.

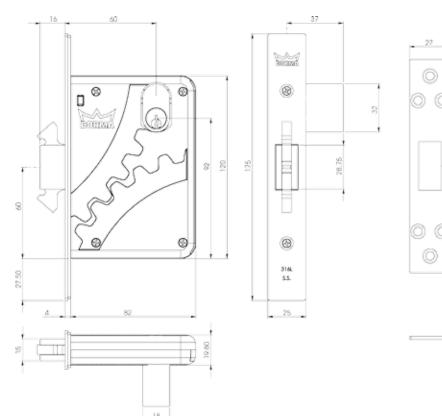
Features

Chrome plated zinc alloy case with stainless steel deadbolt as standard. No handed components fully reversible. Can be grand master keyed, master keyed, keyed alike or construction keyed in all leading restricted and non restricted keying systems and key profiles.

Finishes

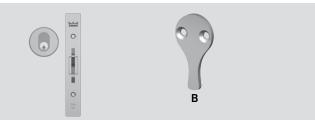
Satin Stainless Steel Polished Stainless Steel Other finishes on application





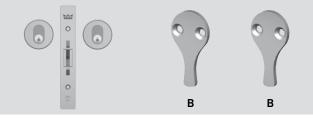
ST9603B, SINGLE CYLINDER DEADBOLT

Bolt is locked or unlocked by key from outside only.



ST9603BB, DOUBLE CYLINDER DEADBOLT

Bolt is locked or unlocked by key from either side.



ST9603VT, CYLINDER AND TURN SNIB DEADBOLT

Bolt is locked or unlocked by either key outside or turn inside.





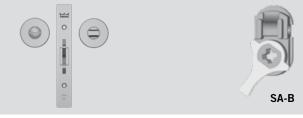
ST9603T, TURN SNIB DEADBOLT

Bolt is locked or unlocked by turn from inside only.



ST9603PT, PRIVACY DEADBOLT

Bolt is locked or unlocked by privacy turn outside or turn inside.



ST9603ET, EMERGENCY PRIVACY DEADBOLT

Bolt is locked or unlocked by privacy turn outside or turn inside.



ST9604 SERIES II MORTICE COMBINATION LOCK

Mortice combination latch functions operated by key, turn or handle outside and by turnsnib, key and handle inside. These combination lock functions allow for both inside and outside handles to be locked. For all combination function options specify base mortice lock eg. ST9602SSS. This lock can then be easily adapted to suit function required.

Applications

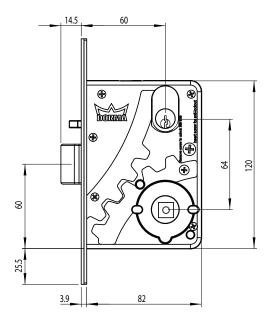
Offices, Residential and Terraces

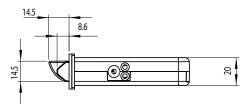
Features

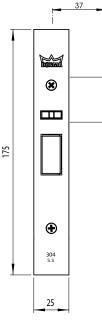
Zinc alloy silver finished case with stainless steel latch, and dead latching bolt, face plate and striker plate as standard. Anti lockout function as standard that can easily be engaged or disengaged if not required. No handed components fully reversible. Can be grand master keyed, master keyed, keyed alike or construction keyed in all leading restricted and non restricted keying systems and key profiles.

Finishes

Satin Stainless Steel Polished Stainless Steel Other finishes on application

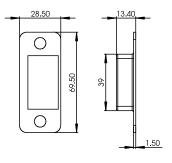


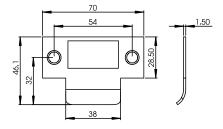




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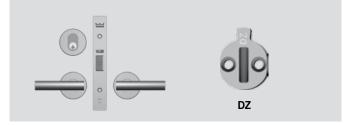






ST9604DZR, ST9604DZL, GLASS DOOR LOCKING LATCH

Latchbolt by handle either side, unless both handles are made inoperative by outside cylinder. Latchbolt automatically deadlatches when door is closed.



ST9604DZR, ST9604DZL, PATIO SECURITY LOCK

Latchbolt by handle either side except when inside cylinder locks both handles. Has antilockout as standard. Latchbolt automatically deadlatches when door is closed.



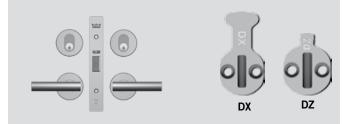
ST9604DZDZR, ST9604DZDZL, DOUBLE CYLINDER ENTRY LOCK

Latchbolt by handle either side, unless both handles are locked by key from either side. Key from either side unlocks both sides. Latchbolt automatically deadlatches when door is closed.



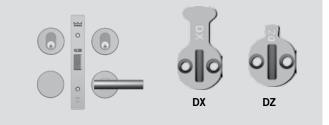
ST9604DXDZR, ST9604DXDZL, INTERNAL CYLINDER LOCK

Latchbolt by handle either side, unless both handles are locked by inside cylinder. External cylinder retracts Latchbolt. Latchbolt automatically deadlatches when door is closed.



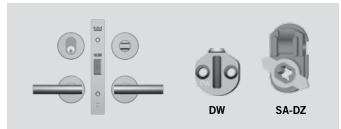
ST9604DXDZR, ST9604DXDZL, ACCESS CONTROL LOCK

Outside cylinder retracts latchbolt only. Inside cylinder locks or unlocks inside handle. Latchbolt automatically deadlatches when door is closed.



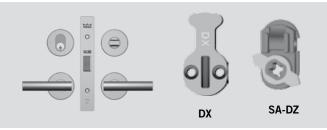
ST9604DWTR, ST9604DWTL, OFFICE LOCK

Latchbolt by handle either side. Cylinder outside or turn inside locks both handles. Latchbolt automatically deadlatches when door is closed.



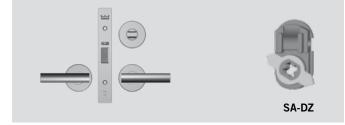
ST9604DXTR, ST9604DXTL, ENTRANCE AND OFFICE LOCK

Latchbolt by handle either side, except when outside handle has been made inoperative by inside turn. External cylinder retracts latchbolt. Latchbolt automatically deadlatches when door is closed.



ST9604TR, ST9604TL, PATIO LOCK

Latchbolt by handle from either side except when handles are made inoperative by turn inside. Latchbolt automatically deadlatches when door is closed. Has anti lockout as standard.



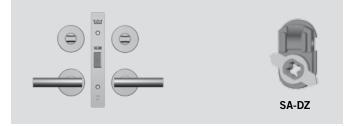
ST9604PTR, ST9604PTL, PRIVACY LATCH

(Toilet, Bedroom and Bathroom doors). Latchbolt by handle from either side unless both handles are locked by inside turn. Emergency unlocking from outside by slotted emergency turn button (with coin, screwdriver etc). Has antilockout as standard.



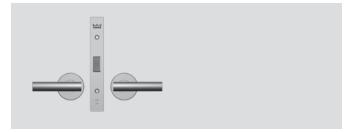
ST9604ETL, ST9604ETR, HOSPITAL PRIVACY LATCH

(Toilet, Bedroom and Bathroom doors). Latchbolt by handle from either side unless both handles are locked by inside turn. Emergency unlocking by outside turn. Has anti-lockout as standard.



ST9604, PASSAGE LATCH

For doors not requiring locking. Both handles always free. Either will retract latchbolt



ST9600 SERIES ACCESSORIES



DZ Cam - Lock and Unlock

The 9650C-DZ cam allows the locking bar to be moved up to an unlocked position or down to a locked position within the lock case by means of a key.



DX Cam - Latch Retraction

The 9650C-DX cam allows the latch bolt to be retracted from a locked position by means of key. This cam does not allow the lock to be left in an unlocked state.



A Cam - Lock and Unlock, Latch Retraction

The 9650C-A cam has a dual function if turned towards the latch bolt it allows the latch bolt to be retracted from a locked position or alternatively this cam allows the locking bar to be moved up to an unlocked position or down to a locked position within the lock case by means of key. This cam is fully reversible for left and right handed doors.

* The "A" cam is for single cylinder use only



DW CAM - Lock and Unlock, Key and Turn

The 9650C-DW cam works as a link by moving the turn adaptor. If used with the ST9602 or ST9604 mortice locks, the 9650C-DW cam via the adaptor allows the locking bar to be moved up to an unlocked position or down to a locked position.



V CAM - Lock and Unlock, Key and Turn

The 9650C-V cam works as a link by moving the turn adaptor. When used with the ST9601 and ST9603 deadbolt range this will lock or unlock the deadbolt.



B CAM - Bolt Lock and Unlock

The 9650C-B cam locks or unlocks the bolt mechanism of the ST9601 and ST9603 deadbolt range only.



SA-DZ Adaptor - Lock and Unlock

The 9640SA-DZ turn adaptor allows the locking bar to be moved up to an unlocked position or down to a locked position within the lock case by means of a turn, or by movement of the link created when using the 9650C-DW cam



DX Adaptor - Latch Retraction

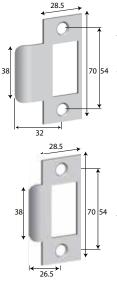
The 9640SA-DX turn adaptor allows the latch bolt to be retracted from a locked position by means of a turn. This turn adaptor does not allow the lock to be left in an unlocked state.

ST9600 SERIES ACCESSORIES



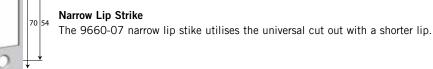
B Adaptor - Bolt lock and Unlock

The 9640SA-B turn adaptor locks or unlocks the bolt mechanism of the ST9601 and ST9603 deadbolt mortice lock range only.



Universal Strike Plate

The 9660-00 universal strike plate is provided with all ST9600, ST9602 and ST9604 mortice lock bodies. It suits the universal cut out as prepared on metal door frames. Longer lipped versions available upon request.





Deadbolt Strike Plate The 9660-01 Deadbolt strike plate is provided with all ST9601 and ST9603 mortice lock bodies.



Rebate Kit - Standard

The 9680-REB Rebate kit suits a 13mm rebate for use with ST9600, ST9602 and ST9604 mortice lock series.

Rebate Kit - Deadbolt

The 9680-REBD Rebate kit suits a 13mm rebate for use with the ST9601 and ST9603 Deadbolts.



Oval Cylinder

The 9630 6 pin C4 key profile oval cylinder can be ordered complete in keyed alike or keyed to differ.

Ordering procedure 9630-DZ, 9630-DX, 9630-A, 9630-B, 9630-DW, 9630-V Add KA for keyed alike Add KD for keyed to differ Finishes Satin Chrome Plate and Chrome Plate

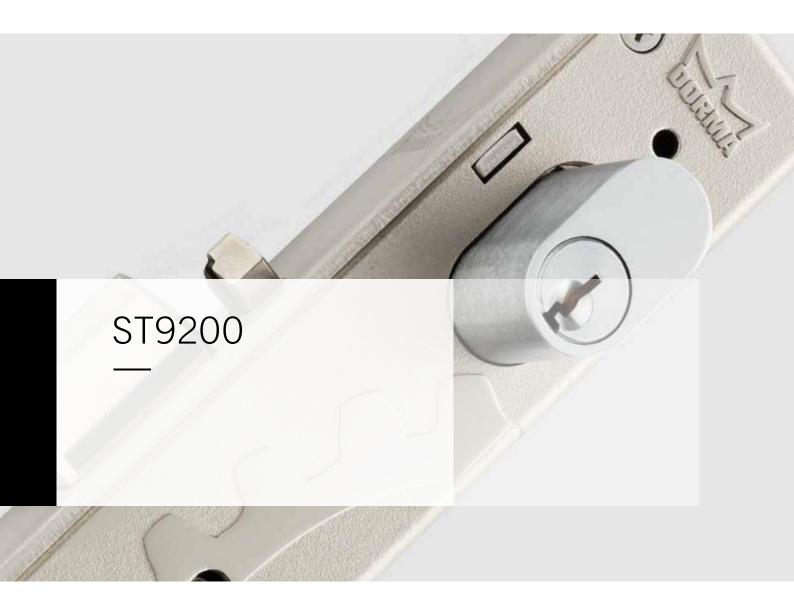
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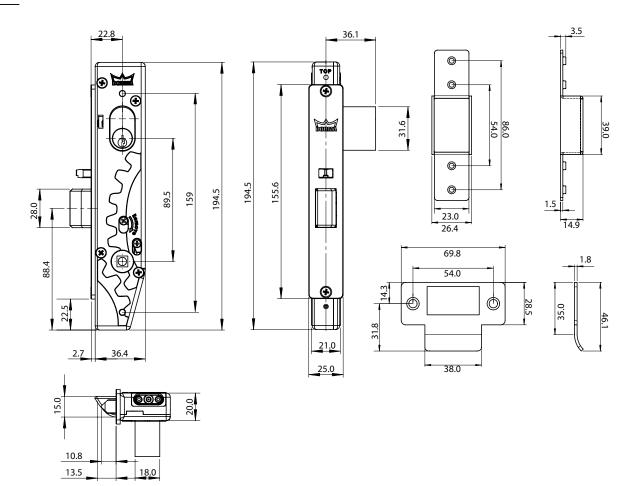


Narrow Stile Mortice Lockset

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ST9200 Cams & Accessories 1	1

DIMENSIONS



PROVIDES EXCEPTIONAL SECURITY, ENHANCED AESTHETICS, AND OUTSTANDING DEPENDABILITY.

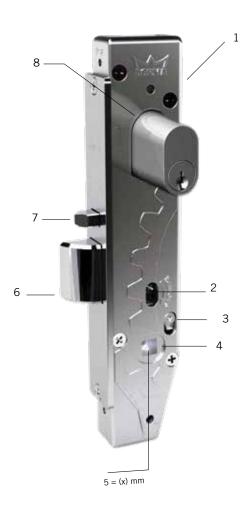
Designed in Australia to meet the needs of the Australasian narrow stile hinged door market these premium performance locksets and latchsets are built with a heavy duty zinc alloy mortice chassis for use in all applications. With a wide variety of lock functions the DORMA ST9200 series narrow stile mortice lock will have the right function to meet your hardware specification requirements.

Features

- All DORMA ST9200 Series narrow stile mortice locks include feature advanced design concepts for extreme reliability and are manufactured with the finest materials for exceptional quality.
- The DORMA ST9200 Series narrow stile mortice lock range is complete with Nightlatch, Vestibule and Combination lock functions.
 - 1. Lock Casing
 - 2. Anti Lockout Adjustment
 - 3. Lock Multi Function Set
 - 4. 7.6mm Split Spindle Hubs
 - 5. Backset
 - 6. Low Resistance latch bolt
 - 7. Deadlatch Bolt
 - 8. Lock Cylinder
 - 9. Strike Plate

RECOMMENDED APPLICATIONS

- Offices
- Retail complexes
- Schools and universities
- Municipal Buildings
- Partition fit-outs
- Residential housing
- All Dorma ST9200 series locks include high strength springs to eliminate unsightly sagging levers.
- Lock functions and handing easily changed in the field by the installer.





TECHNICAL DETAILS

- The ST9200 Mortice lock can be easily changed from a vestibule function (inside handle always free) to a combination function (both handles locked) without the need to disassemble the lock.
- Nickle plated zinc alloy case providing additional anti corrosion resistance and durability.
- Fully reversible, low resistance, 316 grade stainless steel 15mm latch bolt for left or right handed open in or open out doors.
- Auxillary 316 grade stainless steel dead latch to prevent manipulation of the mortice lock latch bolt. Door clearance should be 3mm to ensure correct functioning however the deadlatching will operate up to 7mm gap. Deadlatching pin will retract automatically when the main latchbolt is withdrawn.
- 316 Stainless steel face plate and strike plates (consult DORMA if special finish required).
- Compatible with most electric strikes.
- High strength 7.6mm alloy steel spindles.
- Accepts an Australian oval cylinder.
- Suits most restricted keying systems available in the Australasian market.
- Cylinder retaining screws provided for more positive holding of oval cylinders to mortice lock case.

DORMA ST9200 Narrow Stile

Mortice Locksets

DORMA Door Controls Pty Ltd reserves the right to alter dimensions, design or specifications to any of this product range without notice.

Certification

DORMA ST9200 series narrow stile mortice locks conform to the Australian Lock Standard AS4145.2-2008.

Data and technical features						
23mm	•	•	•			
25.4mm	0	0	0			
Stainless Steel Steel*	•	•	•			
Polished Stainless Steel*	0	0	0			
Other finishes on request	CD	CD	CD			
2 x Split 7.6mm	-	•	٠			
Vertical 159mm	•	•	•			
No cylinder	•	•	٠			
Keyed alike	0	0	0			
Keyed to differ	0	0	0			
Latchbolt	•	•	•			
Deadlatch	•	•	٠			
32-50mm	•	•	•			
Fully reversible	•	•	•			
,						
	23mm 25.4mm Stainless Steel Steel* Polished Stainless Steel* Other finishes on request 2 x Split 7.6mm Vertical 159mm No cylinder Keyed alike Keyed to differ Latchbolt Deadlatch 32-50mm	23mm • 25.4mm • Stainless Steel Steel* • Polished Stainless Steel* • Other finishes on request • 2 x Split 7.6mm - Vertical 159mm • No cylinder • Keyed alike • Keyed to differ • Latchbolt • 32-50mm •	23mm • • 25.4mm • • 25.4mm • • Stainless Steel Steel* • • Polished Stainless Steel* • • Other finishes on request ° ° 2 x Split 7.6mm - • Vertical 159mm • • No cylinder • • Keyed alike • • Keyed to differ • • Deadlatch • • 32-50mm • •			

* Cylinder finishes are provided in the following manner Satin Stainless Steel Locks – Satin Chrome Plate Cylinder. Polished Stainless Steel Locks – Chrome Plate Cylinder.

SPECIFICATION SERVICE

If you require any technical assistance with this or any other DORMA product, or would like help in preparing your next complete hardware specification please contact your DORMA sales office for a no cost and obligation free hardware specification service.

Door Furniture

The Dorma ST9200 series Narrow Stile mortice lock is perfectly suited for use with the Solid 316 grade Stainless Steel Coastal Series Narrow Stile door furniture. Please refer to the DORMA Coastal Series brochure for more technical details.



ORDERING GUIDE

PREFIX	BACKSET	DOOR TYPE	FUNCTION	LOCK FUNCTION	HANDING	KEYING	FINISH
ST9	23mm 2	Aluminium 1	Nightlatch 0 Vestibule 2 Combination 4			Keyed to Differ KD Keyed Alike KA No Cylinder NC	Satin Stainless Steel SSS Polished Stainless Steel PSS Other finishes on application
ST9	2	1	2	DWT	R	KD	SS

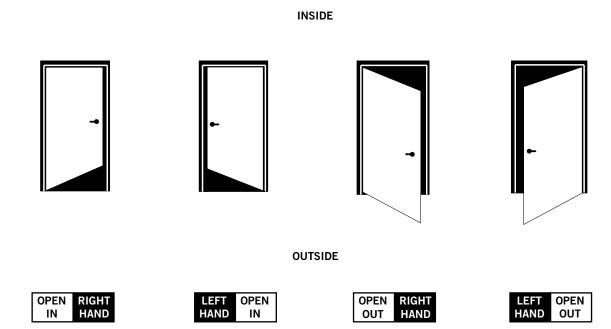
DORMA "ST9200" SERIES PART NUMBER CONFIGURATION GUIDE - STANDARD BACKSETS

ORDERING PROCEDURE:

1.	Select backset required e.g. 23mm	ST9 2
2.	Select door material e.g. Aluminium	ST92 1
3.	Select function e.g. Vestibule lock	ST921 2
4.	Select lock function e.g. Cylinder outside turnsnib inside	ST9212 DWT
5.	Select hand e.g. Right hand	ST9212DWT R
6.	Select cylinder supply required e.g. KD	ST9212DWTR KD
7.	Select finish e.g. Stainless Steel	ST9212DWTRKD SSS

Note - In the case of mortice locks being ordered with cylinders Satin Stainless Steel mortice locks will be provided with Satin Chrome Plate cylinders and Polished Stainless Steel mortice locks will be provided with Chrome Plate cylinders.

HANDING CONFIGURATION



* European ISO handing refer to door controls and glass products

ST9212 MORTICE VESTIBULE LOCK

Mortice vestibule latch functions operated by key, turn or handle outside and by turnsnib, key and handle inside. These vestibule locks allow for single action egress in compliance with building egress codes. For all vestibule function options specify base mortice lock eg ST9212SSS. This lock can then be easily adapted to suit function required

Features

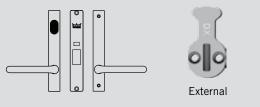
- Nickel plated zinc alloy case
- 316 stainless steel latch, dead latching bolt, face plate and striker plate as standard
- Anti-lockout function as standard, that can easily be engaged or disengaged
- No handed components fully reversible
- Can be grand master keyed, master keyed, keyed alike or construction keyed in all leading restricted and non-restricted keying systems and key profiles

RECOMMENDED APPLICATIONS

- Offices
- Retail complexes
- Residential housing
- Emergency exit applications

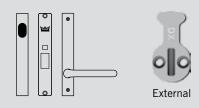
ST9212DXR, ST9212DXL, STOREROOM LOCK

Latchbolt by inside handle at all times for immediate exit. Key outside retracts latchbolt. Outside handle always rigid. Latchbolt automatically deadlatches when door is closed.



ST9212DXR, ST9212DXL, ESCAPE LOCK

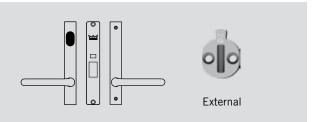
Latchbolt by key from outside and by handle from inside which is always free for immediate exit. Latchbolt automatically deadlatches when door is closed.





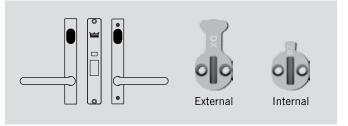
ST9212DZR, ST9212DZL, CLASSROOM LOCK

Latchbolt by handle from either side unless outside is made inoperative by key from outside. Inside handle is always free for immediate exit. Latchbolt automatically deadlatches when door is closed.



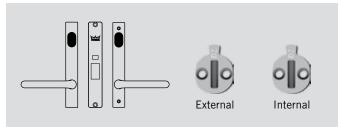
ST9212DXDZR, ST9212DXDZL, DOUBLE CYLINDER EXIT LOCK

Latchbolt by handle either side, unless outside handle is made inoperative by key from inside. Outside cylinder retracts latchbolt. Inside handle always free for immediate exit. Latchbolt automatically deadlatches when door is closed.



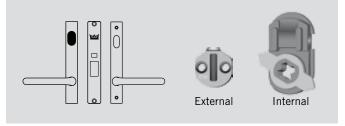
ST9212DZDZR, ST9212DZDZL, COMMUNICATING EXIT LOCK

Latchbolt by handle unless outside handle is made inoperative by key from either side. Unlocking by key from either side, inside handle always free for immediate exit. Latchbolt automatically deadlatches when door is closed.



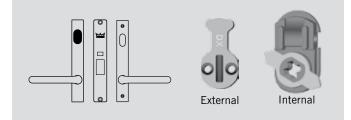
ST9212DWTR, ST9212DWTL, ENTRANCE AND OFFICE LOCK

Latchbolt by handles unless outside handle has been made inoperative by key or inside turn. Unlocking by key or turn. Inside handle always free for immediate exit. Latchbolt automatically deadlatches when door is closed. Has Anti-lockout as standard.



ST9212DXTR, ST9212DXTL, ENTRANCE LOCK

Latchbolt by handles except when outside handle has been made inoperative by inside turn. Cylinder retracts latchbolt. Inside handle always free to escape. Latch bolt automatically deadlatches when door is closed.



ST9214 MORTICE COMBINATION LOCK

Mortice combination latch functions operated by key, turn or handle outside and by turnsnib, key and handle inside. These combination lock functions allow for both inside and outside handles to be locked. For all combination function options specify base mortice lock eg ST9212SSS. This lock can then be easily adapted to suit function required.

Features

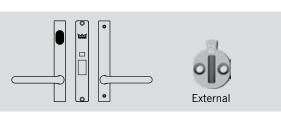
- Nickel plated zinc alloy case
- 316 stainless steel latch, dead latching bolt, face plate and striker plate as standard
- Anti-lockout function as standard, that can easily be engaged or disengaged
- No handed components fully reversible
- Can be grand master keyed, master keyed, keyed alike or construction keyed in all leading restricted and non-restricted keying systems and key profiles

RECOMMENDED APPLICATIONS

- Offices
- Retail complexes
- Residential housing

ST9214DZR, ST9214DZL, GLASS DOOR LOCKING LATCH

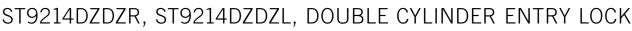
Latchbolt by handle either side, unless both handles are made inoperative by outside cylinder. Latchbolt automatically deadlatches when door is closed.



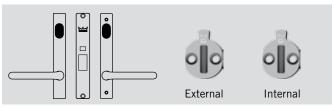
ST9214DXDZR, ST9214DXDZL, INTERNAL CYLINDER LOCK

Latchbolt by handle either side, unless both handles are locked by inside cylinder. External cylinder retracts latchbolt. Latch bolt automatically deadlatches when door is closed.





Latchbolt by handle either side, unless both handles are locked by key from either side. Key from either side unlocks both sides. Latchbolt automatically deadlatches when door is closed.

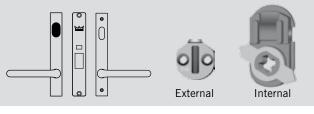


Internal



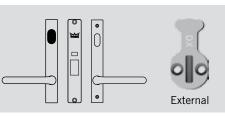
ST9214DWTR, ST9214DWTL, OFFICE LOCK

Latchbolt by handle either side. Cylinder outside or turn inside locks both handles. Latchbolt automatically deadlatches when door is closed.



ST9214DXTR, ST9214DXTL, ENTRANCE AND OFFICE LOCK

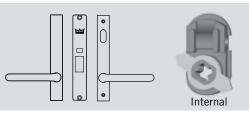
Latchbolt by handle either side, except when outside handle has been made inoperative by inside turn. External cylinder retracts latchbolt. Latchbolt automatically deadlatches when door is closed.





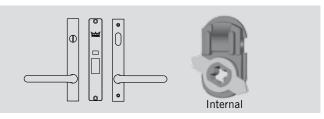
ST9214TR, ST9214TL, PATIO LOCK

Latchbolt by handle from either side except when handles are made inoperative by turn inside. Latchbolt automatically deadlatches when door is closed. Has Anti-lockout as standard.



ST9214PTR, ST9214PTL, PRIVACY LATCH

(Toilet, Bedroom and Bathroom doors).Latchbolt by handle from either side unless both handles are locked by inside turn. Emergency unlocking from outside by slotted emergency turn button (with coin, screwdriver etc). Has Anti-lockout as standard.



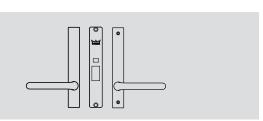
ST9212ETR, ST9212ETL, HOSPITAL PRIVACY LATCH

(Toilet, Bedroom and Bathroom doors). Latchbolt by handle from either side unless both handles are locked by inside turn. Emergency unlocking by outside turn. Has Anti-lockout as standard.



ST9214R, ST9214L, PASSAGE LATCH

For doors not requiring locking. Both handles always free. Either will retract latchbolt..



ST9210 MORTICE NIGHT LATCH

Mortice night latch functions are operated by key outside and by turn snib or key inside and lock automatically when the door is closed. For all night latch function options specify base mortice lock eg. ST9212SSS. This lock can then be easily adapted to suit function required

Features

- Nickel plated zinc alloy case
- 316 stainless steel latch, dead latching bolt, face plate and striker plate as standard
- No handed components fully reversible
- Can be grand master keyed, master keyed, keyed alike or construction keyed in all leading restricted and non-restricted keying systems and key profiles

RECOMMENDED APPLICATIONS

• Security Entrance Doors that feature pull handles with electric strikes.

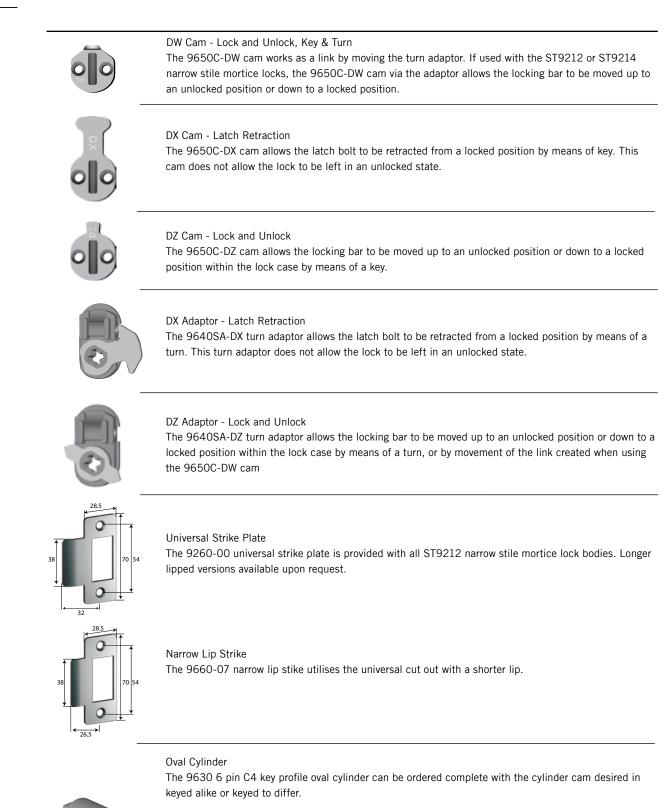


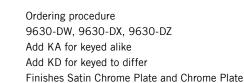
ST9210DXTR, ST9210DXTL, CYLINDER AND TURN NIGHT LATCH

Latchbolt by either key from outside or turn inside. Latchbolt automatically deadlatches when door is closed.



ST9200 ACCESSORIES







DORMA Australia P/L Head Office Victorian Sales Office 46-52 Abbott Road, Hallam, Victoria 3803 Telephone (03) 8795 0666 Facsimile (03) 8795 0280 Toll Free Facsimile 1800 333 309

New South Wales & Australian Capital Territory Telephone (02) 9645 8350 Facsimile (02) 9645 8355

Queensland Telephone (07) 3394 6810 Facsimile (07) 3394 2953 New Zealand Dorma NZ Limited Building P 61-69 Patiki Road Avondale Auckland 1026 Telephone (09) 830 2052 Facsimile (09) 820 4909

South Australia & Northern Territory Telephone (08) 8337 4064 Facsimile (08) 8365 8572

Western Australia Telephone (08) 9228 2322 Facsimile (08) 9228 2422 Newcastle Telephone (02) 4960 2606 Facsimile (02) 4960 2544

ACT Telephone (02) 6203 0323 Facsimile (02) 6260 1810

Tasmania Telephone (03) 6225 4117







Tubular Locksets

DORMA'S CL600 TUBULAR LOCKSETS PROVIDE THE SECURITY, AESTHETICS, AND DEPENDABILITY REQUIRED FOR MANY APPLICATIONS.

Features

- All Dorma CL600 Series locks feature advanced design concepts for reliability and are manufactured with select materials for extra durability.
- All CL600 Series locks are easily adjustable to accommodate door thicknesses from 35mm to 44mm.
- Tubular latch with solid one piece hub and matching Stainless Steel latch bolt
- Dorma CL600 Series locks are easy to install in both wood or hollow metal doors.
- Return springs hold levers in correct horizontal position.
- All CL600 Series locksets are through bolted and have heavy duty springs to provide long life and resistance to lever droop.
- Can be masterkeyed to suit most restricted keying systems available in the Australasian market.
- Standard with C4 6 pin cylinder keyed to differ.
- Adjustable 60-70mm tubular latch as standard
- Clip on roses to conceal internal fixings for greater aesthetic appeal..



Features ······2
Technical Details and Specifications
How To Order ·······4

Functions

Dummy Trim One Side – CL601 ······5
Passage – CL610
Privacy – CL640
Entry – CL651 ······5
Communicating - CL6605
Classroom – CL670 ······5
Storeroom – CL680······5

Trim Designs

CL600 LR Lever ·····	•••••6
CL600 LC Lever ·····	•••••6

Lock Options

Latch Options ·······7
Universal Strike ······7
Rebate Kit ······7

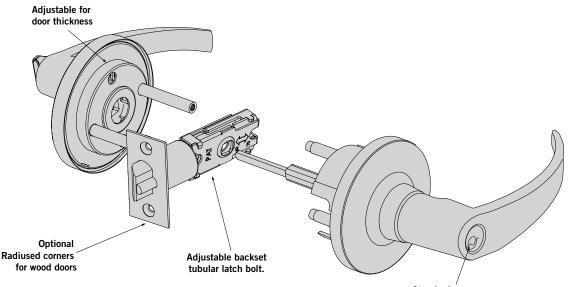
RECOMMENDED APPLICATIONS

- Offices
- Retail Complexes
- Municipal Buildings
- Medical Clinics
- Warehouses
- Nursing Homes

SPECIFICATION SERVICE

If you require any technical assistance with this, or any other Dorma product, or would like help in preparing your next complete hardware specification please contact your Dorma sales office for a cost and obligation free hardware specification service.

TECHNICAL DETAILS



Standard cores for most popular key systems

Technical details CL600 Tubular Key - in - lever

- Reversible handing.
- Lock chassis manufactured with selected stainless steel and zinc dichromate components for superior strength and corrosion resistance.
- Latch bolt front manufactured from stainless steel, brass or bronze, depending on the selected finish.
- Stainless steel, brass or bronze strikes.
- Auxiliary deadlatching bolt prevents manipulation when door is closed.
- Return springs hold levers in correct horizontal position.

Certification:

The Dorma CL600 tubular locksets have been successfully tested to fire door assemblies in accordance with Australian Standard AS1905 Part 1 Fire Resistant Doorsets.

Cylinders and Keying:

Cylinders will be be provided with a keyed to differ C4 6 pin key way with two brass silver keys.

Data and features	Part#	Description	In (mm)
Rose	В	Diameter	76
Latch Bolt	16xxx	Std Backset Throw Front	60/70 12 25x57
Door Thickness	138 134	Minimum Maximum	35 44
Universal Strike	5101- 118	Height Width Lip Length	70 29 17
Minimum Stile		Width	111
Edge Bevel		Maximum	3 in 51

1.Latch bolt is adjustable between 60mm and 70mm. 2.Consult Dorma for other door thicknesses.

Finishes:

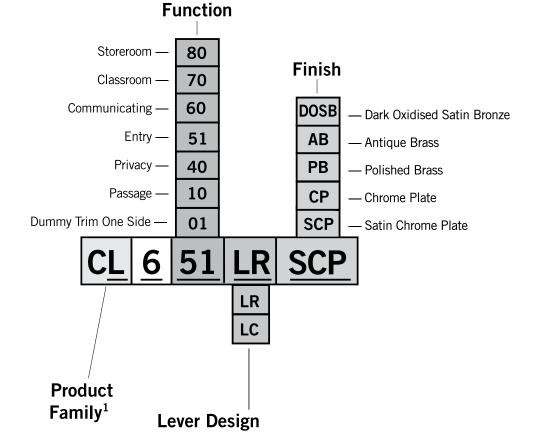
SCP (Satin Chrome Plate) or CP (Chrome Plate) PB (Polished Brass) or AB (Antique Brass) DOBS (Dark Oxidised Satin Bronze)

Levers are zinc based material and are finished to match finishes indicated. Finish of latches, strikes, cylinders/cores, and visible mounting screws, though similar in appearance, may differ from the finish of the trim.

HOW TO ORDER

Configuration Shown – <u>CL651 LR SCP</u>

- Tubular Lever Locks
- CL600 Series
- Entry Function
- Dorma C4 6-pin cylinder keyed to differ
- LR Lever Design
- 76mm Diameter Rose
- Satin Chrome Finish
- 60mm to 70mm Adjustable latch bolt
- Universal Strike Plate 5101-118
- Door Thickness 35-44 mm
- Keyed Different with 2 keys



1. Example shows default values. Refer to Lock Options section for full details

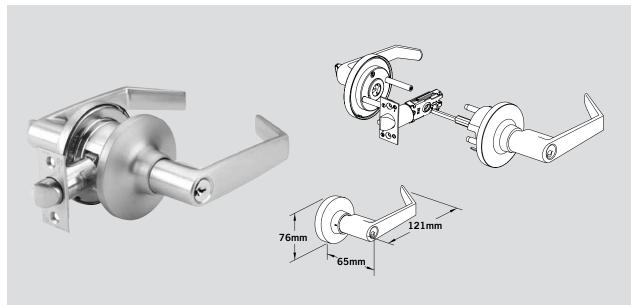
FUNCTIONS

FUNCTION	SERIES	OUTSIDE/INSIDE	DESCRIPTION
Dummy Lever	CL601		 Used as pull or matching lever on pairs of door.
Passage	CL610		 Latch bolt is operated by lever from either side at all times.
Privacy	CL640		 Latch bolt is operated by lever from either side. Outside lever is locked by push button inside. Outside lever is unlocked by emergency release from outside. Outside lever is unlocked by operating inside lever.
Entry	CL651		 Deadlatching latch bolt operated by lever from either side, except when outside lever is locked by push button inside. When outside lever is locked, operating key in outside lever unlocks inside and outside levers. Operating inside lever unlocks lock.
Communicating	CL660		 Deadlatching latch bolt operated by lever from either side when unlocked. Key from either side locks or unlocks inside and outside lever.
Classroom	CL670		 Deadlatching latch bolt operated by lever from either side, except when outside lever is locked from outside by key. When outside lever is locked, operating key unlocks outside lever. When outside lever is locked the inside lever is free for egress.
Storeroom	CL680		 Deadlatching latch bolt retracted by key in outside lever. Outside lever always inoperable. Inside lever is free for egress at all times.

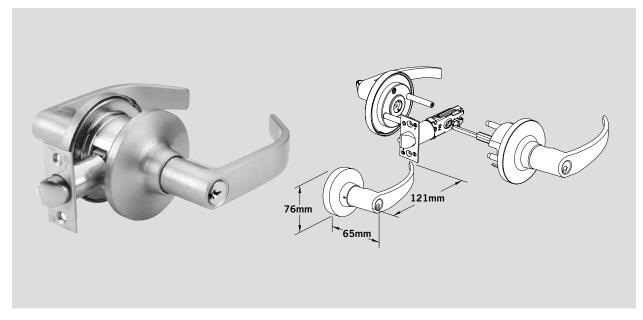
Indicates rigid lever.

THE CL600 SERIES TUBULAR LOCKS ARE AVAILABLE IN TWO LEVER TRIM DESIGN

LEVER DESIGN - LR



LEVER DESIGN - LC



LOCK OPTIONS

	PART NUMBER			
DORMA FUNCTION	60mm - 70mm Adjustable Backset 25mm"W x 57mm"H Square	60mm - 70mm Adjustable Backset 25mm"W x 57mm "H 6mm Radius	60mm - 70mm Adjustable Backset 25mm"Diameter Drive-In	
610 - Passage	16120	16121	16123	
640 - Privacy	16120	16121	16123	
651 - Entry	16170	16171	16173	
660 - Communicating	16170	16171	16173	
670 - Classroom	16190	16191	16193	
680 - Storeroom	16190	16191	16193	
601 - Dummy trim One Side	-	-	-	

12.5MM THROW LATCH BOLT

ADJUSTABLE LATCH	UNIVERSAL STRIKE	REBATE KIT
		000
 16170 (illustrated) 60mm – 70mm Adjustable Backset Latch with deadlatching. 16190 60mm - 70mm Adjustable Backset Latch with deadlacthing. 16120 60mm – 70mm Adjustable Backset Latch no deadlacthing. 16127-127mm Backset latch with deadlatching. 	5101-118 Universal Strike Plate with square edges, anti-rattle tongue supplied as standard with all CL600 locksets or latchsets.	CL600-REB Rebate kit to suit a standard 13mm rebate.



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Tasmania

Telephone (03) 6225 4117





COASTAL SERIES

316 Solid Stainless Steel Door Furniture

DORMA COASTAL SERIES SOLID STAINLESS STEEL ROSE AND PLATE DOOR FURNITURE

DORMA in Australia and New Zealand is developing into a leading manufacturer of solid stainless steel door furniture and fittings. We have remained consistently true to our commitment to high quality materials, first class workmanship and outstanding designs combined with easy fixing. DORMA works closely with architects, designers and our end users to satisfy the sophisticated requirements encountered nowadays in the architectural domain.

When it comes to meeting individual requirements, DORMA is able to call upon exceptional technical expertise in the manufacture of stainless steel components to ensure the fast availability of solutions that meet both the economic and practical needs of the customer.

Through these relationships with architects, designers, end users and installers, the Coastal Series has been developed to meet the highest demands in the project sector. Furthermore these demands require us to place a strong emphasis on design innovation, product development and material use.

We consistently strive to maintain our position as the design and innovation leader that others follow in all facets of architectural hardware. The DORMA Coastal Series has an extensive combination of possibilities with co-ordinated roses and backplates. Moreover the Coastal Series lever handles on rose, plate designs and accessories are characterised by exemplary functional integrity, wear resistance and excellent loadability in both commercial project and residential applications.



CONTENT



5300 lever on round rose 4-7



6500 Narrow round end plate 14-15



5400 Lever on square rose 8-11



6600 Square end plate 16-17



6400 Narrow square end plate 12-13



6700 Round end plate 18-19

Specifications

Finishes

Satin Stainless SteelSSSPolished Stainless SteelPSSPolyester Powder CoatPPC

Door Thickness

Screws and spindles suit door thickness of 32mm to 50mm as standard. Furniture requiring extended fixing screws and spindles are available on application.

Spindles

The Coastal series are provided with 7.6mm spindles

Handing

INSIDE



OUTSIDE



5300 ROUND ROSE FURNITURE

Features

- Stylish and yet a timeless round rose design with bevelled edges suitable for all types of commercial and residential applications
- Manufactured using hygienic and corrosion resistant 316 Solid Stainless Steel
- A characteristic feature of Stainless Steel door furniture is the naturally gleaming finish

- Fully concealed screw fixings by means of a screw on outer rose
- Extensive range of matching escutcheons, turn snibs and privacy snibs
- Designed with bolt through fixing for use with the DORMA ST9600 series mortice locks and latches
- Non handed rose with removable stop screw for opposite handing

- Heavy duty spring mechanism manufactured using the highest grade materials
- Nylon bush preventing metal to metal wear and providing a smoother friction free movement
- All turn snibs and privacy snibs are supplied with a heavy duty star spindle for positive turn actuation and furthermore provides for true installation alignment
- Disabled turn's 5310 and 5311 feature a user friendly finger grip of non entrapment design. Designed with the assistance of access consultants
- Compatible with all Coastal Series lever designs

How to order:

Nominate furniture	style
Full set	5300
External half set	5301
Internal half set	5302
Nominate lever	38
Nominate fixed lever function	F
Nominate handing (if applicable)	LH or RH
Specify finish	SSS
	PSS
	PPC



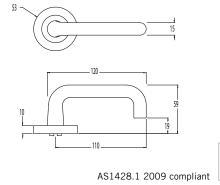
Handing:

When ordering half sets of handed lever designs, handing is as per full set.

5300 ROUND ROSE FURNITURE

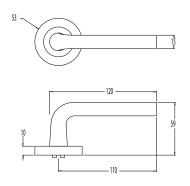
5300/30 Noosa





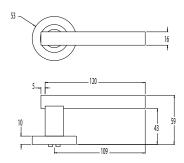
5300/31 Sorrento





5300/33 Muriwai





5300 ROUND ROSE FURNITURE

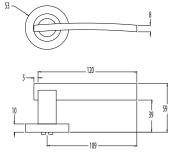
5300/35 Mindil

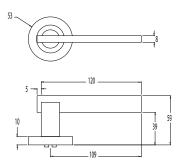


*handed

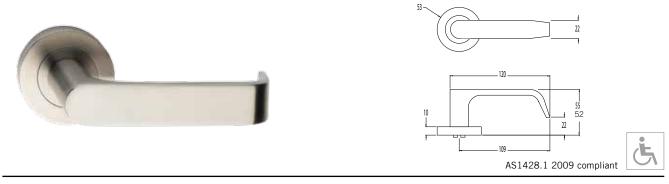
5300/36 Bicheno





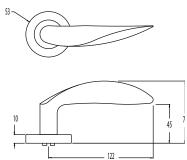


5300/37 Torquay



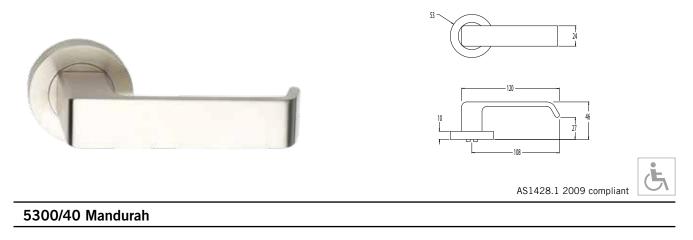
5300/38 Airlie





*handed

5300/39 Manly





All dimensions are in millimetres

5300 SERIES Accessories



5400 SQUARE ROSE FURNITURE

Features

- Modern square rose with bevelled edges suitable for all types of commercial and residential applications
- Manufactured using hygienic and corrosion resistant 316 Solid Stainless Steel
- A characteristic feature of Stainless Steel door furniture is the naturally gleaming finish
- Fully concealed screw fixings by means of the attached square outer rose
- Extensive range of matching square escutcheons, turn snibs and privacy snibs
- Designed with bolt through fixing for use with the DORMA ST9600 series mortice locks and latches
- Non handed rose with removable stop screw for opposite handing

- Heavy duty spring mechanism manufactured using the highest grade materials
- Nylon bush preventing metal to metal wear and providing a smoother friction free movement
- All turn snibs and privacy snibs are supplied with a heavy duty star spindle for positive turn actuation and furthermore provides for true installation alignment
- Disabled turn's 5410 and 5411 feature a user friendly finger grip of non entrapment design. Designed with the assistance of access consultants
- Compatible with all Coastal series lever designs

How to order:

Nominate furniture	style
Full set	5400
External half set	5401
Internal half set	5402
Nominate lever	39
Nominate fixed lever function	F
Nominate handing (if applicable)	LH or RH
Specify finish	SSS
	PSS
	PPC

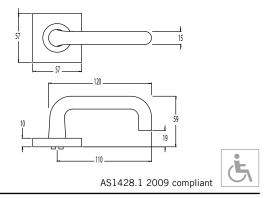
Handing:

When ordering half sets of handed lever designs, handing is as per full set.



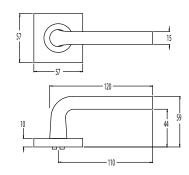
5400/30 Noosa





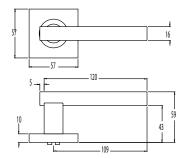
5400/31 Sorrento





5400/33 Muriwai

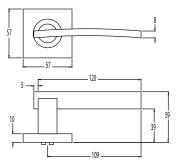




5400 SQUARE ROSE FURNITURE

5400/35 Mindil

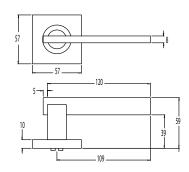




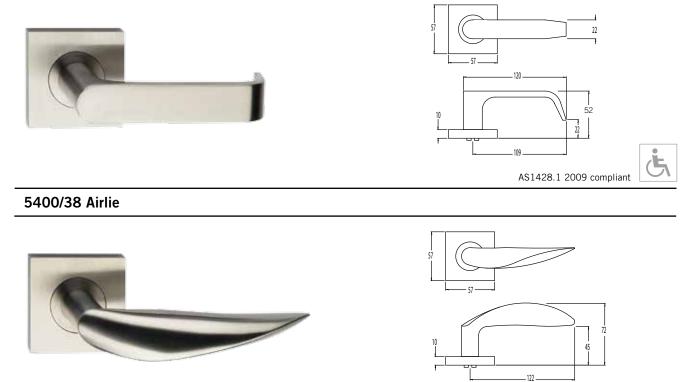
*handed

5400/36 Bicheno

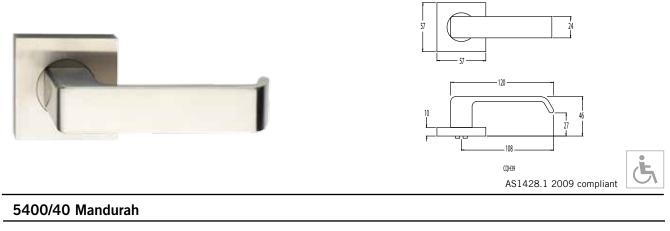




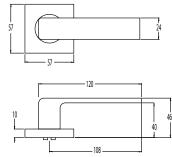
5400/37 Torquay



5400/39 Manly







All dimensions are in millimetres

5400 SERIES Accessories

5403



5408 Emergency Button





5406 Oval Cylinder



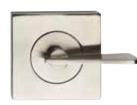
5409 Indicating Emergency Button





5407

Turn Snib



5412 Indicating Turn Snib



5411 Indicating Disabled Turn Snib



6400 NARROW SQUARE END PLATE FURNITURE

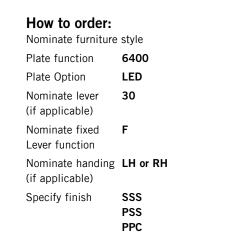
Features

- A true rectangular narrow plate displaying clean modern lines with bevelled edges
- Manufactured using hygienic and corrosion resistant 316 Solid Stainless Steel
- A characteristic feature of Stainless Steel door furniture is the naturally gleaming finish
- Concealed fixed external plates with visible fixed internal plates connected with bolt through fixings

- Extensive range of optional plate functions
- Designed with bolt through fixing for use with Australian narrow stile mortice locks and latches
- Non handed plate with oscillating lever action for quick reversal of handing.
- Heavy duty spring mechanism manufactured using the highest grade materials
- Nylon shim preventing metal to metal wear and

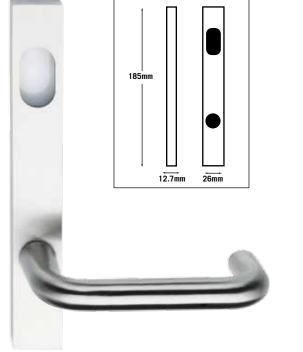
providing a smoother friction free movement

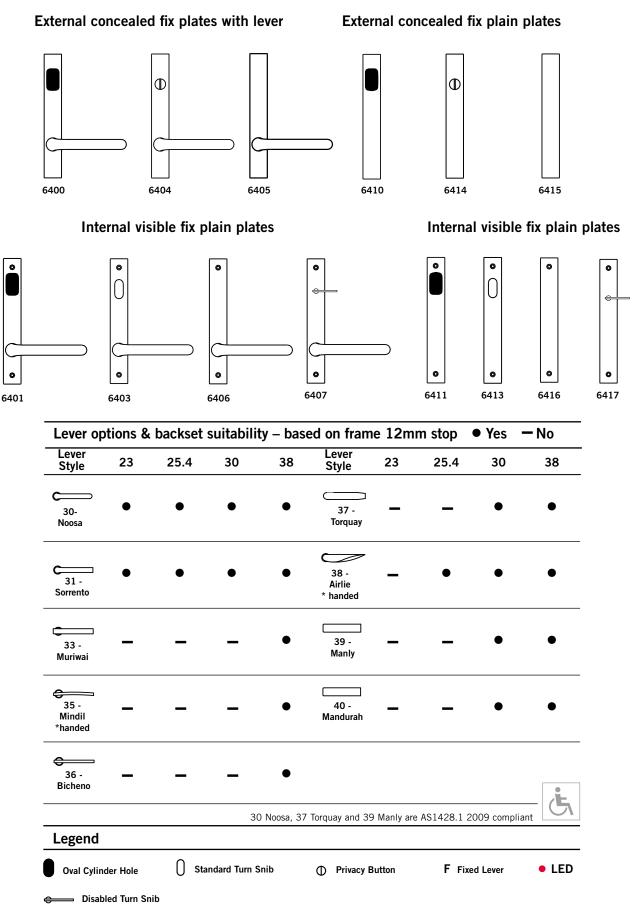
- All turn snibs and privacy snibs on plate are supplied with a heavy duty star spindle for positive turn actuation and furthermore provides for true installation alignment
- Certain Coastal Series lever designs are not compatible with all narrow backset mortice locks. Check your requirements against the suitability chart in this brochure
- Disabled turn's on plates 6407 and 6417 feature a user friendly finger grip of non entrapment design. Designed with the assistance of access consultants



Handing:

When ordering internal plates with handed lever designs, handing is as per external plate.





6500 NARROW ROUND END PLATE FURNITURE

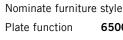
Features

- A stylish alternative to the narrow square end plate displaying clean modern lines with bevelled edges
- Manufactured using hygienic and corrosion resistant 316 Solid Stainless Steel
- A characteristic feature of Stainless Steel door furniture is the naturally gleaming finish
- Concealed fixed external plates with plates connected with bolt through fixings

- Extensive range of optional plate functions
- Designed with bolt through fixing for use with Australian narrow stile mortice locks and latches
- Non handed plate with oscillating lever action for quick reversal of handing
- Heavy duty spring mechanism manufactured using the highest grade materials
- Nylon shim preventing metal to metal wear

and providing a smoother friction free movement

- All turn snibs and privacy snibs on plate are supplied with a heavy duty star spindle for positive turn actuation and furthermore provides for true installation alignment
- Certain Coastal Series lever designs are not compatible with all narrow backset mortice locks. Check your requirements against the suitability chart in this brochure.
- Disabled turn's on plates 6507 and 6517 feature a user friendly finger grip of non entrapment design. Designed with the assistance of access consultants



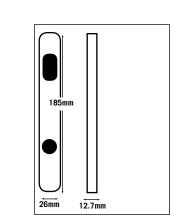
How to order:

Plate function6500Plate OptionLEDNominate lever30(if applicable)FNominate fixed
Lever functionFNominate handing
(if applicable)LH or RHSpecify finishSSS
PSS
PPC

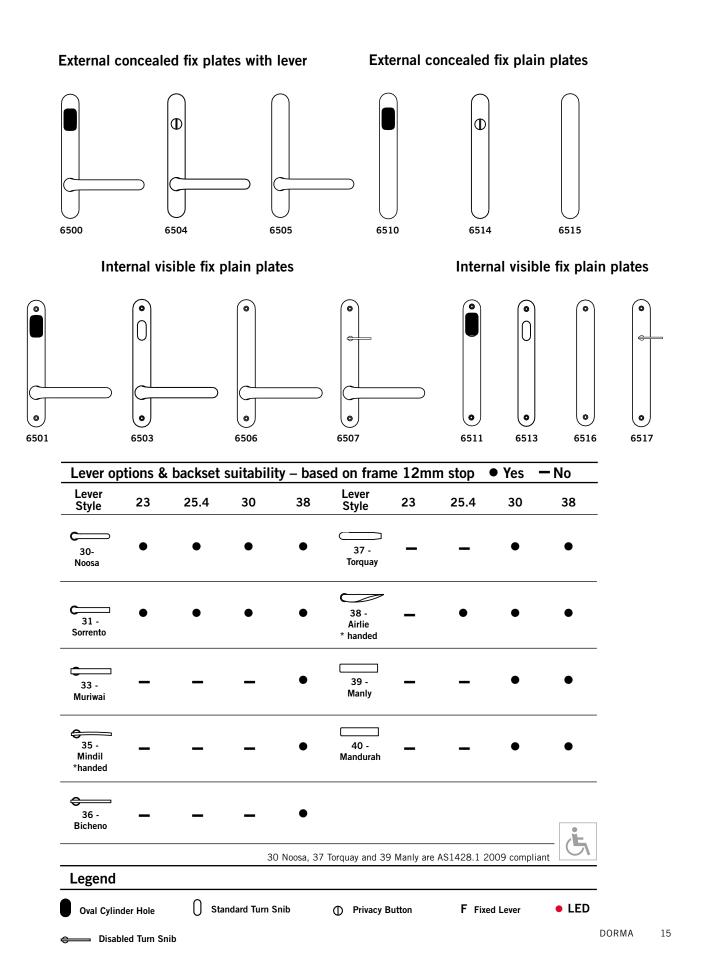
or RH S S C

Handing:

When ordering internal plates with handed lever designs, handing is as per external plate.







6600 SQUARE END PLATE FURNITURE

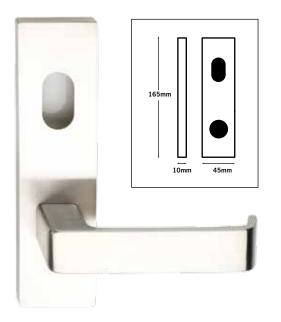
Features

- A true rectangular plate displaying clean modern lines with bevelled edges
- Manufactured using hygienic and corrosion resistant 316 Solid Stainless Steel
- A characteristic feature of Stainless Steel door furniture is the naturally gleaming finish
- Concealed fixed external plates with visible fixed internal plates connected with bolt through fixings

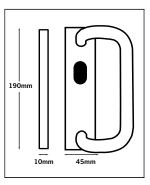
- Extensive range of optional plate functions
- Designed with bolt through the door fixing for use with the DORMA ST9600 series mortice locks and latches
- Non handed plate with removable stop screw for opposite handing. 6680 is handed.
- Heavy duty spring mechanism manufactured using the highest grade materials
- Nylon bush preventing metal to metal wear and providing a smoother friction free movement
- All turn snibs and privacy snibs on plate are supplied with a heavy duty star spindle for positive turn actuation and furthermore provides for true installation alignment
- Disabled turn's on plates 6607, 6608, 6617, 6618 and 6627 feature a user friendly finger

grip of non entrapment design. Designed with the assistance of access consultants

• Compatible with all Coastal series lever designs







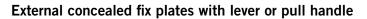
How to order:

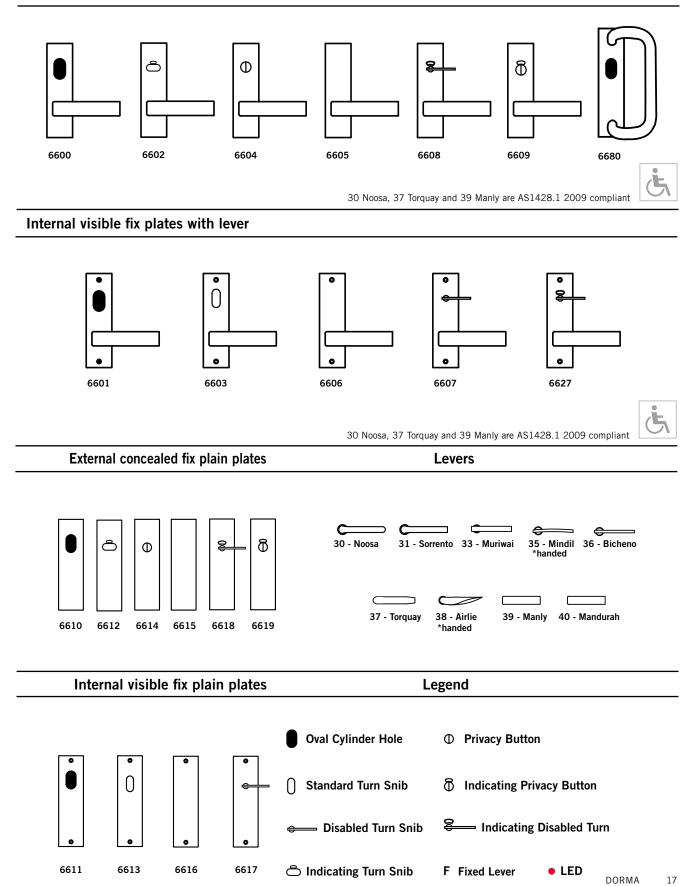
Nominate furniture	style:
Plate function	6600
Plate Option	LED
Nominate lever (if applicable)	39
Nominate fixed Lever function	F

Nominate handing RH (if applicable)	LH or
Specify finish	SSS PSS PPC

Handing:

When ordering internal plates with handed lever designs, handing is as per external plate.





6700 ROUND END PLATE FURNITURE

Features

- A stylish alternative to the rectangular plate displaying clean modern lines with bevelled edges
- Manufactured using hygienic and corrosion resistant 316 Solid Stainless Steel
- A characteristic feature of Stainless Steel door furniture is the naturally gleaming finish
- Concealed fixed external plates with visible fixed

internal plates connected with bolt through fixings

- Extensive range of optional plate functions
- Designed with bolt through the door fixing for use with the DORMA ST9600 series mortice locks and latches
- Non handed plate with removable stop screw for opposite handing.
 6780 is handed.
- Heavy duty spring
 mechanism manufactured

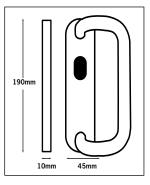
using the highest grade materials

- Nylon bush preventing metal to metal wear and providing a smoother friction free movement
- All turn snibs and privacy snibs on plate are supplied with a heavy duty star spindle for positive turn actuation and furthermore provides for true installation alignment.
- Disabled turn's on plates 6707, 6708. 6717,

6718 and 6727 feature user friendly finger grip of non entrapment design. Designed with the assistance of access consultants

• Compatible with all Coastal series lever designs





How to order:

Nominate furniture	style
Plate function	6700
Plate Option	LED
Nominate lever (if applicable)	30
Nominate fixed	F
Lever function	

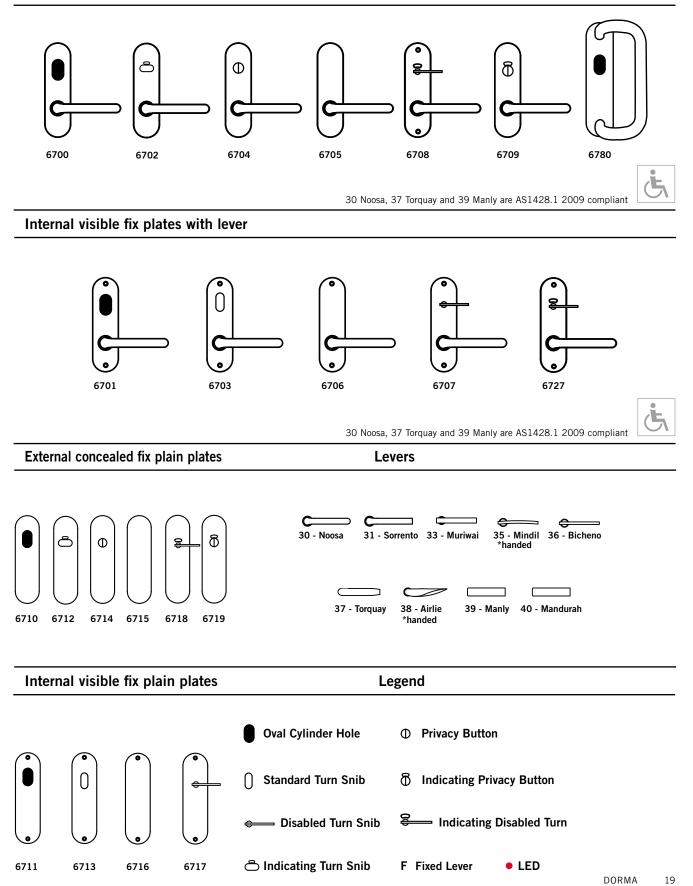
Nominate handing	LH or RH
(if applicable)	

Specify finish	SSS
	PSS
	PPC

Handing:

When ordering internal plates with handed lever designs, handing is as per external plate.







Subject to change without notice. AMD02002· 05/15 · COASTAL SERIES



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ANCILLARY HARDWARE

General Builder's Hardware

DORMA ANCILLARY HARDWARE RANGE, FUNCTIONAL, DEPENDABLE AND PRACTICAL IN APPLICATION.

As expected from the world market leader in Door Controls, DORMA can always be relied on to address the needs of the architectural hardware market. An important sector of the commercial and residential building market is ancillary hardware. DORMA has developed a suite of ancillary hardware products designed to complement our range of architectural hardware products.

Features

- Economical and functional range of ancillary hardware products manufactured for extreme reliability using the finest materials available
- The modern look of Satin Stainless Steel, Satin Nickel Plate and Clear Anodised Aluminium combined with clean lines for greater aesthetics

Product Highlights

- Tubular latch with solid one piece hub and matching Stainless Steel latch bolt
- Roller Bolt with adjustable tension and nylon roller for a silent and smooth action, complete with universal strike plate
- Door stops, floor or wall models are all standard with black rubber buffers
- Barrel Bolts contain a spring loaded ball bearing enabling a positive and smooth action
- Flush bolts of 19mm width for ease of installation into thinner doors with extended shoe and break off point
- Sequence Selectors feature Clear Anodised Aluminium to provide uniform finish with silver door closers and a piano wire spring for added durability
- Push and Pull plates with radius 10mm corners preventing sharp edges
- Tubular bolt accepts both star spindle and flat tail for turn activation along with matching stainless steel bolt

RECOMMENDED APPLICATIONS

- Offices
- Apartments
- Retail complexes
- Schools and Universities
- Municipal buildings
- Partition fit-outs
- Residential housing





SPECIFICATION SERVICE

If you require any technical assistance with this or any other DORMA product, or would like help in preparing your next complete hardware specification please contact your DORMA sales office for a no cost and obligation free hardware specification service.

DORMA Ancillary Hardware:

DORMA Door Controls Pty Ltd reserves the right to alter dimensions, design or specifications to any of this product range without notice.

2202 TUBULAR LATCH

Description

60mm backset tubular latch

Applications

Offices, Residential

Features

Zinc plated steel housing with stainless steel latch bolt, face plate and strike plate as standard. Solid 7.6mm stainless steel spindle hub for added strength and designed to suit horizontal fixed door furniture with 41mm fixing centres. Strike plate with anti rattle feature.

Finish

Satin Stainless Steel, Polished Stainless Steel

2208 TUBULAR BOLT

Description

60mm backset tubular privacy bolt **Applications**

Residential, Bathrooms, Ensuite, W.C.

Features

Zinc plated steel housing with stainless steel bolt, face plate and keeper plate as standard. Hub accepts star spindle and 6mm flat tail suitable for most universal turn snibs.

Finish

Satin Stainless Steel Polished Stainless Steel

2203 REBATE KIT

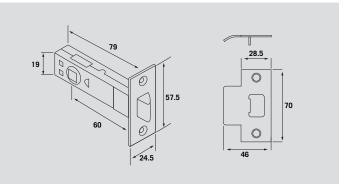
Description

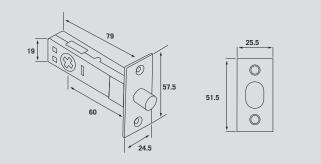
Suitable for 13mm rebated meeting stiles Applications Rebated double doors Features Stainless steel rebate kit with anti rattle latch keeper Finish Satin Stainless Steel

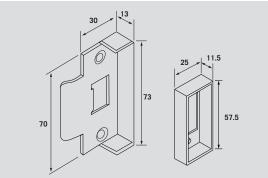
Polished Stainless Steel

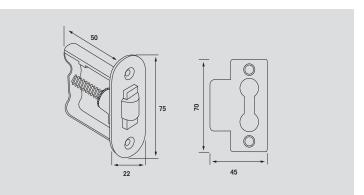
2520 ROLLER BOLT

Description Mortice roller bolt Applications Cupboards, Pivot doors Features Adjustable holding force with nylon roller and brass guides Finish Satin Nickel Plate









2290 DOOR STOP

Description

Floor mounted door stop

Features

Low profile zinc die cast door stop with black rubber buffer **Finish** Satin Nickel Plate

2290E DOOR STOP

Description

Floor mounted door stop

Features

One piece zinc die cast door stop with black rubber buffer and 8mm additional height **Finish** Satin Nickel Plate



Description

Floor mounted door stop

Features

Zinc die cast door stop with black rubber buffer and three fixing points for more heavy duty applications **Finish** Satin Nickel Plate

2280 DOOR STOP

Description

Floor mounted door stop Features Stainless Steel stop with full diameter black rubber buffer ring Finish Satin Stainless Steel

2300 DOOR STOP

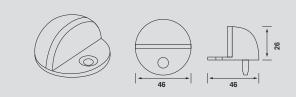
Description

Wall mounted door stop Features Stainless Steel stop with black rubber buffer and four concealed fixing points Finish Satin Stainless Steel

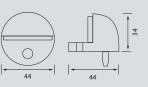
2350 DOOR STOP

Description Wall mounted door stop Features

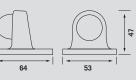
Zinc die cast stop with black rubber buffer and two concealed fixing points Finish Satin Nickel Plate

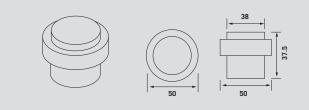


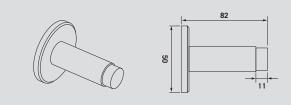


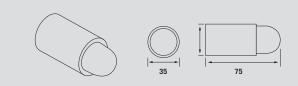












2750 BARREL BOLT

Description

Surface mounted barrel bolt supplied with frame keeper and floor plate.

Features

Bolt housing contains a ball bearing for positive and smooth movement with a 25mm throw.

Available Lengths (x)

2750 - 150mm 2750 - 200mm 2750 - 300mm 2750 - 600mm **Finish** Satin Nickel Plate

2751 NECKED BARREL BOLT

Description

Surface mounted necked barrel bolt supplied with floor plate keeper.

Features

Bolt housing contains a ball bearing for positive and smooth movement with a 23mm throw.

Available Lengths (x)

2751 - 150mm 2751 - 300mm Finish Satin Nickel Plate

2752 LONG THROW BARREL BOLT

Description

Surface mounted barrel bolt supplied with frame keeper and floor plate.

Features

Barrel bolt with long throw of 40mm. Bolt housing contains a ball bearing for positive and smooth movement

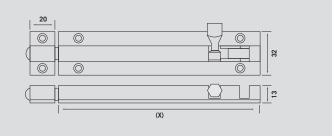
Available Lengths (x)

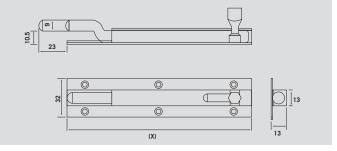
2752 - 150mm Finish Satin Nickel Plate

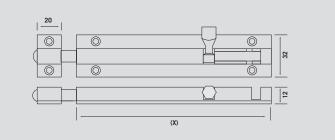
BARREL BOLT ACCESSORIES

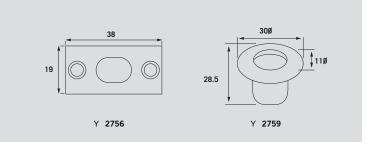
Optional accessories

2756 Floor plate 2759 Top hat ferrule* Finish Satin Nickel Plate* Satin Stainless Steel









2780 PANIC BOLT

Description

Surface mounted panic bolt (skeleton) with concealed fixing, frame keeper and floor plate.

Application

For use on the inactive leaf of double doors where a more robust and stronger bolt is required.

Features

Concealed panic bolts offer greater aesthetics and are highly suitable for doors with lesser stile widths. Standard throw is 50mm.

Available Lengths (x)

2780 - 300mm

2780 - 450mm

2780 - 600mm

Offset Option

Surface mounted panic bolt (skeleton) with concealed fixing and 20mm offset

Available Offset Lengths (x)

2780 - 0S - 600mm

Finish Satin Nickel Plate

2790 PANIC BOLT

Description

Surface mounted panic bolt (skeleton) with visible fixing, frame keeper and floor plate.

Application

For use on the inactive leaf of double doors where a more robust and stronger bolt is required.

Features

Standard throw of 50mm.

Available Lengths (x)

2790 - 300mm

2790 - 450mm 2790 - 600mm

Offset Option

Surface mounted panic bolt (skeleton) with visible fixing and 20mm offset

Available Offset Lengths (x)

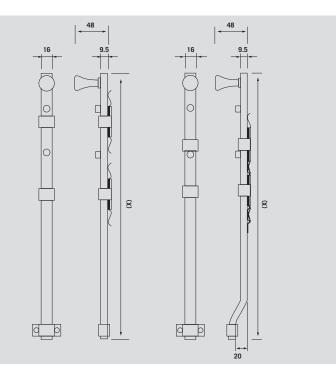
2790 - 0S - 600mm

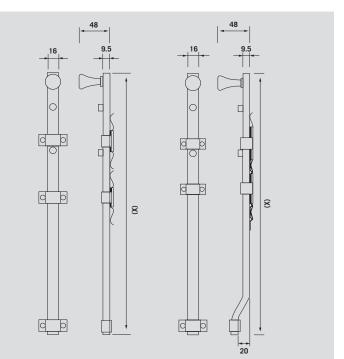
Finish Satin Nickel Plate

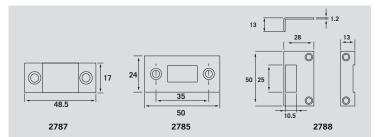
PANIC BOLT ACCESSORIES

Optional Accessories

2785 Standard Floor Plate 2787 Frame Keeper* 2788 Angle Top Plate Finish Satin Nickel Plate* Satin Stainless Steel







2901 FLUSH BOLT

Description

Flush bolt for edge mounting or face mounting on double doors

Features

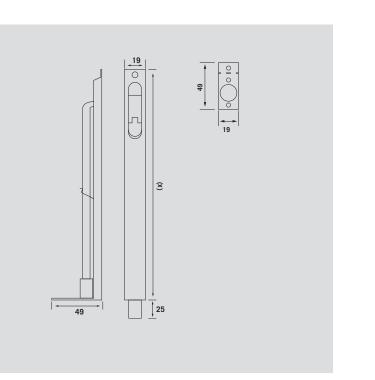
Slim flush bolt enabling installation to doors of 32mm thickness. Extended shoe with break off and includes standard keeper plate. Bolt throw is 25mm.

Available Lengths (x)

150mm 300mm 450mm 600mm

Finish

Satin Nickel Plate



FLUSH BOLT ACCESSORIES

Optional accessories

2902 Standard keeper plate 2903 Top hat ferrule* Finish Satin Nickel Plate* Satin Stainless Steel

SEQUENCE SELECTOR

Description

Sequence selectors for use on double doors with rebated meeting stiles, overlapping seals or latch mechanisms that require the door leaves to close in the correct sequence

Features

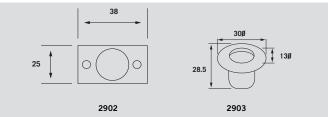
Aluminium sequence selector with nylon roller suitable for left or right handed doors. For added durability we use only the highest quality spring wire available.

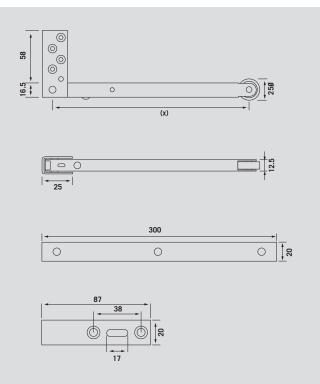
Available Model Lengths (x)

2180 - 180mm – suits pair of doors to 1800mm 2230 - 230mm – suits pair of doors to 2400mm 2305 - 305mm – suits pair of doors greater than 2400mm, also for use with panic exit devices

Finish

Clear Anodised Aluminium





375 & 310 SERIES

Description

Concealed and Visible fix Stainless Steel push and pull plates for fixing back to back through the door.

Applications

Schools, Hospitals, Kitchen Facilities, Toilet Airlock entries, Pivot Doors, Cupboards and other commercial applications.

Features

Stainless Steel plates 2mm in thickness with 10mm radius corners eliminating sharp corners often associated with square cornered plates.

Door Thickness

Screws suit door thickness up to 60mm as standard. Plates requiring extended fixing screws are available on application. Pull handles supplied on their own are suitable for door thickness to 50mm

Plate Size

300 x 75mm x 2mm 300 x 100mm x 2mm

Pull Handle Size

150mm centres x 16mm diameter 200mm centres x 16mm diameter Pull handles can be ordered separately and supplied with fixing bolts for doors to 50mm thickness

Finish

Satin Stainless Steel

Ordering

Height	Width	Fixing	Handle	Finish
3-300mm	10-100mm	C- Concealed	H15 - 150 x 16mm	SSS
	75-75mm	V - Visible	H20 - 200 x 16mm	

Door Sets

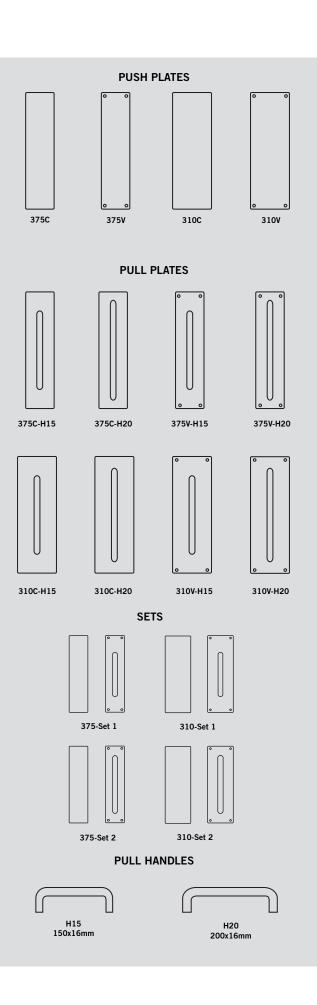
For convenience push pull plate sets are available in the following sets

375 Set 1 consisting of 375C push plate and 375V-H15 pull plate

310 Set 1 consisting of 310C push plate and 310V-H15 pull plate

375 Set 2 consisting of 375C push plate and 375V-H2O pull plate

310 Set 2 consisting of 310C push plate and 310V-H20 pull plate





DORMA Australia P/L Head Office Victorian Sales Office 46-52 Abbott Road, Hallam, Victoria 3803 Telephone (03) 8795 0666 Facsimile (03) 8795 0280 Toll Free Facsimile 1800 333 309

New South Wales & Australian Capital Territory Telephone (02) 9645 8350 Facsimile (02) 9645 8355

Queensland Telephone (07) 3394 6810 Facsimile (07) 3394 2953 New Zealand Dorma NZ Limited Building P 61-69 Patiki Road Avondale Auckland 1026 Telephone (09) 830 2052 Facsimile (09) 820 4909

South Australia & Northern Territory Telephone (08) 8337 4064 Facsimile (08) 8365 8572

Western Australia Telephone (08) 9228 2322 Facsimile (08) 9228 2422 Newcastle Telephone (02) 4960 2606 Facsimile (02) 4960 2544

ACT Telephone (02) 6203 0323 Facsimile (02) 6260 1810

Tasmania Telephone (03) 6225 4117



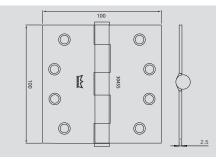




Stainless Steel Hinges

STAINLESS STEEL BROAD BUTT BUTTON TIPPED HINGES

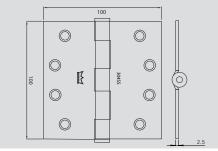
1010-FP-SSS - 100mm x 100mm Fixed Pin Hinge



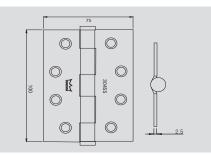
Broad Butt Hinge suitable for Timber or Metal doors and Timber or Pressed Metal frame applications Features:

- 304 Grade Stainless Steel
 - Fixed pin with additional securing feature
 - Standard pack 20 hinges
 - Supplied with (8) x 4.8 x 35mm wood & (4) x M5 x 12mm metal thread screws
 - Size 100 x 100 x 2.5mm
 - Available Finishes Satin Stainless Steel - Polished Stainless Steel

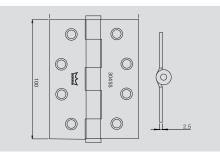
1010-LP-SSS - 100mm x 100mm Loose Pin Hinge

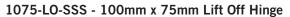


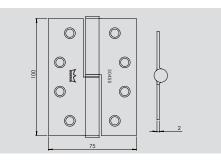
1075-FP-SSS - 100mm x 75mm Fixed Pin Hinge



1075-LP-SSS - 100mm x 75mm Loose Pin Hinge







Broad Butt Hinge suitable for Timber or Metal doors and Timber or Pressed Metal frame applications Features:

- 304 Grade Stainless Steel
- Loose pin
- Standard pack 20 hinges
- Supplied with (8) x 4.8 x 35mm wood & (4) x M5 x 12mm metal thread screws
- Size 100 x 100 x 2.5mm
- Available Finishes Satin Stainless Steel
 - Polished Stainless Steel

Broad Butt Hinge suitable for Timber or Metal doors and Timber or Pressed Metal frame applications Features:

- 304 Grade Stainless Steel
- Fixed pin with additional securing feature
- Standard pack 20 hinges
- Supplied with (8) x 4.8 x 35mm wood &
- (4) x M5 x 12mm metal thread screws
- Size 100 x 75 x 2.5mm
- Available Finishes Satin Stainless Steel - Polished Stainless Steel

Timber or Pressed Metal frame applications Features:

- 304 Grade Stainless Steel
- Loose pin
- Standard pack 20 hinges
- Supplied with (8) x 4.8 x 35mm wood &
- (4) x M5 x 12mm metal thread screws
- Size 100 x 75 x 2.5mm
- Available Finish Satin Stainless Steel - Polished Stainless Steel

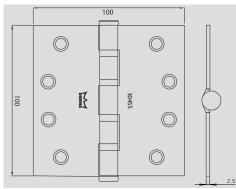
Lift Off Hinge suitable for Timber or Metal doors and Timber or Pressed Metal frame applications Features:

- 304 Grade Stainless Steel
 - Handed right or left
 - 1 pair per box, 30 pairs per carton
 - Supplied with (8) x 4.2 x 35mm wood &
 - (4) x M5 x 12mm metal thread screws
 - Size 100 x 75 x 2mm
 - Available Finish Satin Stainless Steel - Polished Stainless Steel



STAINLESS STEEL BROAD BUTT BALL BEARING BUTTON TIPPED HINGE

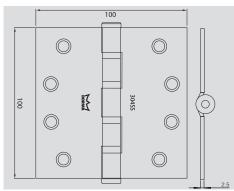
1010-BBFP-SSS – 100mm x 100mm Ball Bearing Fixed Pin Hinge



Ball Bearing Broad Butt Hinge suitable for Timber or Metal doors and Timber or Pressed Metal frame applications Features:

- Grade 304 Stainless Steel
- 4 Ball bearings
- Fixed pin with additional securing feature
- Standard pack 20 hinges
- Supplied with (8) x 4.8 x 35mm wood & (4) x M5 x 12mm metal thread screws
- Size 100 x 100 x 2.5mm
- Available Finishes Satin Stainless Steel
 Polished Stainless Steel

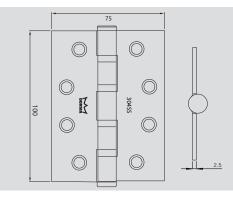
1010-BBLP-SSS - 100mm x 100mm Ball Bearing Loose Pin Hinge



Ball Bearing Broad Butt Hinge suitable for Timber or Metal doors and Timber or Pressed Metal frame applications Features:

- Grade 304 Stainless Steel
- 4 Ball bearings
- Loose Pin
- Standard pack 20 hinges
- Supplied with (8) x 4.8 x 35mm wood &
 - (4) x M5 x 12mm metal thread screws
- Size 100 x 100 x 2.5mm
- Available Finishes Satin Stainless Steel
 Polished Stainless Steel

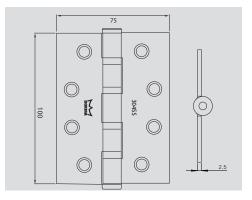
1075-BBFP-SSS – 100mm x 75mm Ball Bearing Fixed Pin Hinge



Ball Bearing Broad Butt Hinge suitable for Timber or Metal doors and Timber or Pressed Metal frame applications Features:

- Grade 304 Stainless Steel
- 4 Ball bearings
- Fixed pin with additional securing feature
- Standard pack 20 hinges
- Supplied with (8) x 4.8 x 35mm wood & (4) x M5 x 12mm metal thread screws
- Size 100 x 75 x 2.5mm
- Available Finishes Satin Stainless Steel
 - Polished Stainless Steel

1075-BBLP-SSS - 100mm x 75mm Ball Bearing Loose Pin Hinge

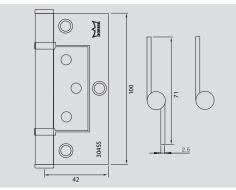


Ball Bearing Broad Butt Hinge suitable for Timber or Metal doors and Timber or Pressed Metal frame applications Features:

- Grade 304 Stainless Steel
- 4 Ball bearings
- Loose Pin
- Standard pack 20 hinges
- Supplied with (8) x 4.8 x 35mm wood & (4) x M5 x 12mm metal thread screws
- Size 100 x 75 x 2.5mm
- Available Finishes Satin Stainless Steel
 - Polished Stainless Steel

STAINLESS STEEL FAST FIX BALL BEARING BUTTON TIPPED HINGE

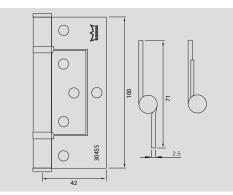
1071AF-BBFF-SSS - 100mm x 71mm Ball Bearing Fast Fix Hinge



Flat Fast Fix hinge suitable for Aluminium door and frame applications Features:

- 304 Grade Stainless Steel
- 2 Ball bearings
- Fixed Pin with additional securing feature • Standard pack 20 hinges
- Supplied with (6) x 4 x 12mm self tapping screws
- Size 100 x 71 x 2.5mm
- Available Finishes Satin Stainless Steel

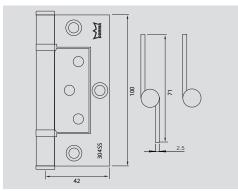
1071AK-BBFF-SSS - 100mm x 71mm Ball Bearing Fast Fix Hinge



Kinked Fast Fix Hinge suitable for Aluminium door and frame applications Features:

- Kinked inner leaf which aids in closing the door square to the frame
- 304 Grade Stainless Steel
- 2 Ball bearings
- · Fixed Pin with additional securing feature
- Standard pack 20 hinges
- Supplied with (6) x 4.2 x 35mm wood & (6) x 4 x 12mm self tapping screws
- Size 100 x 71 x 2.5mm
- Available Finishes Satin Stainless Steel

1071TF-BBFF-SSS - 100mm x 71mm Ball Bearing Fast Fix Hinge



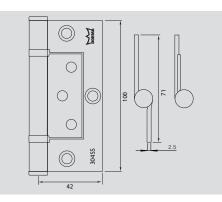
Flat Fast Fix Hinge suitable for Timber door and timber or Aluminium frame applications Features:

- 304 Grade Stainless Steel
- 2 Ball bearings
- Fixed Pin with additional securing feature
- Standard pack 20 hinges
- Supplied with (6) x 4.2 x 35mm wood & (6) x 4 x 12mm self tapping screws
- Size 100 x 71 x 2.5mm
- Available Finishes Satin Stainless Steel

1071TK-BBFF-SSS - 100mm x 71mm Ball Bearing Fast Fix Hinge

Kinked Fast Fix Hinge suitable for Timber door and Timber or Aluminium frame applications Features:

- · Kinked inner leaf which aids in closing the door square to the frame
 - 304 Grade Stainless Steel
- 2 Ball bearings
- Fixed Pin with additional securing feature
- Standard pack 20 hinges
- Supplied with (6) x 4.2 x 35mm wood & (6) x 4 x 12mm self tapping screws
- Size 100 x 71 x 2.5mm
- Available Finishes Satin Stainless Steel



THE INEXPENSIVE SOLUTION TO HANGING DOORS USING QUALITY DORMA GRADE 304 STAINLESS STEEL ARCHITECTURAL HINGES

The exceptional design features and high quality of DORMA hinges offer the guarantee of unparalled reliability and extended service life. Our shrouded ball bearing range of hinges contain high performance ball bearings ensuring excellent load bearing characteristics and the absorption of axial and radial stresses. This results in doors which move silently and effortlessly.

Plus points

For the trade

- Outstanding value for money.
- Easily interpreted part numbering.

For the user

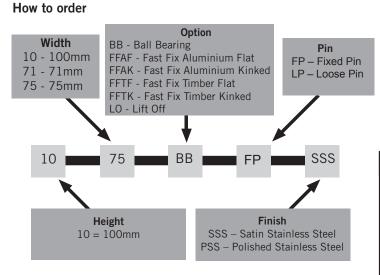
- Robust quality hinges in Grade 304 Stainless Steel.
- Additional security feature on all fixed pin hinges.

For the installer

- Complete fixings screws provided with all hinges to suit differing frame/door types.
- Fast fix hinges available in either Fully Flat or Kinked versions.

For the specifier/architect

- Complete Grade 304 Stainless Steel hinge.Suitable for use with timber,
- Suitable for use with timber, steel & aluminium doors and frames.



Applications

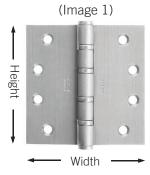
DORMA Stainless Steel Butt hinges are highly recommended for commercial applications. When selecting hinges for doors that are heavy, solid core, fire doors or doors fitted with door closers or automatic door operators, ball bearing hinges should be used. Heavy doors in particular place shear load stress on the top hinge and in some circumstances it is necessary to install two hinges towards the top of the door to assist in alleviating this load.

Hinge Height

Hinge height is always the first measurement shown. The height of the hinge is the length of the leaf, not including the tips of the pin. (See image 1)

Hinge Width

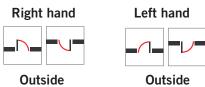
Hinge width is always the second measurement.



The width of the hinge is measured across both leaves when the hinge is fully opened. The door thickness and door jamb width determine the width of the hinge required. (See image 1)

Lift Off

Lift off hinges allow a door to be removed by someone on the outside in the event of an emergency. Doors require a gap between the top of the door and the underside of the head of the door frame to allow sufficient movement upwards for door realease.

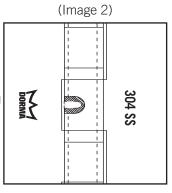


Loose Pin

Loose Pin hinges are capable of having the two leaves separated for ease of door installation or maintenance. For external doors or security applications loose pin hinges should not be used.

Fixed Pin

DORMA fixed pin hinges feature an additional securing feature to prevent unauthorised separation of the hinge leaves. The hinge pin contains a recess that receives a concealed welded stud from the hinge knuckle, aiding against removal of the pin (see image 2)



Fire Rating

DORMA Hinges are approved to AS1905 Part 1

Door Thickness	Door Width	Door Height	Recommended Hinge Broad Butt
30mm to 45mm	≤ 900mm	≤ 2040mm	Internal doors 2 x 100mm x75mm External doors 3 x 100mm x75mm
30mm to 45mm	≤ 900mm	≤ 2340mm ≤ 3000mm	3 x 100mm x75mm 4 x 100mm x75mm
45mm to 55mm	≤ 1050mm	≤ 2040mm ≤ 2340mm ≤ 3000mm	3 x 100mm x100mm 3 x 100mm x100mm 4 x 100mm x100mm

Fixings

All hinges are supplied with stainless steel fixing screws.

Note: Short self tapping screws supplied with all fast fix hinges are for aluminium door and frame applications and should not be used for fixing hinges to timber doors or frames applications.





DORMA Australia P/L Head Office 46-52 Abbott Road Hallam Victoria 3803 Phone 1800 675 411 info.au@dorma.com www.dorma.com.au DORMA NZ Limited Head Office Building P 61-69 Patiki Road Avondale Auckland 1026 Phone 0800 436 762 info.nz@dorma.com





DORMA

Spiral spring double action door hinges







DORMA

Spiral spring double action door hinges

- Maintenance-free plastic pin bushings • Plastic spring sleeves for noiseless door operation
- · Stainless steel rivets



: >

Spiral spring double action door hinges

ArtNo.	Finish
179*	Yellow chromated
180	Steel, bright
181	Steel, silver painted
182	Steel, dark brown painted
183	Steel, brass-plated
184	Steel, nickel-plated
185	Steel, zinc-plated
186	Stainless steel, brushed





42

200

1000

45–50

40–48

70

85,0

65,0 42.5

17,0

198,0

32,0

171.0

Hinge size	29	30	33	36	39
Data and features					
Joint length	75	100	125	150	175
Door width max.	600	700	700	750	850
Door thickness (timber)	18–25	25–30	30–35	35–40	40–45
Door thickness (metal)	18–25	25–30	30–35	30–35	35–40
Door weight in kg	15	22	27	40	55
Dimensions					
A	46,5	54,5	62,0	70,0	79,0
В	32,5	40,0	44,5	51,0	58,0
C	20,0	25,5	29,0	35,0	39,0
D	11,0	11,0	12,5	14,5	16,5
E	75,5	100,5	125,3	150,0	175,0
ØF	19,0	21,0	22,5	25,0	29,0

80,0

55.0

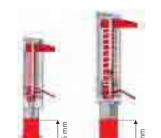
Telescopic door holder, DORMA 350 / 360

- Compact dimensions
- Modern design

G

- · Spring-loaded floor pads
- Invisible fixings
- Easy to install

Art. Nr.	DORMA 350	DORMA 360
Height	105 mm	147 mm
Width	29 mm	29 mm
Stroke	35 mm	55 mm



Index door spring 623

Galvanised

100,3

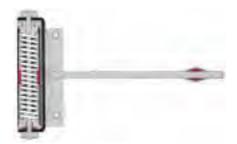
• For internal and external doors

126,0

148,0

• Maintenance-free plastic pin bushings

Size	1–2	3–4	
Application	Internal doors	External doors	
Arm Length	200 mm	300 mm	
Art. No	55551102	555512022	



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No. 2 Jalan Terusan, Jurong Singapore 619285 Phone: +656268/7633 +656265/7914 Fax:

DORMA Door Controls (Pty.) Ltd.

Kings Court, 4A Mineral Crescent ZA-2000 Crown/Gauteng Johannesburg Phone: +27 11/8 30 02 80 Fax: +27 11/8 30 0 2 9 1

DORMA Gulf Door Controls FZE

Jebel Ali Free Zone, Roundabout 8, Unit VC 02 Dubai, United Arab Emirates Phone: +971 48/83 90 14 Fax: +971 48/83 90 15



052 302 51532, GB, X. DD. 09/04

* Not available in Size 42





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