
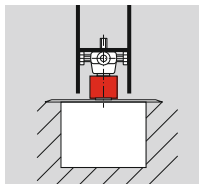


## Universal floor springs

The DORMA BTS 75 V is a highly adaptable floor spring suitable for all standard single and double action doors with widths up to 1100 mm, with its closing force individually regulated by means of an adjustment screw.

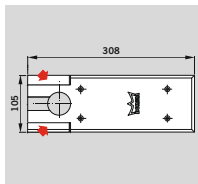
The BTS 75 V with no hold-open carries the  mark.

Maximum ease of use and a wide range of accessories allowing the system to be installed in conjunction with different door designs and floor covering types are the salient features of the DORMA BTS 75 V.



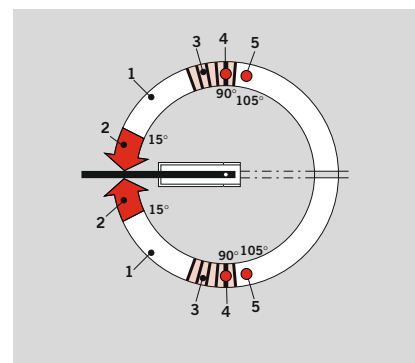
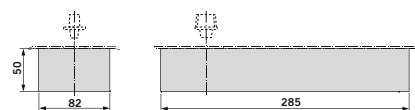
### Extended spindle inserts


For doors with thresholds and carpet-covered floors, these are the ideal solution. DORMA spindle inserts can be fitted to increase the floor clearance and are available in lengths from 5 to 50 mm.



### Universal cover plate

Simply snap off the pre-blanked corner sections and the universal cover plate can be adapted to either an LH (ISO 6) or an RH (ISO 5) door as required. Available in stainless steel or satin-brushed brass.



Data and features	BTS 75 V
Closing force, adjustable	EN 1-4
Standard and fire/smoke check doors, external doors <sup>1)</sup>	•
Non-handed and suitable for both single and double action doors	•
Closing force adjustable by screw	•
Closing speeds independently adjustable by separate valves	175° – 15° 15° – 0°
Backcheck, mechanical	•
Fixed hold-open at an angle of	90° 105°
(no hold-open for fire doors)	○
Cover plate fixed to floor spring	•
Floor spring compliant with EN 1154	•
 mark (not valid for BTS 75 V with hold-open)	•
• yes ○ optional	

<sup>1)</sup> For particularly high and heavy doors and also doors that constantly have to close against wind pressure, we recommend the DORMA BTS 80.

### DORMA BTS 75 V

- Max. door weight: 120 kg
- Non-handed model for RH (ISO 5) and LH (ISO 6)
- Adjustable closing force (EN 1-4)
- Closing speed adjustable in two separate ranges – approx. 175° to approx. 15° and approx. 15° to approx. 0° (latching action)
- Mechanical backcheck
- Constant hold-open, approx. 90°, optional
- Constant hold-open, approx. 105°, optional

For specification texts, see page 288 ff.

## The floor spring series

### DORMA BTS 80

#### for single and double action doors

As a universal floor spring, the DORMA BTS 80 has been designed to meet the requirements of doors of all types. With its many individually combinable extras, it is able to satisfy almost every application requirement.

### DORMA BTS 80 F

#### for fire and smoke check doors

The DORMA BTS 80 F is suitable for fire and smoke check doors to EN 1154: These doors have to exhibit the special design features required for floor spring operation. If used on fire barriers approved by the building supervisory authorities, compliance with the conditions of the relevant approval certificate must be ensured.

### DORMA BTS 80 EMB

#### with electro-hydraulic hold-open

The DORMA BTS 80 EMB enables single-leaf fire and smoke check doors to be held open at an angle between approx. 75° and 180°. Due to the principle employed, a very slight fall-back must be expected. In the event of an alarm or power failure, the hold-open is released and the floor spring closes the door. Release initiation is by external lintel or ceiling-mounted smoke detectors (e.g. DORMA RMZ or RM in the Contur design) or by a fire alarm system. The hold-open can also be released by simply tugging the door in the closing direction.

### DORMA BTS 80 FLB

#### with free-swing function

With this unit, single-leaf

fire and smoke check doors can move freely during normal operation. In the event of an alarm, however, they are reliably closed by the floor spring.

### DORMA BTS 80 BSR

#### door co-ordinator

Base system accommodating the BTS 80 F, BTS 80 EMB and BTS 80 FLB. The installation height of the floor spring increases by 15 mm. Ensures the correct closing sequence of double doors, i.e. inactive leaf before active leaf. This system operates independently of the door closer via an active and an inactive leaf mechanism connected by a Bowden cable.

### BTS 80 BSR-EMB

#### with door co-ordinator and electro-mechanical hold-open

### BTS 80 BSR-FLB

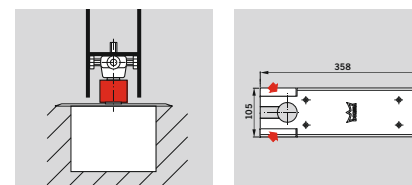
#### with door co-ordinator and free-swing function

Free-swing function on the active leaf only.

### Approval certification

The DORMA BTS 80 F has been tested and approved by the State Material Testing Authority, Dortmund/Germany to EN 1154 and is subject to third-party quality verification. Regular audit testing is undertaken. Test reports and/or certificates are available on request.

The DORMA BTS 80 BSR has been tested and approved to EN 1158 by the State Material Testing Authority, Stuttgart/Germany for use on double doors. Additional approval certification may be required in conjunction with the fire and smoke check door concerned – check local regulations.

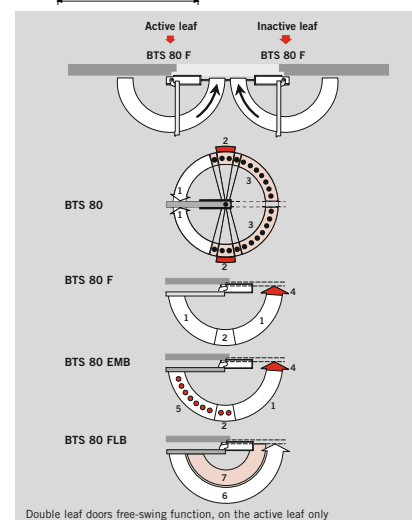
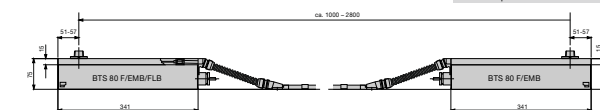
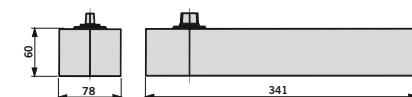


### Extended spindle inserts

The floor clearance can be adjusted to the required value by using the appropriate spindle inserts. This is particularly advantageous for doors with thresholds or operating over carpeted floors. Spindle inserts are available in lengths from 5 mm to 50 mm. Special spindle inserts are required for the BTS 80 BSR.

### Universal cover plate

Adjustable to right or left hand single action applications by simply snapping off the appropriate pre-blanked corner sections. Available in stainless steel or satin-brushed brass. Special cover plates are required with the BTS 80 BSR.



Data and features	BTS 80	BTS 80 F	BTS 80 EMB	BTS 80 FLB
Closing force/spring force				
Standard doors, ≤ 1100 mm	–	EN 4	EN 4	EN 4
fire and smoke ≤ 1250 mm	–	EN 5	EN 5	EN 5
check doors ≤ 1400 mm	–	EN 6	EN 6	EN 6
Closing force/spring force				
Standard doors ≤ 950 mm	EN 3	–	–	–
≤ 1100 mm	EN 4	–	–	–
≤ 1400 mm	EN 6	–	–	–
Non-handed, suitable for double action doors <sup>1)</sup>	●	–	–	–
Handing				
LH (ISO 6)	–	●	●	●
RH (ISO 5)	–	●	●	●
Closing speed adjustable by valve	●	●	●	●
Latching speed adjustable by valve	–	●	●	–
Backcheck, mechanical	●	●	●	–
Hold-open, electro-hydraulic, hold-open point adjustable 75°–180°	–	–	●	–
Free swing 0°–180°	–	–	–	●
Power input in W	–	–	2.3	2.3
Operating voltage in VDC ±15%	–	–	24	24
Rated for continuous duty (DF in %)	–	100	100	100
Hydraulic hold-open	●	–	–	–
Floor spring compliant with EN 1154	●	●	●	●
Hold-open device compliant with EN 1155	–	–	●	●
CE mark	–	●	●	●

● yes – no

<sup>1)</sup> Not permitted for fire and smoke check doors in Germany.

### DORMA BTS 80 BSR

Ensures the correct closing sequence of door leaves.

### DORMA BTS 80

- Max. door leaf weight: 300 kg
- Closing force optionally EN 3, 4, 6
- Non-handed model for RH (ISO 5) and LH (ISO 6)
- Adjustable closing speed (1)
- Mechanical backcheck, from approx. 80° (2)
- Adjustable hold-open or delayed closing action, approx. 75°–180° (3)

### DORMA BTS 80 F

- Max. door leaf weight: 300 kg
- Closing force optionally EN 4, 5, 6
- Adjustable closing speed (1)
- Mechanical backcheck, from approx. 80° (2)
- Adjustable latching action (4)

### DORMA BTS 80 EMB

As DORMA BTS 80 F, but additionally with electro-hydraulic hold-open.

### DORMA BTS 80 FLB


As DORMA BTS 80 F, but with automatic closing function in the event of an alarm.

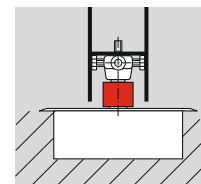
Free-moving door during normal operation

For specification texts, see page 288 ff.

## Floor springs for double action doors

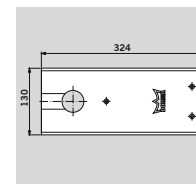
Specially designed for the movement patterns of double action doors, the DORMA BTS 84 can be easily adapted to individual requirements. With an installation depth of just 40 mm, it offers the particular advantage of only requiring a shallow pocket, thus enabling problem-free installation.

The wide-ranging choice of accessories ensures adaptability to the most varied floor constructions and flooring materials. The BTS 84 without hold-open carries the  mark.




### Extended spindle inserts

Replacement spindles can be used to increase the floor clearance when required. Ideal where doors are provided with thresholds or operate over carpet-covered floors. Available in lengths from 5 mm to 50 mm.



### Cover plate

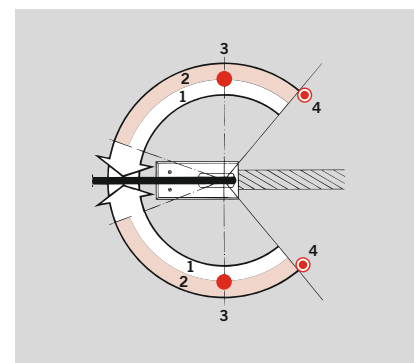
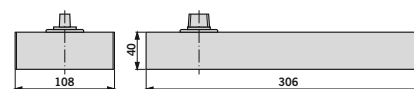
Available in stainless steel or satin-brushed brass.

Data and features	BTS 84		
Closing force	EN 2	EN 3	EN 4
Standard doors	●	—	—
and external doors <sup>1) 2)</sup>	—	●	—
≤ 850 mm	—	—	●
≤ 950 mm	—	—	—
≤ 1100 mm	—	—	—
Closing speed adjustable by valve	●	●	●
Constant hold-open at 90°	○	○	○
Floor spring compliant with EN 1154	●	●	●
 mark (not valid for BTS 84 with hold-open)	●	●	●

● yes — no ○ optional

<sup>1)</sup> For particularly high and heavy doors and also doors that constantly have to close against wind pressure, select the floor spring in the next highest size or the DORMA BTS 80.

<sup>2)</sup> Max. opening angle 130°. In the case of doors that can open beyond 130°, install a door stop.



### DORMA BTS 84

- Max. door weight: 100 kg
- Closing force optionally EN 2, 3, 4
- Adjustable closing speed (1)
- Second adjustable closing range approx. 130 to approx. 20° (2)
- Constant hold-open, approx. 90°, optional (3)
- Max. door opening angle: approx. 130°
- Door stop OGRO TZ 5000 (4)

For specification texts, see page 288 ff.



Floor-Concealed  
Door Closers

# DORMA BTS80



Dependable and Versatile Floor-Concealed Closer

The BTS80 Series of floor-concealed door closers offer adaptability to almost any installation.

The closer's compact body permits its use where a larger closer would be prohibitive. Versatility allows installation in thin slab concrete subfloor construction. A wide selection of interchangeable spindles makes the BTS80 suitable for virtually any floor covering or threshold application. Because the BTS80 can control exceptionally heavy single- and double-acting doors, you can incorporate the floor closer into almost any design to meet most materials, size, and weight requirements.

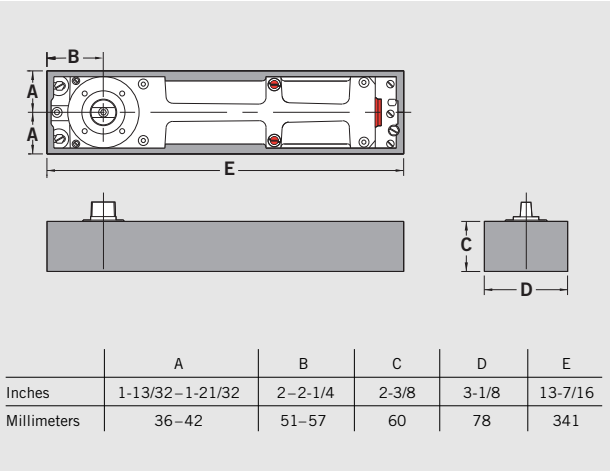
Trouble-free performance under adverse climatic and traffic conditions makes the BTS80 floor-concealed closer dependable and a perfect choice for even the most rigorous applications. For total control and uncompromising creativity for any door opening, specify a BTS80 floor-concealed closer.

Features	BTS80	BTS80	BTS80 F
Spring Sizes	3	4, 6	5
Non-handed unit suitable for both single- and double-acting doors	•	•	-
Controlled closing with two adjustable valves	175°-70° 70°-0°	175°-70° 70°-0°	180°-0° 7°-0°
Mechanical backcheck	-	•	•
Delayed action	•	•	-
Multipoint hold open between 75° and 175°	•	•	-

• yes      - no

Size Selection Chart BTS80/BTS80 F			
BTS80	BTS80 F	Exterior	Interior
ANSI Size 3	—	2'6"-3'0"	2'6"-3'6"
ANSI Size 4	ANSI Size 5	2'6"-3'6"	2'6"-4'0"
ANSI Size 6	—	3'6"-4'0"	4'0"-4'6"

Maximum door widths and recommended sizes shown are for average conditions. If there are unusual site conditions, e.g. high or exceptionally heavy doors or wind pressure, the next stronger spring size should be selected.



**Certification:**

The DORMA BTS80 F Series is listed by U.L. and C.U.L. under their continuing reinspection programs. The DORMA BTS80 Series is certified to the requirements of ANSI/BHMA A156.4 for grade 1 closers.

**Specifications:**

All floor-concealed door closers shall be DORMA BTS80 Series employing a cam and roller mechanism. The closers shall be capable of controlling interior or exterior doors weighing up to 660 pounds and measuring up to 4'-0" wide exterior and 4'-6" interior. The closers will have selectable multipoint hold open between approximately 75° and 175°. The closers will have selectable delayed action to allow delayed closing from 175° to 75°. The closers will have mechanical backcheck at approximately 70°. Dual valve adjustment will provide controlled closing speed from approximately 175° opening range, even in cold temperature conditions. The closer will provide adjustment within the cement case to allow lateral and longitudinal adjustment of 1/4" and vertical height adjustment of 5/32". Field interchangeable spindles will be available to provide bottom door clearances ranging from 5/16" to 2-5/16".

**Optional Specifications:**

The closers should be used with sealing compound SC-1 to prevent water or cleaning solvent from entering the cement case.

Floor-concealed door closers for all fire doors shall be DORMA BTS80 F. The closers shall be single-acting and have controlled closing from a full 180°. A sweep range of 180°–0° and latch range of 7°–0° will help insure positive latching of the door.

**Finishes:****Optional Plated Finishes:**

Brass: 605 (Bright) or 606 (Satin).  
Bronze: 611 (Bright), 612 (Satin), or  
613 (Oxidized Satin Oil Rubbed).  
Nickel: 618 (Bright) or 619 (Satin).  
Chrome: 625 (Bright) or 626 (Satin).

**Standard Sprayed Finishes:**

Aluminum: 689.  
Bronze: 691 (Dull), 690 (Statuary), or 695 (Dark Duranodic).  
Gold: 696.  
Black: 693.

**Optional DORMA Custom Color or Designer Color Finishes:**

Contact Customer Service.

**Warranty:** 25 years for projects within the United States. For full details, refer to the **Limited Warranty Policy** in the current DORMA price list.

How to Order BTS80 Series		Example
Closer	BTS80 BTS80 F ( <b>specify hand</b> ) (see <b>BTS Applications and Accessories</b> brochure for specific handling of accessories and packages)	BTS80 BTS80 F (LH)
Package	Center-pivoted double-acting aluminum door and frame	BTS80/A
Size	ANSI Size 6	BTS80/A Sz 6
Accessories	Specify the accessory (see <b>BTS Applications and Accessories</b> brochure)	SC-1
Spindle	74010 or 80010 are furnished standard unless otherwise specified (see Spindles on page 6)	BTS80/A x 74025
Finish	Bright Brass	BTS80/A 3 (605)

**BTS80 Series Technical Details:**

- Compact closer body and cement case 2-3/8" deep suited for thin slab concrete construction.
- Accommodates doors weighing up to 660 pounds and 4'-6" wide interior and 4'-0" exterior.
- Closer adjustment in cement case provides lateral and longitudinal adjustment of 1/4" and height adjustment of 5/32".

- A pressure relief valve protects closer from damage caused by forced closing.
- Optional sealing compound SC-1 prevents water or cleaning solvent from entering the cement case.
- **If door hardware or adjacent structures interfere with maximum opening, an auxiliary stop should be installed.**

**BTS80****Technical Details:**

- Closer body is non-handed.
- Mechanical backcheck at approximately 70° (excluding size 3, where backcheck is removed to meet barrier-free through 90° of opening for easier passage).
- Selectable delayed action between 175° and 75°. Extends the closing cycle to allow unobstructed passage.
- Delayed action is functional when hold open is not engaged.
- Dual thermostatic control valves combined with special hydraulic fluid provide controlled closing from 175°.
- Selectable multipoint hold open between approximately 75° and 175°.
- Adjustment for start of hold open range or when delayed action releases. Adjustable between 75° and 105°.

1 Valve adjustment 70°–0°.

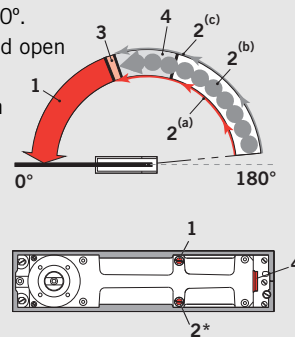
2 <sup>(a)</sup>Valve adjustment 175°–70°.

<sup>(b)</sup>Selectable multipoint hold open between 75° and 175°.

<sup>(c)</sup>Selectable delayed action from 175° to 75°.

3 Mechanical backcheck at approximately 70° (except size 3).

4 Start of hold open/end of delayed action range adjustment. Adjustable between 75° and 105°.



\* Clockwise turns create a longer delay time with a slower closing speed. Turning valve completely clockwise creates hold open and eliminates delayed action.

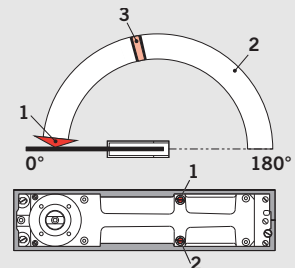
**BTS80 F****Technical Details:**

- U.L. listed for use with fire doors.
- Closer body is handed.
- Non-hold open only.
- Mechanical backcheck at approximately 70°.
- Dual thermostatic control valves combined with special hydraulic fluid provide controlled closing from 180°.
- Recommended for applications using a wall magnet to hold a door open at 180°.

1 Valve adjustment 7°–0°.

2 Valve adjustment 180°–0°.

3 Mechanical backcheck at approximately 70°.

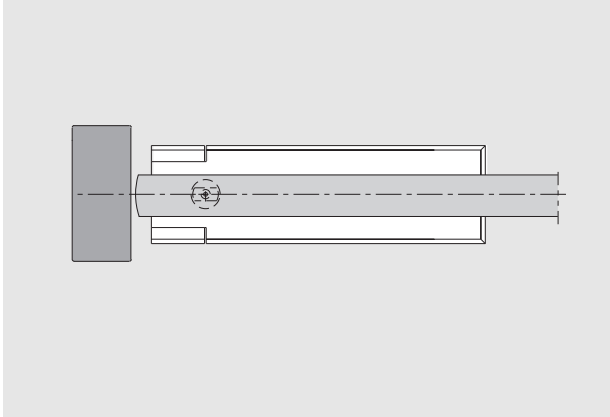




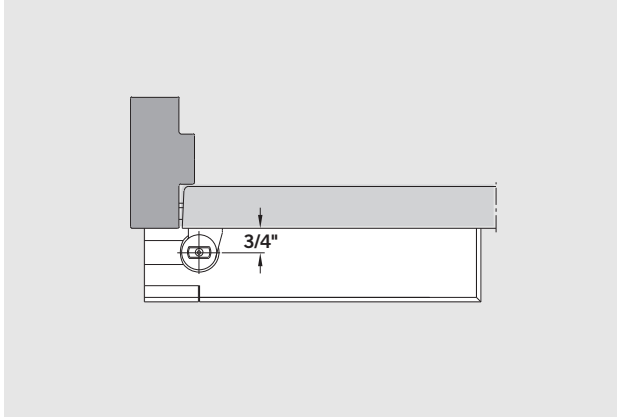
## Applications

Accessory packages for the following applications are designated with an alpha suffix, i.e. "A," "B." For application details and accessory illustrations, see **BTS Applications and Accessories** brochure.

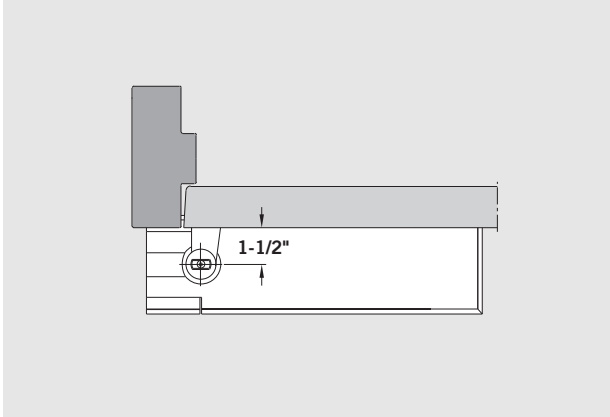
### Center Hung Packages (A,B,G,H)



### 3/4" Offset Packages (D,E,F,L,L-E,L-F)

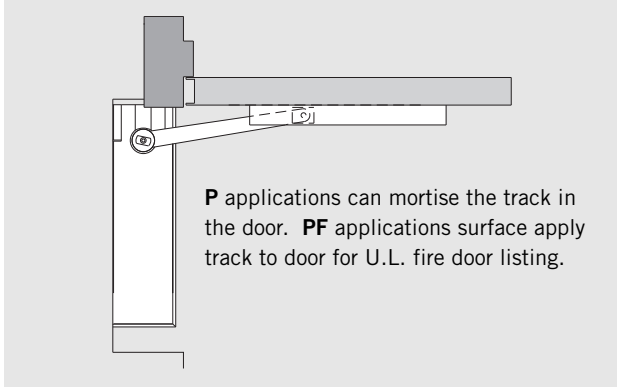


### 1-1/2" Offset Packages (C,C-E,C-F)

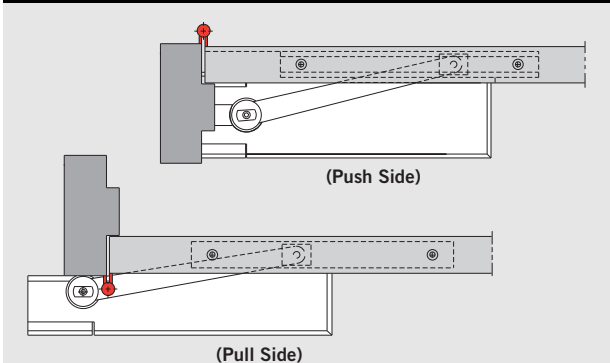


### Pocket Door Packages (P)

### Pocket Fire Door Packages (PF)

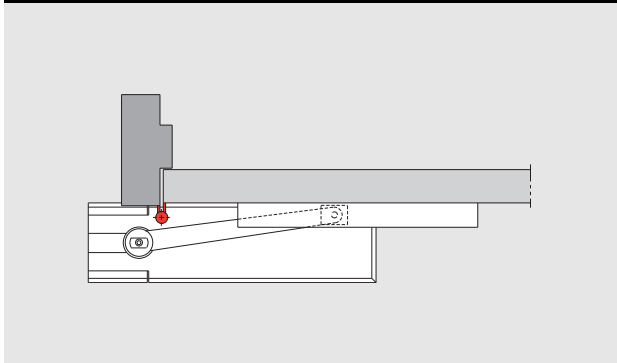


### Independent Hung Packages ( I )



Track is surface applied to the door for U.L. fire door listing.

### Independent Hung Fire Door Packages (IF)



Track is surface applied to the door for U.L. fire door listing.



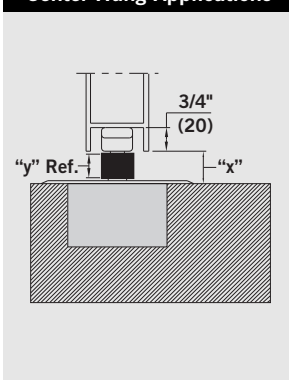
### Spindles

Spindle No.	Dimension "x" (Door Clearance)	3° Pre-load Spindle No.	Dimension "y"
74003	5/16"	80003	1/8"
74005	1/2"	80005	5/16"
74007	5/8"	-	7/16"
(STD) 74010	3/4"	80010	1/2"
74012	13/16"	-	5/8"
74015	7/8"	80015	11/16"
74020	1-1/8"	80020	7/8"
74025	1-5/16"	80025	1"
74030	1-1/2"	80030	1-5/16"
74035	1-11/16"	-	1-1/2"
74040	1-7/8"	-	1-11/16"
74045	2-1/16"	-	1-7/8"
74050	2-5/16"	-	2-1/16"

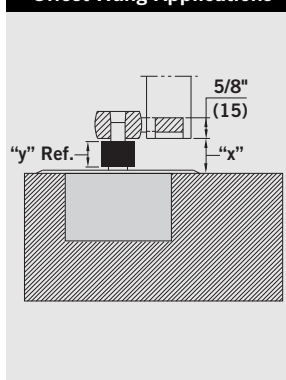
### Pre-load Spindles

Spindles are available with a 3° pre-load for additional pressure to hold door in the closed position. Normally, this is only necessary for center-pivoted single acting applications. However, they can also be used with other applications to compensate for templating errors. Specify hand of pre-load spindle when ordering.

### Center Hung Applications



### Offset Hung Applications



### Extended Spindle Insert

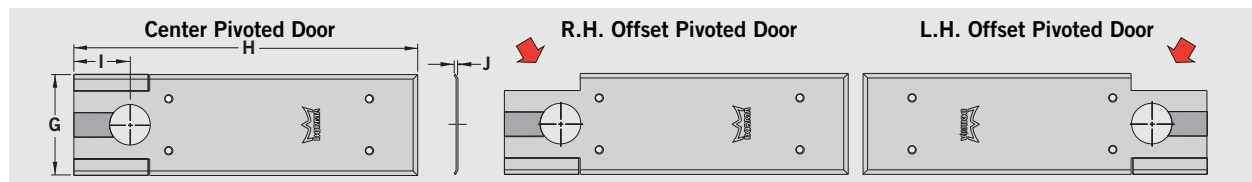
**NOTE: Closer and arm must be installed per template for door clearances shown to be valid.**

Closers with extended spindle inserts are used with thresholds, carpeted floors, or orterrazzo pans or in cases where more clearance between door and floor is required. All spindles are zinc plated.

### Cover Plate

Universal cover plate **7410**, suitable for left hand/right hand, 3/4" offset, 1-1/2" offset, and center pivoted doors. Material is stainless steel or brass depending on the plated finish specified.

	G	H	I	J
Inches	4-1/8	14-3/32	2-9/32	3/32
Millimeters	105	358	58	2



### DORMA Americas

www.dorma-usa.com

### DORMA Architectural Hardware

DORMA Drive, Drawer AC  
Reamstown, PA 17567-0411  
Telephone: (800) 523-8483  
Facsimile: (800) 274-9724  
E-mail: archdw@dorma-usa.com

### DORMA Glas

1520 Jabez Run, Suite 303  
Millersville, MD 21108  
Telephone: (800) 451-0649  
Facsimile: (410) 923-3060  
E-mail: glas@dorma-usa.com

### DORMA Canada

1680 Courtney Park Drive, Unit 13  
Mississauga, Ontario L5T 1R4  
Telephone: (800) 387-4938  
Facsimile: (905) 670-5850  
E-mail: sales@dormacanada.com

### DORMA Mexico, S. de R.L. de C.V.

Astrónomos 28, Col. Escandón  
México, D.F. 11800  
Del. Miguel Hidalgo  
Telephone: (52+55) 5272-6937  
Facsimile: (52+55) 5272-6948  
E-mail: operacion@dorma.com.mx



# BTS 80 BTS 75 V

Floor Springs

## Universal application, individual functions and assured quality

Whether standard, narrow or wide, whether LH, RH, or single or double action – DORMA 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, DORMA BTS 80 and BTS 75 V floor springs offer maximum reliability and quality.

Certified to ISO 9001.

### Benefits...

#### ...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

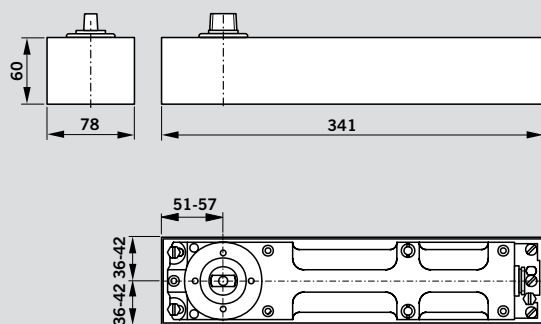
- Constant, temperature-independent closing cycle.
- Highly efficient mechanism gives maximum user convenience.

Data and features		BTS 80	BTS 75 V
Spring strength (EN)		3	4
Spring strength adjustment		–	–
Standard and external doors <sup>1)</sup>	≤ 950 mm	●	–
	≤ 1100 mm	–	●
	≤ 1400 mm	–	–
Fire and smoke check doors		–	–
Max. leaf weight (kg)		300	120
Non-handed, suitable for single and double action doors		●	●
Closing speed	175° – 0°	●	–
adjustable by valve	175° – 15°	–	●
	15° – 0°	–	●
Backcheck, mechanical		●	●
Delayed action adjustable by valve (selectable alternative to the hold-open feature)		●	–
Hold-open	Adjustable	●	–
	Fixed 90°	–	●
	Fixed 105°	–	●
Coverplate secured to	cement box floor spring	–	–
		●	●
Weight in kg		7.1	3.0
Dimensions in mm	Length	341	285
	Width	78	82
	Height	60	50
Floor spring tested to EN 1154		●	●
CE mark for building products (products with factory-fitted hold-open do not carry a CE mark)		–	●

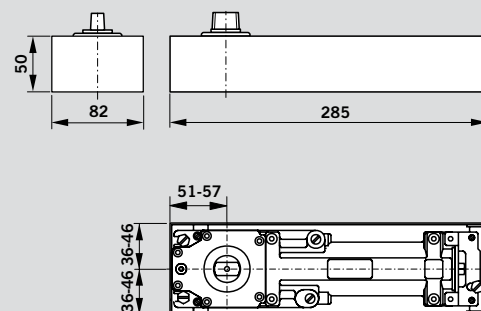
● yes – no

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

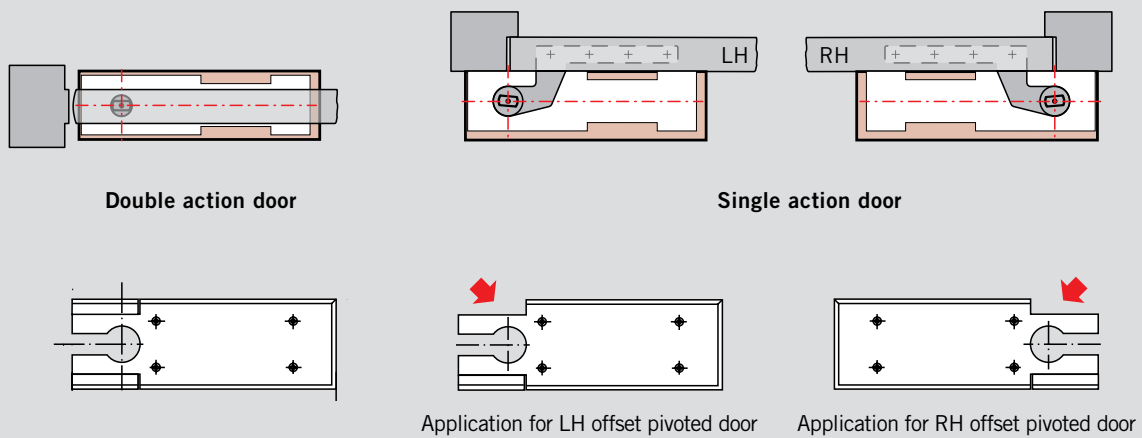
### BTS 80



### BTS 75 V



## Application and Installation

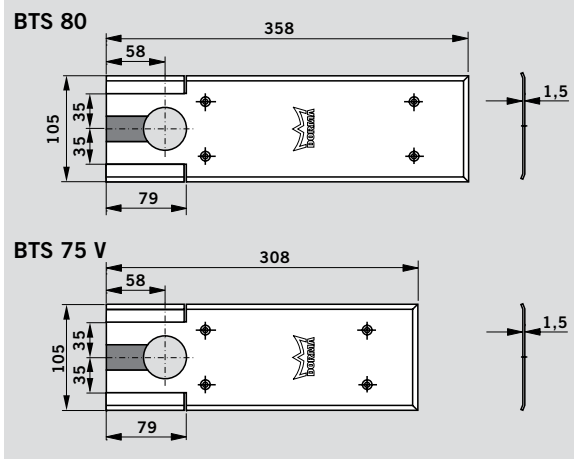


## Accessories

### 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.

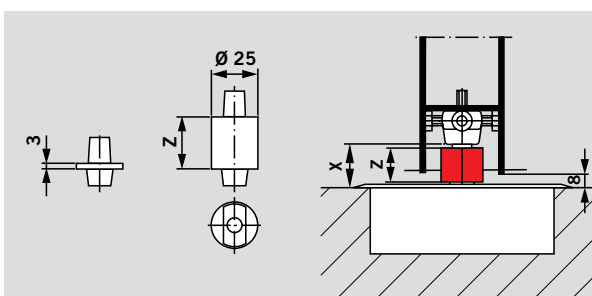
The universal cover plate is available in stainless steel or satin brass (material thickness 1.5 mm).



### 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.















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)

### 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	Extended spindles (extension in mm)												2300 sealing compound, 0.5 kg	
															
		45200401 Standard	45200402 5	45200403 7,5	45200404 10	45200419 12,5	45200405 15	45200406 20	45200407 25	45200414 28	45200408 30	45200409 35	45200410 40	45200411 45	45200412 50
															45090086
Including cement box and standard spindle															
EN 3	EN 1 – 4	●	#	#	#	#	#	#	#	#	#	#	#	#	#
80120000	61701000														
EN 4	EN 1 – 4 with hold-open at 90°	●	#	#	#	#	#	#	#	#	#	#	#	#	#
80110000	61701200														
EN 6	EN 1 – 4 with hold-open at 105°	●	#	#	#	#	#	#	#	#	#	#	#	#	#
80130000	61701300														
Including cement box without spindle															
EN 3	EN 1 – 4	#	#	#	#	#	#	#	#	#	#	#	#	#	#
80120001	61701001														
EN 4	EN 1 – 4 with hold-open at 90°	#	#	#	#	#	#	#	#	#	#	#	#	#	#
80110001	61701201														
EN 6	EN 1 – 4 with hold-open at 105°	#	#	#	#	#	#	#	#	#	#	#	#	#	#
80130001	61701301														
Universal cover plate															
46700000	46700059	Stainless steel													
46700100	46700159	Satin brass													

● = Floor spring with spindle      # = Accessories

#### BTS 80 specification text

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
  - ☐ ... mm extension
  - ☐ special model ...
- ☐ Universal cover plate (1.5 mm thick)
  - ☐ stainless steel
  - ☐ satin brass
- ☐ Sealing compound

**Make:** DORMA BTS 80

#### DORMA BTS 75 V specification text

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
- ☐ Without spindle
- ☐ Fixed hold-open at 90°

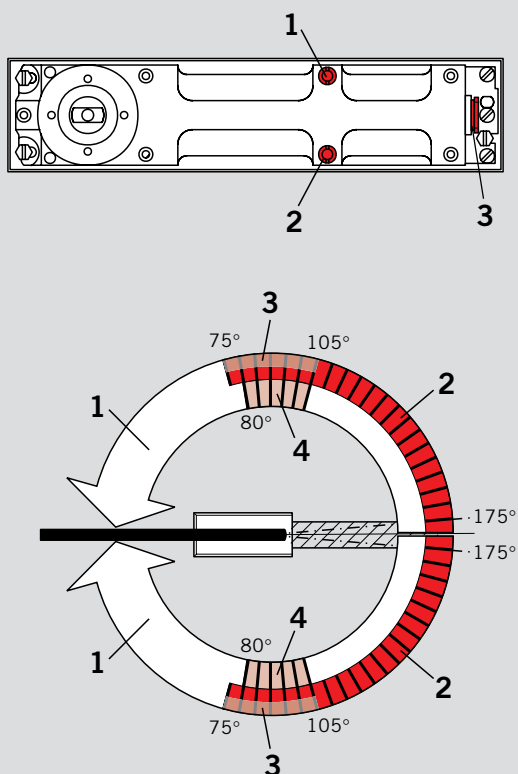
- ☐ Fixed hold-open at 105°

#### Accessories

- ☐ Spindle
  - ☐ standard
  - ☐ ... mm extension
  - ☐ special design...
- ☐ Universal cover plate (1.5 mm thick)
  - ☐ stainless steel
  - ☐ satin brass
- ☐ Sealing compound

**Make:** DORMA BTS 75 V

## Standard and optional functions of the BTS 80



- 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°.

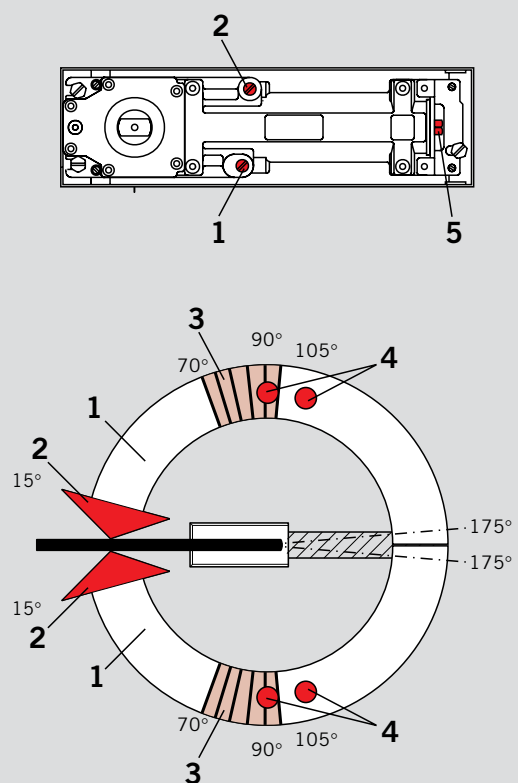
### Delayed action

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.

### Backcheck

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

## Standard and optional functions of the BTS 75 V



- 1 Adjustable closing speed in the range 175° – 15°.
- 2 Adjustable closing speed in the range 15° – 0°.

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

### Closing speed

With two independently adjustable closing ranges (175° – 15° and 15° – 0°) the DORMA BTS 75 V is ideally adaptable to different structural conditions.

### 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.**

### Backcheck

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

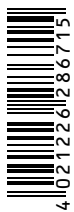


The DORMA BTS 75 V is CERTIFIRE approved (Certificate No. 127) for door types ITT 60 and IMM, IMN 240.



[www.dorma.com](http://www.dorma.com)

WN 052 420 51532, 11/11, BTS 80/75 V, GB, X, DD, xx/11 - Subject to change without notice



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Transom concealed  
door closer

# DORMA RTS 85

## Disappears into the frame

**Ideal for shopfitting. For both double and single action doors. Elegant, versatile, practical and quality assured.** The DORMA RTS 85 offers a solution for installations where door control must be provided without disturbing the aesthetic appearance of the door. 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 configuration.



Quality assured manufacture to DIN ISO 9001, EN 29001, BS 5750  
certified and verified by BSI Quality Assurance  
Reg.-No. Q 6423, FM 10756

### 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.

#### For the architect/specifier

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

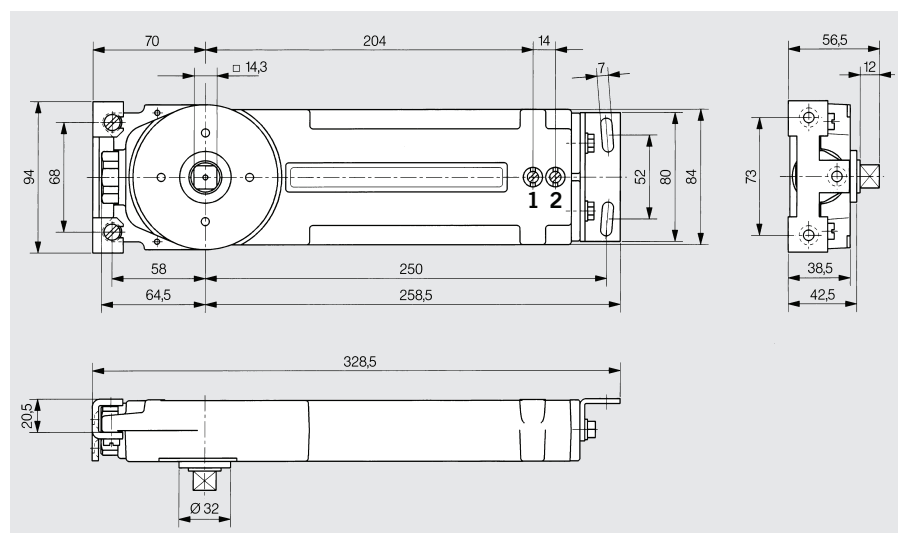
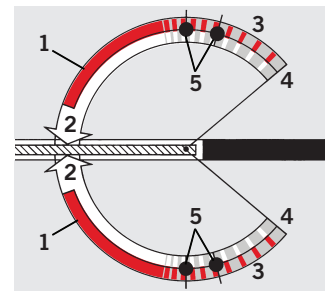
#### For the user

- 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		
		EN 3	EN 4	EN 5
Closing force	Internal	●	–	–
	up to 1950 mm	–	●	–
	and external doors*	–	–	●
Same model for double action doors, RH (ISO 5) and LH (ISO 6)		●	●	●
Closing speed variable by valve adjustment		●	●	●
Final closing speed variable by valve adjustment		●	●	●
Backcheck, progressive, mechanical		●	●	●
Backstop, mechanical		●	●	●
Hold-open	105°	○	○	○
	190°	○	○	○
Extended spindle	5 mm	○	○	○
	10 mm	○	○	○
Reduced pivot point for tempered glass doors (65 mm)		○	○	○
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 1154		●	●	●

● Yes – No ○ Option

\* Max Door weight for floor pivot 8550–8557 90 kgs.  
8560 G 200 kgs.



### 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.

### 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 Closer arm with angle bracket

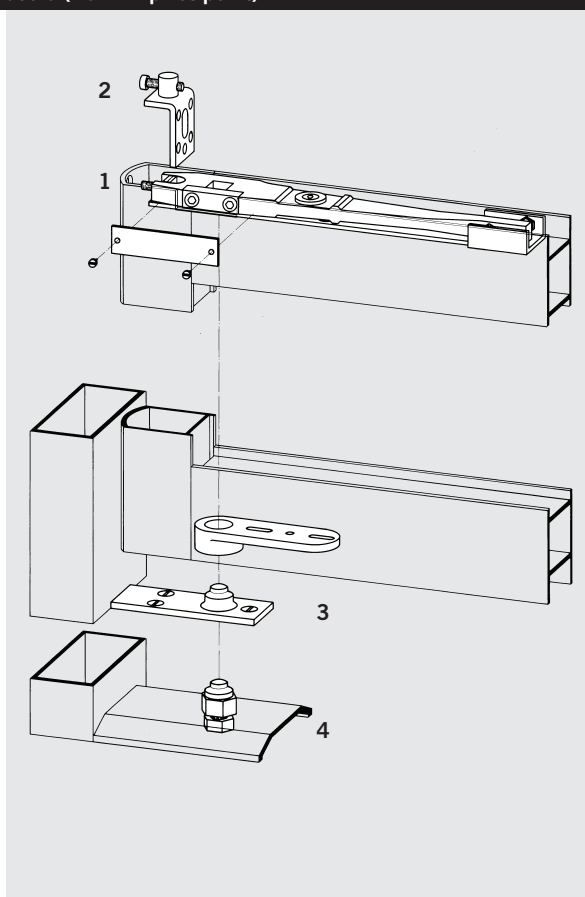
Art.-No. 8531  
for top rails with min. 12 mm channel depth and 38 mm width  
(not suitable for doors with mitred-joints).

#### 3 Floor pivot set

Art.-No. 8550/1  
for bottom rails with channel depth of 18–50 mm. Floor portion of pivot is fitted directly to floor and adjustable in height.

#### 4 Threshold pivot set

Art.-No. 8554/6  
for bottom rails with channel depth of up to 50 mm. Floor clearance: 5 mm. Floor portion is fitted directly to threshold and adjustable in height.



#### 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 Closer arm with angle bracket

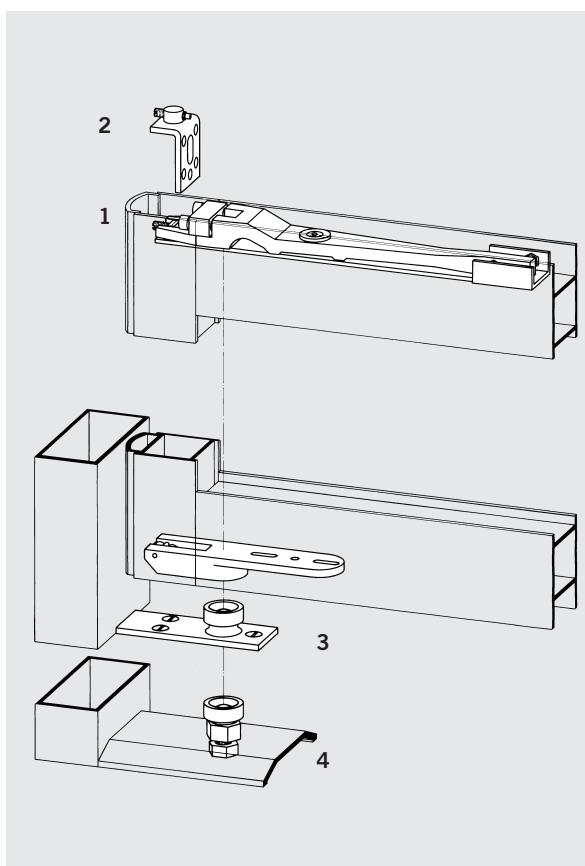
Art.-No. 8535  
for top rails with min. 18 mm channel depth and 35 mm width  
(not suitable for doors with mitred-joints).

#### 3 Floor pivot set

Art.-No. 8552/3  
for bottom rails with channel depth of up to 50 mm. Floor portion of pivot is fitted directly to floor and is adjustable in height.

#### 4 Threshold pivot set

Art.-No. 8555/7  
for bottom rails with channel depth of up to 50 mm. Floor clearance: 5 mm. Floor portion is fitted directly to threshold and is height adjustable.



## 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:

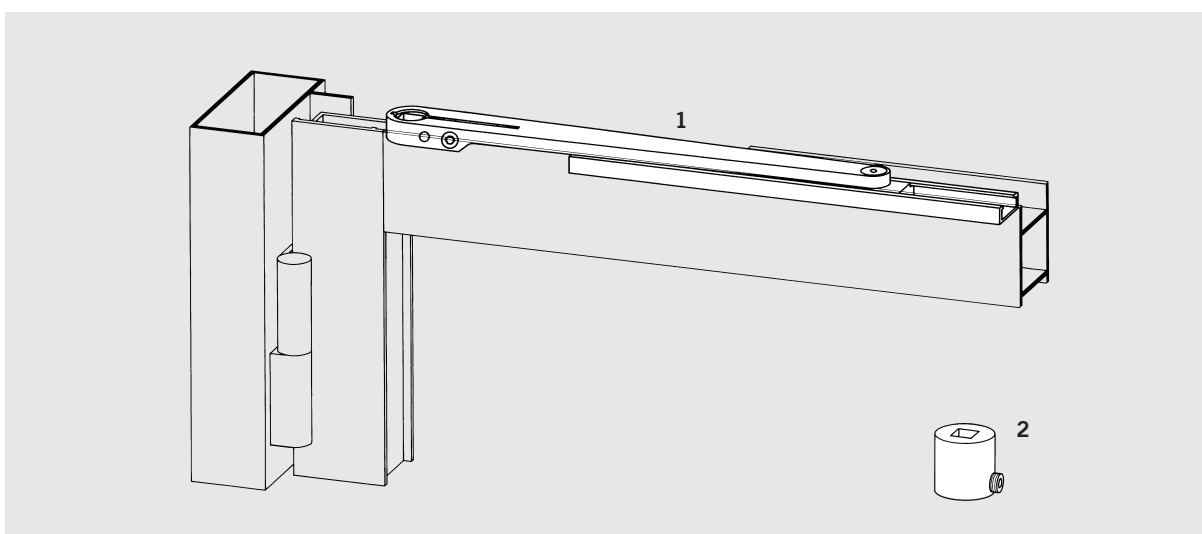
Maximum door opening with slide arm and channel assemblies –105°. Consult our Technical Service Department giving specific details for slide arm and channel assemblies. Drawings of door and frame

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 Glass range of products).

### 1 Fixing bracket Art.-No. 8520 G

For fixing the DORMA RTS in the transom.

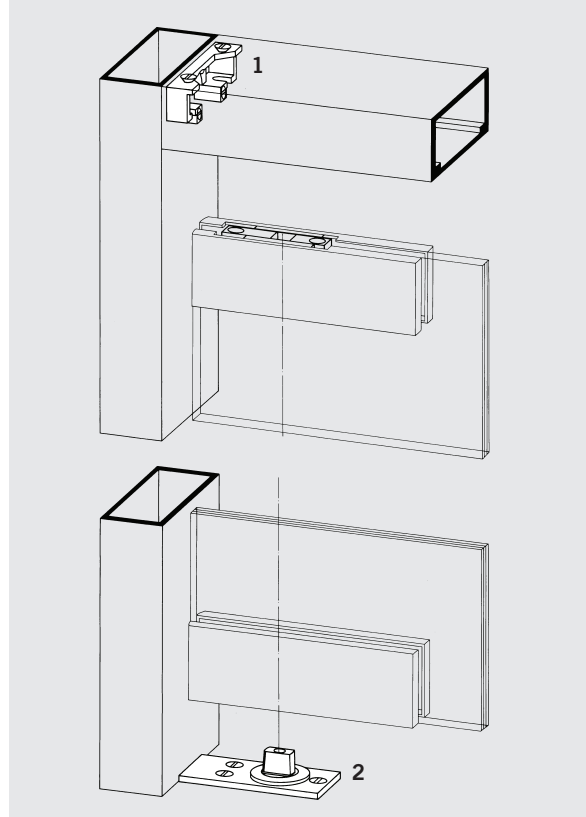
### 2 Floor pivot bearing with flat-tapered spindle

Art.-No. 8560 G

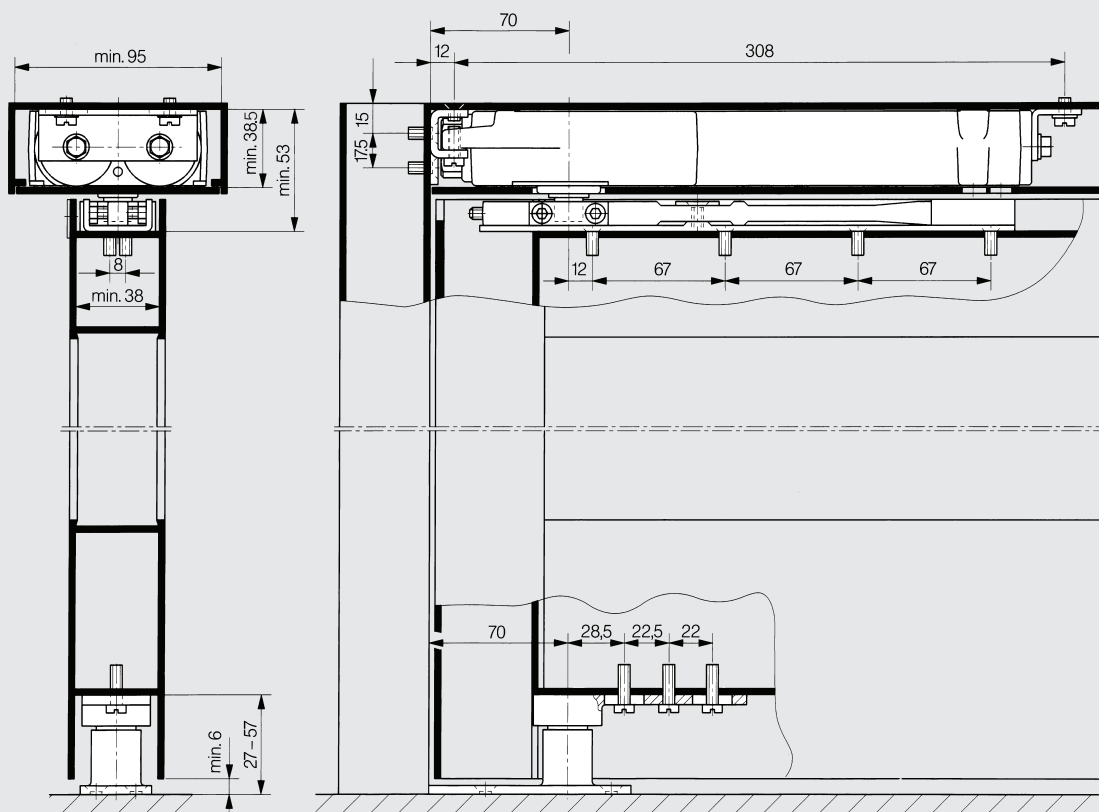
With sealed roller bearing assembly, rust-protected, for max. door weights of 110 kg (if used without the transom concealed door closer, then 200 kg).

Special pivots also available with extended spindles of 5, 10 and 15 mm, and also for special environments (e.g. wet rooms) in stainless steel; Art.-No. 8560 GE (only available with standard spindle).

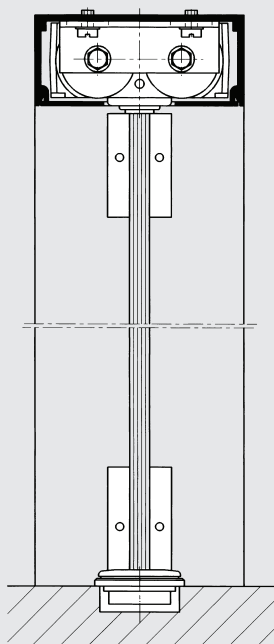
The floor pivot bearing combined with appropriate bottom straps from the accessories range for DORMA BTS floor springs is also suitable for aluminium, steel and timber doors.



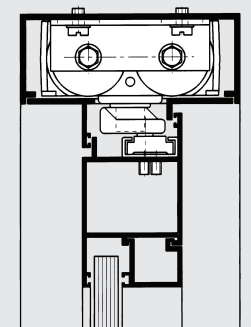
## Typical applications



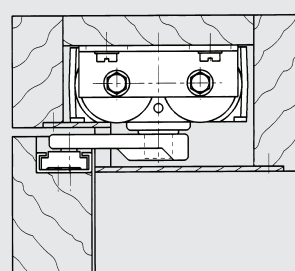
Double action aluminium door



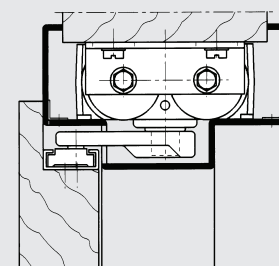
Double action tempered glass door with aluminium frame



Single action double rebated aluminium door



Single action timber door



Single action timber door in a steel frame

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

**DORMA RTS 85 for double and single action doors**

Door closer RTS 85	Standard model	Standard model with hold-open at 105°	Standard model with hold-open at 90°	with spindle insert 5 mm extended	with spindle insert 5 mm extended and hold-open at 105°	with spindle insert 5 mm extended and hold-open at 90°	with spindle insert 10 mm extended	with spindle insert 10 mm extended and hold-open at 105°	with spindle insert 10 mm extended and hold-open 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 channel	closer arm with bracket	Floor pivot set, height 27 mm	Floor pivot set, height 57 mm	Threshold pivot set 1"	Threshold pivot set 1 9/16"	Closer arm with channel for single action doors	weld-on extensions
Side-load installation	85210005	85210007	65310300	65410300	65510400	65510500	85210001	85110001
End-load installation	85210009	85210011	65320300	65420300	65520400	–		

**DORMA RTS 85 for tempered glass doors**

Door closer RTS 85 G	Standard model	Standard model with hold-open at 105°	Standard model with hold-open 90°	with spindle insert 5 mm extended	with spindle insert 5 mm extended and hold-open at 105°	with spindle insert 5 mm extended and hold-open at 90°	with spindle insert 10 mm extended	with spindle insert 10 mm extended and hold-open at 105°	with spindle insert 10 mm extended and hold-open at 90°
EN 3	85311301	85313301	85312301	85311302	–	–	85311303	–	85312303
EN 4	85321301	85323301	85322301	85321302	85323302	85322302	85321303	–	85322303
EN 5	85331301	85333301	85332301	85331302	–	–	85331303	–	85332303

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
to RTS 85 G	65540000	85210025	85210026	85210027	85540059

**Specification text**

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

**Size**

- ☐ EN 3  
☐ EN 4  
☐ EN 5

**Model**

- ☐ For both single and double action doors (pivot point 70 mm)  
☐ For tempered glass doors (pivot point 65 mm)  
☐ 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. \_\_\_\_\_

**Make:** DORMA RTS 85

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