



Floor springs

**DORMA** **BTS 80 F**  
**- EMB**  
**- FLB**

## Floor springs designed especially for fire and smoke doors. Wide range of functions, quality assured.

CERTIFIRE approved for use on certain fire doors:  
See certificate no. 128 (BTS 80 F and EMB).  
Complies with requirements of HTM 59 (DOH).  
PSA approved (MOB H3 03).



### Plus points

#### For the trade

- Complete range for every application.
- Simple stock-holdig 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. 128 (BTS 80 F, EMB).

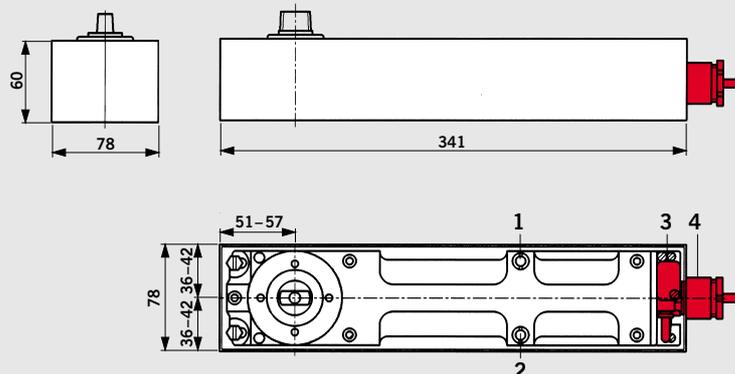
#### For the user

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

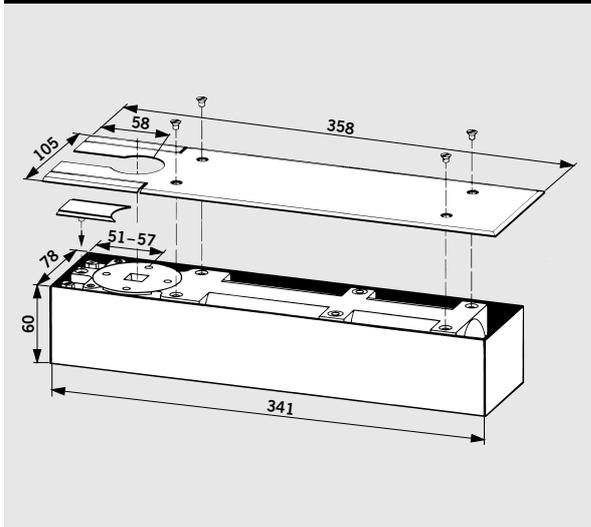
Technical data		BTS 80 F			BTS 80 EMB			BTS 80 FLB		
Closing force	Size	EN 4	EN 5	EN 6	EN 4	EN 5	EN 6	EN 4	EN 5	EN 6
Standard doors up to	1100 mm	●	–	–	●	–	–	●	–	–
	1250 mm	–	●	–	–	●	–	–	●	–
	1400 mm	–	–	●	–	–	●	–	–	●
Universal model for RH (ISO 5) LH (ISO 6) and double action doors (to close from 175) up to	905 mm	●	–	–	●	–	–	–	–	–
	1125 mm	–	●	–	–	●	–	–	–	–
	1280 mm	–	–	●	–	–	●	–	–	–
Handed model (to close from 180)	LH	●	●	●	●	●	●	●	●	●
	RH	●	●	●	●	●	●	●	●	●
Closing speed variable by valve adjustment		●	●	●	●	●	●	●	●	●
Latching action variable by valve adjustment		●	●	●	●	●	●	–	–	–
Backcheck, mechanical		●	●	●	●	●	●	–	–	–
Delayed action		–	–	–	–	–	–	–	–	–
Hold-open, electro-magnetic, Hold-open point selectable between 75 and 180°		–	–	–	●	●	●	–	–	–
Free swing 0–180°		–	–	–	–	–	–	●	●	●
Weight in kg		7.1	7.1	7.1	7.7	7.7	7.7	7.7	7.7	7.7
Dimensions in mm										
Length		341	341	341	341	341	341	341	341	341
Overall depth		78	78	78	78	78	78	78	78	78
Height		60	60	60	60	60	60	60	60	60
Power input in W		–	–	–	2.3	2.3	2.3	2.3	2.3	2.3
Operating voltage in vDC ± 15 %, residual ripple max. 30 %		–	–	–	24	24	24	24	24	24
Duty factor in % [Rated for continuous service (duty factor 100 %)]		–	–	–	100	100	100	100	100	100
Door closer tested to EN 1154		●	●	●	●	●	●	●	●	●
Hold-open devices tested to EN 1155		–	–	–	●	●	●	●	●	●

● 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
- 4 Gland for protective conduit (power supply to EMB/FLB)



### DORMA BTS 80 F



CERTIFIRE approved cert. no. 128

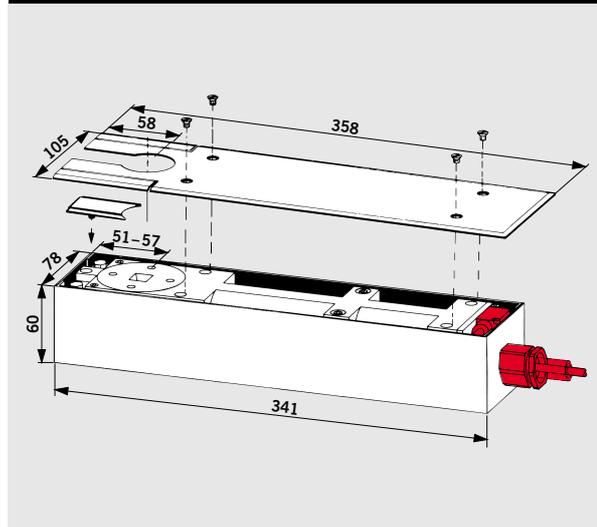
#### Fire door applications

Please see the CERTIFIRE Register of Approved Products for full details of fire door types with which this floor spring may be used.

#### Approval and certification

The DORMA BTS 80 F has been approved, and is subject to third-party verification, by the State Material Testing Agency (MPA) of North Rhine Westphalia/Dortmund, Germany. PSA approved (MOB H3 03) HTM 59 (DOH).

### DORMA BTS 80 EMB



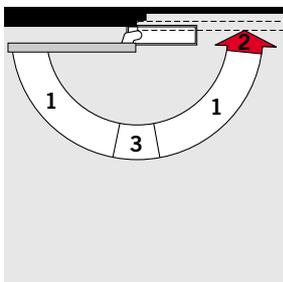
Floor spring with electromagnetic hold-open CERTIFIRE approved cert. no. 128

#### Fire door applications

Please see the CERTIFIRE Register of Approved Products for full details of fire door types with which this floor spring may be used.

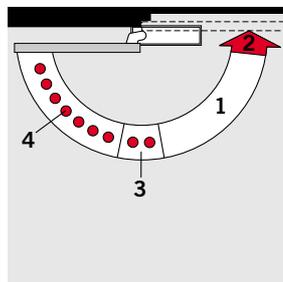
#### Approval certification

The DORMA BTS 80 EMB has been approved by the Institute for Building Technology, Berlin, for use in combination with all common smoke detector systems, e.g. DORMA BTS 80 EMB with DORMA RMZ 2: approval certificate Z-6.5-1310. PSA approved (MOB H3 03) HTM 59 (DOH).



- 1 Fully controlled closing with adjustable speed
- 2 Adjustable latching action
- 3 Mechanical backcheck

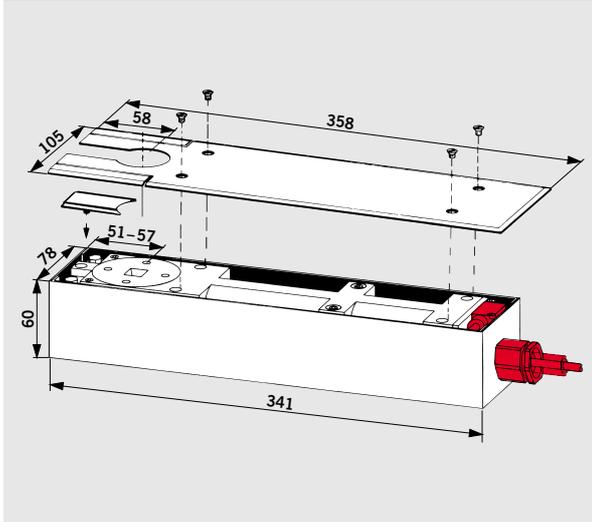
Example shows LH door; mirrored arrangement applies to RH door.



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

Example shows LH door; mirrored arrangement applies to RH door.

## DORMA BTS 80 FLB



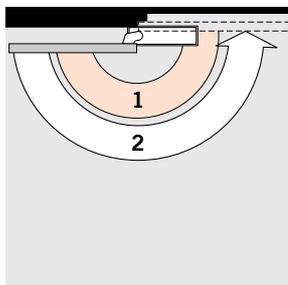
Floor spring with free-swing feature (electro-hydraulically controlled spring detent)

### Fire door applications

The DORMA BTS 80 FLB is designed to remove all spring pressure, whilst the door is available for manual opening and closing. When the current supply is interrupted, e.g. fire alarm, the floor spring resumes its self-closing function.

### Approval certification

The DORMA BTS 80 FLB has been approved by the Institute for Building Technology, Berlin, for use in combination with all common smoke detector systems, e.g. DORMA BTS 80 EMB with DORMA RMZ 2: approval certificate Z-6.5-1310.



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

Example shows LH door; mirrored arrangement applies to RH door.

## Accessories

### Applications and fixing instructions, door straps and top centres

See Technical Information "Floor spring accessories".

### Spindle inserts

Interchangeable spindle inserts enable the floor clearance to be increased if required (doors with thresholds, carpeted floors, etc.).

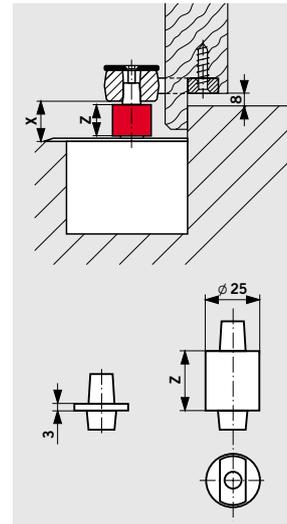
Special spindle designs on application: e.g. flat tapered with 3° offset, square spindles and spindle inserts for non DORMA accessories.

### Extended spindle insert

Spindle Extension = Dimension "X" – (standard 8 mm) (Door Clearance) Z – 3 mm

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

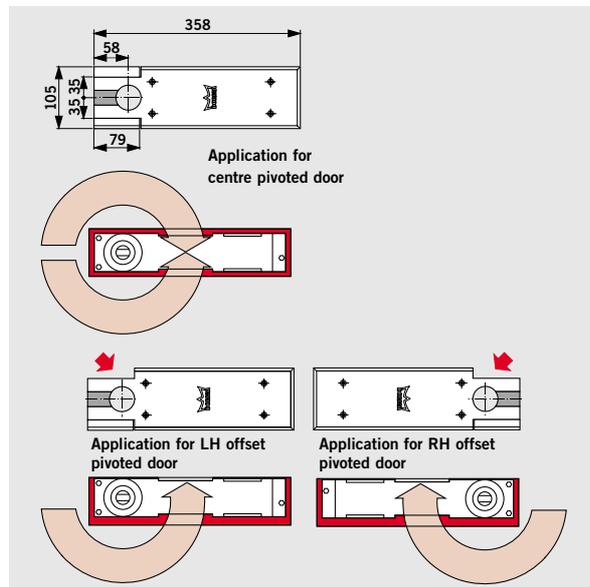


### Universal cover plate

One cover plate, suitable for left hand/right hand 36 mm offset, and centre pivoted doors. Further modification is necessary for use with 5 mm offset accessories. Available in stainless steel or satin brass (thickness of material 1.5 mm). A reinforcing underplate is available for use in areas of especially heavy traffic or trolleys.

### 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).



**Scope of supply and accessories**

Floor spring <b>BTS 80 F</b>	With cement box, without spindle insert	Spindle inserts <sup>1)</sup>	Universal cover plate		Sealing compound 2300, 0.5 kg 45090059	
			Stainless steel 46700000	Satin Brass 56700100		
<b>Size EN 4</b>						
LH	80220101	#	#	#	#	
RH	80220201	#	#	#	#	
Universal	80220001	#	#	#	#	
<b>Size EN 5</b>						
LH	80210101	#	#	#	#	
RH	80210201	#	#	#	#	
Universal	80210001	#	#	#	#	
<b>Size EN 6</b>						
LH	80230101	#	#	#	#	
RH	80230201	#	#	#	#	
Universal	80230001	#	#	#	#	

Floor spring <b>BTS 80 EMB</b>	With cement box, without spindle insert, 3.5 m cable	Spindle inserts <sup>1)</sup>	Universal cover plate		Sealing compound 2300, 0.5 kg 45090059	Protective conduit (3.5 m) for cable 82000005
			Stainless steel 46700000	Satin Brass 56700100		
<b>Size EN 4</b>						
LH	82224101	#	#	#	#	#
RH	82224201	#	#	#	#	#
Universal	82224001	#	#	#	#	#
<b>Size EN 5</b>						
LH	82214101	#	#	#	#	#
RH	82214201	#	#	#	#	#
Universal	82214001	#	#	#	#	#
<b>Size EN 6</b>						
LH	82234101	#	#	#	#	#
RH	82234201	#	#	#	#	#
Universal	82234001	#	#	#	#	#

Floor spring <b>BTS 80 FLB</b> for free-swing action	With cement box, without spindle insert, 3.5 m cable	Spindle inserts <sup>1)</sup>	Universal cover plate		Sealing compound 2300, 0.5 kg 45090059	Protective conduit (3.5 m) for cable 82000005
			Stainless steel 46700000	Satin Brass 56700100		
<b>Size EN 4</b>						
LH	82124101	#	#	#	#	#
RH	82124201	#	#	#	#	#
<b>Size EN 5</b>						
LH	82114101	#	#	#	#	#
RH	82114201	#	#	#	#	#
<b>Size EN 6</b>						
LH	82134101	#	#	#	#	#
RH	82134201	#	#	#	#	#

# = Accessory

<sup>1)</sup> See technical information leaflet "Floor spring accessories"

**Specification text**

**DORMA BTS 80 F**

CERTIFIRE approved universal floor spring, with hydraulically fully controlled closing from 175°, adjustable latching action and back-check; including cement box CERTIFIRE approved certificate no. 128.

**Size**

- EN 4
- EN 5
- EN 6

**Model**

- LH (ISO 6)
- RH (ISO 5)
- Universal

**Accessories**

- Universal cover plate, 1.5 mm thick
  - stainless steel
  - satin brass
  - reinforcing underplate
- Spindle insert, . . . mm extension
- Sealing compound

**Make:** DORMA BTS 80 F

**DORMA BTS 80 EMB**

Floor spring with electro-hydraulic hold-open and integral pressure compensation feature for multipoint hold-open between 75° and 175°. With adjustable, hydraulically fully controlled closing speed, adjustable latching action, backcheck; including cement box.  
Operating voltage: 24 vDC  
Power input: 2.3 W  
CERTIFIRE approved certificate no. 128.  
Officially approved by the Institute for Building Technology, Berlin, for use in hold-open systems.

**Size**

- EN 4
- EN 5
- EN 6

**Model**

- LH (ISO 6)
- RH (ISO 5)
- Universal
- Special design with integral circuit for door co-ordinator with electro-magnetic retention
  - LH
  - RH

**Accessories**

- Universal cover plate, 1.5 mm thick
  - stainless steel
  - satin brass
  - reinforcing underplate
- Spindle insert, . . . mm extension
- Sealing compound

**Make:**  
DORMA BTS 80 EMB

**Note:**

According to the German codes of practice relating to hold-open systems, acceptance inspection of the system is mandatory.

**DORMA BTS 80 FLB**

Free-swing floor spring with electro-hydraulic free-swing feature between 0° and 180°, closing action (de-energised condition) from 180°, and backcheck (de-energised condition).  
Operating voltage: 24 vDC  
Power input: 2.3 W

**Size**

- EN 4
- EN 5
- EN 6

**Model**

- LH (ISO 6)
- RH (ISO 5)

**Accessories**

- Universal cover plate, 1.5 mm thick
  - stainless steel
  - satin brass
  - reinforcing underplate
- Spindle insert, . . . mm extension
- Sealing compound

**Make:**  
DORMA BTS 80 FLB

**Note:**

According to the German codes of practice relating to hold-open systems, acceptance inspection of the system is mandatory.

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