



Floor Springs

DORMA

BTS 80
BTS 75 V



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). Certified to ISO 9001.

Complies with requirements of HTM 59 (DOH). PSA approved (MOB H3 03).



CERTIFIRE
Cert. no. 128

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. 128 (BTS 80 F, EMB).

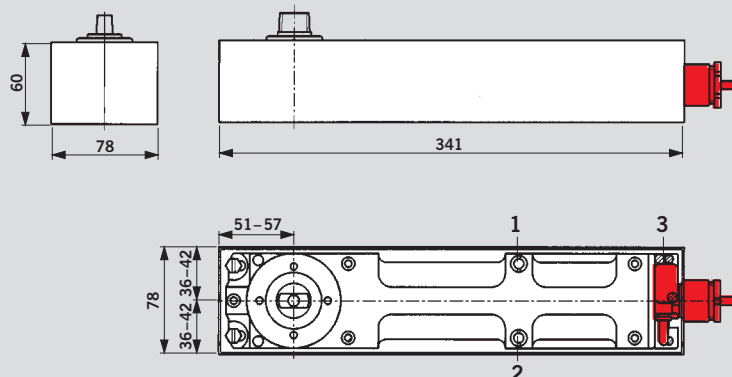
For the user

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

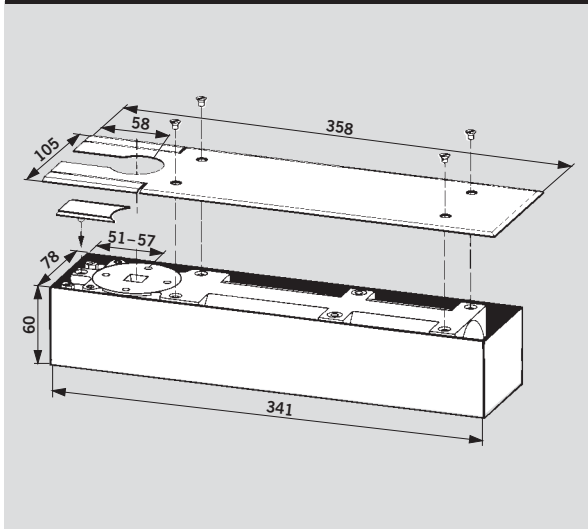
Technical data		BTS 80 F			BTS 80 EMB			BTS 80 FLB		
Closing force	Size	EN 4	EN 5	EN 6	EN 4	EN 5	EN 6	EN 4	EN 5	EN 6
Standard doors up to	1100 mm	●	–	–	●	–	–	●	–	–
	1250 mm	–	●	–	–	●	–	–	●	–
	1400 mm	–	–	●	–	–	●	–	–	●
Universal model for RH (ISO 5) LH (ISO 6) and double action doors (to close from 175) up to	905 mm	●	–	–	●	–	–	–	–	–
	1125 mm	–	●	–	–	●	–	–	–	–
	1280 mm	–	–	●	–	–	●	–	–	–
Handed model (to close from 180)	LH	●	●	●	●	●	●	●	●	●
	RH	●	●	●	●	●	●	●	●	●
	Universal	●	●	●	●	●	●	–	–	–
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



DORMA BTS 80 F



CERTIFIRE approved cert. no. 128

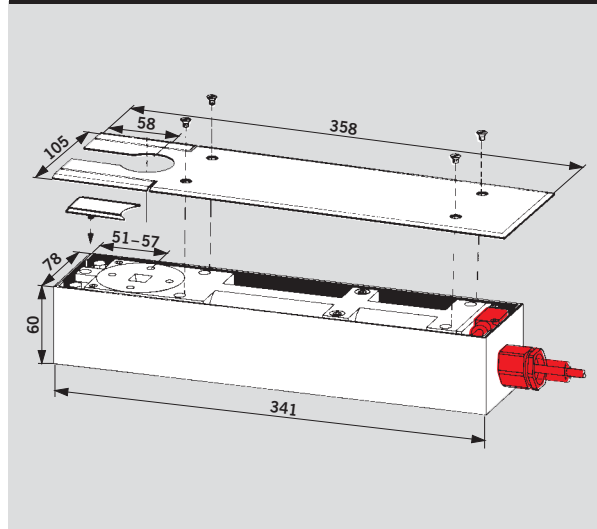
Fire door applications

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



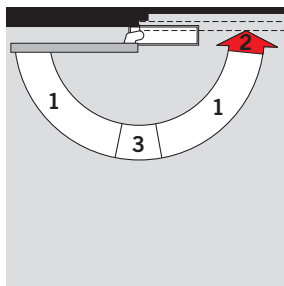
Floor spring with electromagnetic hold-open CERTIFIRE approved cert. no. 128

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.

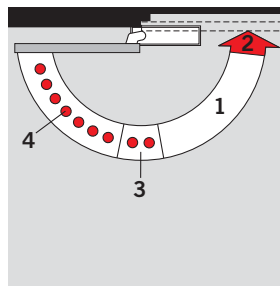
Approval certification

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

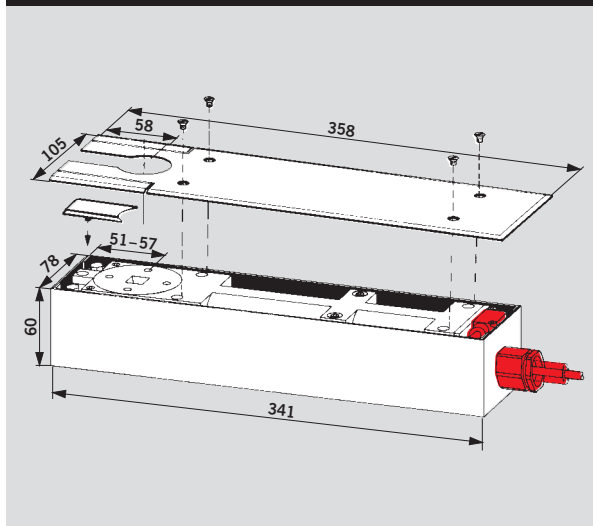
Example shows LH door; mirrored arrangement applies to RH door.



- 1 Fully controlled closing with adjustable speed
- 2 Adjustable latching action
- 3 Mechanical backcheck
- 4 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.

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.).

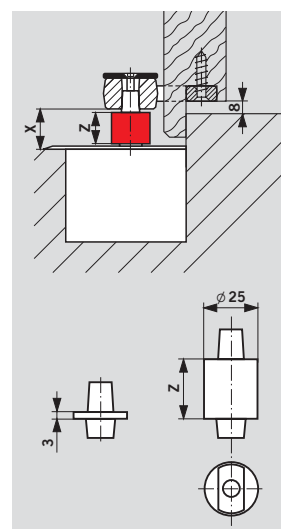
Special spindle designs on application: e.g. flat tapered with 3° offset, square spindles and spindle inserts for non DORMA accessories.

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.

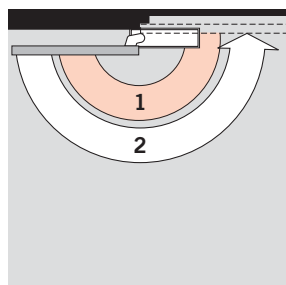


Universal cover plate

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.

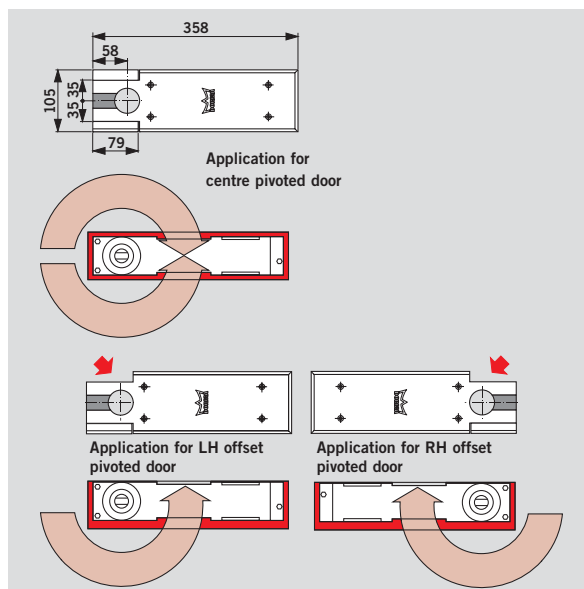
DORMA 2300 Sealing Compound

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).



- 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.



Scope of supply and accessories

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

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

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

= Accessory ¹⁾ 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. Acceptance test required in Germany.

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

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

Acceptance test required in Germany.

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

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Floor spring

DORMA **BTS 84**

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 shop-fitting industry the option of a DORMA quality 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.



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.

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

Technical Data	BTS 84		
	EN 2	EN 3	EN 4
Spring strength			
Standard and external doors ^{1) 2)}	up to 850 mm	–	–
	up to 950 mm	●	–
	up to 1100 mm	–	●
Closing speed variable by valve adjustment	●	●	●
Backcheck	–	–	–
Delayed action	–	–	–
Hold-open point	90°	○	○
or	105°	○	○
Weight in kg, approx.	5.0	5.0	5.0
Dimensions in mm			
Length	306	306	306
Width	108	108	108
Height	40	40	40
Door closer tested to EN 1154	●	●	●

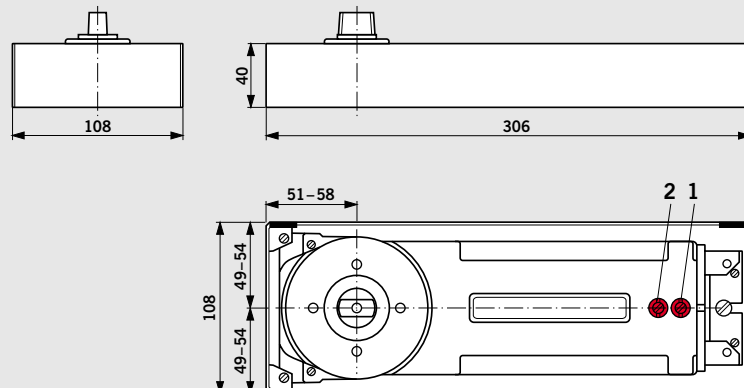
● Yes – No ○ Option

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°.

- 1 Valve for closing speed adjustment 130° – 0°
- 2 Valve for increasing closing speed 130° – 20°



Standard and optional functions

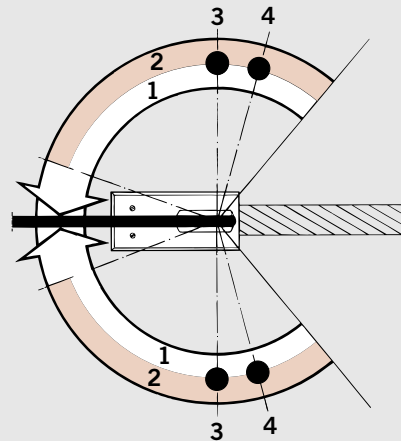
Closing ranges

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

With the hold-open (optional extra), the door can be held at angles of either 90° or 105°.

- 1 First adjusting closing range (130° – 0°)
- 2 Second adjusting closing range (130° – approx. 20°)
- 3 Hold open at 90° (optional extra)
- 4 Hold open at 105° (optional extra)



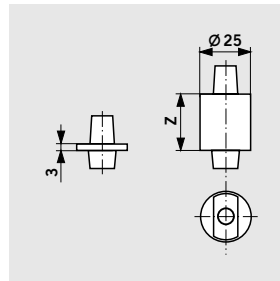
Accessories

Applications and fixing instructions, door straps and top centres

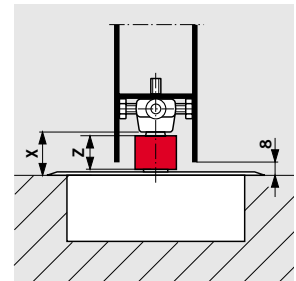
See Technical Information "Floor spring accessories".

Extended spindle insert

Spindle Extension	Dimension "X" (Door Clearance)
Standard	8 mm
5 mm	13 mm
7.5 mm	15.5 mm
10 mm	18 mm
12.5 mm	20.5 mm
15 mm	23 mm
20 mm	28 mm
25 mm	33 mm
30 mm	38 mm
35 mm	43 mm
40 mm	48 mm
45 mm	53 mm
50 mm	58 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, terazzo pans or in cases where more clearance between door and floor is required. Surface finish: Zinc plated.

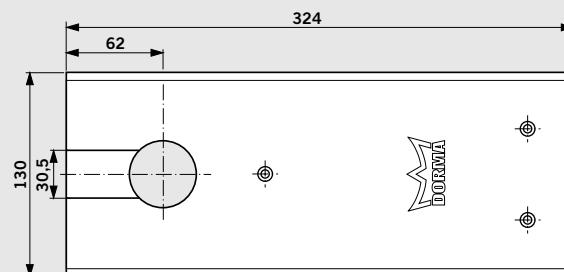


DORMA 2300 Sealing Compound

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).

Universal cover plate

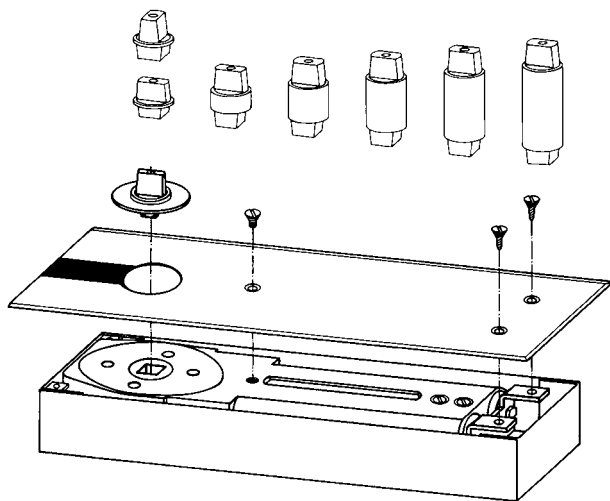
available in stainless steel or satin brass.



Options and accessories

Floor spring BTS 84 including cement box and standard spindle insert	Floor spring BTS 84 including cement box without spindle insert	Extended spindle inserts (extension in mm)														Universal cover plate		Sealing compound 2300 0.5 kg 45090059
		0 normal	5	7,5	10	12,5	15	20	25	28	30	35	40	45	50	Stainless steel	Satin brass	
		45200401	45200402	45200403	45200404	45200419	45200405	45200406	45200407	45200414	45200408	45200409	45200410	45200411	45200412	46700022	46700023	
Standard																		
EN 2 81125002	EN 2 81125001	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
EN 3 81110002	EN 3 81110001	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
EN 4 81100002	EN 4 81100001	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
with hold-open 90°																		
EN 2 81225002	EN 2 81225001	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
EN 3 81210002	EN 3 81210001	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
EN 4 81200002	EN 4 81200001	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
with hold-open 105°																		
EN 2 81325002	EN 2 81325001	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
EN 3 81310002	EN 3 81310001	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
EN 4 81300002	EN 4 81300001	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#

= Accessory



Specification text

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

Size

- EN 2
- EN 3
- EN 4

Models

- Standard
- Hold-open 90°
- Hold-open 105°

Accessories

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

Make: DORMA BTS 84

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The address of a subsidiary/
representation in your area you
can find at the DORMA website:
www.dorma.com



Floor Spring
Accessories

DORMA

**BTS
Accessories**

For single action aluminium doors

Aluminium door straps

- 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 door strap

Art. No. 7459

Silver (EV 1, Euras C-0):

Order No. 45010409

Dark bronze

(DB 4, Euras C-34):

Order No. 45010709

Special colours on request.

DORMA aluminium door strap

Art. No. 7459 B

Silver (EV 1, Euras C-0):

Order No. 45010482

Dark bronze

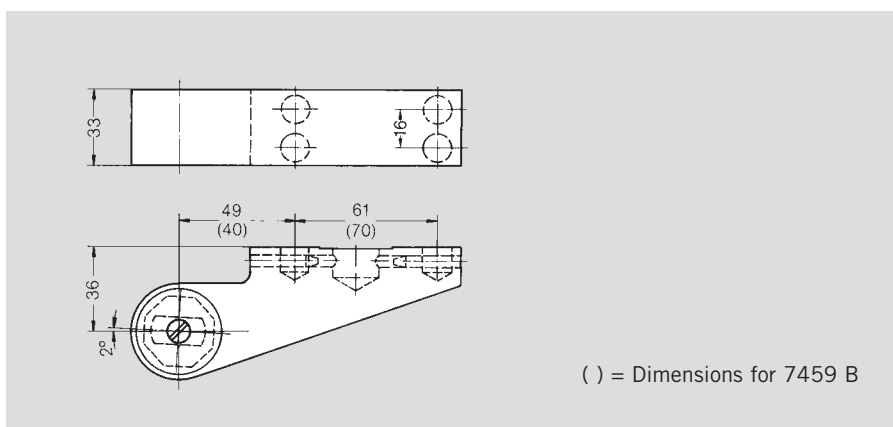
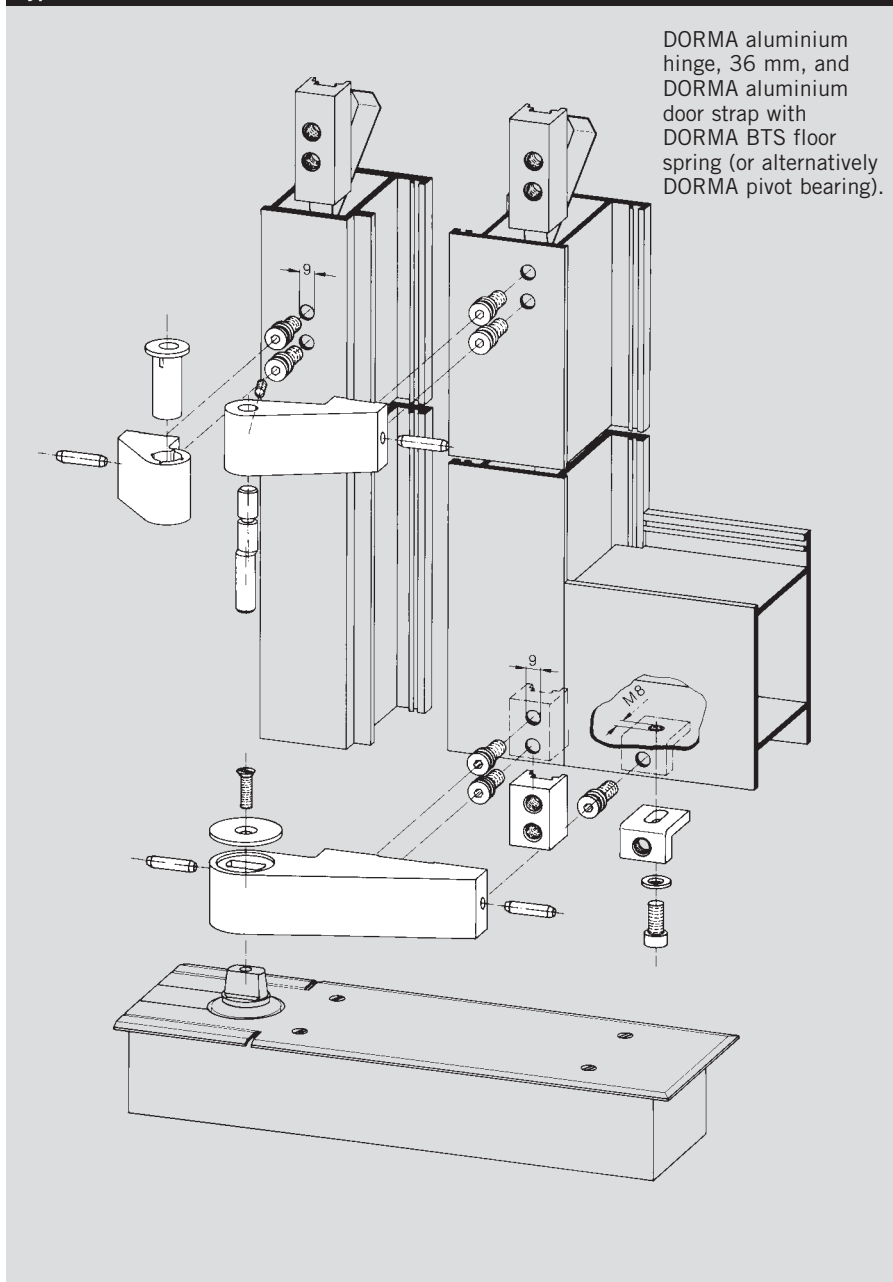
(DB 4, Euras C-34):

Order No. 45010782

Special colours on request.

For further details and aluminium hinges, see our brochure entitled "DORMA LM hinges" with ordering guide.

Typical installation



Drill jig for aluminium hinges

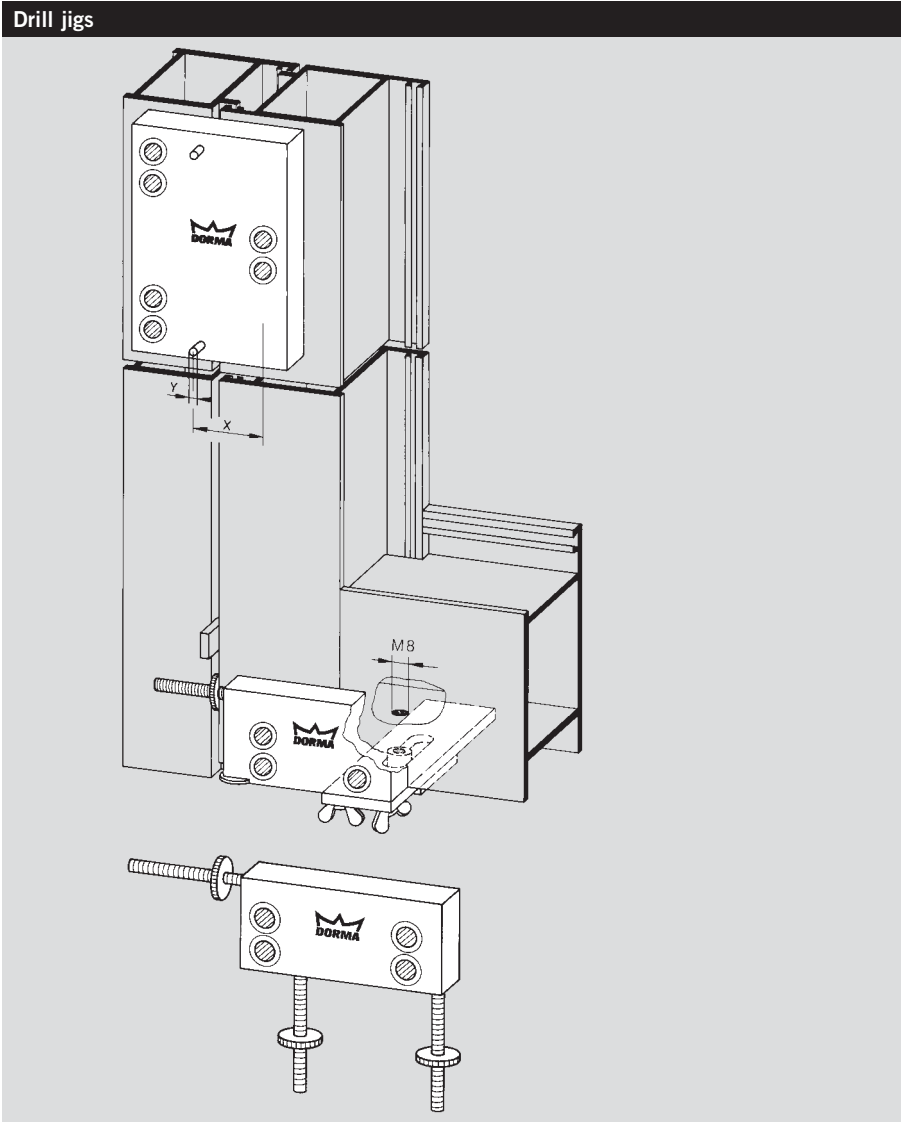
For standard hinges (9 mm dia.), for IK (insulated construction) hinges (11 mm dia.) and also for 2 and 3-part hinges; indicate dimensions x and y or the profile.

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

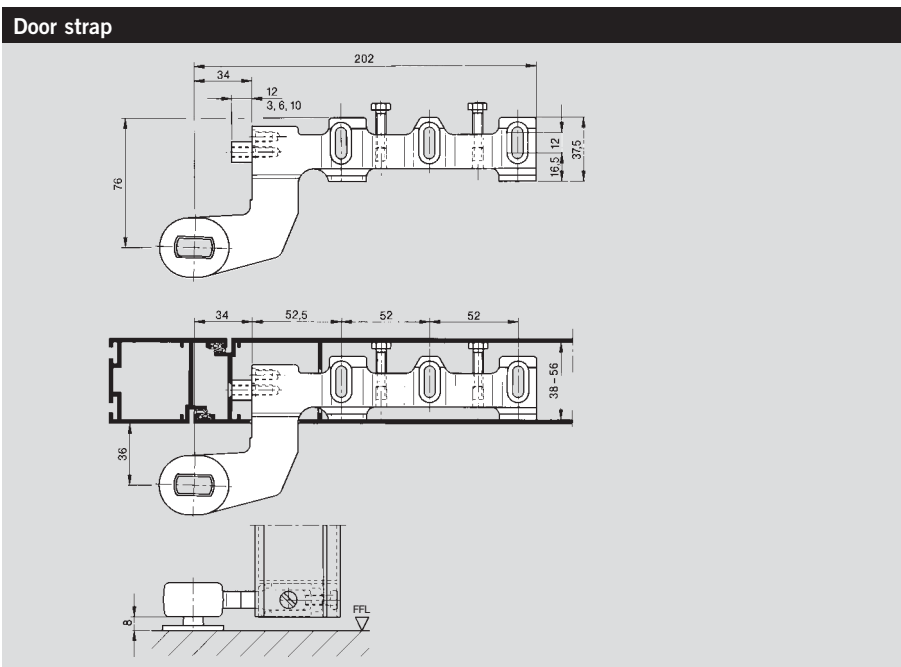


Door strap

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

Cover caps

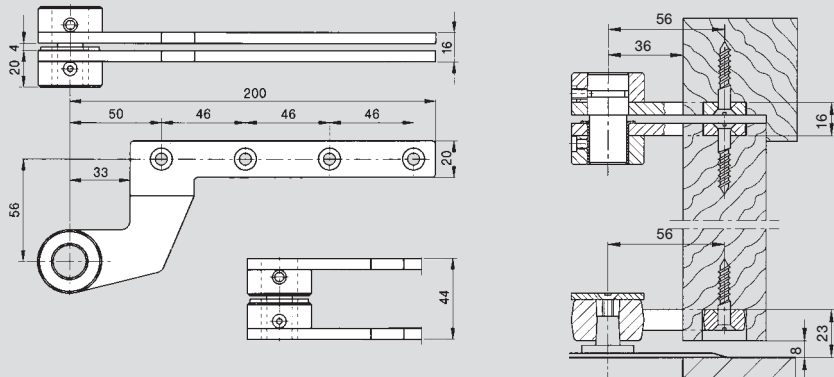
See pages 4 and 5,
Art. No. 7481 and 7482.



For flush-closing doors

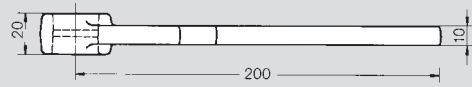
Top centres

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



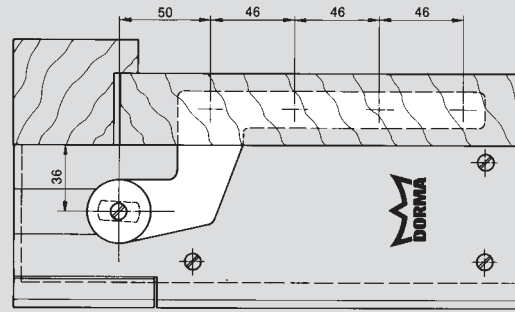
Door strap

Art. No. 7411/56
Drop forged steel, zinc-plated.
Order No. 45010003



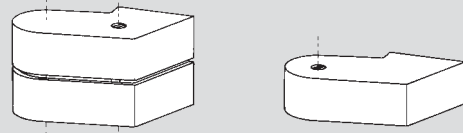
Top washer for door strap

Art. No. 7432
Stainless steel
Order No. 45090030



Cover caps

for top centres and door strap

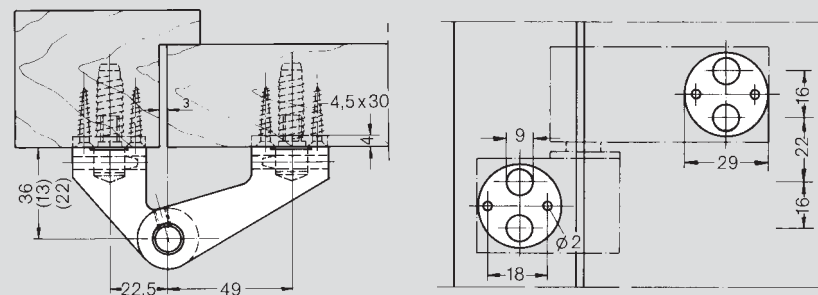


Type	Order No. for cover caps		
	for top centres, two parts	for door strap, single	
		LH (ISO 6)	RH (ISO 5)
Die cast aluminium Art. No. 7483/7481 Mill finish	45500301	45055300	45051300
Silver (EV 1, Euras C-0)	45500401	45055400	45051400
Dark bronze (DB 4, Euras C-34)	45500701	45055700	45051700

LM pivot hinges with fixing for non-rebated timber doors

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

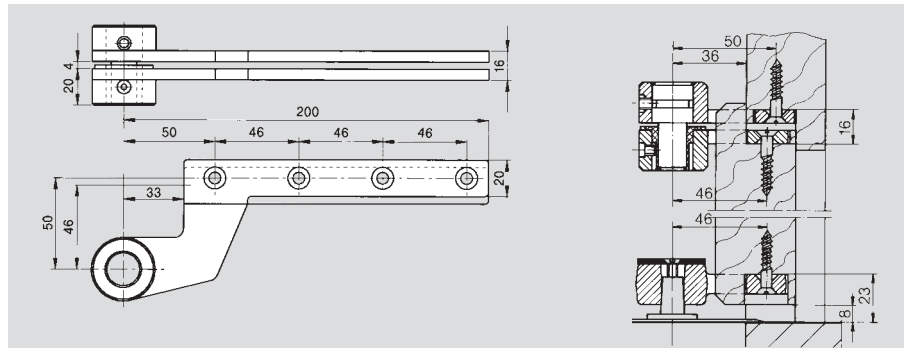
For order number, see LM hinge brochure



For rebated doors

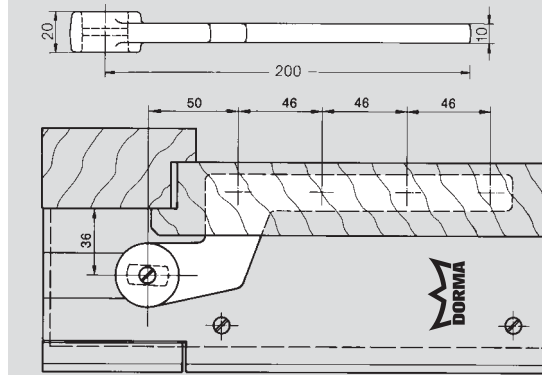
Top centres

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

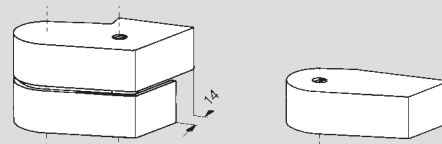


Top washer for door strap

Art. No. 7432
Stainless steel
Order No. 45090030

Cover caps

for top centres and door strap



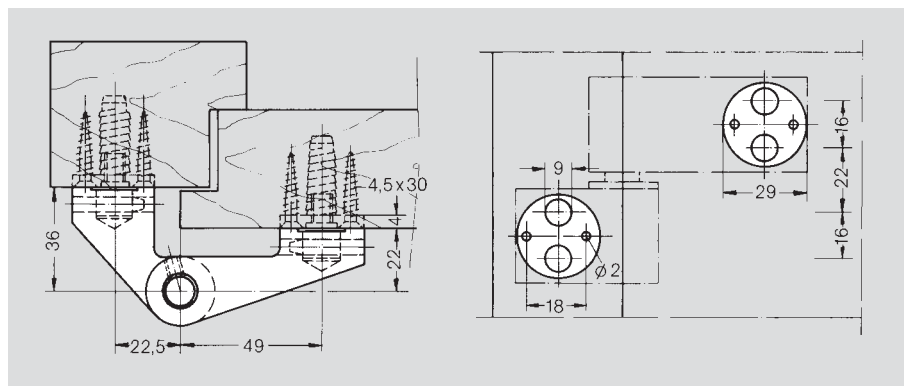
Type	Order No. for cover caps			
	for top centres, two parts		for door strap, single	
	LH (ISO 6)	RH (ISO 5)	LH (ISO 6)	RH (ISO 5)
Die cast aluminium Art. No. 7484/7482 Mill finish	45505300	45501300	45055301	45051301
Silver (EV 1, Euras C-0)	45505400	45501400	45055401	45051401
Dark bronze (DB 4, Euras C-34)	45505700	45501700	45055701	45051701

LM pivot hinges with fixing for over-rebated timber doors

For order number, see LM hinge brochure

Drill jig for flush closing and over-rebated doors

Dimension x = 50.5 mm,
Dimension y = 3 mm

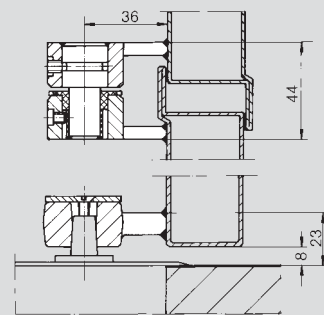
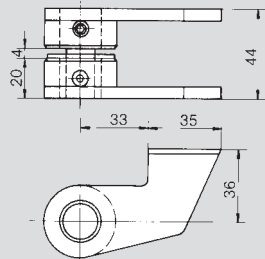


For single action steel doors

Weld-on accessories

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

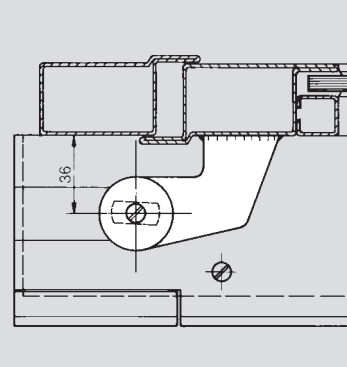
Art. No. 7431
Drop forged steel, primed
Order No. 45010005

Top washer for door strap

Art. No. 7432
Stainless steel
Order No. 45090030

Cover caps

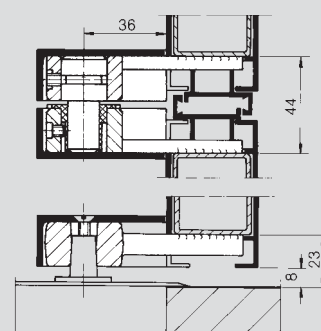
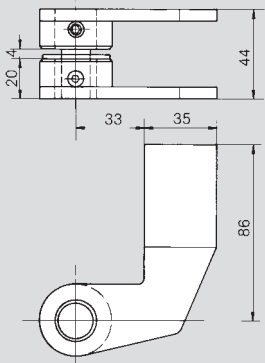
see pages 4 and 5



Weld-on accessories

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

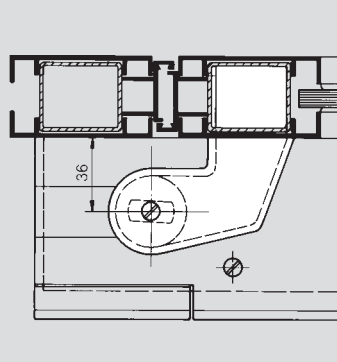
Art. No. 7441
Drop forged steel, primed
Order No. 45010007

Top washer for door strap

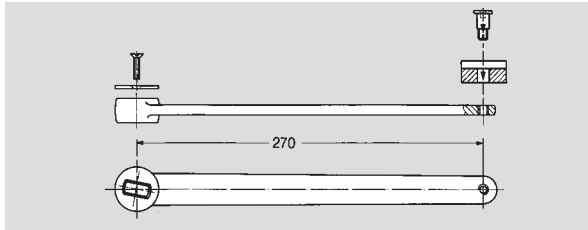
Art. No. 7432
Stainless steel
Order No. 45090030

Cover caps

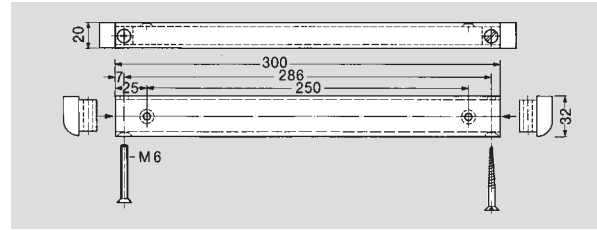
see pages 4 and 5



For butt hung doors



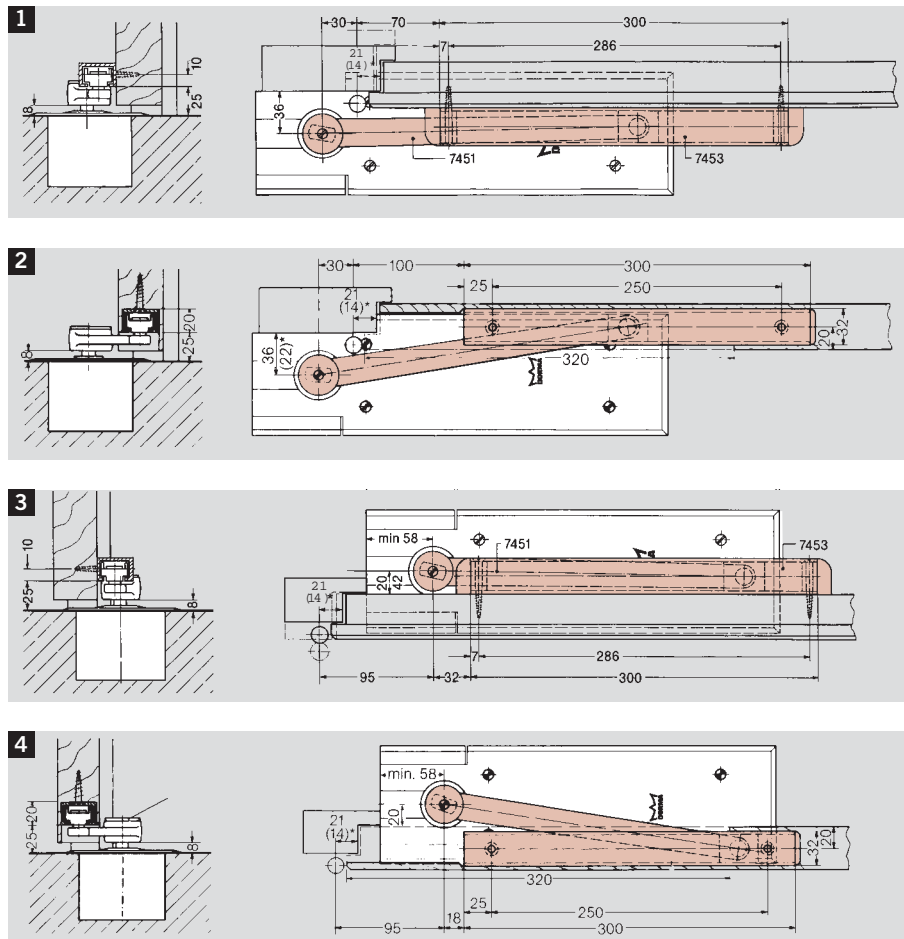
Swing lever Art. No. 7451 N
Drop forged steel, including top washer 7432.
Order No. 45090070



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

Example installations

()* = Offset for non-rebated doors



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

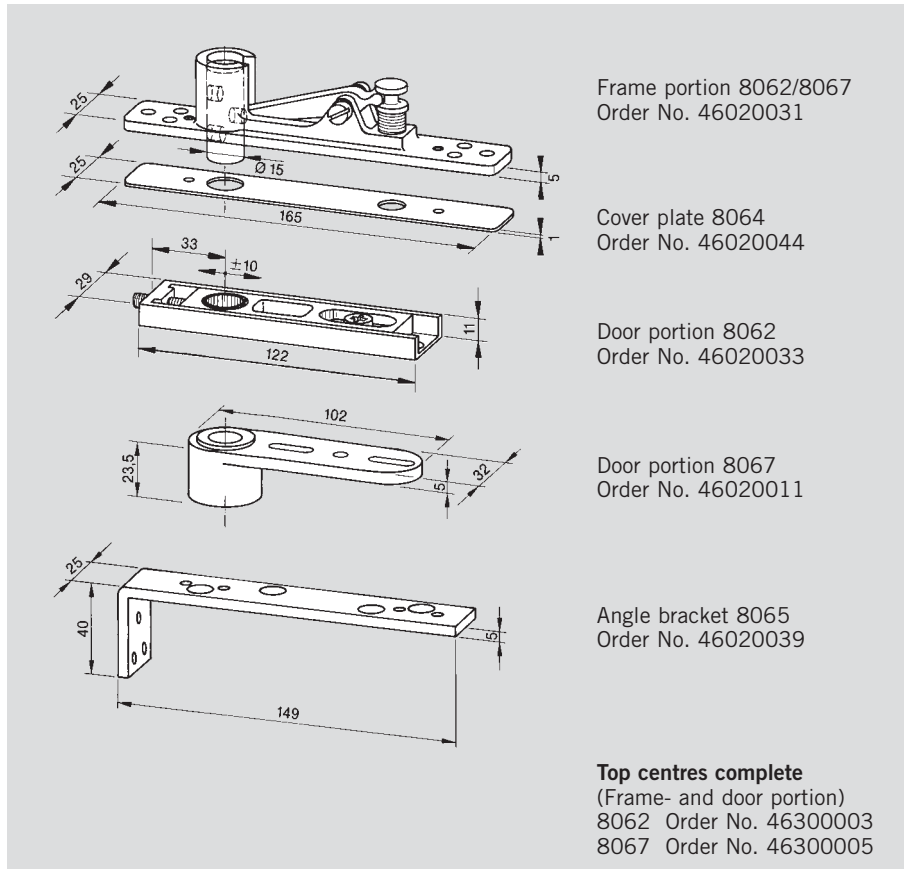
1) Set door stop at maximum door opening. Owing to the differing pivot points of the floor spring and hinges, the backcheck is activated earlier, i.e. at an opening angle less than 85°. This type of installation reduces the floor spring's power. To minimise this effect, make sure that the door is correctly hung and free-running on its hinges. Detailed installation drawing available on request.

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

For steel, aluminium and timber doors

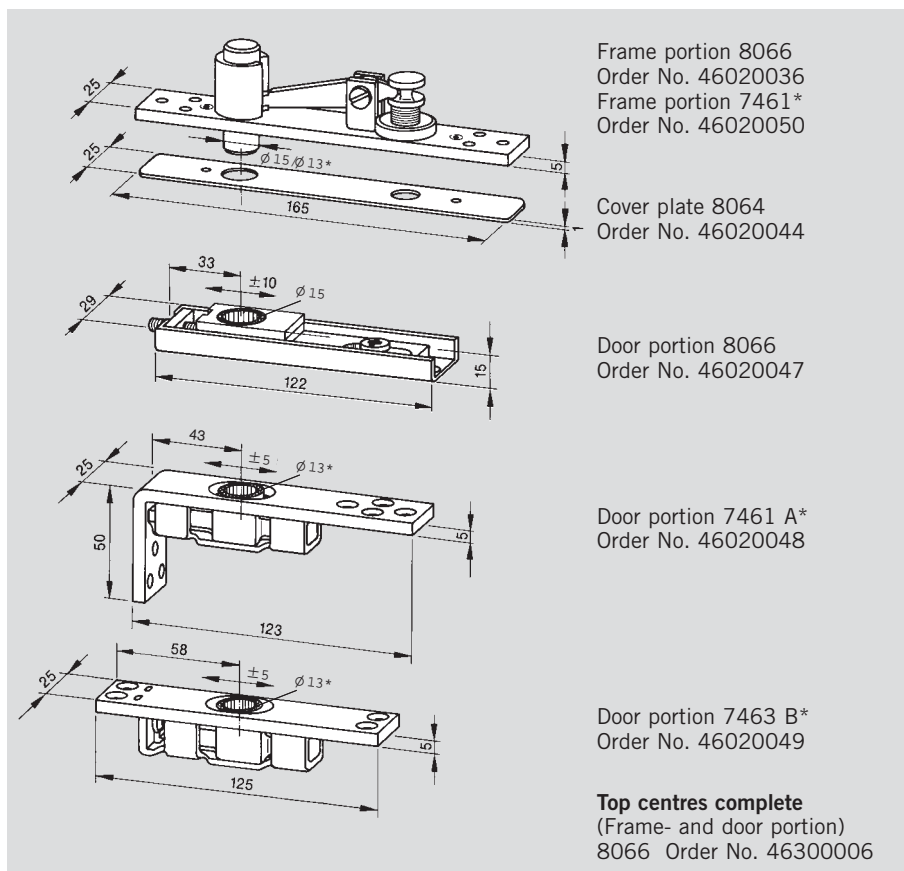
Adjustable top centres (die cast aluminium)

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 or 20 mm.



Adjustable top centres (steel)

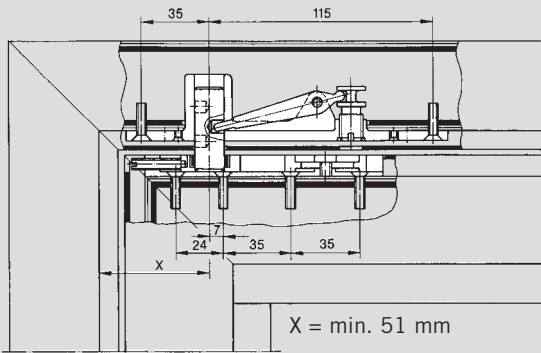
comprising an frame portion with adjustable pin for deep profiles up to max. 16 mm, and door portion with needle bearing. For deeper profiles, the top centre assembly can be supplied with pins extended by 10 mm or 20 mm.



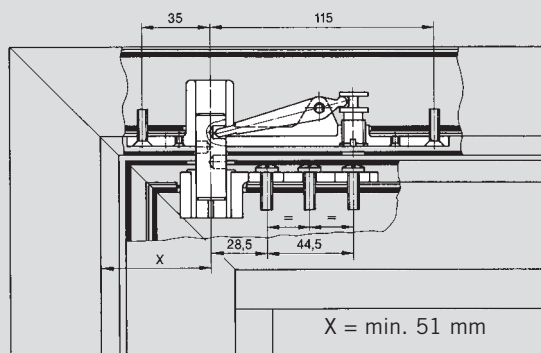
* For door portions 7461 A and 7463 B, use frame portion 7461 with 13 mm dia. pin.

Typical installations

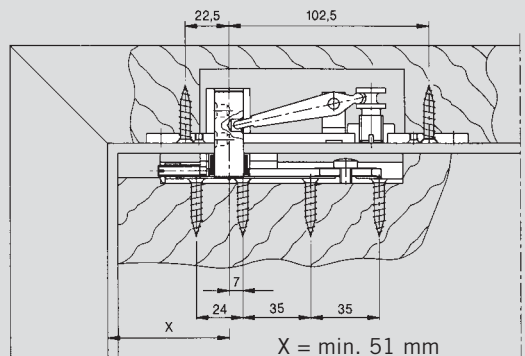
for aluminium doors **Top centre 8062**



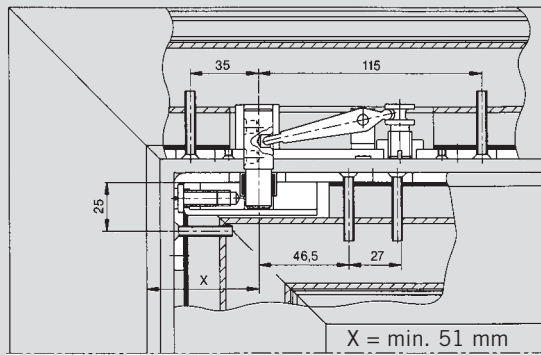
for aluminium doors **Top centre 8067**



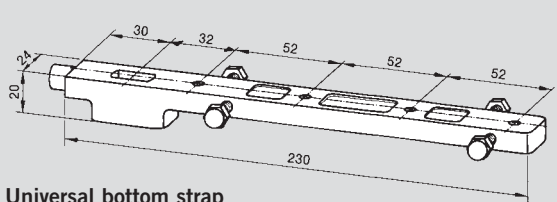
for timber doors **Top centre 8066**



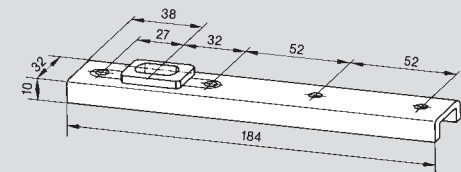
for steel doors **Top centre 7461**



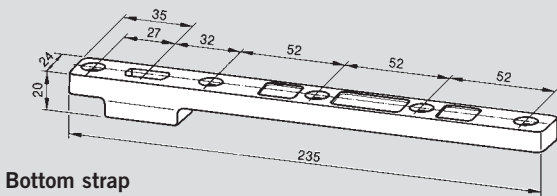
Bottom straps



Universal bottom strap
 Art. No. 7422
 Drop forged steel, zinc-plated; adjustable to various frame profiles.
 Order No. 46010002

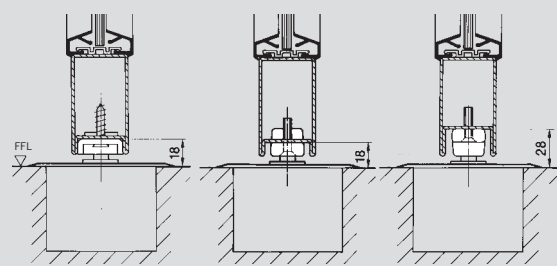


Bottom strap
 Art. No. 8021
 Zinc-plated steel; for door weights up to 100 kg.
 Order No. 45010410

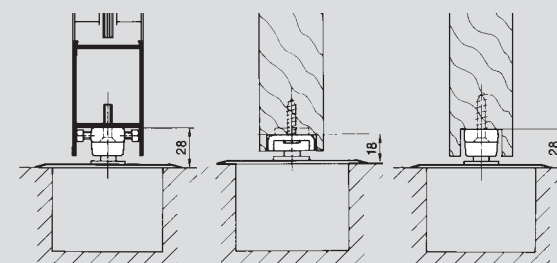


Bottom strap
 Art. No. 7421
 Drop forged steel, zinc-plated for door weights up to 300 kg.
 Order No. 46010001

Typical installations



Bottom strap 8021 **Bottom strap 7421 with milled hole** **Bottom strap 7421 surface fixed**



Bottom strap 7422 **Bottom strap 8021** **Bottom strap 7421**

Pivot bearings

Floor pivot bearing

Floor pivot bearing

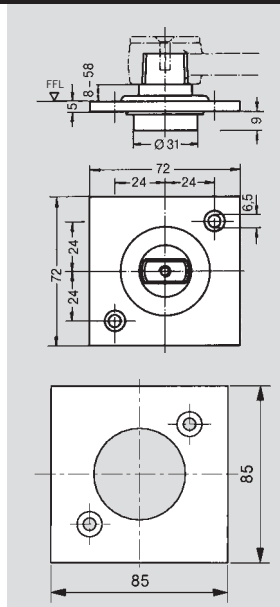
Art. No. 7471 K
with thrust roller bearing,
load capacity max. 200 kg.
Order No. 45070001

Also available to special
order with extended spindles
in increments of 5 mm up
to max. 50 mm.

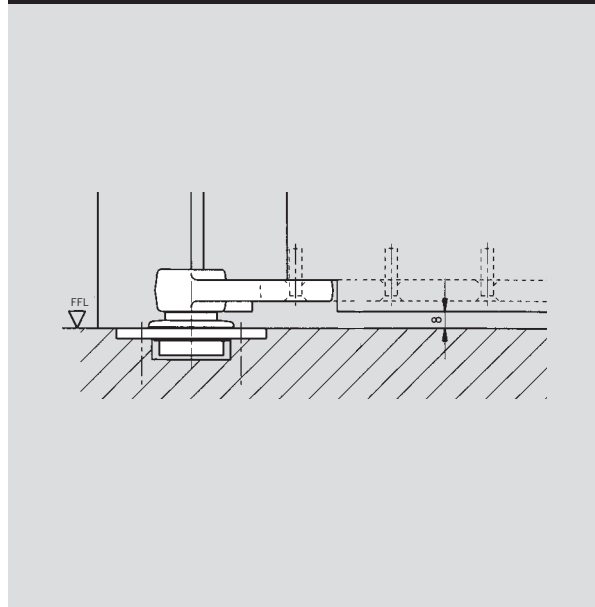
Art. No. 7471 AX
with angular contact roller
bearing, load capacity
max. 300 kg.
Order No. 45070002

Cover plate

7471 K/AX



Typical installation



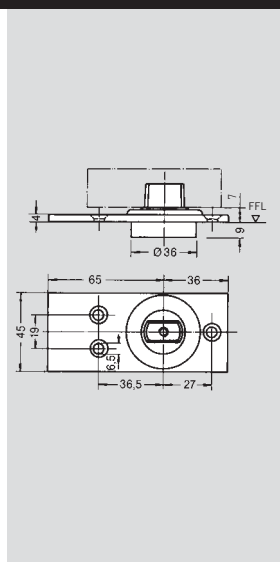
Floor pivot bearing

Floor pivot bearing

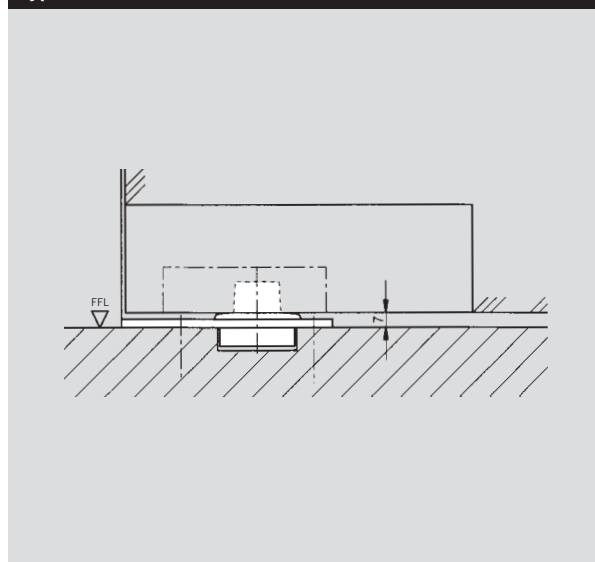
Art. No. 7475 AX
with angular contact roller
bearing, load capacity
max. 300 kg.
Order No. 45070003

Also available in stainless
steel.

Art. No. 8560 GE
Order No. 65540059



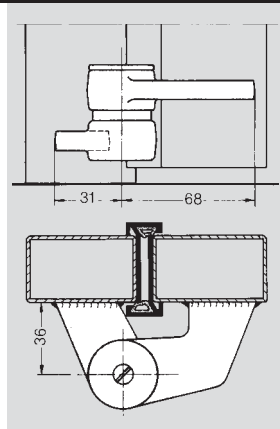
Typical installation



Weld-on hinge

Weld-on hinge

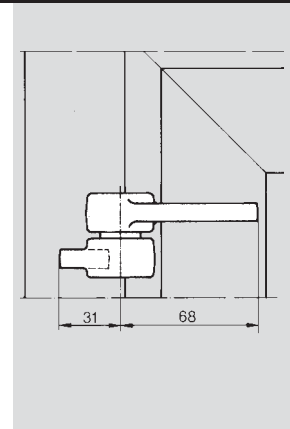
Art. No. 7472 K
with thrust roller bearing,
load capacity max. 200 kg,
and door strap 7431
(see page 6) non-handed,
bearing can be inserted from
either side.
Order No. 45070011



Weld-on hinge

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



Weld-on pivot bearing

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:

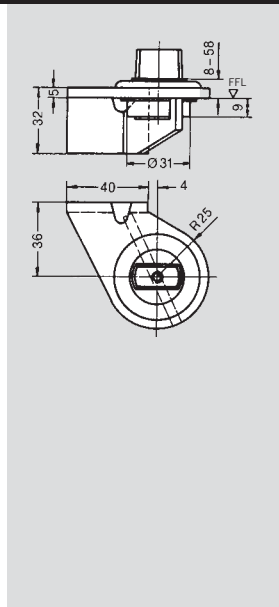
Order No. 45075007

RH (ISO 5) door:

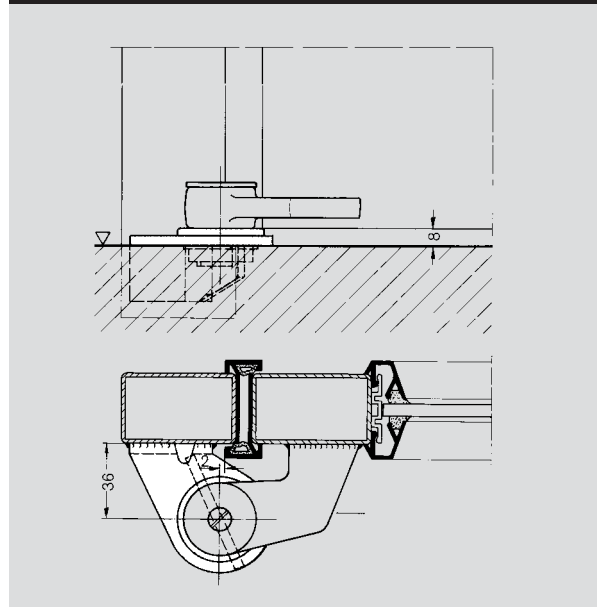
Order No. 45071007

AX model available on request
(300 kg capacity)

Also available to special
order with extended spindles
in increments of 5 mm up
to max. 50 mm.



Typical installation



Screw-on pivot bearing

Screw-on pivot bearing

Art. No. 7473 K
with thrust roller bearing,
load capacity max. 200 kg,
and reinforcement plate
supplied loose.

Suitable for timber, steel
and aluminium doors.

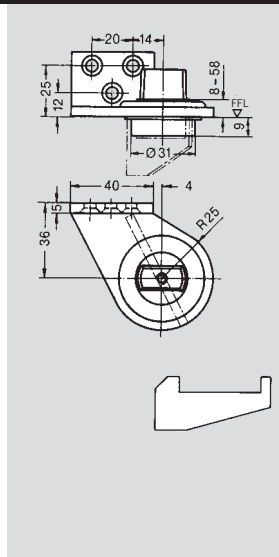
LH (ISO 6) door:

Order No. 45075005

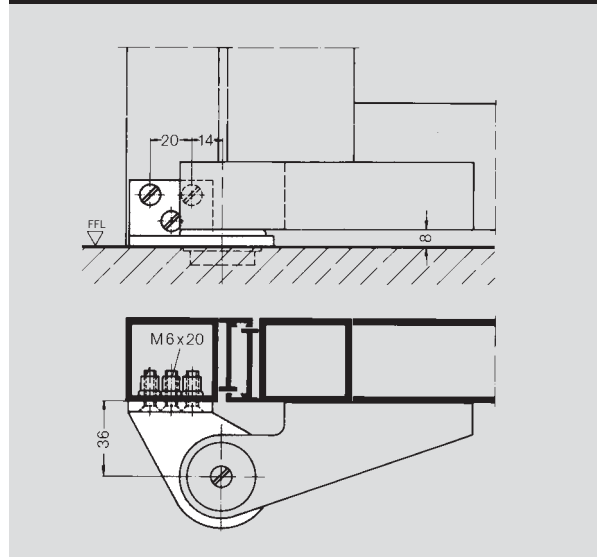
RH (ISO 5) door:

Order No. 45071005

Also available to special
order with extended spindles
in increments of 5 mm up
to max. 50 mm.



Typical installation

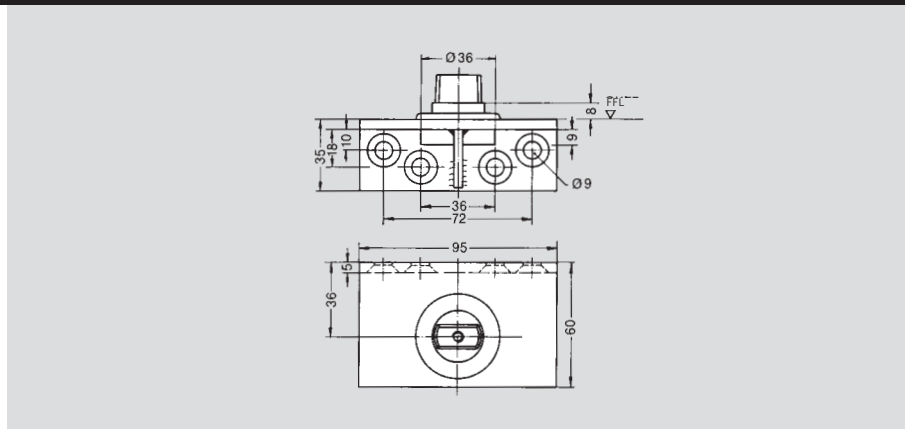


Screw-on pivot bearing

Screw-on pivot bearing

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

Order No. 45070012



Spindle inserts

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

Length in mm	Order No.
Standard	45200401
+ 5	45200402
+ 7.5	45200403
+ 10	45200404
+ 12.5	45200419
+ 15	45200405
+ 20	45200406
+ 25	45200407
+ 28	45200414
+ 30	45200408
+ 35	45200409
+ 40	45200410
+ 45	45200411
+ 50	45200412

Special types available on request:

e.g. flat-tapered with 3° offset.
Square spindle and other spindle inserts for non DORMA accessories.

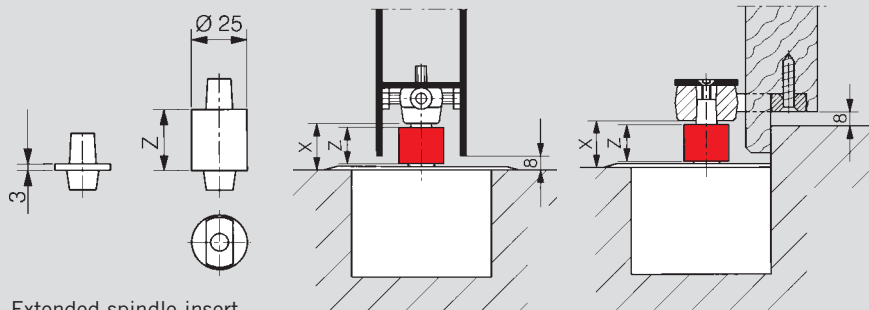
Sealing compound

DORMA sealing compound 2300
0.5 kg
Order No. 45090011

Cement boxes

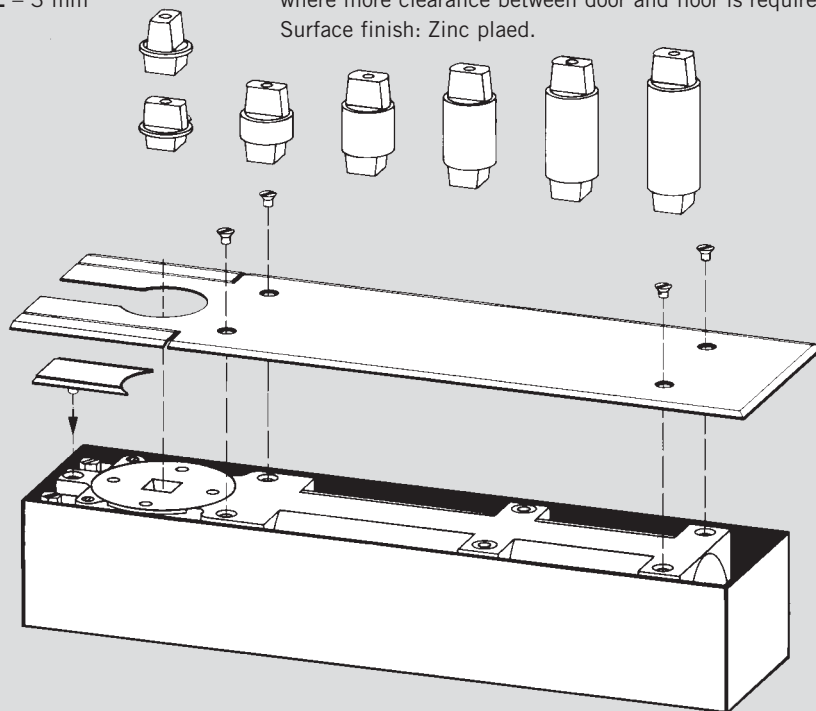
for floor springs	Order No.
DORMA BTS 80	45090056
DORMA BTS 75	45090057
DORMA BTS 84	81000001

Typical applications



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



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DORMA Drive, Drawer AC
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Phone: +45 44/54 30 00
Fax: +45 44/94 95 04

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DORMA Trading Park
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Fax: +44 208/5 58 61 22



4 021 22 612 85 82 4

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

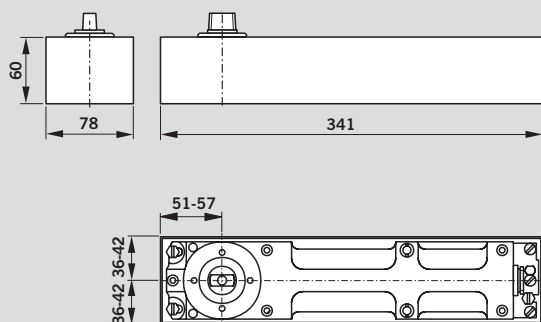
- Constant, temperature-independent closing cycle.
- Highly efficient mechanism gives maximum user convenience.

Data and features		BTS 80			BTS 75 V	
		3	4	6	1-4	
Spring strength (EN)		3	4	6	1-4	
Spring strength adjustment		-	-	-	●	
Standard and external doors ¹⁾	≤ 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 adjustable by valve	175° – 0°				●	
	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 marking for building products					In preparation	

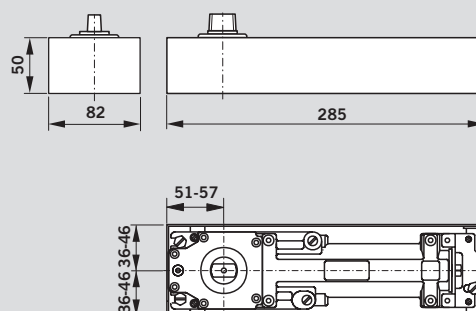
● yes – no

¹⁾ For applications involving particularly high or heavy loads, and doors which have to close against wind or draught conditions, the next larger spring strength should be selected.

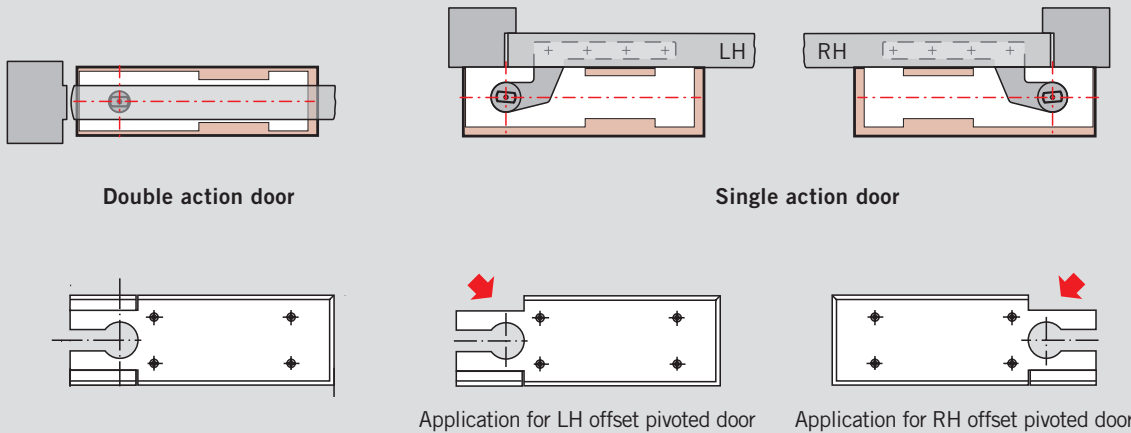
BTS 80



BTS 75 V



Application and Installation

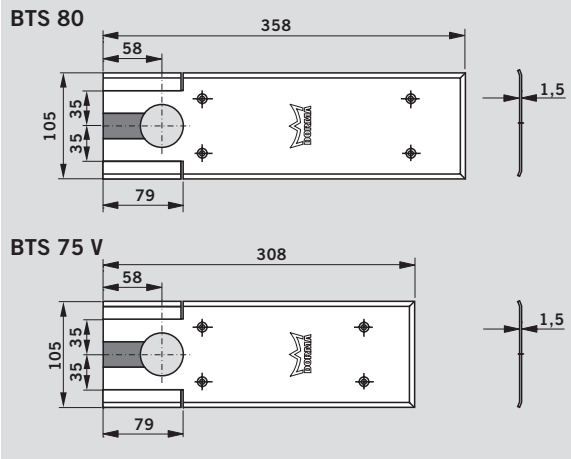


Accessories

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.

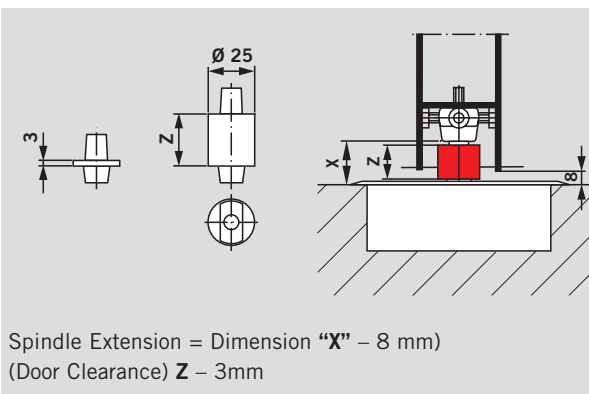
The universal cover plate is available in stainless steel or satin brass (material thickness 1.5 mm).



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.
















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

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  45090059	
															
		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
Including cement box and standard spindle															
EN 3 80120000	EN 1 – 4 61701000	●	#	#	#	#	#	#	#	#	#	#	#	#	#
EN 4 80110000	EN 1 – 4 with hold-open at 90° 61701200	●	#	#	#	#	#	#	#	#	#	#	#	#	#
EN 6 80130000	EN 1 – 4 with hold-open at 105° 61701300	●	#	#	#	#	#	#	#	#	#	#	#	#	#
Including cement box without spindle															
EN 3 80120001	EN 1 – 4 61701001	#	#	#	#	#	#	#	#	#	#	#	#	#	#
EN 4 80110001	EN 1 – 4 with hold-open at 90° 61701201	#	#	#	#	#	#	#	#	#	#	#	#	#	#
EN 6 80130001	EN 1 – 4 with hold-open at 105° 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.

Accessories

- Spindle
 - standard
 - ... mm extension
 - special design...

- Universal cover plate (1.5 mm thick)
 - stainless steel
 - satin brass

- Sealing compound

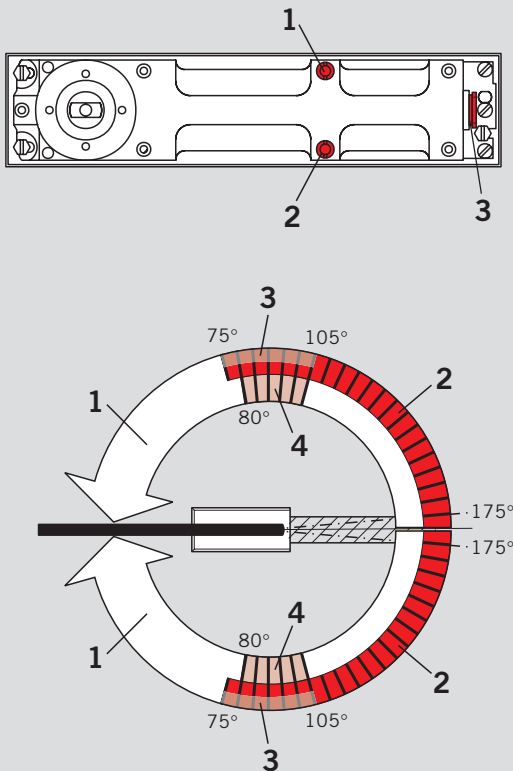
Make: DORMA BTS 75 V

Models

- With spindle
- Without spindle

- Fixed hold-open at 90°
- Fixed hold-open at 105°

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°.

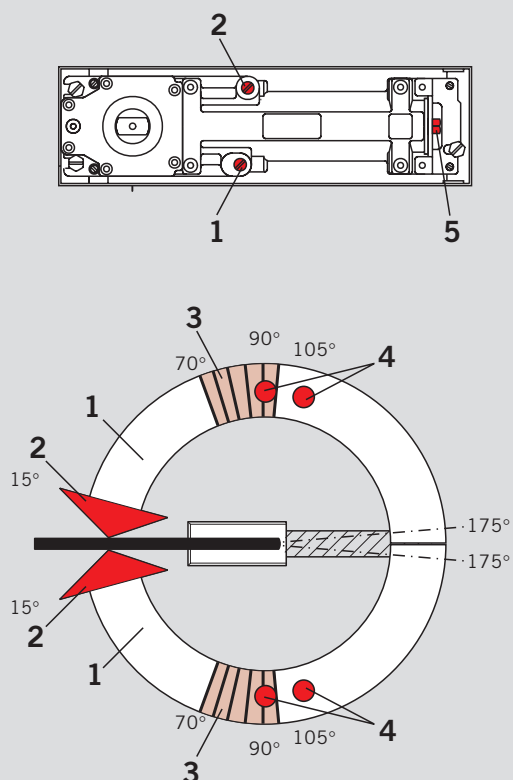
Backcheck

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.

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.

Backcheck

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

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.



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

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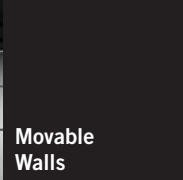
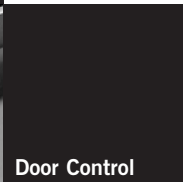
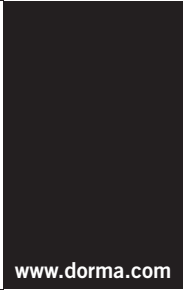
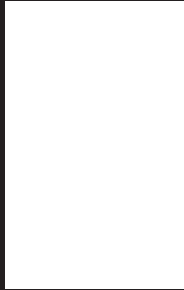
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