

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 F	BTS80 BFE
Spring Sizes	2,3	5U	*
Non-handed unit suitable for both single- and double-acting doors	•	-	•
Controlled closing with two adjustable valves	175°–70° 70°–0°	180°–0° 7°–0°	175°–70° 70°–0°
Mechanical backcheck	•	•	-
Delayed action	•	-	•
Multipoint hold open between 75° and 175°	•	-	•

• yes - no * Meets 8.5 lb maximum opening force on 3'-0" wide exterior doors.

Size Selection Chart BTS80/BTS80 F

BTS80	BTS80 F	Exterior	Interior
Size 2	Size 5U	2'6"–3'6"	2'6"–4'0"
Size 3	—	3'6"–4'0"	4'0"–4'6"

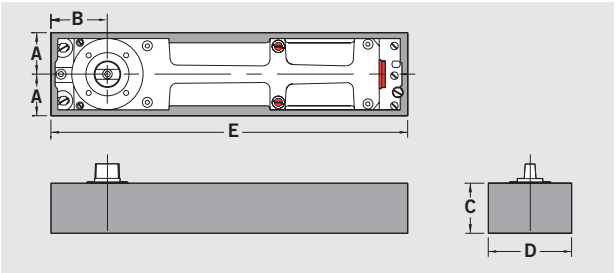
Maximum door widths and recommended sizes shown are for average conditions. If there are unusual site conditions, e.g. high or exceptionally heavy doors or wind pressure, the next stronger spring size should be selected.

Door Size Chart BTS80 BFE

BTS80 BFE	Exterior
	3'0"

– Meets 8.5 lb maximum opening force on 3'-0" wide exterior doors.

NOTE: Although DORMA BTS80 BFE Series closers comply with barrier-free opening force restrictions, it can not be guaranteed that adequate control will be obtained while complying with barrier-free opening force restrictions.



	A	B	C	D	E
Inches	1-13/32–1-21/32	2–2-1/4	2-3/8	3-1/8	13-7/16
Millimeters	36–42	51–57	60	78	341

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 A156.4 for grade 1 closers. The BTS80 BFE meets the opening force requirements of ANSI A117.1 for exterior barrier-free accessibility.

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 75º and 175º. The closers will have selectable delayed action to allow delayed closing from 175º to 75º. The closers will have mechanical backcheck at approximately 70º. Dual valve adjustment will provide controlled closing speed from approximately 175º 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:
Floor-concealed door closers for all exterior barrier-free entrances shall be DORMA BTS80 BFE. The closers shall be capable of maintaining a maximum opening force of 8.5 pounds or less through 90º of door swing. The closers will have selectable delayed action standard, and selectable multipoint hold open will also be standard. The closers should be used with a 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 180º. A sweep range of 180º–0º and latch range of 7º–0º 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.

How to Order BTS80 Series		Example
Closer	BTS80 BTS80 F **(specify hand)** BTS80 BFE (see **BTS Applications and Accessories** brochure for specific handing of accessories and packages)	BTS80 BTS80 F (LH) BTS80 BFE
Package	Center-pivoted double-acting aluminum door and frame	BTS80/A
Size	Size 3	BTS80/A Sz 3
Accessories	Specify the accessory (see **BTS Applications and Accessories** 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 BFE (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.**

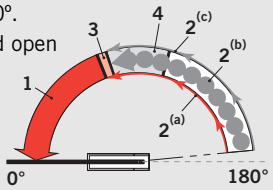
BTS80

Technical Details:

- Closer body is non-handed.
- Mechanical backcheck at approximately 70°.
- 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°.

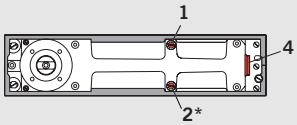
1 Valve adjustment 70°–0°.

2 [a]Valve adjustment 175°–70°.
[b]Selectable multipoint hold open between 75° and 175°.
[c]Selectable delayed action from 175° to 75°.



3 Mechanical backcheck at approximately 70°.

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

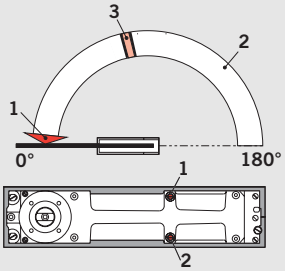
Technical Details:

- 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°.



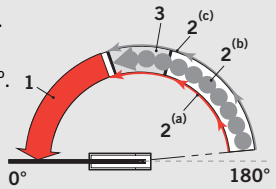
BTS80 BFE

Technical Details:

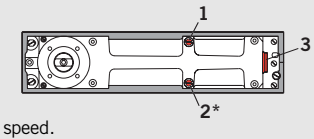
- Closer body is non-handed.
- Designed to meet 8.5 pound maximum opening force requirements for exterior barrier-free doors.
- Dual thermostatic control valves combined with special hydraulic fluid provide controlled closing from 175°.
- Selectable multipoint hold open between approximately 75° and 175°.
- 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.
- Adjustment for start of hold open range or when delayed action releases. Adjustable between 75° and 105°.
- Mechanical backcheck eliminated to meet the barrier-free opening force requirement through 90° of opening.

1 Valve adjustment 70°–0°.

2 [a]Valve adjustment 175°–70°.
[b]Selectable multipoint hold open between 75° and 175°.
[c]Selectable delayed action from 175° to 75°.



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

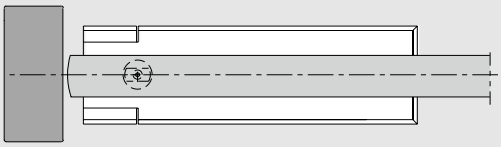


* Clockwise turns create a longer delay time with a slower closing speed. Turning valve completely clockwise creates hold open and eliminates delayed action.

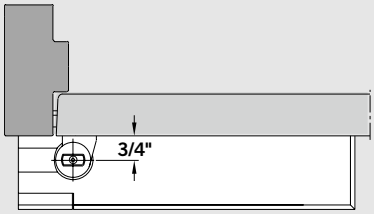
Applications

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.

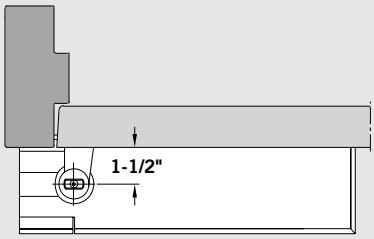
Center Hung Packages (A,B,G,H)



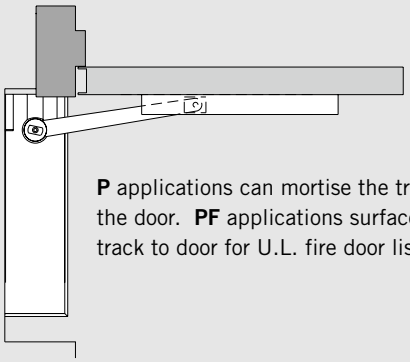
3/4" Offset Packages (D,E,F,L,L-E,L-F)



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

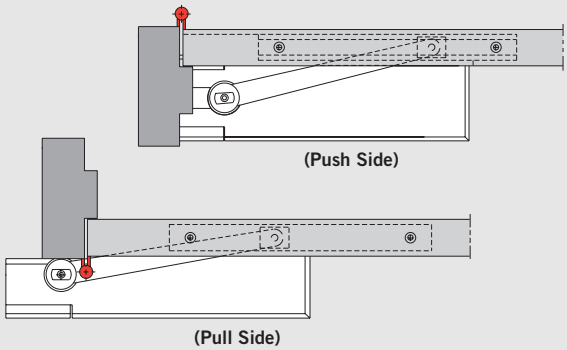


Pocket Door Packages (P)
Pocket Fire Door Packages (PF)



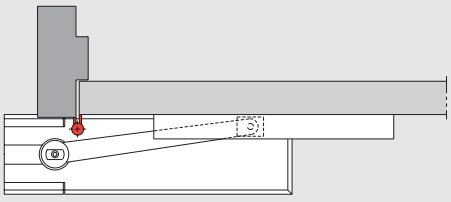
P applications can mortise the track in the door. **PF** applications surface apply track to door for U.L. fire door listing.

Independent Hung Packages (I)



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

Independent Hung Fire Door Packages (IF)



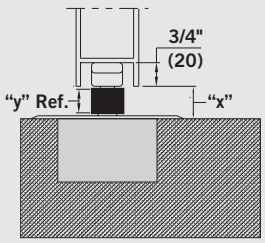
Track is surface applied to the door for U.L. fire door listing.

Spindles

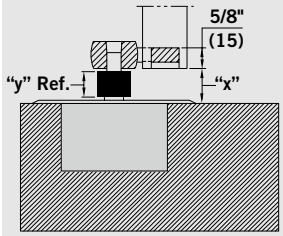
Spindle No.	Dimension "x" (Door Clearance)	3° Pre-load Spindle No.	Dimension "y"
74003	5/16"	80003	1/8"
74005	1/2"	80005	5/16"
74007	5/8"	-	7/16"
(STD) 74010	3/4"	80010	1/2"
74012	13/16"	-	5/8"
74015	7/8"	80015	11/16"
74020	1-1/8"	80020	7/8"
74025	1-5/16"	80025	1"
74030	1-1/2"	80030	1-5/16"
74035	1-11/16"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

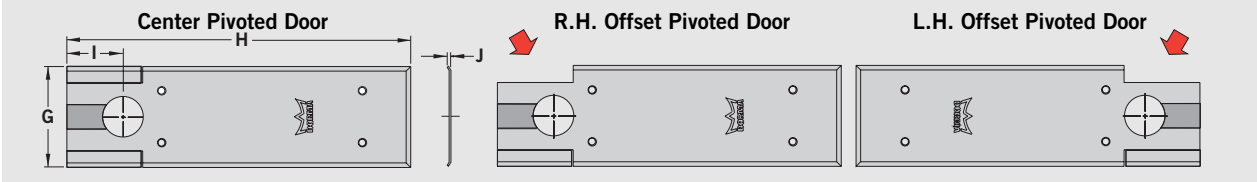


Extended Spindle Insert
NOTE: Closer and arm must be installed per template for door clearances shown to be valid.
Closers with extended spindle inserts are used with thresholds, carpeted floors, or orterrazzo pans or in cases where more clearance between door and floor is required. All spindles are 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



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