



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.

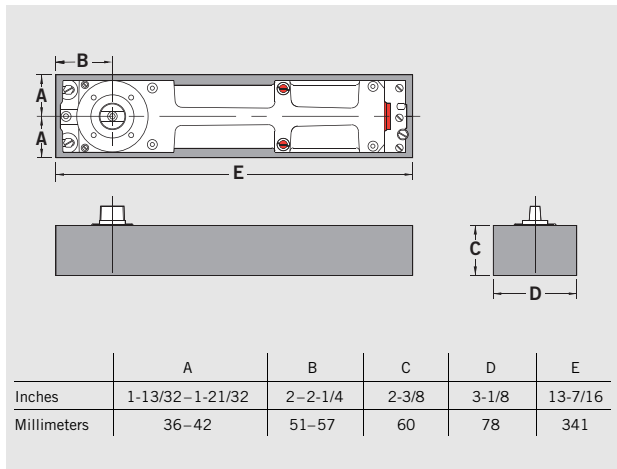
Features	BTS80	BTS80	BTS80 F
Spring Sizes	3	4, 6	5
Non-handed unit suitable for both single- and double-acting doors	•	•	-
Controlled closing with two adjustable valves	175°-70° 70°-0°	175°-70° 70°-0°	180°-0° 7°-0°
Mechanical backcheck	-	•	•
Delayed action	•	•	-
Multipoint hold open between 75° and 175°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

• 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 (specify hand) (see BTS Applications and Accessories 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 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 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".

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°.

- 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.**

The diagram illustrates the internal valve mechanism of the BTS80 closer. It shows a semi-circular valve assembly with a red arrow indicating the direction of door movement from 0° to 180°. Key components are labeled: 1 (valve adjustment), 2 (selectable multipoint hold open), 3 (mechanical backcheck), and 4 (start of hold open/end of delayed action range adjustment). A detailed view of the valve assembly shows the internal components and the adjustment points.

- 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° (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°.

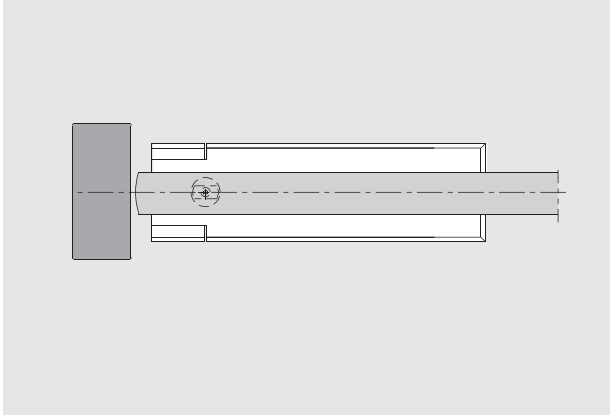
The diagram illustrates the internal valve mechanism of the BTS80 F fire door closer. It shows a semi-circular valve assembly with a red arrow indicating the direction of door movement from 0° to 180°. Key components are labeled: 1 (valve adjustment), 2 (valve adjustment), and 3 (mechanical backcheck). A detailed view of the valve assembly shows the internal components and the adjustment points.

- 1 Valve adjustment 7°–0°.
- 2 Valve adjustment 180°–0°.
- 3 Mechanical backcheck at approximately 70°.

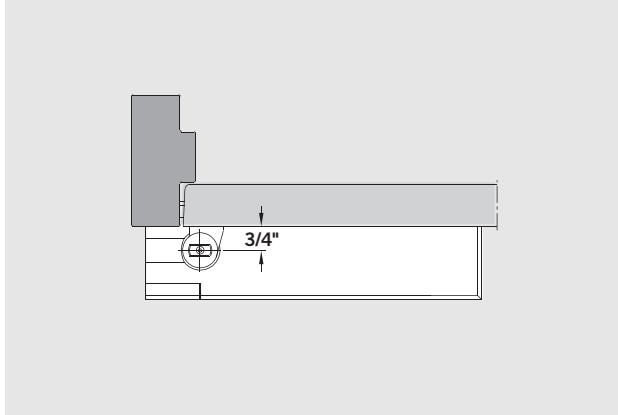
Applications

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.

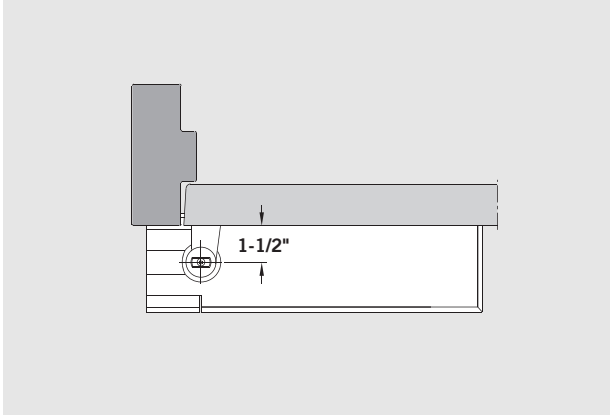
Center Hung Packages (A,B,G,H)



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

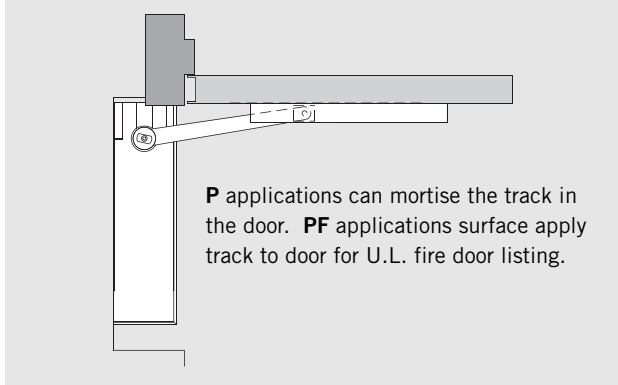


1-1/2" Offset Packages (C,C-E,C-F)



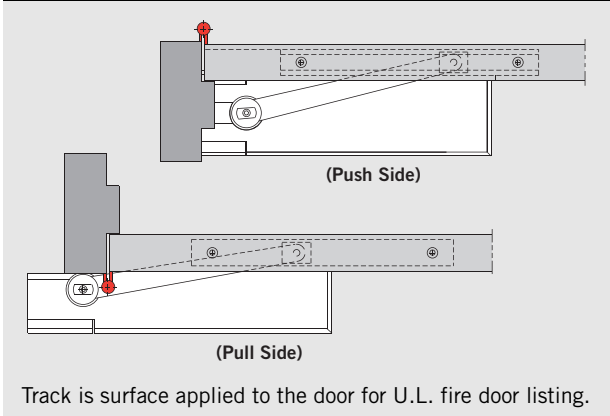
Pocket Door Packages (P)

Pocket Fire Door Packages (PF)



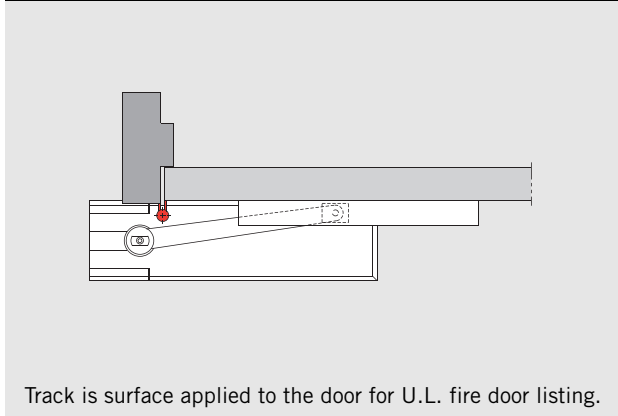
P applications can mortise the track in the door. **PF** applications surface apply track to door for U.L. fire door listing.

Independent Hung Packages (I)



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

Independent Hung Fire Door Packages (IF)

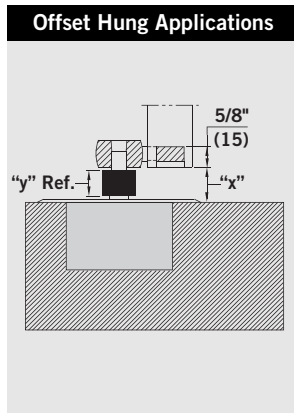
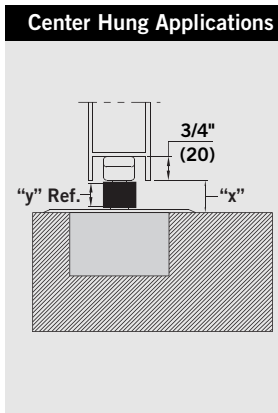


Track is surface applied to the door for U.L. fire door listing.

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 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.



Extended Spindle Insert

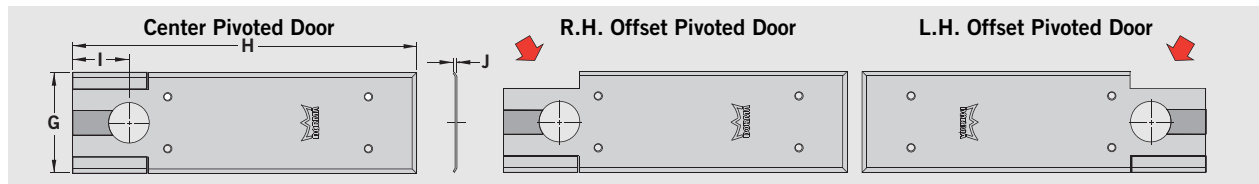
NOTE: Closer and arm must be installed per template for door clearances shown to be valid.

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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