

Surface Applied
Door Closers

# DORMA 8900

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The quality management system at the Reamstown, PA facility is certified to ISO-9001:2000.*

*DORMA Door Controls Inc., dba: DORMA Architectural Hardware



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# The 8900 Series heavy-duty door closers are versatile, durable, reliable, and feature modern styling for institutional or high-traffic commercial applications.

**Long Term Performance:**
- 10 million cycles independently certified.
- TIGHT LOCK® arm tightening.
- Forged steel main arm hub.
- Corrosion-resistant, high-strength, aluminum housing.
- Hardened pinion/piston provide toughness and high-strength.

**Certifications & Warranty:**
- ANSI A156.4 Grade 1 certified.
- U.L. & C.U.L. listed.
- Meets UL10C and UBC 7.2 (1997).
- 8916 meets ANSI A117.1 and ADA for barrier-free accessibility.
- CSFM approved.

**Product Configuration:**
- Non-handed for RH or LH doors.
- Tri-pack (Reg, TJ, PA) standard.
- 8916 meets Size 1 (5 lb opening force) barrier-free ADA adjustability.
- Positioning valve (POS) on front, accessible with closer installed.
- Full adjustment using BC, POS (PA mount), Sweep, and Latch valves.
- Delay valve optional.
- All valves (including POS) are accessible with closer installed.
- Closing force adjustment assured by octagonal housing bore.
- Closing force adjustment halts at either full-on or full-off — no guessing.
- Accurate installation using full-size templates.
- Cover retained by screws passing through cover holes.

| Features | 8916 | 8956 |
|---|---|---|
| Spring size (8916 shipped as size 4) | 1–6 | 5–6 +50% |
| Non-handed | • | • |
| Parallel arm bracket | • | • |
| Full line of specialty function arms and plates | • | • |
| Backcheck positioning adjustment | • | • |
| Controlled closing with two adjustment valves | 180°–15° 15°–0° | 180°–15° 15°–0° |
| Backcheck | • | • |
| Hydraulic delayed action | ○ | ○ |
| Hold open | ○ | ○ |
| SN1 sex nuts for 1-3/4" thick doors included | • | • |
| Self-drilling screws | ○ | ○ |
| Self-tapping screws | ○ | ○ |
| Tamper-resistant TORX screws | ○ | ○ |
| Full cover (plastic) | • | • |
| Full cover (metal) | ○ | ○ |

• standard ○ optional

**Features:**
- Standard Models 8916 and 8956 closers shipped with regular arm, plastic cover, and components required for the three most popular mounting configurations (Reg, TJ, PA).
- Model 8916 closers fully adjustable to meet interior and exterior barrier-free ADA requirements.
- Model 8916 may be used on doors to 48" wide interior (42" wide exterior) and weighing up to 180 lb.
- Model 8956 closers fully adjustable for use on exceptionally wide, tall, or heavy doors.
- Backcheck valve (standard) provides adjustable-intensity hydraulic cushioning and prevents uncontrolled door opening to protect the door and frame.
- POS Backcheck Positioning valve (standard) maintains effective backcheck range on parallel arm applications.
- Tamper-resistant (hex key) valve adjustment with all valves accessible with closer installed on door (standard).
- Full plastic cover standard, full metal cover (FMC) optional.
- Heavy duty, aesthetically pleasing, and easy to adjust steel arm assembly.
- Standard fasteners include separate wood and metal screws.
- SN1 sex nuts for 1-3/4" thick doors included standard.
- 25 year warranty.
- Optional delay valve extends the closing cycle time.
- Arm options include a variety of specialty arms, interchangeable across many DORMA surface closer models.
- A full complement of optional plates and brackets are available for special applications.
- Screw options include self-drilling and tapping screws (DPK89) for steel door and frame applications or self-tapping screws (TPK89) for aluminum door and frame applications.

**Specification:**
The heavy-duty 8900 Series non-handed surface applied closer with adjustable spring power and backcheck positioning adjustment. The 8900 has intensity adjustable hydraulic backcheck that will take effect at approximately 65º. The 8900 has two independent, noncritical adjustment valves to control sweep and latch closing speeds. The backcheck positioning valve maintains an effective backcheck range on parallel arm applications. The 8916 will be available with field adjustable spring power from size 1 to 6 for barrier-free requirements. The 8956 will be adjustable size 5 to 6 +50% additional closing force over the size 6. All 8900 fully adjustable spring force door closers to include an integral design to positively stop adjustment of the spring at the minimum and maximum spring force settings.

**Optional Specifications:**
The 8900 Series closer will have optional delayed action. Delayed action range will be effective from maximum opening to approximately 65º. All 8916 and 8956 SPA, SPAT, and SPAK to have (ABP) Advanced Backcheck Position to advance backcheck to approximately 45º. All 8900 closers to have full metal covers. All 8900 closers to have sex nuts with machine screws for 1-3/8" door (SN2). Closers to have self-drilling screws for steel doors and frames (DPK89). Closers to have self-tapping screws for aluminum doors and frames (TPK89). Closers to have TORX security for all exposed fasteners (TX89).

**REDUCED OPENING FORCE INSTALLATIONS CAUTION:**
Manual door closers, including closers certified to meet BHMA/ANSI A156.4, when installed and adjusted to conform to ADA or other reduced opening force requirements, may not provide sufficient power to reliably close and latch a door.

Refer to catalog for ED800 Low Energy Operator to meet reduced opening force requirements without affecting closing power.

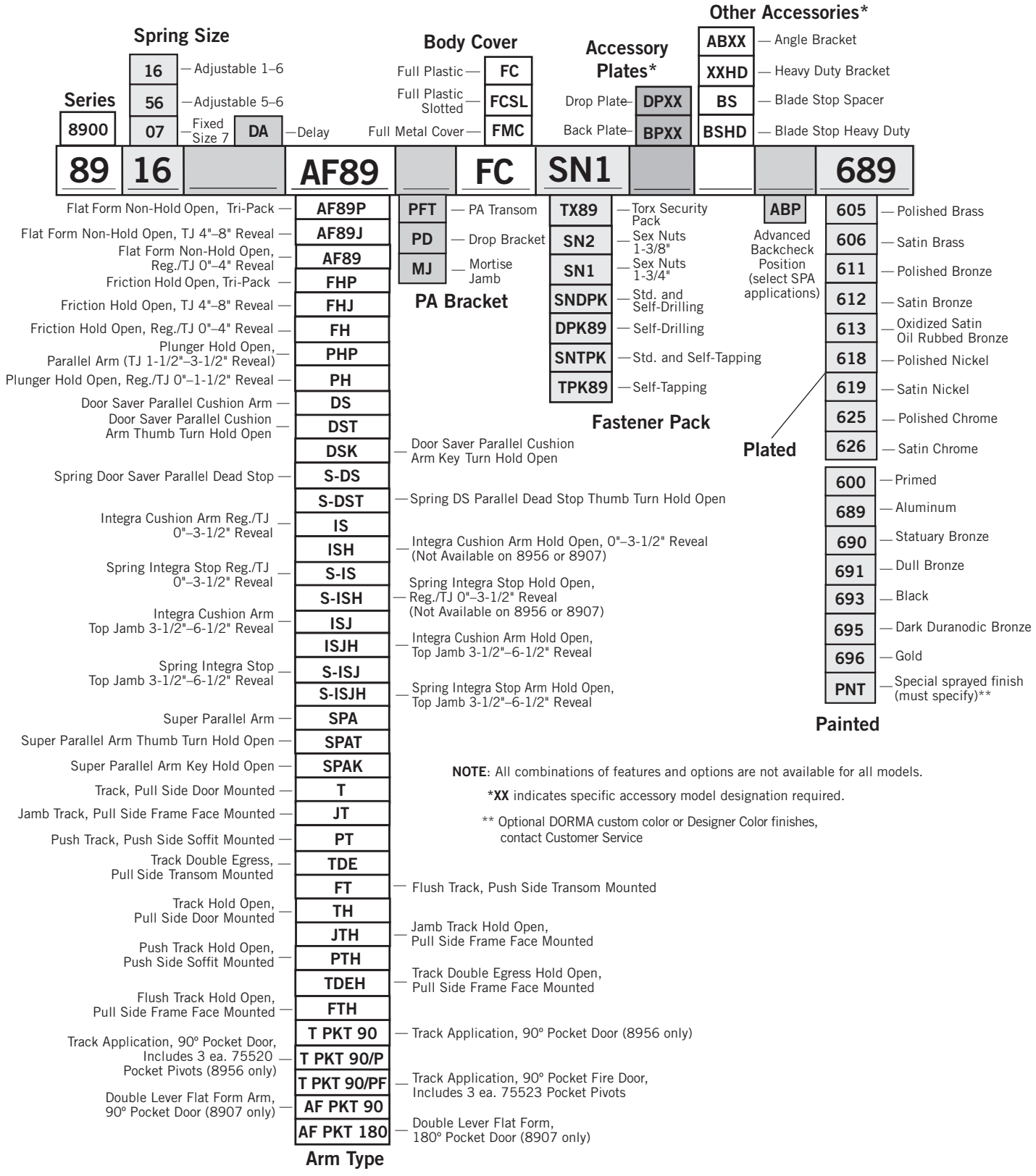
**Finishes:**
**Standard Sprayed Finishes:**
Aluminum: 689.
Bronze: 691 (Dull), 690 (Statuary), or 695 (Dark Duranodic).
Gold: 696.
Black: 693.

**Optional DORMA Custom Color or Designer Color Finishes:**
Contact Customer Service.

**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).

**Warranty:** 25 years.

## How to Order 8900 Series




**NOTE**: All combinations of features and options are not available for all models.

***XX** indicates specific accessory model designation required.

** Optional DORMA custom color or Designer Color finishes, contact Customer Service

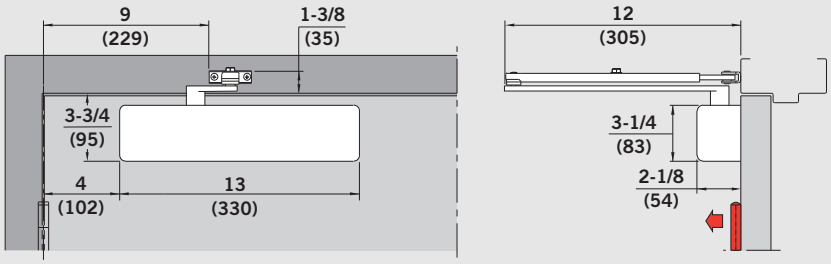
## Technical Drawing Symbols and Notes

- • – Recommended application
- **N/A** – Not applicable/application not recommended
- ♿ – Opening force 5 lb or less on interior doors; 8.5 lb or less on exterior doors where door without closer attached requires 1 lb opening force or less.

**NOTE:** The effective degree at which the backcheck occurs is determined by a **backcheck positioning** adjustment. Specifically designed for parallel arm applications, it advances the backcheck to an approximate range similar to regular and top jamb applications. The backcheck range(s) shown with each parallel arm technical drawing reflects an **on** status. Regular, top jamb, and track ranges reflect an **off** status. The 8900 Series closer is shipped with the backcheck positioning valve on. The (ABP) Advanced Backcheck Position option is available for SPA heavy-duty parallel arm applications to further advance backcheck for extremely abusive environments.

# Regular × Flat Form Arm

**8916 AF89**
**8956 AF89**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 3-3/8".
Minimum door rail to bottom of cover 3-5/8".




### Size Selection Chart

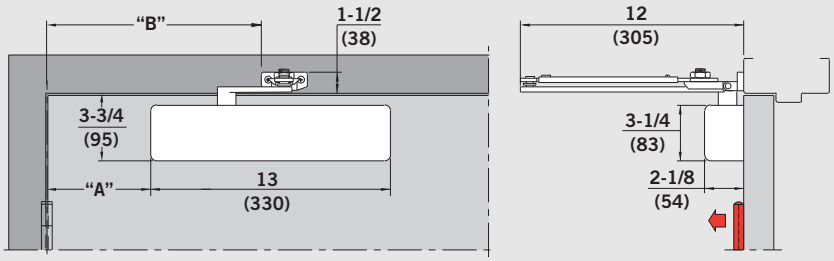
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
|---|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

| MAXIMUM OPENING | APPROX. BACKCHECK* | APPROX. DELAYED ACTION |
|---|---|---|
| 180° | 65°–180° | 180°–65° |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

# Regular × Friction Hold Open

**8916 FH**
**8956 FH**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 3-3/8".
Minimum door rail to bottom of cover 3-5/8".




### Size Selection Chart

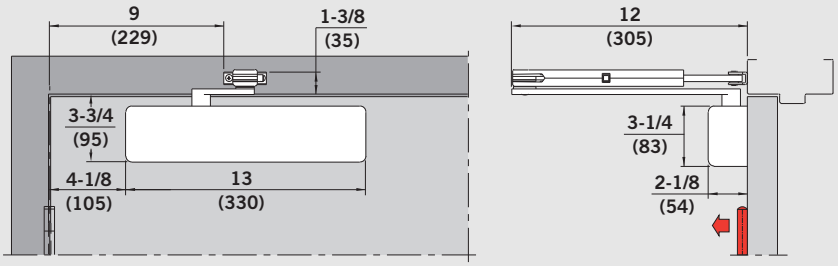
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
|---|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

| TEMPLATE REFERENCE | DIM "A" | DIM "B" | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK* | APPROX. DELAYED ACTION | MINIMUM HOLD OPEN | MAXIMUM HOLD OPEN |
|---|---|---|---|---|---|---|---|
| TO 100° | 5-3/4" (146) | 11-5/8" (295) | 130° | 65°–130° | 90°–65° | 85° | 110° |
| 100° TO 120° | 3-3/4" (95) | 8-7/8" (225) | 180° | 70°–180° | 100°–70° | 105° | 170° |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

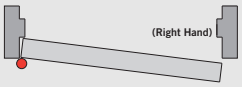
# Regular × Plunger Hold Open

**8916 PH**
**8956 PH**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 3-3/8".
Minimum door rail to bottom of cover 3-5/8".




### Size Selection Chart

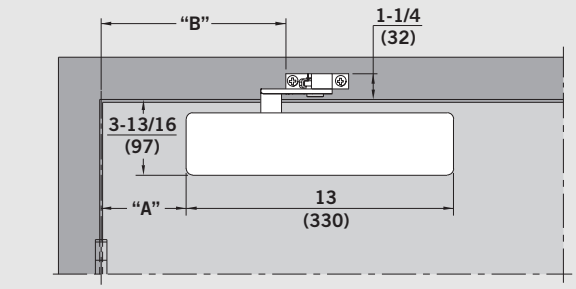
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
|---|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

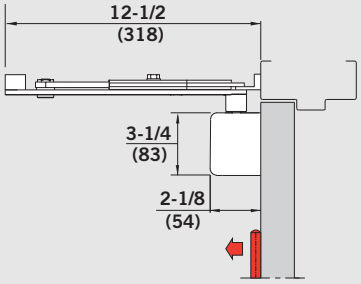
| MAXIMUM OPENING | APPROX. BACKCHECK* | APPROX. DELAYED ACTION | MINIMUM HOLD OPEN | MAXIMUM HOLD OPEN |
|---|---|---|---|---|
| 180° | 65°–180° | 180°–70° | 30° | 140° |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

# Regular × Cushion IS Arm

**8916 IS/ISH**
**8956 IS/ISH**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 3-3/8".
Minimum door rail to bottom of cover 3-13/16".




## Size Selection Chart

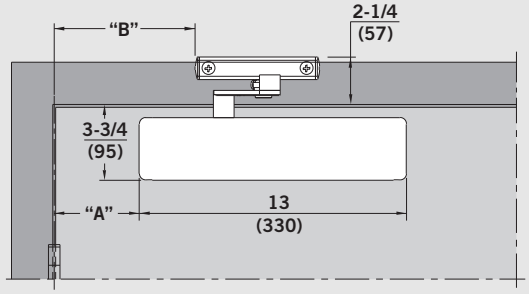
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
|---|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

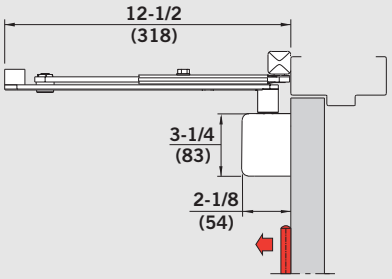
| TEMPLATE REFERENCE | DIM "A" | DIM "B" | CUSHION/ HOLD OPEN | * APPROX. BACKCHECK | APPROX. DELAYED ACTION |
|---|---|---|---|---|---|
| 85° | 5-3/4" (146) | 13-5/8" (346) | 85° | 70°–85° | 70°–85° |
| 90° | 5-1/8" (130) | 13-1/4" (337) | 90° | 70°–90° | 70°–90° |
| 95° | 4-5/16" (110) | 13" (330) | 95° | 70°–95° | 70°–95° |
| 100° | 5-1/4" (133) | 12-3/8" (314) | 100° | 70°–100° | 70°–100° |
| 105° | 3-3/4" (95) | 12" (305) | 105° | 75°–105° | 70°–105° |
| 110° | 3-3/8" (92) | 11-5/8" (295) | 110° | 75°–110° | 70°–1105° |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

# Regular × Spring Stop IS Arm

**8916 S-IS/S-ISH**
**8956 S-IS/S-ISH**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 3-3/8".
Minimum door rail to bottom of cover 3-3/4".




## Size Selection Chart

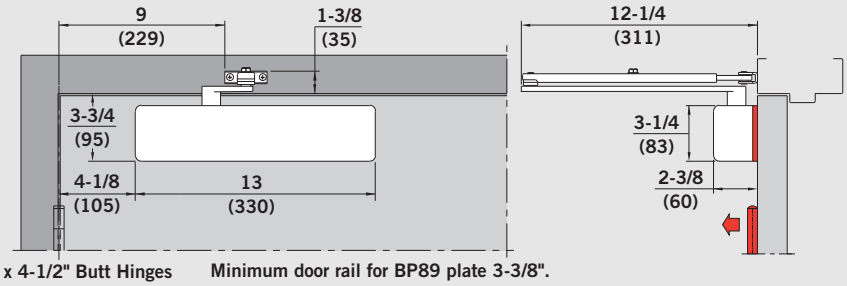
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. |
|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • |
| | EXTERIOR | N/A | N/A | N/A | • | • |

| TEMPLATE REFERENCE | DIM "A" | DIM "B" | ** DEAD STOP/ HOLD OPEN | * APPROX. BACKCHECK | APPROX. DELAYED ACTION |
|---|---|---|---|---|---|
| 85° | 8-7/8" (226) | 11-9/16" (294) | 85° | 60°–85° | 70°–85° |
| 90° | 8-1/4" (210) | 10-15/16" (278) | 90° | 60°–90° | 70°–90° |
| 100° | 7-3/8" (188) | 10-1/16" (256) | 100° | 70°–100° | 70°–100° |
| 110° | 6-5/8" (168) | 9-5/16" (237) | 110° | 70°–110° | 70°–110° |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.
** Hold Open is approximately 5°–7° less than the dead stop angle listed in the chart.

# Regular × Flat Form Arm × Backplate

**8916 AF89 BP89**
**8956 AF89 BP89**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for BP89 plate 3-3/8".
Minimum door rail to bottom of plate/cover 3-5/8".




## Size Selection Chart

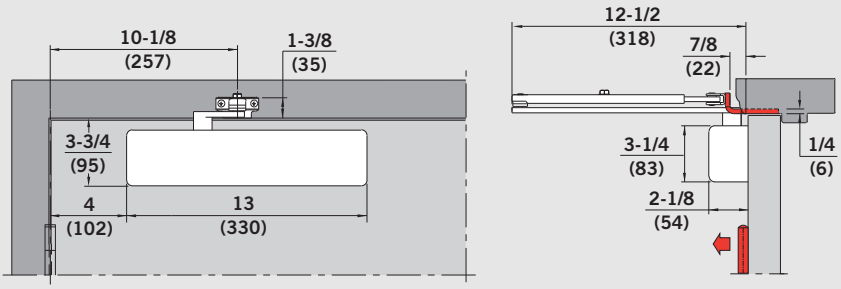
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

| MAXIMUM OPENING | APPROX. BACKCHECK* | APPROX. DELAYED ACTION |
|---|---|---|
| 180° | 65°–180° | 180°–70° |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

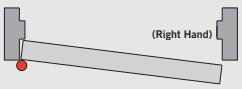
# Regular × Flat Form Arm × Mortised Jamb Bracket

**8916 AF8MJ**
**8956 AF8MJ**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 3-3/8".
Minimum door rail to bottom of cover 3-5/8".




## Size Selection Chart

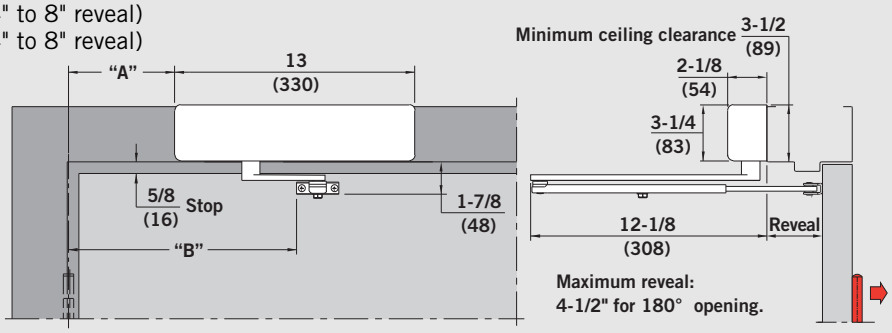
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

| MAXIMUM OPENING | APPROX. BACKCHECK* | APPROX. DELAYED ACTION |
|---|---|---|
| 180° | 80°–180° | 180°–65° |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

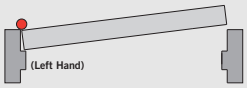
# Top Jamb × Flat Form Arm

**8916 AF89J** (4" to 8" reveal)
**8956 AF89J** (4" to 8" reveal)




4-1/2" x 4-1/2" Butt Hinges

Minimum frame face for mounting closer 3".
Specify hand.




## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
|---|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

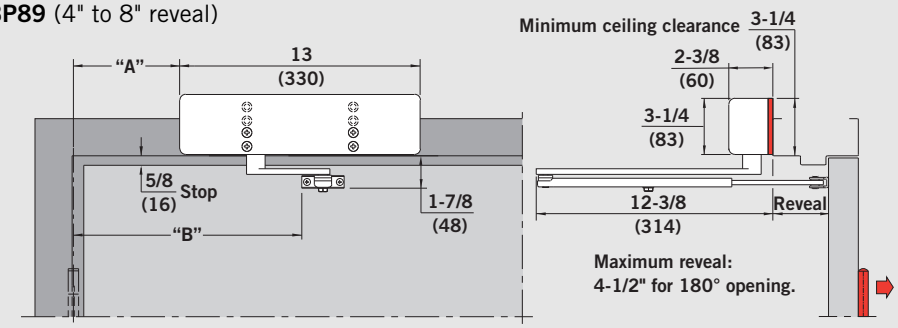
| TEMPLATE REFERENCE | DIM "A" | DIM "B" | REVEAL | ARM | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK* | APPROX. DELAYED ACTION |
|---|---|---|---|---|---|---|---|
| TO 100° | 5-3/4" (146) | 12-3/8" (314) | 0" | AF89 | 115° | 70°–115° | 115°–60° |
| | | | 4" | AF89 | 120° | 75°–120° | 120°–70° |
| **TO 100°** | **5-3/4" (146)** | **12-3/8" (314)** | **4"** | **AF89J** | **120°** | **75°–120°** | **120°–70°** |
| | | | **8"** | **AF89J** | **125°** | **80°–125°** | **125°–70°** |
| OVER 100° | 1-3/4" (44) | 8-3/8" (213) | 0" | AF89 | 180° | 85°–180° | 180°–80° |
| | | | 4" | AF89 | 180° | 95°–180° | 180°–95° |
| **OVER 100°** | **1-3/4" (44)** | **8-3/8" (213)** | **4"** | **AF89J** | **180°** | **95°–180°** | **180°–95°** |
| | | | **8"** | **AF89J** | **160°** | **105°–160°** | **160°–100°** |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

**Note: Bold type shows supplied arm.**

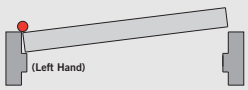
# Top Jamb × Flat Form Arm × Backplate

**8916 AF89J BP89** (4" to 8" reveal)
**8956 AF89J BP89** (4" to 8" reveal)




4-1/2" x 4-1/2" Butt Hinges

Minimum frame face for mounting BP89 plate 1-5/8".
Specify hand.




## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
|---|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

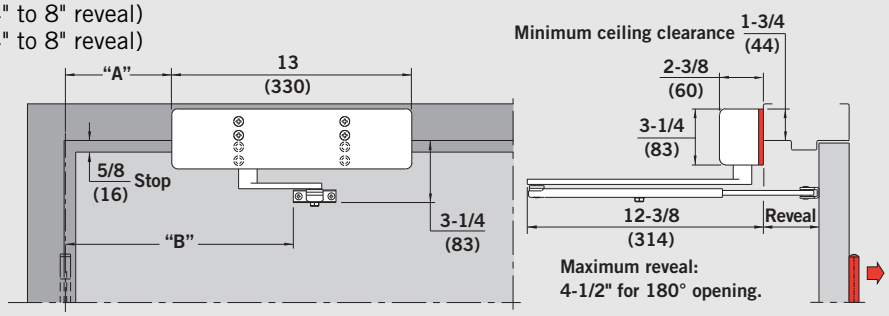
| TEMPLATE REFERENCE | DIM "A" | DIM "B" | REVEAL | ARM | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK* | APPROX. DELAYED ACTION |
|---|---|---|---|---|---|---|---|
| TO 100° | 5-3/4" (146) | 12-3/8" (314) | 0" | AF89 | 115° | 70°–115° | 115°–60° |
| | | | 4" | AF89 | 120° | 75°–120° | 120°–70° |
| **TO 100°** | **5-3/4" (146)** | **12-3/8" (314)** | **4"** | **AF89J** | **120°** | **75°–120°** | **120°–70°** |
| | | | **8"** | **AF89J** | **125°** | **80°–125°** | **125°–70°** |
| OVER 100° | 1-3/4" (44) | 8-3/8" (213) | 0" | AF89 | 180° | 85°–180° | 180°–80° |
| | | | 4" | AF89 | 180° | 95°–180° | 180°–95° |
| **OVER 100°** | **1-3/4" (44)** | **8-3/8" (213)** | **4"** | **AF89J** | **180°** | **95°–180°** | **180°–95°** |
| | | | **8"** | **AF89J** | **160°** | **105°–160°** | **160°–100°** |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

**Note: Bold type shows supplied arm.**

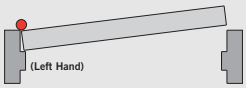
# Top Jamb Drop × Flat Form Arm × Backplate

**8916 AF89J BP89** (4" to 8" reveal)
**8956 AF89J BP89** (4" to 8" reveal)




4-1/2" x 4-1/2" Butt Hinges

Minimum frame face for mounting BP89 plate 1-5/8".
Specify hand.




## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
|---|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

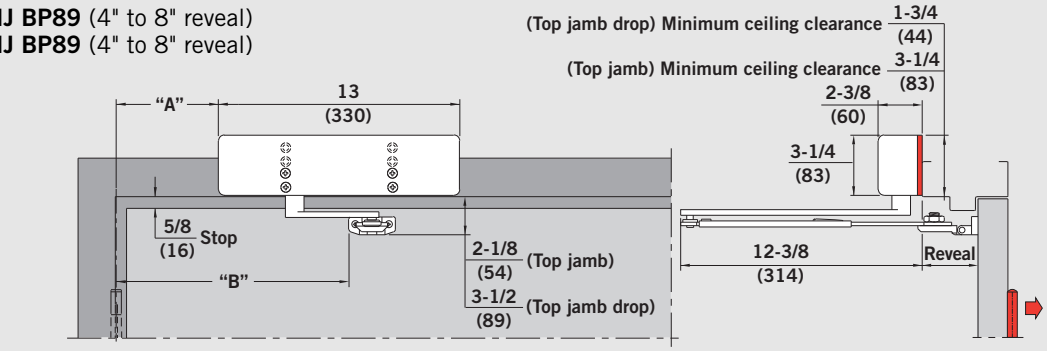
| TEMPLATE REFERENCE | DIM "A" | DIM "B" | REVEAL | ARM | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK* | APPROX. DELAYED ACTION |
|---|---|---|---|---|---|---|---|
| TO 100° | 5-3/4" (146) | 12-3/8" (314) | 0" | AF89 | 115° | 70°–115° | 115°–60° |
| | | | 4" | AF89 | 120° | 75°–120° | 120°–70° |
| **TO 100°** | **5-3/4" (146)** | **12-3/8" (314)** | **4"** | **AF89J** | **120°** | **75°–120°** | **120°–70°** |
| | | | **8"** | **AF89J** | **125°** | **80°–125°** | **125°–70°** |
| OVER 100° | 1-3/4" (44) | 8-3/8" (213) | 0" | AF89 | 180° | 85°–180° | 180°–80° |
| | | | 4" | AF89 | 180° | 95°–180° | 180°–95° |
| **OVER 100°** | **1-3/4" (44)** | **8-3/8" (213)** | **4"** | **AF89J** | **180°** | **95°–180°** | **180°–95°** |
| | | | **8"** | **AF89J** | **160°** | **105°–160°** | **160°–100°** |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

**Note: Bold type shows supplied arm.**

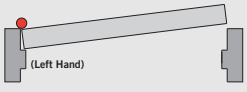
# Top Jamb × Friction Hold Open × Backplate

**8916 FHJ BP89** (4" to 8" reveal)
**8956 FHJ BP89** (4" to 8" reveal)




4-1/2" x 4-1/2" Butt Hinges

Minimum frame face for mounting BP89 plate 1-5/8".
Specify hand.




## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
|---|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

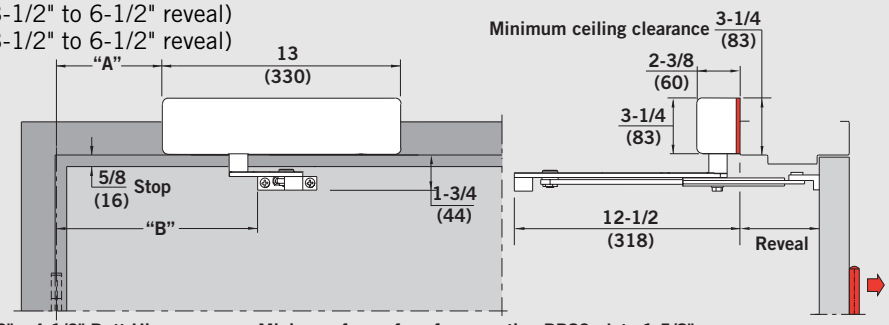
| TEMPLATE REFERENCE | DIM "A" | DIM "B" | REVEAL | ARM | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK* | APPROX. DELAYED ACTION | MIN. HOLD OPEN | MAX. HOLD OPEN |
|---|---|---|---|---|---|---|---|---|---|
| TO 100° | 7-3/4" (197) | 12-1/2" (318) | 0" | FH | 103° | 70°–105° | 105°–65° | 70° | 100° |
| | | | 4" | FH | 104° | 70°–105° | 105°–70° | 70° | 100° |
| **TO 100°** | **7-3/4" (197)** | **12-1/2" (318)** | **3-1/4"** | **FHJ** | **104°** | **65°–105°** | **105°–65°** | **70°** | **100°** |
| | | | **8"** | **FHJ** | **104°** | **70°–105°** | **105°–70°** | **70°** | **100°** |
| OVER 100° | 3-1/2" (89) | 8-1/4" (210) | 0" | FH | 180° | 85°–180° | 180°–85° | 70° | 170° |
| | | | 4" | FH | 180° | 95°–180° | 180°–95° | 70° | 170° |
| **OVER 100°** | **3-1/2" (89)** | **8-1/4" (210)** | **3-1/4"** | **FHJ** | **180°** | **90°–180°** | **180°–90°** | **70°** | **170°** |
| | | | **8"** | **FHJ** | **165°** | **100°–165°** | **165°–100°** | **60°** | **155°** |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

**Note: Bold type shows supplied arm.**

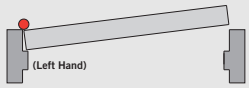
# Top Jamb × Cushion IS Arm × Backplate

**8916 ISJ/ISJH BP89** (3-1/2" to 6-1/2" reveal)
**8956 ISJ/ISJH BP89** (3-1/2" to 6-1/2" reveal)




4-1/2" x 4-1/2" Butt Hinges

Minimum frame face for mounting BP89 plate 1-5/8". Specify hand.




## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
|---|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

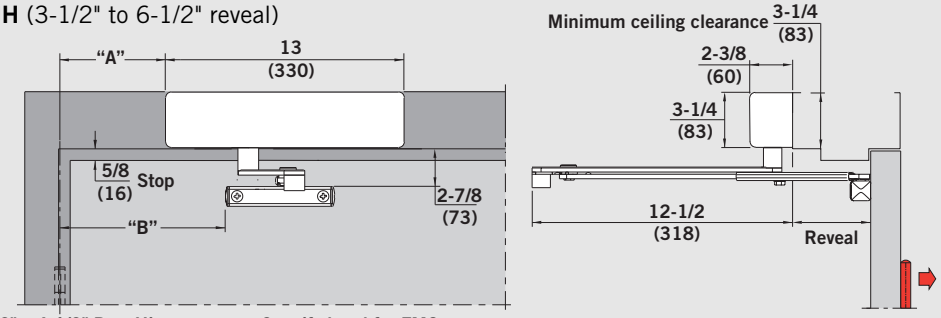
| TEMPLATE REFERENCE | DIM "A" | DIM "B" | REVEAL | ARM | CUSHION/ HOLD OPEN | * APPROX. BACKCHECK | APPROX. DELAYED ACTION |
|---|---|---|---|---|---|---|---|
| 85° | 6-3/8" (162) | 12-5/8" (321) | 0"–3-1/2" | IS | 85° | 60°–85° | 85°–60° |
| | | | **3-1/2"–6-1/2"** | **ISJ** | **85°** | **60°–85°** | **85°–60°** |
| 90° | 5-5/8" (143) | 12-1/8" (308) | 0"–3-1/2" | IS | 90° | 60°–90° | 90°–60° |
| | | | **3-1/2"–6-1/2"** | **ISJ** | **90°** | **60°–90°** | **90°–60°** |
| 95° | 5-3/8" (137) | 11-3/4" (298) | 0"–3-1/2" | IS | 95° | 65°–95° | 95°–65° |
| | | | **3-1/2"–6-1/2"** | **ISJ** | **95°** | **65°–95°** | **95°–65°** |
| 100° | 5-1/8" (130) | 11-1/4" (286) | 0"–3-1/2" | IS | 100° | 65°–100° | 100°–55° |
| | | | **3-1/2"–6-1/2"** | **ISJ** | **100°** | **70°–100°** | **100°–70°** |
| 105° | 4-7/8" (124) | 11" (279) | 0"–3-1/2" | IS | 105° | 70°–105° | 105°–70° |
| | | | **3-1/2"–6-1/2"** | **ISJ** | **105°** | **70°–105°** | **105°–70°** |
| 110° | 4-5/8" (117) | 10-3/4" (273) | 0"–3-1/2" | IS | 110° | 70°–110° | 110°–70° |
| | | | **3-1/2"–6-1/2"** | **ISJ** | **110°** | **70°–110°** | **110°–70°** |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

**Note: Bold type shows supplied arm.**

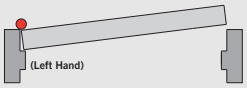
# Top Jamb × Spring Stop IS Arm

**8916 S-ISJ/S-ISJH** (3-1/2" to 6-1/2" reveal)
**8956 S-ISJ/S-ISJH** (3-1/2" to 6-1/2" reveal)




4-1/2" x 4-1/2" Butt Hinges

Specify hand for FMC.
Backcheck positioning valve in "OFF" position.




## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. |
|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • |
| | EXTERIOR | N/A | N/A | N/A | • | • |

| TEMPLATE REFERENCE | DIM "A" | DIM "B" | REVEAL | ARM | ** DEAD STOP/ HOLD OPEN | * APPROX. BACKCHECK | APPROX. DELAYED ACTION |
|---|---|---|---|---|---|---|---|
| 85° | 8-5/16" (211) | 11" (279) | 0"–3½" | S-IS | 85° | 60°–85° | 85°–60° |
| | | | **3½"–6½"** | **S-ISJ** | **85°** | **60°–85°** | **85°–60°** |
| 90° | 8" (203) | 10-11/16" (271) | 0"–3½" | S-IS | 90° | 60°–90° | 90°–60° |
| | | | **3½"–6½"** | **S-ISJ** | **90°** | **60°–90°** | **90°–60°** |
| 100° | 6-7/8" (175) | 9-9/16" (243) | 0"–3½" | S-IS | 100° | 65°–100° | 100°–65° |
| | | | **3½"–6½"** | **S-ISJ** | **100°** | **70°–100°** | **100°–70°** |
| 110° | 6-1/4" (159) | 8-15/16" (227) | 0"–3½" | S-IS | 110° | 70°–110° | 110°–70° |
| | | | **3½"–6½"** | **S-ISJ** | **110°** | **70°–110°** | **110°–70°** |

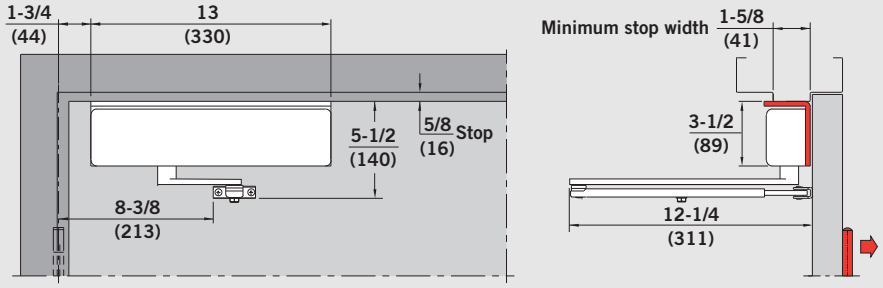
* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

** Hold Open is approximately 5°–7° less than the dead stop angle listed in the chart.

**Note: Bold type shows supplied arm.**

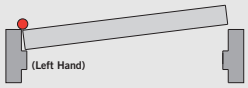
# Top Jamb × Flat Form Arm × Angle Bracket

**8916 AF89 AB89**
**8956 AF89 AB89**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for arm shoe 6" (5/8" stop shown).
Specify hand.




## Size Selection Chart

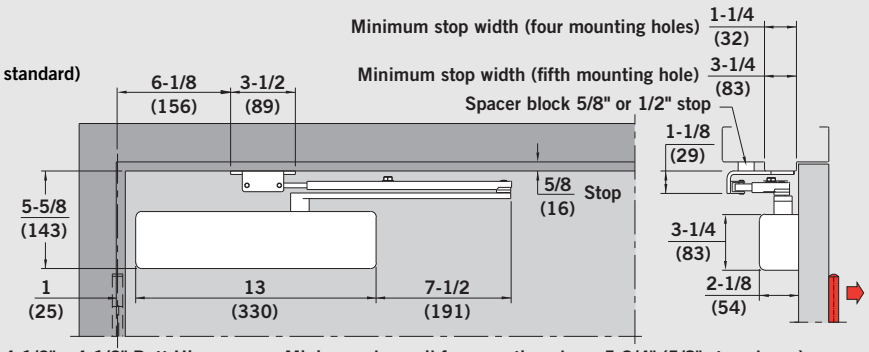
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. | 5'-0" max. |
|---|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | N/A | • | • | • | N/A |

| MAXIMUM OPENING | APPROX. BACKCHECK* | APPROX. DELAYED ACTION |
|---|---|---|
| 180° | 70°–180° | 180°–80° |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

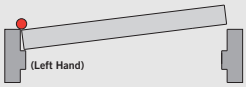
# Parallel Arm × Flat Form Arm

**8916 AF89P**
**8956 AF89P**
**(P89 bracket furnished standard)**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 5-3/4" (5/8" stop shown).
Minimum door rail to bottom of cover 6-1/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.



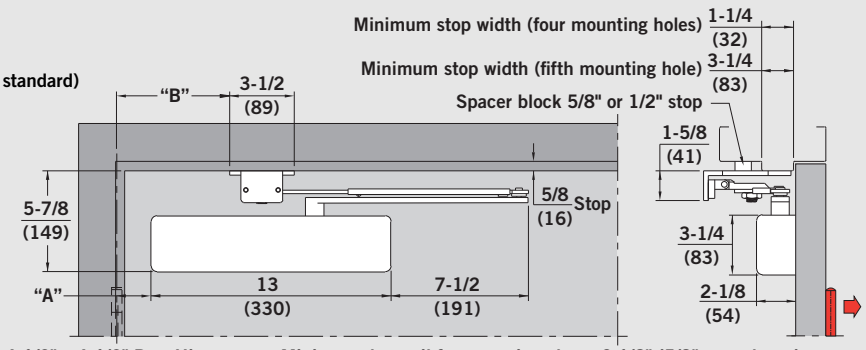

## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

| MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|
| 180° | 60°–180° | 180°–70° | 24" |

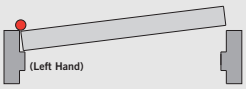
# Parallel Arm × Friction Hold Open

**8916 FHP**
**8956 FHP**
**(PHB bracket furnished standard)**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 6-1/8" (5/8" stop shown).
Minimum door rail to bottom of cover 6-3/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.



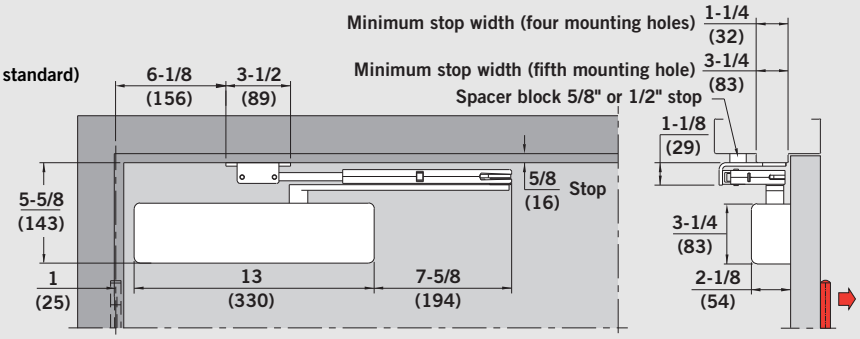

## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

| TEMPLATE REFERENCE | DIM "A" | DIM "B" | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MIN. HOLD OPEN | MAX. HOLD OPEN | MIN. DOOR WIDTH |
|---|---|---|---|---|---|---|---|---|
| TO 100° | 5-5/8" (143) | 10-1/2" (267) | 110° | 65°–110° | 110°–65° | 45° | 105° | 29" |
| OVER 100° | 1-1/4" (32) | 6-1/8" (156) | 180° | 60°–180° | 180°–70° | 45° | 175° | 24" |

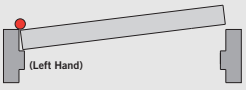
# Parallel Arm × Plunger Hold Open

**8916 PHP**
**8956 PHP**
**(P89 bracket furnished standard)**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 5-7/8" (5/8" stop shown).
Minimum door rail to bottom of cover 6-1/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.



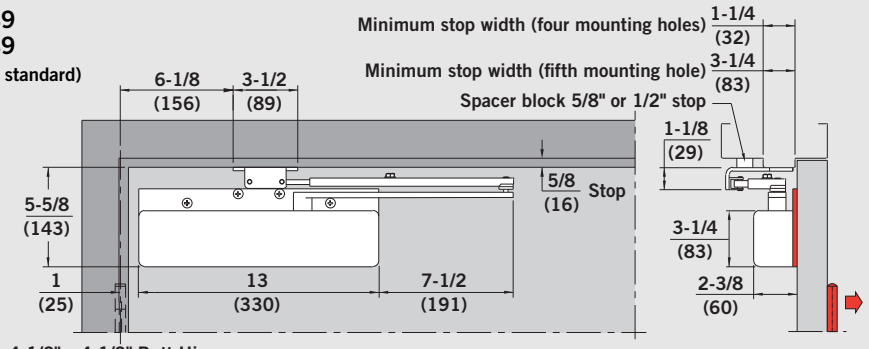

## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

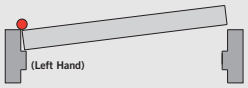
| MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM HOLD OPEN | MAXIMUM HOLD OPEN | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|
| 180° | 60°–180° | 180°–75° | 30° | 130° | 24" |

# Parallel Arm × Flat Form Arm × Drop Plate

**8916 AF89P DP89**
**8956 AF89P DP89**
**(P89 bracket furnished standard)**




Minimum door rail for mounting DP89 plate 2-7/8" (5/8" stop shown).
Minimum door rail to bottom of cover/plate (5/8" stop shown).
Backcheck positioning valve in "ON" position.



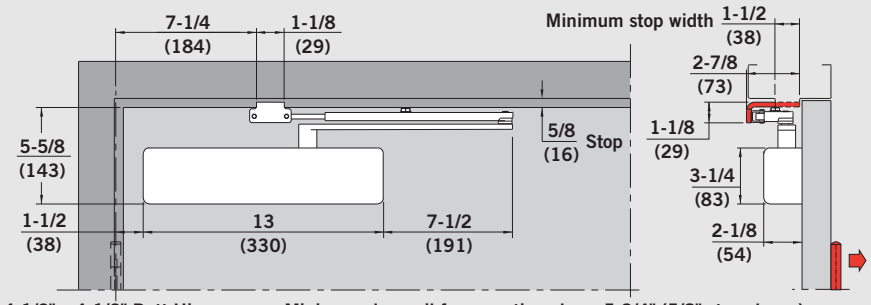

## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

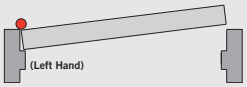
| MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|
| 180° | 60°–180° | 180°–70° | 24" |

# Parallel Arm × Flat Form Arm × Mortised Jamb Bracket

**8916 AF8MJ**
**8956 AF8MJ**




Minimum door rail for mounting closer 5-3/4" (5/8" stop shown).
Minimum door rail to bottom of cover 6-1/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.



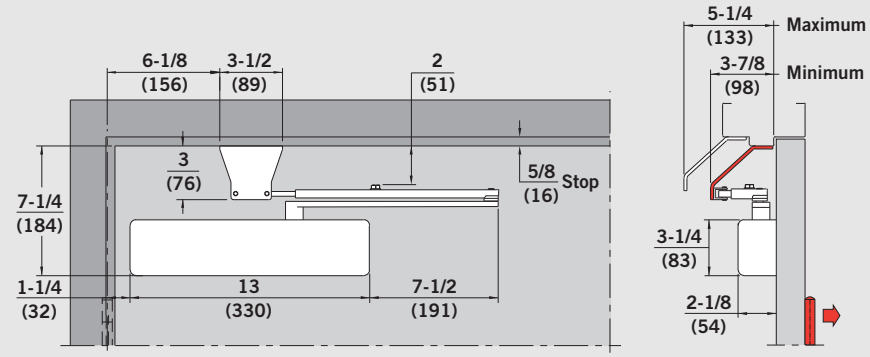

## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

| MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|
| 180° | 65°–180° | 180°–70° | 24" |

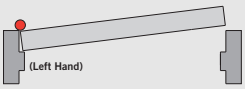
# Parallel Arm × Flat Form Arm × Parallel Drop Bracket

**8916 AF89 PD**
**8956 AF89 PD**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 7-3/8" (5/8" stop shown).
Minimum door rail to bottom of cover 7-3/4" (5/8" stop shown).
Backcheck positioning valve in "ON" position.



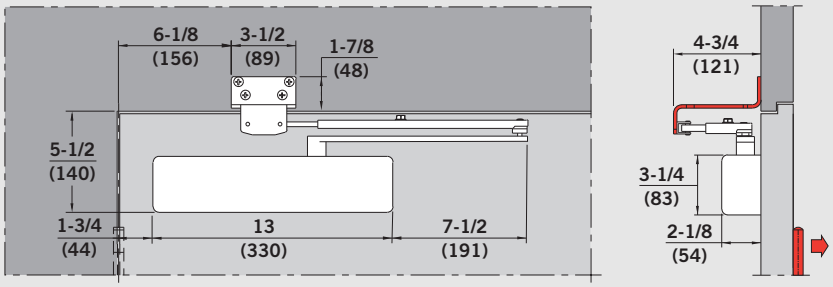

## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

| MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|
| 180° | 70°–180° | 180°–70° | 24" |

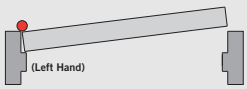
# Parallel Arm × Flat Form Arm × Parallel Flush Transom Bracket

**8916 AF89 PFT**
**8956 AF89 PFT**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 5-1/8".
Minimum door rail to bottom of cover 5-3/8".
Backcheck positioning valve in "ON" position.



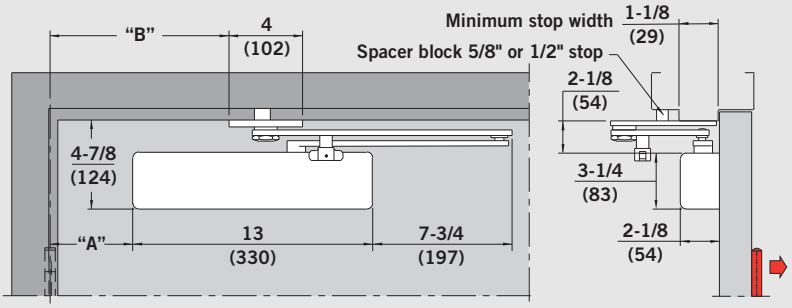

## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

| MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|
| 180° | 60°–180° | 180°–70° | 24" |

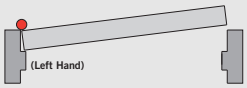
# Heavy-Duty Super Parallel Arm

**8916 SPA/SPAT/SPAK**
**8956 SPA/SPAT/SPAK**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 5" (5/8" stop shown).
Minimum door rail to bottom of cover 5-3/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.




## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

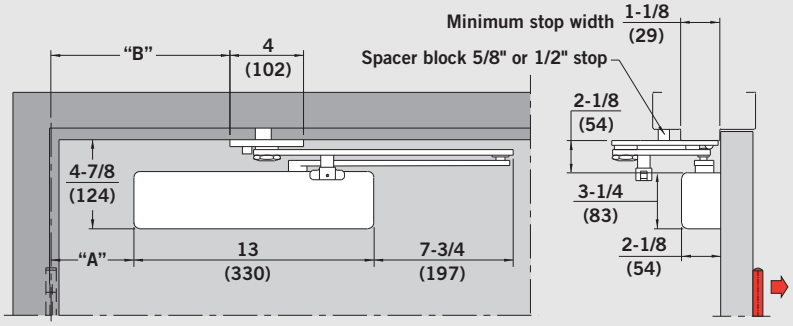
| ANGLE OF OPENING/ HOLD OPEN | DIM "A" CLOSER | DIM "B" SOFFIT PLATE | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| TO 100° H.O. 90° | 4-1/2" (114) | 9-3/8" (238) | 100° | 60°–100° | 100°–65° | 26" |
| TO 180° H.O. 125° | 7/8" (22) | 6-1/4" (159) | 180° | 70°–180° | 180°–75° | 23" |

**(ABP) Advanced Backcheck Position**

| ANGLE OF OPENING/ HOLD OPEN | DIM "A" CLOSER | DIM "B" SOFFIT PLATE | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| TO 100° H.O. 90° | 4-3/4" (121) | 9-7/8" (251) | 100° | 45°–100° | 100°–70° | 28" |

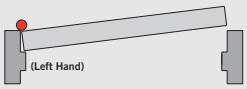
# Heavy-Duty Parallel Arm Door Saver × Cushion

**8916 DS/DST/DSK**
**8956 DS/DST/DSK**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 5" (5/8" stop shown).
Minimum door rail to bottom of cover 5-3/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.




## Size Selection Chart

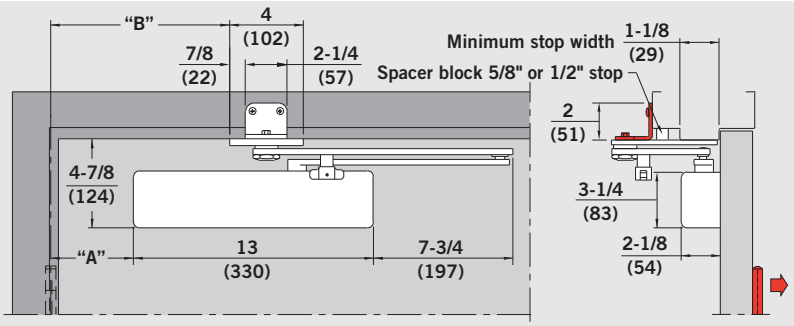
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

| TEMPLATE REFERENCE | DIM "A" CLOSER | DIM "B" SOFFIT PLATE | * CUSHION/ HOLD OPEN | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| 85° | 4-3/8" (111) | 10-5/8" (270) | 85° | 50°–85° | 85°–60° | 26" |
| 90° | 3-1/2" (89) | 9-3/4" (248) | 90° | 55°–90° | 90°–60° | 25" |
| 100° | 2-3/8" (60) | 8-5/8" (219) | 100° | 60°–100° | 100°–65° | 24" |
| 110° | 1-1/4" (32) | 7-1/2" (191) | 110° | 65°–110° | 110°–70° | 23" |

* Hold Open is approximately 1°–2° less than the cushion angle listed in the chart.

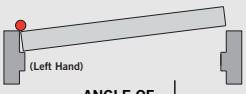
# Heavy-Duty Super Parallel Arm × Narrow Frame Bracket

**8916 SPA/SPAT/SPAK NFHD**
**8956 SPA/SPAT/SPAK NFHD**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 5" (5/8" stop shown).
Minimum door rail to bottom of cover 5-3/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.




## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

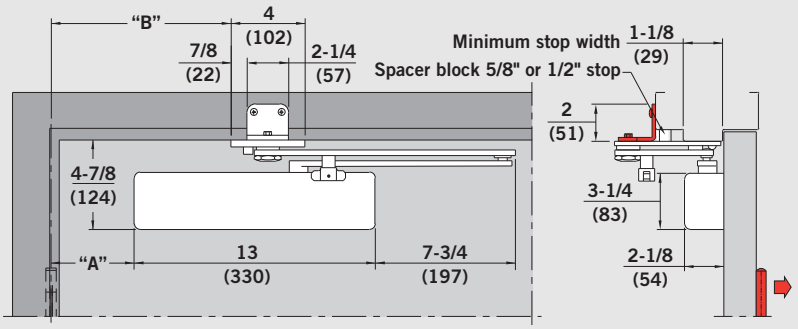
| ANGLE OF OPENING / HOLD OPEN | DIM "A" CLOSER | DIM "B" SOFFIT PLATE | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| TO 100° H.O. 90° | 4-1/2" (114) | 9-3/8" (238) | 100° | 60°–100° | 100°–65° | 26" |
| TO 180° H.O. 125° | 7/8" (22) | 6-1/4" (159) | 180° | 70°–180° | 180°–75° | 23" |

**(ABP) Advanced Backcheck Position**

| ANGLE OF OPENING / HOLD OPEN | DIM "A" CLOSER | DIM "B" SOFFIT PLATE | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| TO 100° H.O. 90° | 4-3/4" (121) | 9-7/8" (251) | 100° | 45°–100° | 100°–70° | 28" |

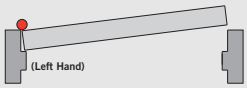
# Heavy-Duty Parallel Arm Door Saver × Cushion × Narrow Frame Bracket

**8916 DS/DST/DSK NFHD**
**8956 DS/DST/DSK NFHD**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 5" (5/8" stop shown).
Minimum door rail to bottom of cover 5-3/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.




## Size Selection Chart

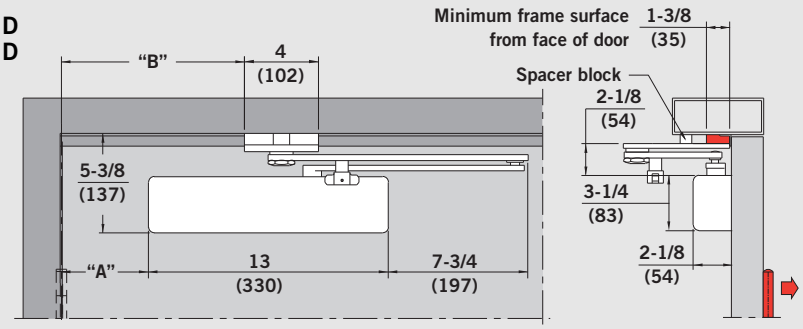
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

| TEMPLATE REFERENCE | DIM "A" CLOSER | DIM "B" SOFFIT PLATE | * CUSHION/ HOLD OPEN | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| 85° | 4-3/8" (111) | 10-5/8" (270) | 85° | 50°–85° | 85°–60° | 26" |
| 90° | 3-1/2" (89) | 9-3/4" (248) | 90° | 55°–90° | 90°–60° | 25" |
| 100° | 2-3/8" (60) | 8-5/8" (219) | 100° | 60°–100° | 100°–65° | 24" |
| 110° | 1-1/4" (32) | 7-1/2" (191) | 110° | 65°–110° | 110°–70° | 23" |

*Hold open is approximately 1°–2° less than the cushion angle listed in the chart.

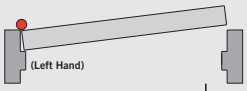
# Heavy-Duty Super Parallel Arm × Blade Stop Spacer

**8916 SPA/SPAT/SPAK BSHD**
**8956 SPA/SPAT/SPAK BSHD**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 5" (5/8" stop shown).
Minimum door rail to bottom of cover 5-3/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.




## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

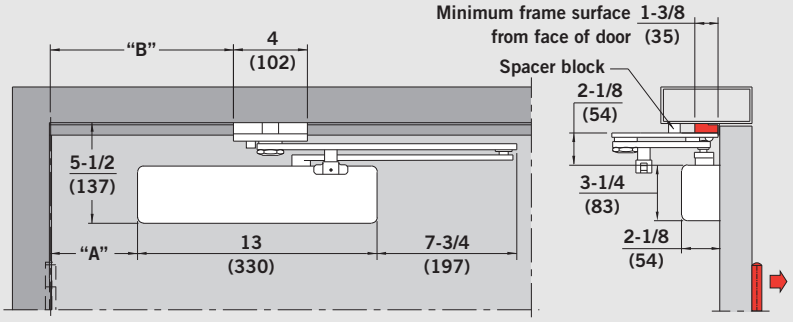
| ANGLE OF OPENING/ HOLD OPEN | DIM "A" CLOSER | DIM "B" SOFFIT PLATE | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| TO 100° H.O. 90° | 4-1/2" (114) | 9-3/8" (238) | 100° | 60°–100° | 100°–65° | 26" |
| TO 180° H.O. 125° | 7/8" (22) | 6-1/4" (159) | 180° | 70°–180° | 180°–75° | 23" |

**(ABP) Advanced Backcheck Position**

| ANGLE OF OPENING/ HOLD OPEN | DIM "A" CLOSER | DIM "B" SOFFIT PLATE | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| TO 100° H.O. 90° | 4-3/4" (121) | 9-7/8" (251) | 100° | 45°–100° | 100°–70° | 28" |

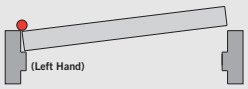
# Heavy-Duty Parallel Arm Door Saver × Cushion and Blade Stop Spacer

**8916 DS/DST/DSK BSHD**
**8956 DS/DST/DSK BSHD**




4–1/2" X 4-1/2" Butt Hinges

Minimum door rail for mounting closer 5" (5/8" stop shown).
Minimum door rail to bottom of cover 5-3/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.




## Size Selection Chart

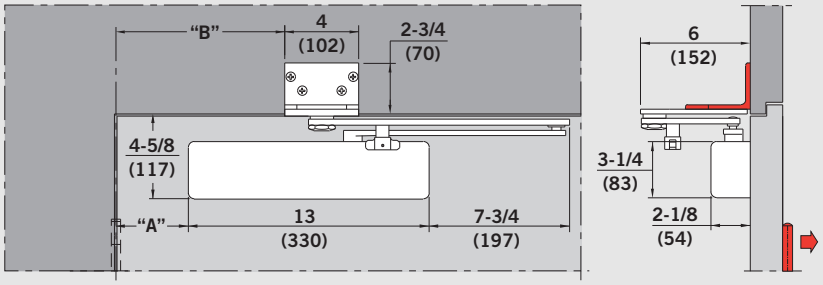
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

| TEMPLATE REFERENCE | DIM "A" CLOSER | DIM "B" SOFFIT PLATE | * CUSHION/ HOLD OPEN | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| 85° | 4-3/8" (111) | 10-5/8" (270) | 85° | 50°–85° | 85°–60° | 26" |
| 90° | 3-1/2" (89) | 9-3/4" (248) | 90° | 55°–90° | 90°–60° | 25" |
| 100° | 2-3/8" (60) | 8-5/8" (219) | 100° | 60°– 100° | 100°–65° | 24" |
| 110° | 1-1/4" (32) | 7-1/2" (191) | 110° | 65°–110° | 110°–70° | 23" |

* Hold Open is approximately 1°–2° less than the cushion angle listed in the chart.

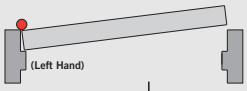
# Heavy-Duty Super Parallel Arm × Flush Transom Bracket

**8916 SPA/SPAT/SPAK FTHD**
**8956 SPA/SPAT/SPAK FTHD**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 4-3/4" (5/8" stop shown)
Minimum door rail to bottom of cover 5-1/8" (5/8" stop shown)
Backcheck positioning valve in "ON" position.




| ANGLE OF OPENING/ HOLD OPEN | DIM "A" CLOSER | DIM "B" (F102) BRACKET | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| TO 100° H.O. 90° | 4-1/2" (114) | 9-3/8" (238) | 100° | 60°–100° | 100°–65° | 26" |
| TO 180° H.O. 125° | 7/8" (22) | 6-1/4" (159) | 180° | 70°–180° | 180°–75° | 23" |

**(ABP) Advanced Backcheck Position**

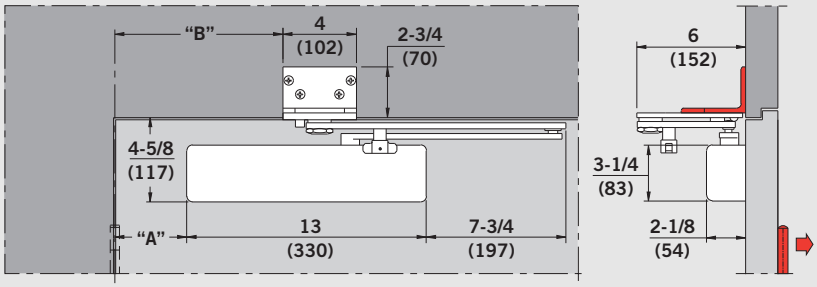
| ANGLE OF OPENING/ HOLD OPEN | DIM "A" CLOSER | DIM "B" SOFFIT PLATE | APPROX. MAXIMUM OPENING | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| TO 100° H.O. 90 | 4-3/4" (121) | 9-7/8" (251) | 100° | 45°–100° | 100°–70° | 28" |

## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

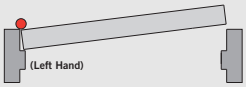
# Heavy-Duty Parallel Arm Door Saver × Cushion × Flush Transom Bracket

**8916 DS/DST/DSK FTHD**
**8956 DS/DST/DSK FTHD**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 4-3/4" (5/8" stop shown).
Minimum door rail to bottom of cover 5-1/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.




| TEMPLATE REFERENCE | DIM "A" CLOSER | DIM "B" (FT102) BRACKET | * CUSHION/ HOLD OPEN | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| 85° | 4-3/8" (111) | 10-5/8" (270) | 85° | 50°–85° | 85°–60° | 26" |
| 90° | 3-1/2" (89) | 9-3/4" (248) | 90° | 55°–90° | 90°–60° | 25" |
| 100° | 2-3/8" (60) | 8-5/8" (219) | 100° | 60°–100° | 100°–65° | 24" |
| 110° | 1-1/4" (32) | 7-1/2" (191) | 110° | 65°–110° | 110°–70° | 23" |

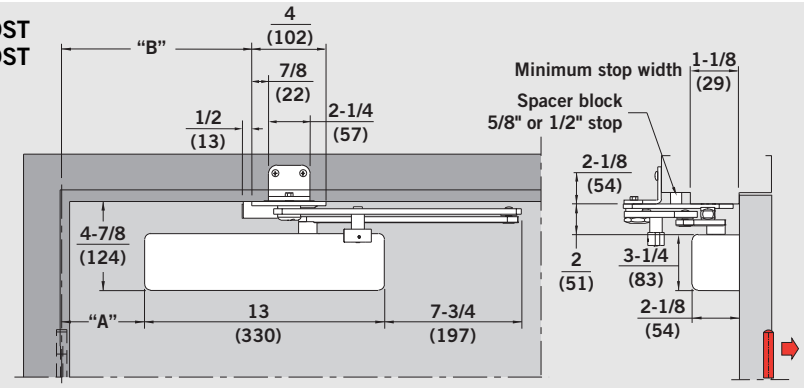
* Hold Open is approximately 1°–2° less than the cushion angle listed in the chart.

## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

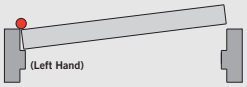
# Heavy-Duty Parallel Arm × Spring Door Saver

**8916 S-DS/S-DST**
**8956 S-DS/S-DST**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 5" (5/8" stop shown).
Minimum door rail to bottom of cover 5-3/8" (5/8" stop shown).
Backcheck positioning valve in "ON" position.




## Size Selection Chart

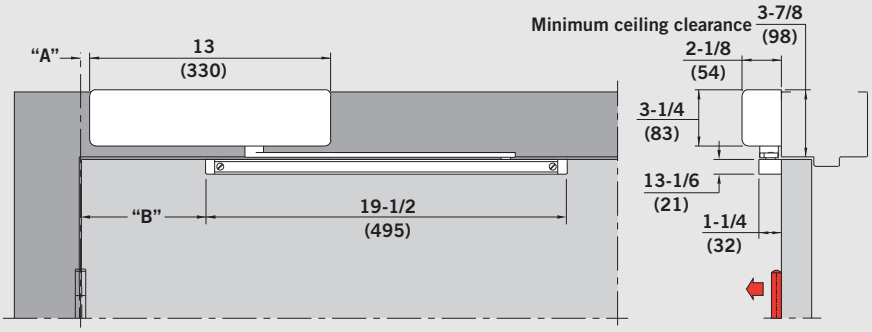
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. | 4'-6" max. |
|---|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | N/A | • | • | • | N/A |

| TEMPLATE REFERENCE | DIM "A" CLOSER | DIM "B" SOFFIT PLATE | * DEAD STOP/ HOLD OPEN | APPROX. BACKCHECK | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|
| 85° | 4-3/8" (111) | 10-5/8" (270) | 85° | 50°–85° | 85°–60° | 26" |
| 90° | 3-1/2" (89) | 9-7/8" (251) | 90° | 55°–90° | 90°–60° | 25" |
| 100° | 2-3/8" (60) | 8-5/8" (219) | 100° | 60°–100° | 100°–65° | 24" |
| 110° | 1-1/4" (32) | 7-1/2" (191) | 110° | 65°–110° | 110°–70° | 23" |

* Hold Open is approximately 5°–7° less than the dead stop angle listed in the chart.

# Track - Pull Side Door Mounted

**8916 T**
**8916 TH**
**8956 T**
**8956 TH**




4-1/2" x 4-1/2" Butt Hinges

Minimum frame face for closer 3-1/2".
Specify hand.




## Size Selection Chart

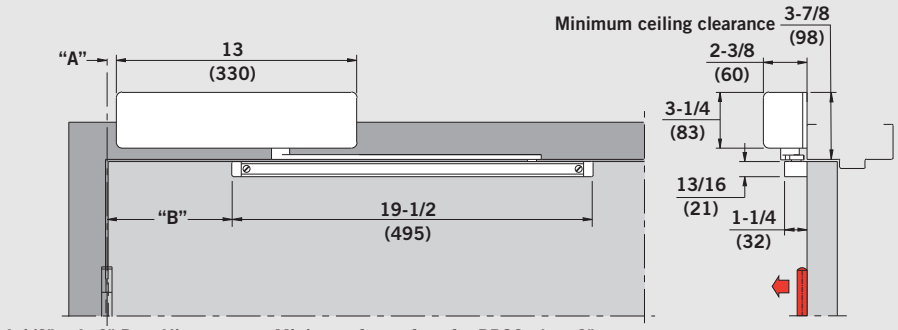
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. |
|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | • | • | • | N/A |

| TEMPLATE REFERENCE | DIM "A" | DIM "B" | CUSHION | MAXIMUM HOLD OPEN | APPROX. BACKCHECK* | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|---|
| 85° | 1/2" (13) | 9-3/4" (248) | 85° | 80° | 70°–85° | 85°–60° | 31" |
| 90° | 1/2" (13) | 9" (229) | 90° | 85° | 70°–90° | 90°–60° | 30" |
| 110° | 1/2" (13) | 6-1/4" (159) | 110° | 105° | 70°–110° | 110°–60° | 27" |
| 180° | 3/4" (19) | 4" (102) | 180° | 160° | 75°–180° | 180°–65° | 25" |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

# Track - Pull Side Door Mounted × Backplate

**8916 T BP89**
**8916 TH BP89**
**8956 T BP89**
**8956 TH BP89**




4-1/2" x 4- 2" Butt Hinges

Minimum frame face for BP89 plate 2".
Specify hand.




## Size Selection Chart

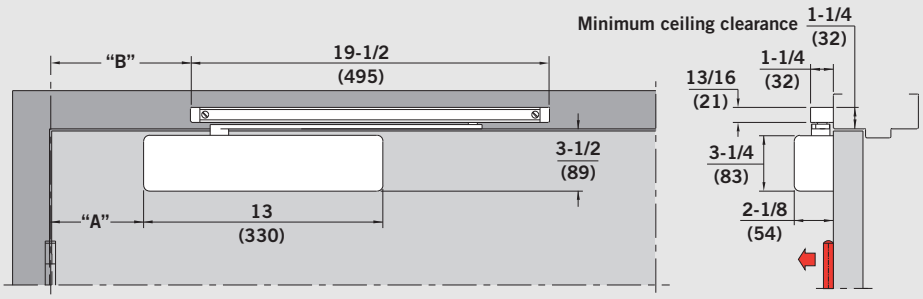
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. |
|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | • | • | • | N/A |

| TEMPLATE REFERENCE | DIM "A" | DIM "B" | DEAD STOP | MAXIMUM HOLD OPEN | APPROX. BACKCHECK* | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|---|
| 85° | 1/2" (13) | 9-3/4" (248) | 85° | 80° | 70°–85° | 85°–60° | 31" |
| 90° | 1/2" (13) | 9" (229) | 90° | 85° | 70°–90° | 90°–60° | 30" |
| 110° | 1/2" (13) | 6-1/4" (159) | 110° | 105° | 70°–110° | 110°–60° | 27" |
| 180° | 3/4" (19) | 4" (102) | 180° | 160° | 75°–180° | 180°–65° | 25" |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

# Jamb Track - Pull Side Frame Mounted

**8916 JT**
**8916 JTH**
**8956 JT**
**8956 JTH**




4-1/2" x 4-1/2" Butt Hinges

Minimum frame face for mounting track 1-1/4".
Minimum door rail for mounting closer 3".
Minimum door rail to bottom of cover 3-3/8".




## Size Selection Chart

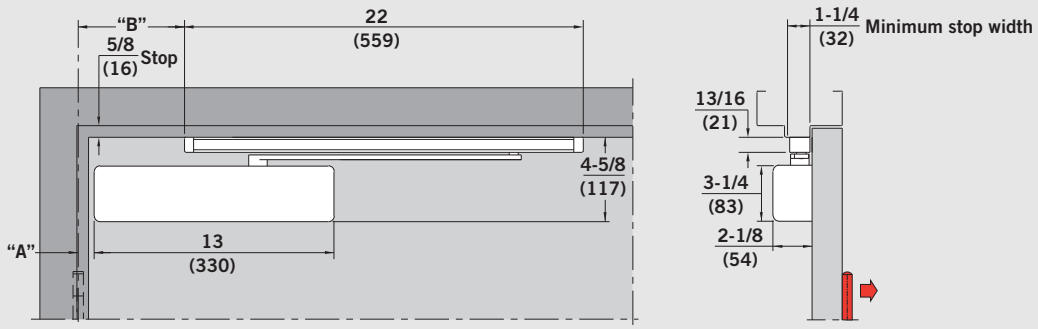
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. |
|---|---|---|---|---|---|---|
| 8916 | INTERIOR | • | • | • | • | N/A |
| | EXTERIOR | • | • | • | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | • | • | • | N/A |

| TEMPLATE REFERENCE | DIM "A" | DIM "B" | CUSHION | MAXIMUM HOLD OPEN | APPROX. BACKCHECK* | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|---|
| 85° | 3-1/2" (89) | 9-3/4" (248) | 85° | 80° | 75°–85° | 85°–65° | 31" |
| 90° | 3-1/2" (89) | 9" (229) | 90° | 85° | 75°–90° | 90°–65° | 30" |
| 110° | 3-1/2" (89) | 7" (178) | 110° | 100° | 75°–110° | 110°–65° | 28" |
| 175° | 3-1/2" (89) | 4" (102) | 178° | 145° | 75°–180° | 178°–65° | 25" |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

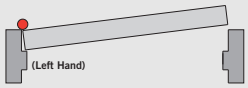
# Push Track - Push Side Soffit Mounted

**8916 PT89**
**8916 PT89H**
**8956 PT89**
**8956 PT89H**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 4-1/4" (5/8" stop shown).
Minimum door rail to bottom of cover 5-1/8" (5/8" stop shown).



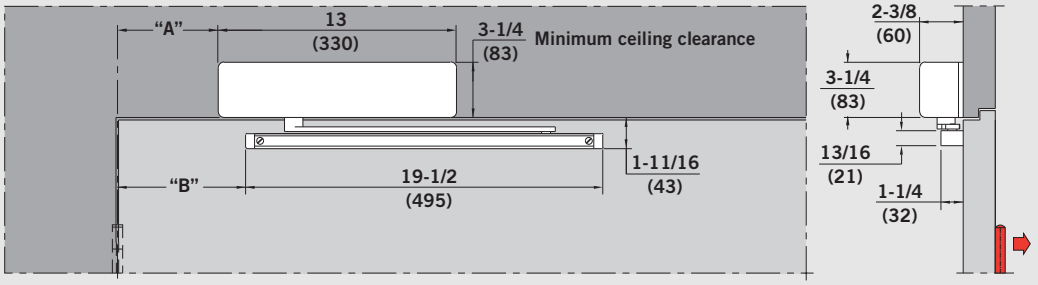

## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH | | | |
|---|---|---|---|---|---|
| | | 2'-6" min. | 3'-0" max. | 3'-6" max. | 4'-0" max. |
| 8916 | INTERIOR | • | • | • | N/A |
| | EXTERIOR | • | • | N/A | N/A |
| 8956 | INTERIOR | N/A | • | • | • |
| | EXTERIOR | • | • | • | N/A |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

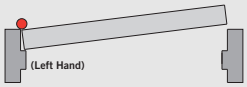
# Flush Track - Push Side Door Mounted × Backplate

**8916 FT BP89**
**8916 FTH BP89**
**8956 FT BP89**
**8956 FTH BP89**




4-1/2" x 4-1/2" Butt Hinges

Minimum transom surface for mounting BP89 plate 3".
Specify hand.




## Size Selection Chart

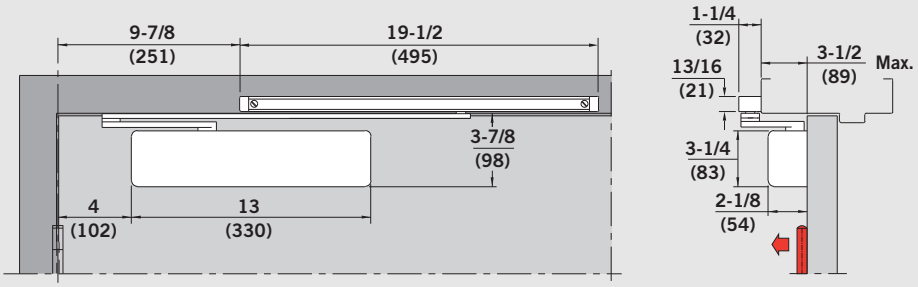
| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH | | | | |
|---|---|---|---|---|---|---|
| | | 2'-0" min. | 2'-6" max. | 3'-0" max. | 3'-6" max. | 4'-0" max. |
| 8916 | INTERIOR | • | • | ♿ | ♿ | N/A |
| | EXTERIOR | • | • | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | N/A | • | • | • |
| | EXTERIOR | N/A | • | • | • | N/A |

| TEMPLATE REFERENCE | DIM "A" | DIM "B" | CUSHION | MAXIMUM HOLD OPEN | APPROX. BACKCHECK* | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|---|---|
| 85° | 5-1/2" (140) | 7" (178) | 85° | 80° | 70°–85° | 85°–60° | 29" |
| 90° | 5-1/2" (140) | 6-1/8" (156) | 90° | 85° | 70°–90° | 90°–60° | 28" |
| 110° | 4-1/2" (114) | 4-3/4" (121) | 110° | 105° | 75°–110° | 110°–65° | 26" |
| 135° | 3-1/2" (89) | 3-3/4" (95) | 135° | 125° | 85°–135° | 135°–70° | 25" |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

# Track Double Egress - Pull Side Frame Mounted

**8916 TDE**
**8916 TDEH**
**8956 TDE**
**8956 TDEH**




4-1/2" x 4-1/2" Butt Hinges

Minimum door rail for mounting closer 3-1/2".
Minimum door rail to bottom of cover 3-3/4".
Arm requires a mimimum 3-3/4" clearance between door face and wall when opening 90 and greater.




## Size Selection Chart

| CLOSER | INTERIOR/ EXTERIOR | DOOR WIDTH 2'-6" min. | 3'-0" max. | 3'-6" max. | 4'-0" max. |
|---|---|---|---|---|---|
| 8916 | INTERIOR | • | ♿ | ♿ | N/A |
| | EXTERIOR | • | ♿ | N/A | N/A |
| 8956 | INTERIOR | N/A | • | • | • |
| | EXTERIOR | • | • | • | N/A |

| TEMPLATE REFERENCE | CUSHION | MAXIMUM HOLD OPEN | APPROX. BACKCHECK* | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|---|---|
| 125° | 125° | 110° | 80°–125° | 125°–65° | 30" |

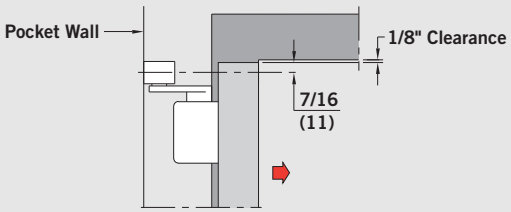
* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

# 90° Pocket Door (Track Arm)

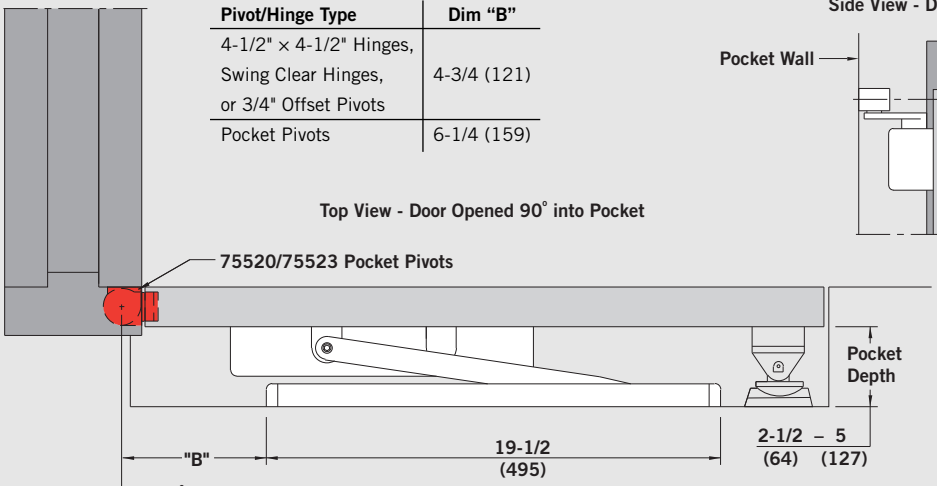
**8956 T PKT 90**

| Pivot/Hinge Type | Dim "B" |
|---|---|
| 4-1/2" x 4-1/2" Hinges, Swing Clear Hinges, or 3/4" Offset Pivots | 4-3/4 (121) |
| Pocket Pivots | 6-1/4 (159) |

Side View - Door Opened 90° into Pocket




Top View - Door Opened 90° into Pocket




℄ of 90° Pocket Pivots, 4-1/2" x 4-1/2" Butt Hinges, or 3/4" Offset Pivots




## Size Selection Chart

| CLOSER | INTERIOR | DOOR WIDTH 3'-0" max. |
|---|---|---|
| 8956 | INTERIOR | • |

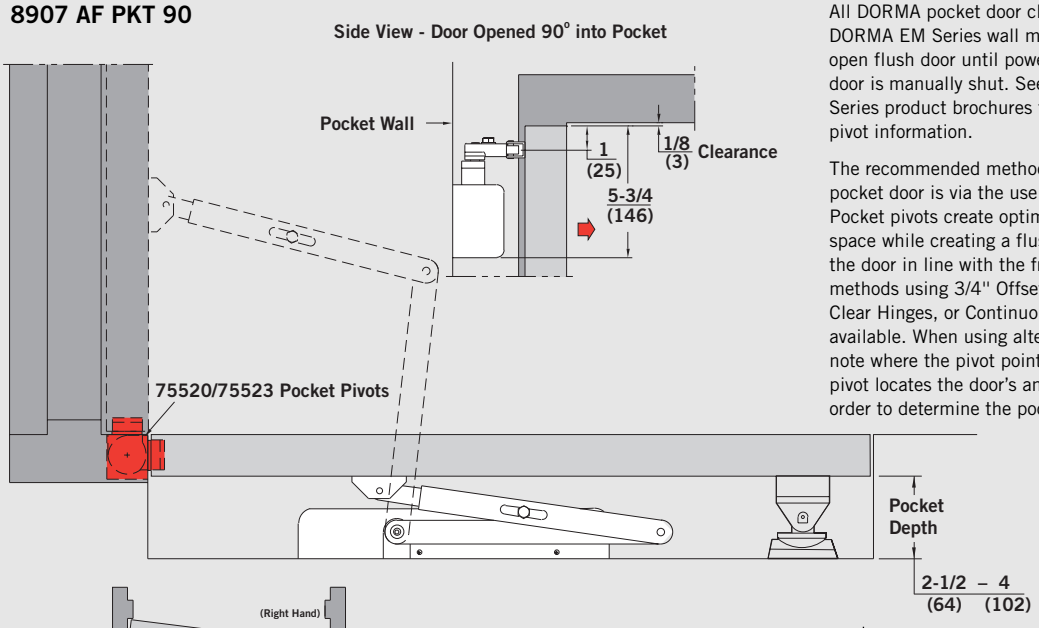
All DORMA pocket door closers, combined with a DORMA EM Series wall magnet, create a held open flush door until power is interrupted or the door is manually shut. See individual EM and LM Series product brochures for specific magnet and pivot information.

| TEMPLATE REFERENCE | APPROX. BACKCHECK* | APPROX. DELAYED ACTION | MINIMUM DOOR WIDTH |
|---|---|---|---|
| 90° | 65°–90° | 90°–65° | 26" |

* Backcheck positioning valve factory preset to on, advancing backcheck approximately 15°.

# 90° Pocket Door (Double-Lever Arm)

### 8907 AF PKT 90




All DORMA pocket door closers, combined with a DORMA EM Series wall magnet, create a held open flush door until power is interrupted or the door is manually shut. See individual EM and LM Series product brochures for specific magnet and pivot information.

The recommended method for hanging a 90° pocket door is via the use of pocket pivots. Pocket pivots create optimum unobstructed space while creating a flush appearance with the door in line with the frame. Alternate methods using 3/4" Offset Pivots, Swing Clear Hinges, or Continuous Hinges are also available. When using alternate methods, note where the pivot point of the hinge or pivot locates the door's angle of opening in order to determine the pocket depth.

**Size Selection Chart**

| CLOSER | INTERIOR | DOOR RANGE | TEMPLATE REFERENCE | APPROX. BACKCHECK* |
|---|---|---|---|---|
| 8907 | INTERIOR | 2'-0" to 4'-0" | 90° | 80°–90° |

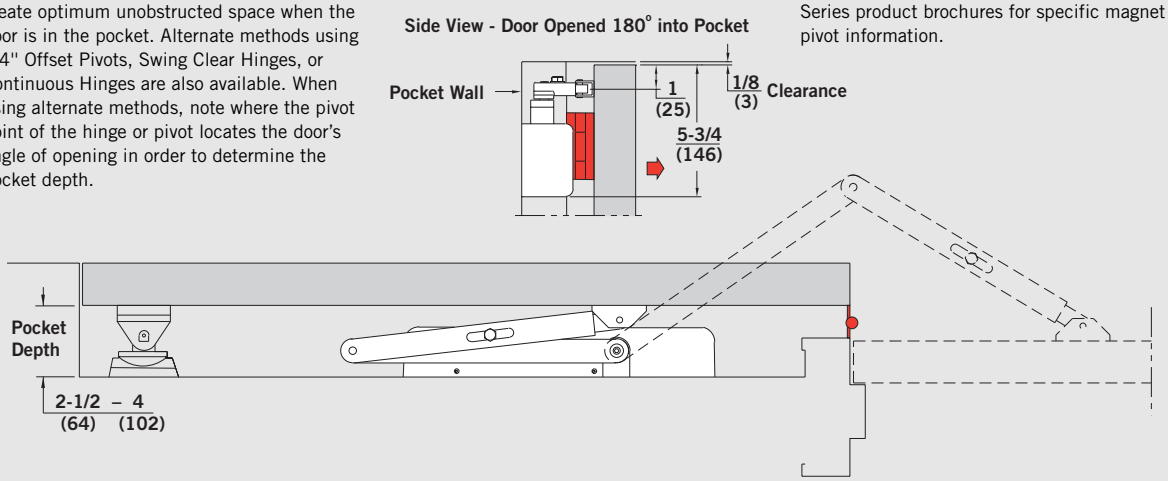
* Backcheck range is with positioning valve on.

# 180° Pocket Door (Double-Lever Arm)

### 8907 AF PKT 180

The recommended method for hanging the door is via the use of butt hinges. Hinges create optimum unobstructed space when the door is in the pocket. Alternate methods using 3/4" Offset Pivots, Swing Clear Hinges, or Continuous Hinges are also available. When using alternate methods, note where the pivot point of the hinge or pivot locates the door's angle of opening in order to determine the pocket depth.

All DORMA pocket door closers, combined with a DORMA EM Series wall magnet, create a held open flush door until power is interrupted or the door is manually shut. See individual EM and LM Series product brochures for specific magnet and pivot information.

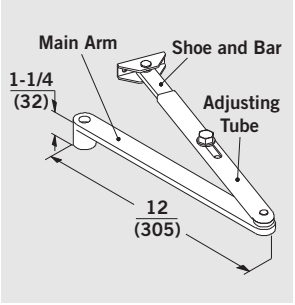



**Size Selection Chart**

| CLOSER | INTERIOR | DOOR RANGE | TEMPLATE REFERENCE | APPROX. BACKCHECK* | APPROX. DELAYED ACTION |
|---|---|---|---|---|---|
| 8907 | INTERIOR | 2'-0" to 3'-0" | 180° | 120°–180° | 180°–130° |

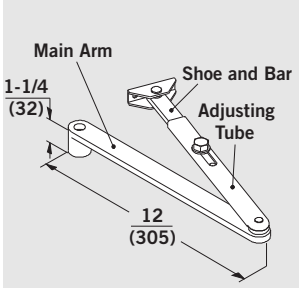
* Backcheck range is with positioning valve on.

## Flat Form Arm



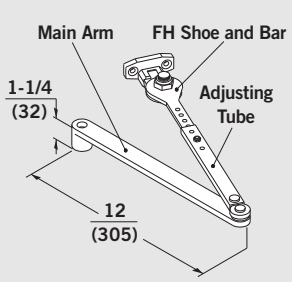

Standard arm furnished with 8900 Series closers. Arm is non-handed.
**AF89** — Regular flat form arm, complete (0"–4" [0 mm–102 mm] reveal).
**AF89J** — Top jamp flat form arm complete (4"–8" [102 mm to 203 mm] reveal).
**AF89P** — Parallel flat form arm complete (Tri-Pack) (0"–4" [0 mm–102 mm] reveal). P89 included.
**AFM89** — Regular flat form main arm and adjusting tube.

## Flat Form Arm for MJ



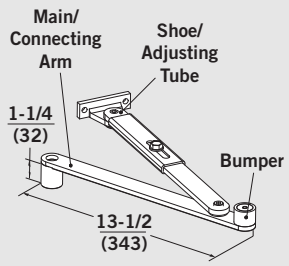

**AF8MJ** — Regular flat form arm complete for use with MJ (mortise jamb) bracket.
MJ bracket ordered separately.

## Friction Hold Open Arm



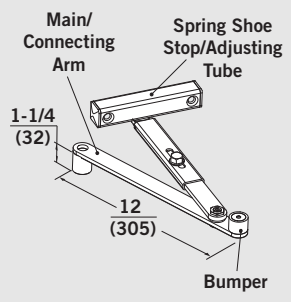

Provides a hold open function between approximately 90° and 180° of door opening (conditions permitting). Arm is non-handed.
**FH** — Friction hold open arm complete (0"–4" [0 mm–102 mm] reveal).
**FHJ** — Top jamb friction hold open arm complete (4"–8" [102 mm–203 mm] reveal).
**FHP** — Friction hold open arm complete (Tri-Pack) (0"–4" [0 mm–102mm] reveal). PHB included.
**FHM04** — Friction hold open main arm and adjusting tube (0"–4" [0 mm–102 mm] reveal).
**FHM48** — Friction hold open main arm and adjusting tube (3-1/4"–8" [83 mm–203 mm] reveal).
**FHSB** — Friction hold open shoe and bar.

## Cushion IS Arm



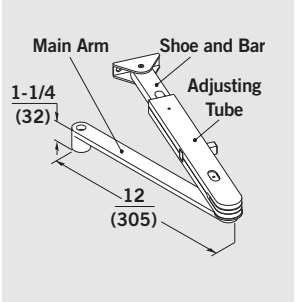

Provides a cushioned opening function for regular and top jamb applications at 85°, 90°, 95°, 100°, 105°, and 110°. Arm is non-handed.
**IS** — Cushion IS arm complete (0"–3-1/2" [0 mm–89 mm] reveal).
**ISJ** — Cushion IS top jamb arm complete (3-1/2"–6-1/2" [89 mm–165 mm] reveal).
**ISH** — Cushion IS hold open arm complete (0"–3-1/2" [0–89 mm] reveal).
**ISJH** — Cushion IS top jamb hold open arm complete. (3-1/2"–6-1/2" [89 mm–165 mm] reveal).

## Spring Stop IS Arm



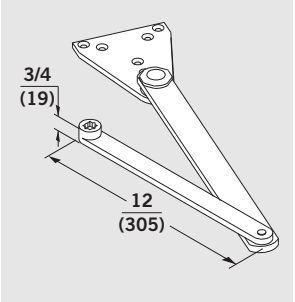

Provides a spring assisted dead stop function for regular and top jamb applications at 85°, 90°, 100°, and 110°. Arm is non-handed.
**S-IS** — Spring stop IS arm complete (0"–3-1/2" [0 mm–89 mm] reveal).
**S-ISH** — Spring stop IS hold open arm complete (0"–3-1/2" [0 mm–89 mm] reveal).
**S-ISJ** — Spring stop IS top jamb arm complete (3-1/2"–6-1/2" [89 mm–165 mm] reveal).
**S-ISJH** — Spring stop IS top jamb hold open arm complete (3-1/2"–6-1/2" [89 mm–165 mm] reveal).

## Plunger Hold Open Arm



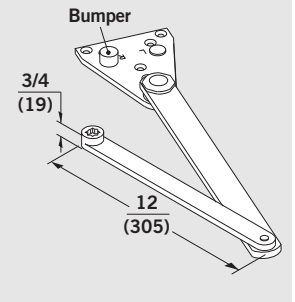

Provides a hold open function at a selected point within a range from approximately 30° to 150° (conditions and installation applications permitting). Ideal for doors frequently placed in and out of hold open. Arm is non-handed.
**PH** — Plunger hold open arm complete regular or top jamb mount (0"–1-1/4" [0 mm–32 mm] reveal).
**PHP** — Plunger hold open arm complete parallel arm or top jamb mount (1-1/4"–3-1/4" [32 mm–83 mm] reveal).
**PHM** — Plunger hold open main arm and adjusting tube.
**PHSB** — Plunger hold open shoe and bar regular and top jamb mount (0"–1-1/4" [0 mm–32 mm] reveal).
**PHSBP** — Plunger hold open shoe and bar parallel arm or top jamb mount (1-1/4"–3-1/4" [32 mm–83 mm] reveal).

## Super Parallel Arm




Heavy-duty parallel arm. Available in non-hold open, thumb turn hold open and hex key turn hold open. Units can be installed for maximum opening of 100° or 180°. Hold open units will hold open at 90° or 125°. Maximum opening is 180° (conditions permitting). Arm is non-handed. Non-hold open arm illustrated.
**SPA** — Super parallel arm non-hold open.
**SPAT** — Super parallel arm thumb turn hold open.
**SPAK** — Super parallel arm hex key turn hold open.

## Door Saver Arm

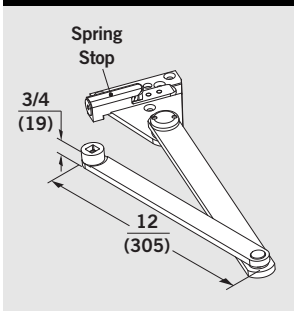



Heavy-duty parallel arm with integral cushioned opening function. Available in non-hold open, thumb turn hold open, and hex key turn hold open. Units can be installed to achieve either stop or stop and hold open at 85°, 90°, 100°, and 110°. Maximum opening is 110° (conditions permitting). Arm is non-handed. Non-hold open arm illustrated.
**DS** — Door saver arm non-hold open only.
**DST** — Door saver arm thumb turn hold open.
**DSK** — Door saver arm hex key turn hold open.
**BUMPERDS** - Door saver bumper only.

## Cushion IS/Spring Stop IS Arm Accessories

**SISM** — Cushion IS/spring stop IS main arm and connecting arm. (0"–3-1/2" [0 mm–89 mm] reveal).
**SISJM** — Cushion IS/spring stop IS top jamb main arm and connecting arm. (3-1/2"–6-1/2" [89 mm–165 mm] reveal).
**ISSB** — Cushion IS spring shoe stop and adjusting tube.
**BUMPER IS** — Cushion IS/spring stop IS urethane bumper.
**S-SPRING IS** — Spring shoe stop assembly complete.

## Spring Stop Door Saver Arm



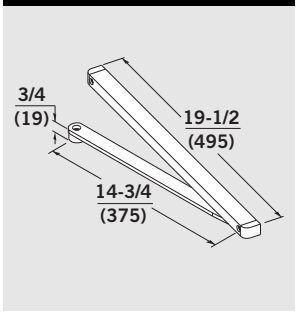

Heavy-duty parallel arm with spring assisted dead stop function. Available in non-hold open and thumb turn hold open. Units can be installed to achieve either stop or stop and hold open at 85°, 90°, 100°, and 110°. Maximum opening is 110° (conditions permitting). Arm is non-handed. Non-hold open arm illustrated.

**S-DS** — Spring stop door saver arm.

**S-DST** — Spring stop door saver arm thumb turn hold open.

**S-SPRING DS** — Spring stop assembly compete.

## Track Arm




Provides slide track function for improved aesthetics and vandal resistance. Units can be installed to provide 85°, 90°, 110° or 180° of door opening (conditions and application permitting). Arm is non-handed. Also available with hold open option to provide selective single point hold open. Range of hold open and maximum opening varies with mounting application. T version illustrated.

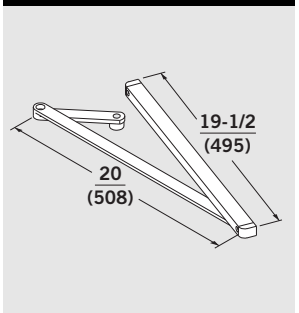
**T** — Track arm complete. Can be used in T, JT and FT track applications.

**TH** — Track hold open arm complete. Can be used in THO, JTHO and FTHO track applications.

**PT89** — Push-side track arm complete. Used with PT track applications (closer on door, track or soffit).

**PT89H** — Push-side track hold open arm complete. Used with PT track applications (closer on door, track on soffit).

## TDE Track Arm

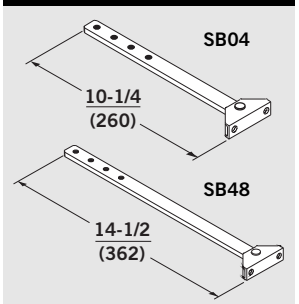



Provides slide track function for pull-side reveal conditions up to 3-1/2". Provides 125° of door opening (conditions permitting). Arm is handed. Also available with hold open option to provide selective single point hold open between 30° and 110°. Arm requires a minimum 3-3/4" clearance between door face and wall when opened 90° and greater.

**TDE** — Double egress track arm complete.

**TDEH** — Double egress hold open track arm complete.

## Regular Arm Shoe and Bar

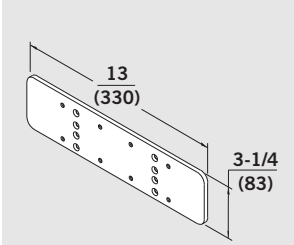



**SB04** — 0"–4" (0 mm–102 mm) reveal - Shoe and bar only.

**SB48** — 4"–8" (102 mm–203 mm) reveal - Shoe and bar only.

SB04 and SB48 must be used in conjunction with AMF89. Non-handed.

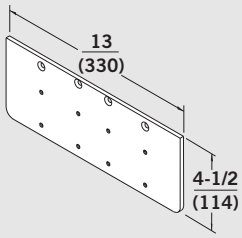
## Backplate




**BP89** — For mounting top jamb when frame face is less than 2-7/8" (73 mm). Two sets of mounting holes accommodate 1-3/4" (44 mm) or 3-1/4" (83 mm) minimum ceiling clearance.* Top set of holes create top jamb drop application to clear a surface applied stop/holder.

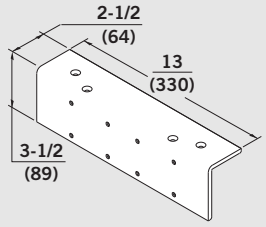
Can also be used for regular mount closer to clear mortised stop/holder.

## Drop Plate



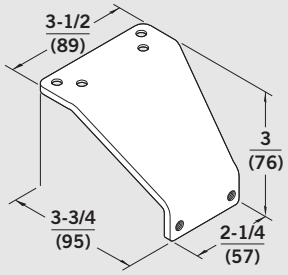

**DP89** — For parallel arm installation of 8900 Series closers when top door rail is less than 5-3/4" (146 mm) for non-hold open and plunger hold open. When top door rail is less than 6" (152 mm) for friction applications (assuming 5/8" (16 mm) stop dimension).

## Angle Bracket



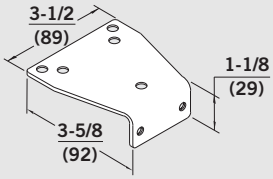

**AB89** — For installation of 8900 Series closers where parallel arm and top jamb applications are not practical due to low overhead ceiling clearance, narrow frame face, or unusual trim conditions. This bracket can also be used to provide clearance for a surface-applied stop/holder.

## Drop Bracket



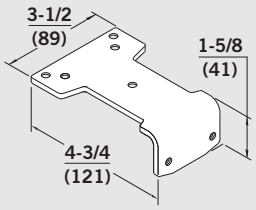

**PD** — For 8900 Series closer non-hold open parallel arm applications to clear a surface-applied stop/holder.

## Bracket



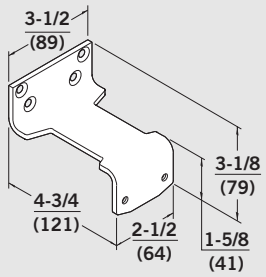

**P89** — Furnished standard with 8900 P Series closer non-hold open and plunger hold open parallel arm applications. Spacer block furnished standard for use with narrow stop applications.

## Parallel Hold Open Bracket



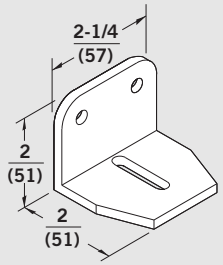

**PHB** — Furnished standard with 8900 FHP Series closer friction hold open parallel arm applications. Spacer block furnished standard for use with narrow stop applications.

## Parallel Flush Transom Bracket




**PFT** — For all 8900 Series closer hold open and non-hold open parallel arm installations where flush transom conditions prohibit use of P89 or PHB bracket.

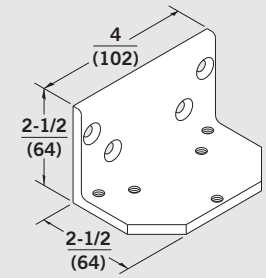
## Narrow Frame Bracket




**NFHD** — For use with all 8900 Series DS and SPA applications where total frame depth is less than 4-1/2" (114 mm), prohibiting use of standard spacer block. NFHD bracket is used in lieu of block supplied with arm.

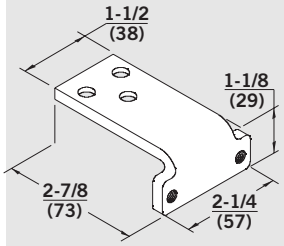
*Overhead ceiling clearance is measured from bottom of frame face to ceiling.

### Flush Transom Bracket




**FTHD** — For use with all 8900 Series DS and SPA applications where flush transom conditions prohibit normal installation of soffit bracket.

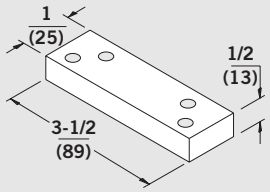
### Mortised Jamb Bracket




**MJ** — For 8900 Series closers with regular mount non-hold open assemblies where frame conditions will not permit use of the standard foot, e.g. molded, bull nose, or ornate trim. Permits use of parallel arm application between twin communicating doors where limited space prohibits use of P89 bracket.

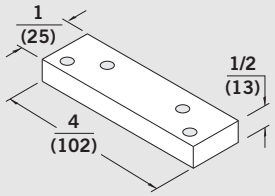
Flat form arm applications must use MJ in combination with AF8MJ Arm.

### Blade Stop Spacer



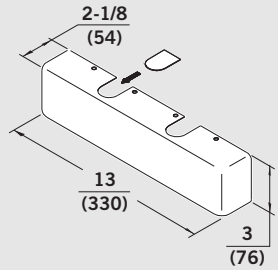

**BS** — For use with all 8900 Series P89, PD, and PHB applications installed on cased frames with applied blade stops. This block is used in conjunction with the spacer furnished with the arm to provide adequate clearance for the blade stop.

### Heavy-Duty Blade Stop Spacer




**BSHD** — For use with all 8900 Series DS and SPA applications installed on cased frames with applied blade stops. This block is used in conjunction with the spacer furnished with the arm to provide adequate clearance for the blade stop.

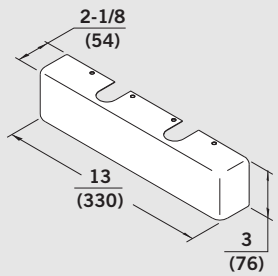
### Full Plastic Cover




**FC** — Full plastic cover with interchangeable tab.

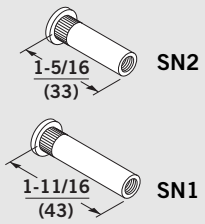
**FCSL** — Full plastic slotted cover with interchangeable tab. Mounting holes slotted for low ceiling conditions.

### Full Metal Cover




**FMC**— Full metal cover. Specify hand for top jamb, T track, and FT track applications.

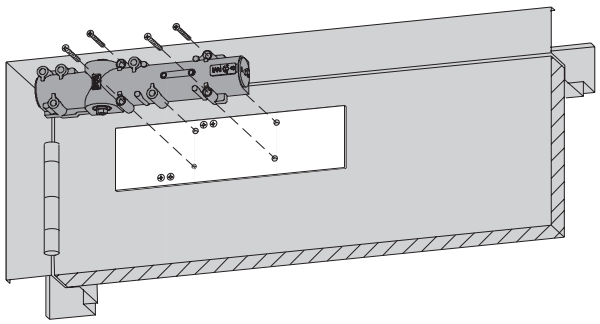
### Sex Nuts




**SN1** — Sex nuts for 1-3/4" (44 mm) door.

**SN2** — Sex nuts for 1-3/8" (35 mm) door.

Required for use on unreinforced doors and wood or composite labeled fire doors for securely attaching hardware to the door.



**4040R** - Conversion plate utilizes **LCN 4040 Reg. 120°** holes for attachment to the door. The frame face will require drilling and tapping two holes for the arm shoe assembly. The DORMA 8900 Series closer will open a full 180° at this location.

**4040P** - Conversion plate utilizes **LCN 4040 PA 180°** holes for attachment to the door. The frame will require drilling and tapping four holes for the DORMA 960R soffit bracket. The DORMA 8900 Series closer will open a full 180° at this location.

**4040C** - Conversion plate utilizes **LCN 4040 Cush 90°** holes for attachment to the door. Requires drilling and tapping five holes in the frame for the DORMA **DS** soffit bracket.

**4040E** - Conversion plate utilizes **LCN 4040 EDA 180°** holes for attachment to the door. Requires drilling and tapping five holes in the frame for the **SPA** soffit bracket.

**4011** - Conversion plate utilizes **LCN 4011 Reg. 90°** or **LCN 4011 Reg. 140°** holes for attachment to the door. The frame face will require drilling and tapping two holes for the arm shoe assembly.

**4111** - Conversion plate utilizes **LCN 4111 PA 90°** or **LCN 4111 PA 180°** holes for attachment to the door. Requires drilling and tapping five holes in the frame for the DORMA **SPA** soffit bracket.

**4020** - Conversion plate utilizes **LCN 4020 TJ 100°** or **LCN 4020 TJ 180°** holes for attachment to the frame face. The door will require drilling and tapping two holes for the arm shoe assembly.

**7500R** - Conversion plate utilizes **Norton 7500 Reg. 90°** or **Norton 7500 Reg. 180°** holes for attachment to the door. The arm shoe attaches using the existing Norton arm shoe preparation.

**P7500** - Conversion plate utilizes **Norton P7500 PA 90°** or **Norton P7500 PA 180°** holes for attaching the closer body to the door. The soffit bracket attaches using the existing Norton soffit bracket preparation.

**8300/8500** - Conversion plate utilizes **Norton 8300** and **8500** regular and parallel arm holes for attachment to the door. Regular arm shoe and parallel arm soffit bracket attachments use the existing Norton preparation.

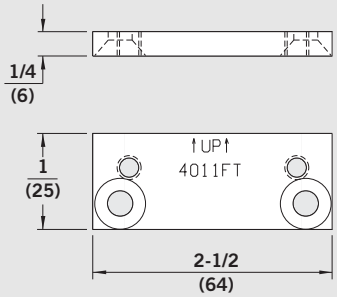
**4011FT** - Optional arm shoe conversion plate used with4040R, 4011, or 4020 for applications in which redrilling is not desirable.

**89/DC220R** - Conversion plate utilizes **Corbin/Russwin DC2200** regular arm mounting holes for attaching the closer body to the door. Arm shoe attaches using the existing C/R mounting holes.

**89SPA/ DC2210PA** - Conversion plate utilizes **Corbin/Russwin DC2210** heavy duty parallel arm mount holes for attaching the closer body to the door. The soffit bracket would need new holes prepared in the soffit to utilize the DORMA SPA plate.

**8980R/PA** - Conversion plate utilizes **DORMA TS83** regular or parallel arm template holes to mount the closer to the door. For parallel arm, the parallel bracket can either remain or be replaced with a new P89 standard parallel arm bracket.

**4011FT (optional for use with 4040R, 4011, or 4020)**



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