

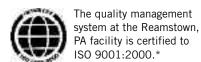


Surface Applied Door Closers

DORMA 7400

T∽
10

Technical Drawings Regular × round form arm 5 Regular × friction hold open 5 Regular × cushion IS arm 6 Regular × spring stop IS arm 6 Top jamb × round form arm 7
Regular × round form arm 5 Regular × friction hold open 5 Regular × cushion IS arm 6 Regular × spring stop IS arm 6
Regular × friction hold open 5 Regular × cushion IS arm 6 Regular × spring stop IS arm 6
Regular × cushion IS arm
Regular × spring stop IS arm6
Top jamb × round form arm
Top jamb × friction hold open
Top jamb × cushion IS arm8
Top jamb × spring stop IS arm
Parallel arm × round form arm
Parallel arm × friction hold open9
Heavy-duty super parallel arm10
Heavy-duty parallel arm door saver × cushion
Heavy-duty parallel arm × spring door saver
Track - pull side door mounted
Jamb track - pull side frame mounted
Push track - push side soffit mounted
Flush track - push side door mounted × backplate 13
Track double egress - pull side frame mounted
Accessories
Round form arm (8 mm rod)
Round form arm (10 mm rod)
Round form arm (secured elbow) (8 mm rod)
Narrow profile arm (8 mm)
Narrow profile arm (10 mm)
Regular arm shoe and rod
Friction hold open arm
Cushion IS arm 15 AB74 angle bracket 18
Spring stop IS arm. 15 AB86 angle bracket. 18
Cushion IS/spring stop IS arm accessories
Super parallel arm
Door saver arm
Spring stop door saver arm
Track arm
TDE track arm
Push side track arm
Sex nuts
BP74 backplate
BP86 backplate
BP86FC backplate





^{*}DORMA Door Controls Inc., dba: DORMA Architectural Hardware

BP74T backplate......17



The 7400 Series closers offer modern styling and versatility while providing safe and reliable door control.

Featuring backcheck and adjustable spring sizes, DORMA's 7400 Series is the ideal solution in a wide variety of applications, including barrier-free. This Grade 1 hydraulic surface door closer is both flexible and easy to install, and it's all backed by DORMA's 25-year warranty.

The 7400 Series offers a compact design and is available in a variety of sprayed finishes to complement any opening's decor.

Technical Details:

- Available as 7414 with adjustable spring sizes 1–4 and 7436 with adjustable spring sizes 3–6.
- & 7414 meets 5 lb interior barrier-free applications.
- Non-handed for regular, top jamb and parallel arm applications.
- Quick and easy to install.
- · Compact design.
- Two noncritical adjusting valves (sweep and latch) with thermostatic properties work to provide consistent closing speeds under a wide variety of temperatures.
- Adjustable backcheck standard. Provides cushioning when the door is abusively opened.
- Available with optional delayed action to delay door closing from maximum opening. Delay time is adjustable.
- The 7400 Series is certified to the requirements of ANSI A156.4 Grade 1.
- Available with optional self-drilling screws for steel door and frame applications (DPK86).
- Available with optional self-tapping screws for aluminum door and frame applications (TPK86).
- BP640C mounting bracket can be used when installing into a 9-1/16" template hole pattern.

Certification:

The DORMA 7400 is listed by U.L. and C.U.L. under their reinspection programs. Meets the requirements for UL10C and UBC 7.2 (1997) for positive pressure. California State Fire Marshall (CSFM) approved.

Specification:

All closers shall be DORMA 7400 Series hydraulic surface applied rack and pinion closers. The closer has two independent valves to separately control sweep and latch closing speeds and provide constant speeds when temperatures change. Standard with adjustable backcheck to provide cushioning effect in opening. All 7400 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.

Features	7414	7436
Spring sizes (shipped as size 4)	1-4*	3–6
Non-handed	•	•
Parallel arm bracket	•	•
Adjustable spring sizes	•	•
Fixed spring sizes	-	-
Controlled closing with two adjustable valves	180°-10° 10°-0°	180°-10° 10°-0°
Backcheck	•	•
Delayed action	0	0
Hold open	0	0
Self-drilling screws	0	0
Self-tapping screws	0	0
Tamper-resistant TORX screws	0	0
Slim plastic cover	0	0
Full plastic cover	0	0

- yes no optional
- * Meets 5 lb maximum opening force on 3'-0" wide interior doors.

Optional Specification:

The 7400 Series closer to have delayed action (DA). Delayed action range will be effective from maximum opening to approximately 65°. All 7400 closers to have slim plastic cover (COV) or full plastic cover (FC). Closers to have arm with a selective single point hold open between $80^{\circ}-170^{\circ}$ for regular mount (FH), $70^{\circ}-175^{\circ}$ for parallel arm mount (specify FHP).

All closers to have sex nuts with machine screws for 1-3/4" door (SNB1) or 1-3/8" door (SNB2). Closers to have self-drilling screws for steel doors and frames (DPK86). Closers to have self-tapping screws for alumninum doors and frames (TPK86). Closers to have TORX security for all exposed fasteners (TX86).

All closers to be supplied with BP640C mounting bracket to match a 9-1/16" closer body hole pattern.

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.

Warranty: 25 Years.

How to Order	7400 Series		Example
Size	Adjustable 3–6 Adjustable 1–4		7436 7414
Application	No designation P J	- Regular mount - Regular, top jamb, and parallel mount - Top jamb mount	7414 AR 7414 ARP 7436 ARJ
Body Option	DA COV FC	- Adjustable delayed action - Slim plastic cover - Full plastic cover	7436 DA 7436 COV 7414 FC
Arm	AR ARJ ARP A08 A08P FH FHJ FHP IS ISH S-IS S-ISH ISJ ISJH S-ISJ S-ISJH SPA SPAT SPAK DS S-DST DSK T TH PT86 PT86H TDE TDEH	Round form non-hold open (regular mount) Round form non-hold open (top jamb mount) Round form non-hold open (parallel arm mount) Round form secured elbow non-hold open (regular mount) Round form secured elbow non-hold open (parallel arm mount) Friction hold open (regular mount) Friction hold open (top jamb 4" to 8" reveal) Friction hold open (parallel arm) Cushion IS arm (regular mount) Cushion IS arm (regular mount) Spring stop IS arm (regular mount) Spring stop IS arm (regular mount) Spring stop IS arm (top jamb 3-1/2" to 6-1/2" reveal) Cushion IS arm (top jamb 3-1/2" to 6-1/2" reveal) Spring stop IS arm (top jamb 3-1/2" to 6-1/2" reveal) Spring stop IS arm hold open (top jamb 3-1/2" to 6-1/2" reveal) Spring stop IS arm hold open (top jamb 3-1/2" to 6-1/2" reveal) Super parallel arm Super parallel arm, thumb turn hold open Super parallel arm, hex key turn hold open Door saver parallel arm Spring stop door saver parallel arm Door saver parallel arm, thumb turn hold open Spring stop door saver parallel arm, thumb turn hold open Slide track arm T, JT, and FT applications Slide track arm T, JT, and FT applications with hold open Stop mounted slide track arm Stop mounted slide track arm, double egress (specify hand) Jamb mounted slide track arm, double egress with hold open (specify hand)	7414 AR 7414 ARJ 7436 ARP 7414 AO8 7436 AO8P 7414 FH 7436 FHJ 7414 IS 7414 IS 7414 IS 7414 S-IS 7414 S-ISJ 7414 S-ISJ 7414 S-ISJ 7414 S-ISJ 7414 S-ISJ 7414 S-ISJ 7416 S-PA 7436 SPA 7436 SPAT 7436 SPAT 7436 S-DS 7436 S-DS 7436 S-DS 7436 T 7436 TH 7436 TDE LH 7436 TDE LH 7436 TDE LH
Accessories		- Specify the number of the accessory.	7414 × DP74
Fastener Packs	SNB1 DPK86 TPK86 TX86	 Sex nuts (see information on page 16) Self-drilling screw pack for steel doors and frames Self-tapping screw pack for aluminum doors and frames Tamper-resistant TORX screws 	7436 SNB1 7436 DPK86 7436 TPK86 7436 TX86
Finish	See DORMA fini	sh information in this brochure. Example: 689 = Aluminum	7436 689

Technical Drawing (Symbols and Notes)

Recommended application

N/A – Not applicable/application not recommended

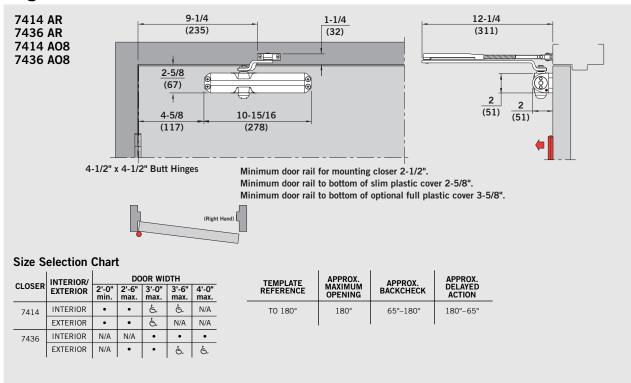
E

 Opening force 5 lb or less on interior doors; 8.5 lb or less on exterior doors where door without closer attached is 1 lb or less. **REDUCED OPENING FORCE INSTALLATIONS CAUTION:** Manual door closers, including closers certified to conform to BHMA/ANSI Standard 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.

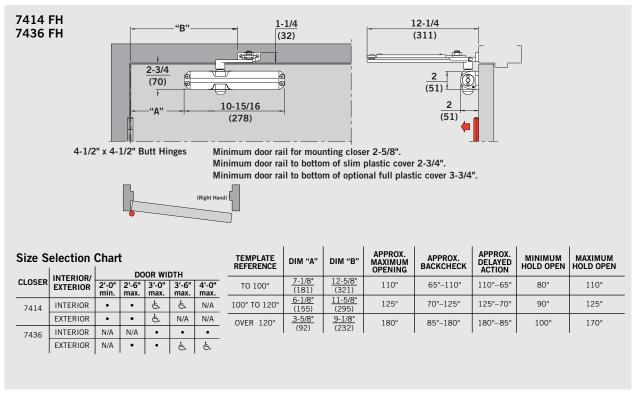
Refer to catalog for information on ED800 Low Energy Operator to meet reduced opening force requirements without affecting closing power.



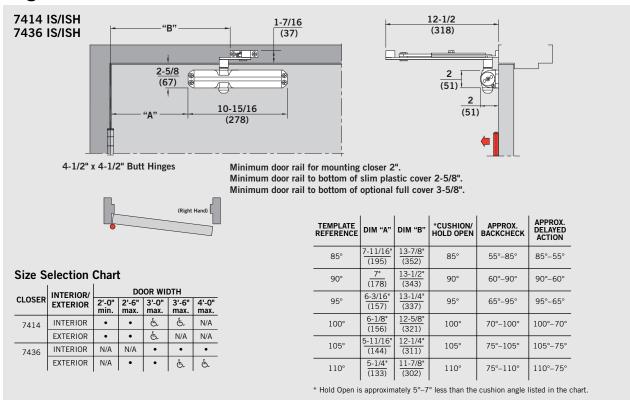
Regular × Round Form Arm



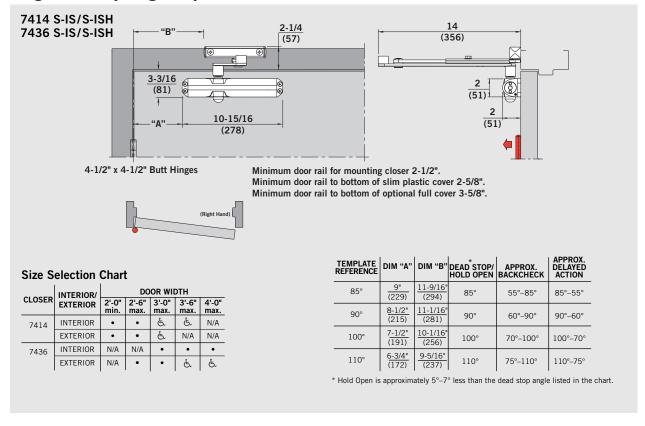
Regular × Friction Hold Open



Regular × Cushion IS Arm

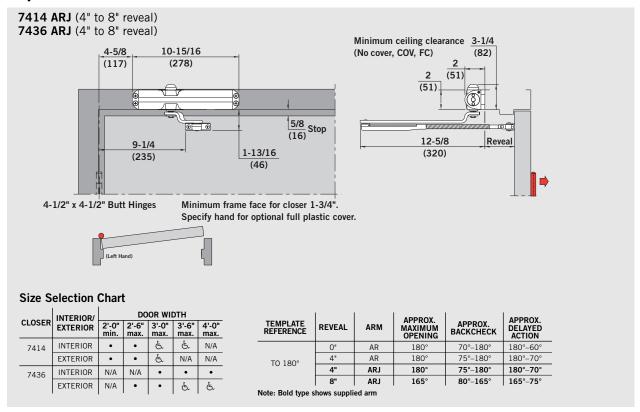


Regular × Spring Stop IS Arm

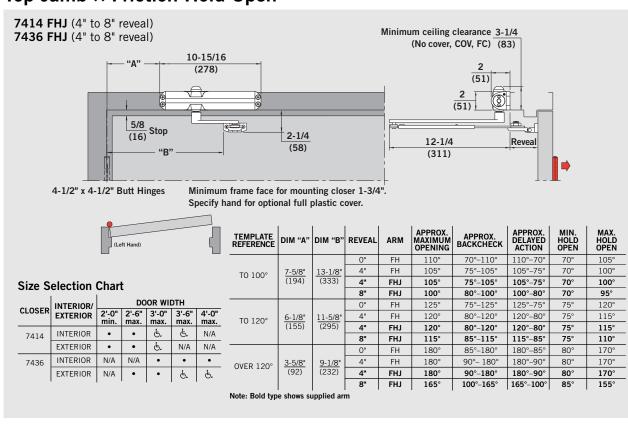




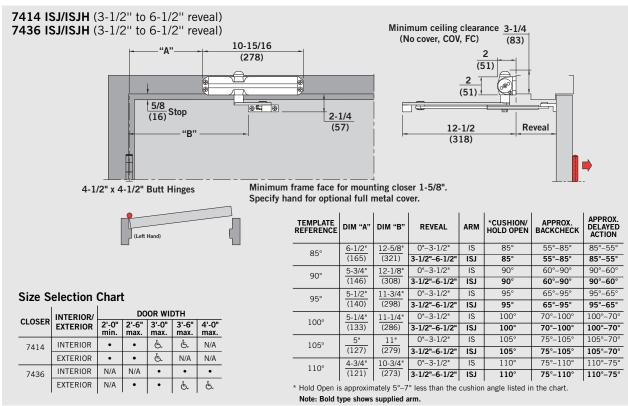
Top Jamb × Round Form Arm



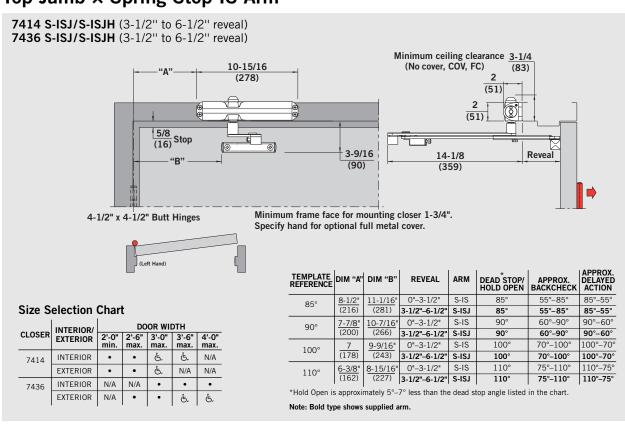
Top Jamb × Friction Hold Open



Top Jamb × Cushion IS Arm

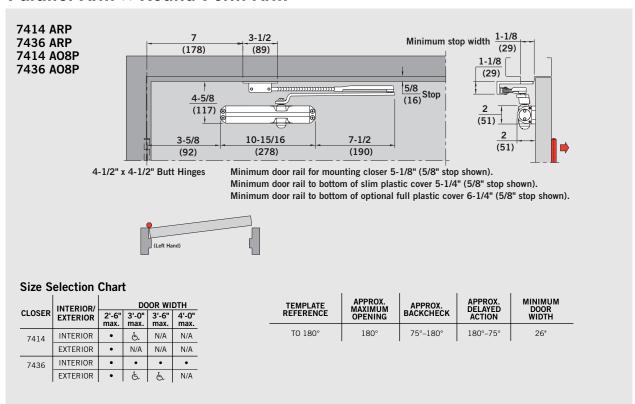


Top Jamb × Spring Stop IS Arm

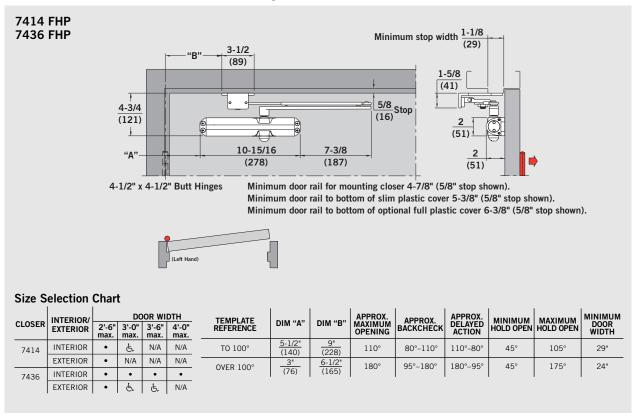




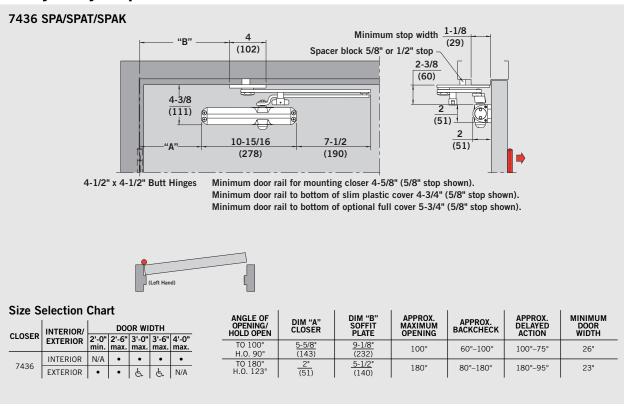
Parallel Arm × Round Form Arm



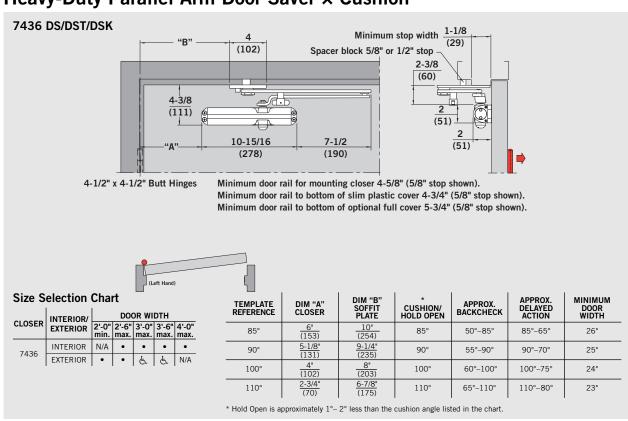
Parallel Arm × Friction Hold Open



Heavy-Duty Super Parallel Arm

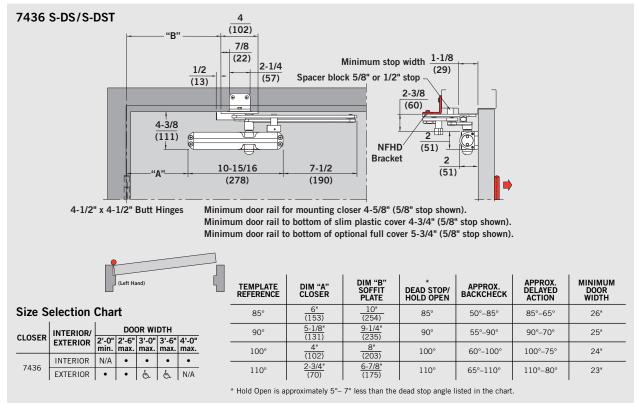


Heavy-Duty Parallel Arm Door Saver × Cushion

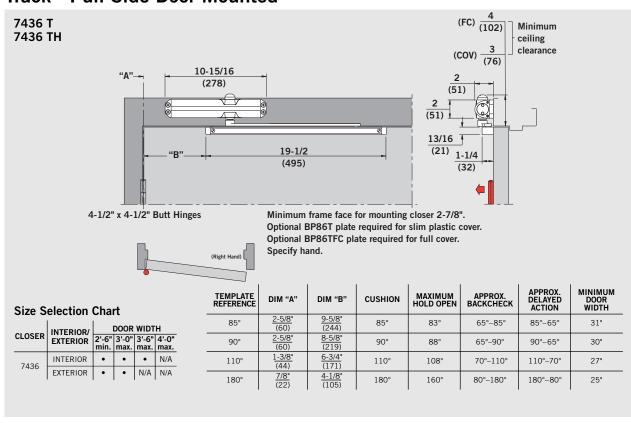




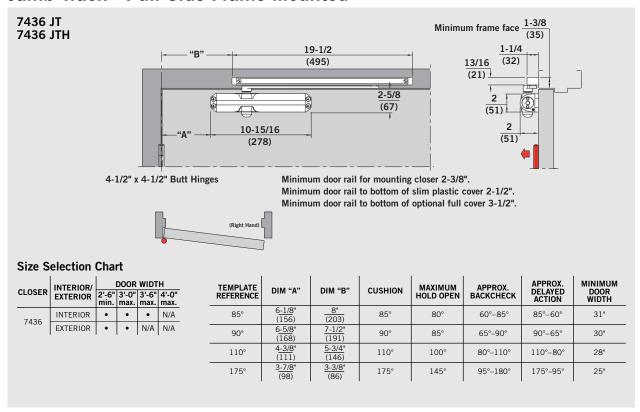
Heavy-Duty Parallel Arm × Spring Door Saver



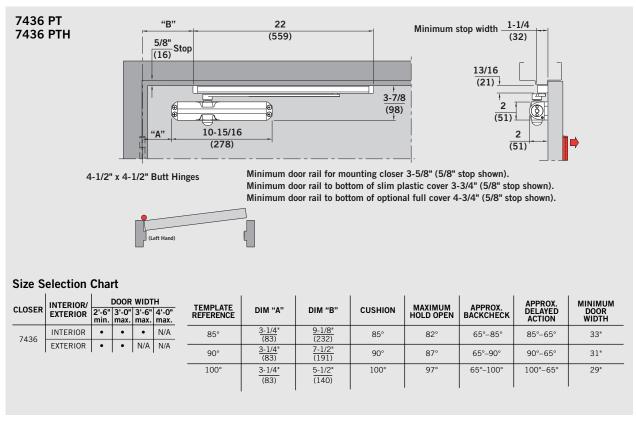
Track - Pull Side Door Mounted



Jamb Track - Pull Side Frame Mounted

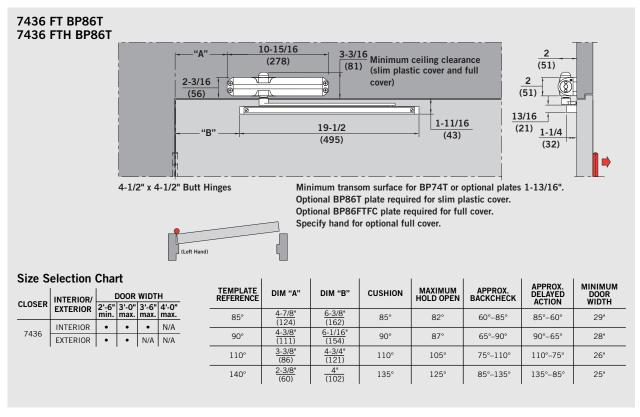


Push Track - Push Side Soffit Mounted

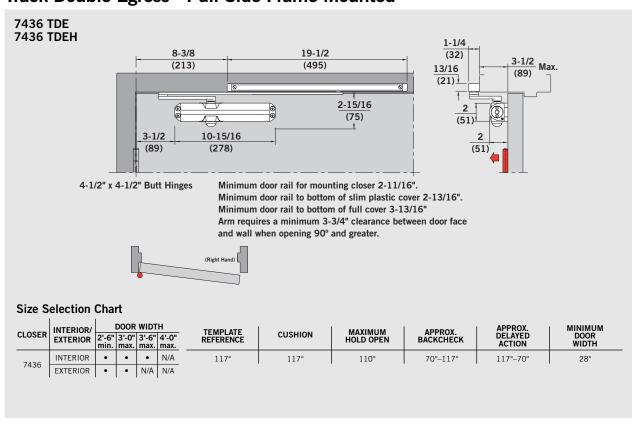




Flush Track - Push Side Door Mounted × Backplate

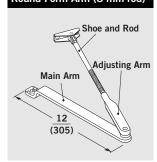


Track Double Egress - Pull Side Frame Mounted





Round Form Arm (8 mm rod)

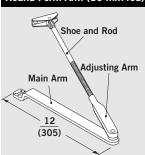


AR — Complete Arm Assembly (0"-4" [0 mm-102 mm] reveal) with 8 mm rod. Arm is non-handed.

ARP — Parallel round form arm complete (Tri-Pack) (0"-4" [0 mm-102 mm] reveal). P86 included.

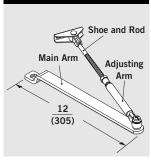
AMR04 — Regular non-hold open main arm and adjusting arm. Accepts 8 mm rod.

Round Form Arm (10 mm rod)



ARJ — Complete Arm Assembly (4"-8" [102 mm-203 mm] reveal) with 10 mm rod. Designed specifically for top jamb applications with deeper reveals. Arm is non-handed. AMR48 — Regular non-hold open main arm and adjusting arm. Accepts 10 mm rod.

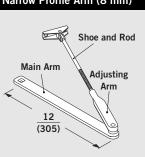
Round Form Arm (8 mm rod)



AO8 —Complete secured elbow arm non-hold open assembly (0"-4" [0 mm-102 mm] reveal) with 8 mm rod. Optional arm with 7400 Series closers. Arm is nonhanded.

AO8P— Parallel round form arm secured elbow non-hold open complete (Tri-Pack) (0"-4" [0 mm-102 mm] reveal). P86 included.

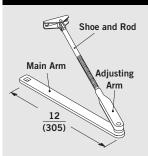
Narrow Profile Arm (8 mm)



ARNP — Complete arm assembly. Regular or top jamb mount. Permits installation on 1" (25 mm) frame face for regular mount with maximum pull-side reveal of 1/8" (3 mm). Can also be used top jamb (0"-4" [0 mm-102 mm] reveal) for narrow top door rails. Arm is non-handed. **ARNPP** — Complete arm assembly for parallel arm mount (Tri-Pack). (0"-4" [0 mm-102 mm] reveal). P86 included.

AMR04NP — Narrow profile main arm and adjusting arm. Used in conjunction with SR04 shoe and rod. Uses 8 mm rod.

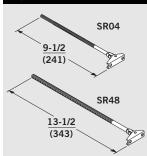
Narrow Profile Arm (10 mm)



ARNPJ — Complete arm assembly for top jamb installations (4"-8" [102 mm-203 mm] reveal) for narrow top door rails. Arm is non-handed. AMR48NP — Narrow profile main arm and adjusting arm. Used in conjunction with SR48 shoe and rod. Uses 10 mm rod.

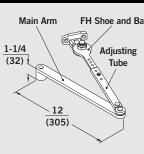


Regular Arm Shoe and Rod



SR04 (8 mm Rod Diameter) — 0"-4" (0 mm-102 mm) reveal. Shoe and rod only. SR48 (10 mm Rod Diameter)— 4"-8" (102 mm-203 mm) reveal. Shoe and rod only. SR04 has an 8 mm rod and must be used in conjunction with main arm and adjusting arm AMR04. The SR48 has a 10 mm rod and must be used with main arm and adjusting arm AMR48. Non-handed.

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 — Friction hold open arm complete (4"-8" [102 mm-203 mm] reveal).

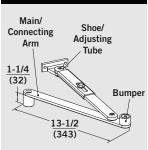
FHP — Friction hold open arm complete (Tri-Pack) (0"-4" [0 mm-102 mm] reveal). PHB included.

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 (4"-8" [102 mm-203 mm] reveal).

FHSB — Friction hold open shoe and bar.

Cushion IS Arm

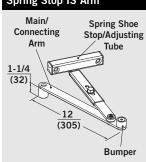


Provides a cushioned opening function for regular and top jamb applications at 85°, 90°, 95°, 100°, 105°, and 110°. Arm is non-handed. IS — Cushion IS arm complete (0"-3-1/2" [0 mm-89 mm] reveal).

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).

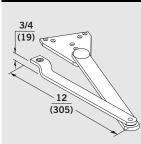
Cushion IS/Spring Stop IS Arm Accessories

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.





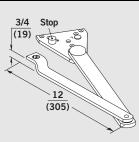
Heavy-duty parallel arm. Available in non-hold open, thumb turn hold open, and hex key turn hold open. Units can be installed for maximum opening of 100° or 180°. Hold open units will hold open at 90° or 125°. Maximum opening is 180° (conditions permitting). Arm is nonhanded. Non-hold open arm illustrated.

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



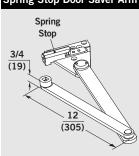
Heavy-duty parallel arm with integral cushioned opening function. Available in non-hold open, thumb turn hold open, and hex key turn hold open. Units can be installed to achieve either stop or stop and hold open at 85°, 90°, 100°, and 110°. Maximum opening is 110° (conditions permitting). Arm is non-handed.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

DST — Door saver arm thumb turn hold open.

DSK — Door saver arm hex key turn hold open.

BUMPER DS — Door saver bumper.

Spring Stop Door Saver Arm



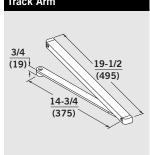
Heavy-duty parallel arm with spring assisted dead stop function. Available in nonhold open and thumb turn hold open. Units can be installed to achieve either stop at 85°, 90°, 100°, and 110° or stop and hold open function. Maximum opening is 110° (conditions permitting). Arm is non-handed. Non-hold open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

S-DS — Spring stop door saver arm.

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

S-SPRING DS — Spring stop assembly complete.

Track Arm

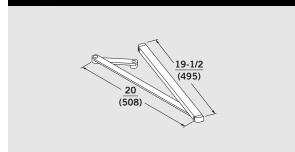


Provides slide track function for improved aesthetics and vandal resistance. Units can be installed to provide 85°, 90° , 110° , or 180° of door opening (conditions and application permitting). Arm is non-handed.

T — Track arm complete. Can be used on pull-side T applications (closer on door, track on frame) and JT applications (track on frame, closer on door). Can also be used with FT flush transom applications (closer on transom, track on door).

TH — Track hold open arm complete. Can be used in same applications as T arm. Range of hold open and maximum opening varies with mounting application.

TDE Track Arm



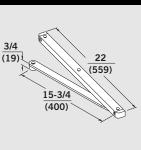
Provides slide track function for pull-side reveal conditions up to 3-1/2". Provides 117° of door opening (conditions permitting). Arm is handed. Also available with hold open option to provide selective single point hold open between 30° and 110°.

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.

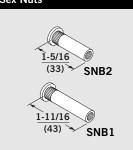
Push Side Track Arm



PT86 — Push-side track arm complete. Used with PT track applications (closer on door, track on soffit).

PT86H — Push-side track hold open arm complete. Used with PT track applications (closer on door, track on soffit).

Sex Nuts



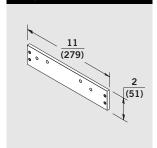
SNB1 — Sex nuts with machine screws for 1-3/4" (44 mm) door.

SNB2 - Sex nuts with machine screws 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.

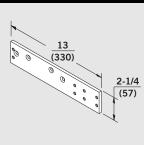


Backplate



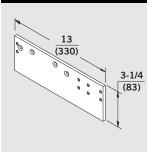
BP74 — For top jamb mount when overhead ceiling clearance is less than 2-1/4" (57 mm). Can also be used for regular mount to clear a mortised overhead stop/holder.

Backplate



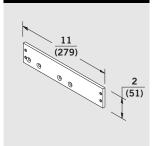
BP86 — For top jamb mount with slim plastic cover when overhead ceiling clearance is less than 2-1/4" (57 mm). Can also be used for regular mount to clear a mortised overhead stop/holder.

Backplate



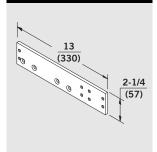
BP86FC — For top jamb mount with full plastic cover when overhead ceiling clearance is less than 2-1/4" (57 mm). Can also be used for regular mount to clear a mortised overhead stop/holder.

Backplate



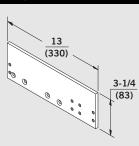
BP74T — For use with pullside track applications (closer on frame face, track on door) to permit installation on a standard 2" (51 mm) frame face.

Backplate



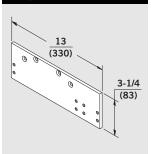
BP86T — For use with pullside track applications (closer on frame face, track on door) with slim plastic cover to permit installation on a standard 2" (51 mm) frame face.

Backplate



BP86TFC — For use with pull-side track applications with full cover (closer on frame face, track on door) to permit installation on a standard 2" (51 mm) frame face.

Backplate



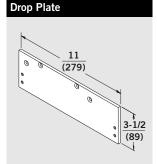
BP86FTFC — Required for track mount with full cover when being used on a flush transom (closer on transom, track on door). Mounting holes in the plate avoid rabbet on door.

Conversion Plate



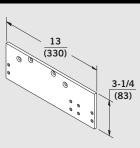
BP640C — For regular, top jamb, or parallel arm mounts. Permits replacement of existing 642–646/641/640 Series closers with 7400 Series closers. Eliminates the need to remachine the door and frame. Totally concealed when installed. Allows installation of 7400 to retrofit into any closer with a 9-1/16" x 3/4" hole pattern.





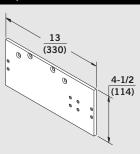
DP74 — For top jamb mount to clear a surface applied stop/holder. Overhead ceiling clearance must be 1-3/4" (44 mm) or more. Permits parallel arm installation with minimum top door rail of 2-1/2" (64 mm) for non-hold open, 2-3/4" (70 mm) for friction hold open applications (assuming 5/8" [16 mm] stop dimension).

Drop Plate



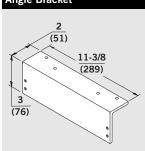
DP86 — For top jamb mount with slim plastic cover to clear a surface applied stop/holder. Overhead ceiling clearance must be 1-3/4" (44 mm) or more. Permits parallel arm installation with minimum top door rail of 2-1/2" (64 mm) for non-hold open, 2-3/4" (70 mm) for friction hold open applications (assuming 5/8" [16 mm] stop dimension).

Drop Plate



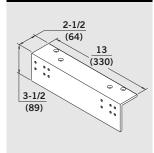
DP86FC — For top jamb mount with full plastic cover to clear a surface applied stop/holder. Overhead ceiling clearance must be 1-3/4" (44 mm) or more. Permits parallel arm installation with minimum top door rail of 2-1/2" (64 mm) for non-hold open, 2-3/4" (70 mm) for friction hold open applications (assuming 5/8" [16 mm] stop dimension).

Angle Bracket



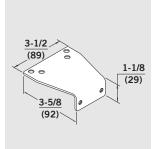
AB74 — For installation of closers where parallel arm and top jamb applications are not practical due to low overhead ceiling clearance, narrow frame face or unusual trim conditions. This bracket can also be used to provide clearance for a surfaceapplied stop/holder.

Angle Bracket



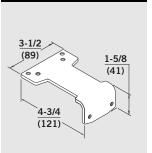
AB86 — For installation of closers using a slim or full plastic cover. Used where parallel arm and top jamb applications are not practical due to low overhead ceiling clearance, narrow frame face or unusual trim conditions. This bracket can also be used to provide clearance for a surface-applied stop/holder.

Parallel Arm Bracket



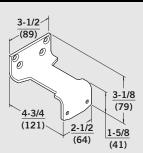
P86 — Furnished standard with 7400 Series non-hold open parallel arm applications.

Parallel Hold Open Bracket



PHB — Furnished standard with 7400 Series friction hold open parallel arm applications.

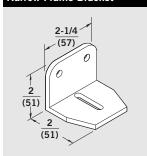
Parallel Flush Transom Bracket



PFT — For all 7400 Series closer hold open and non-hold open parallel arm applications where flush transom conditions prohibit use of P86 or PHB bracket.

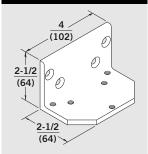


Narrow Frame Bracket



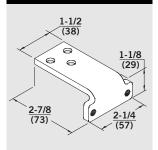
NFHD — For use with all DS and SPA applications where total frame depth is less than 4-1/2" (114 mm), prohibiting use of standard spacer block. NFHD bracket is used in lieu of block supplied with arm.

Flush Transom Bracket



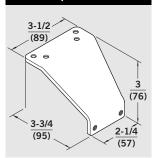
FTHD — For use with all DS and SPA applications where flush transom conditions prohibit normal installation of soffit bracket.

Mortised Jamb Bracket



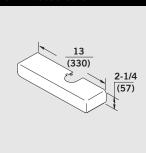
MJ — For 7400 Series closers with regular mount non-hold open assemblies, where frame conditions will not permit use of the standard foot, e.g. molded or ornate trim. Permits use of parallel arm application between twin communicating doors where limited space prohibits use of the wider P86 bracket.

Parallel Drop Bracket



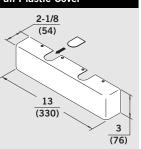
PD — For 7400 Series closer non-hold open parallel arm applications to clear a surface-applied stop/holder.

Slim Plastic Cover



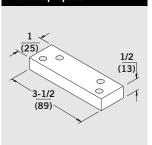
COV — Optional slim plastic cover.

Full Plastic Cover



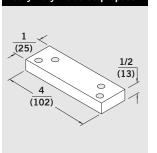
FC — Optional full plastic cover with interchangeable tab. Closers are prepared to accept FC covers only when specified with initial closer order.

Blade Stop Spacer



BS — For use with all 7400 Series P86, PD, and PHB applications installed on cased frames with applied blade stops. This block is used to provide adequate clearance for the blade stop.

Heavy-Duty Blade Stop Spacer



BSHD — For use with all 7400 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.



DORMA Group North America www.dorma-usa.com **DORMA Architectural Hardware** DORMA Drive, Drawer AC

Reamstown, PA 17567-0411 Telephone: (800) 523-8483 Facsimile: (800) 274-9724

DORMA Canada

1680 Courtney Park Drive, Unit 13 Mississauga, Ontario L5T 1R4 Telephone: (800) 387-4938 Facsimile: (905) 670-5850

DORMA Mexico, S. de R.L. de C.V.

Astrónomos 28 Col. Escandón 11800, México, D.F.

Mexico

Telephone: (52+55) 5272-6937 Facsimile: (52+55) 5272-6948 E-mail: dormaoper@prodigy.net.mx