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Corrosion-Resistant Door Closers



STA 8900 Series

STA 8600 Series

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DORMA USA quality and environmental management systems in Reamstown, PA and Steeleville, IL are certified to ISO 9001:2008 and ISO 14001:2004.



Intertek



Intertek

STA 8900 & 8600 SERIES

Ideal for use in severe climate conditions, or where there is exposure to corrosive environments.

Recommended applications include seashore and swimming pool areas, offshore oil rigs, ships, chemical plants, sewage treatment facilities, or anywhere rust and corrosion present a problem.

Technical Details

- Ideal for corrosive environments.
- Available as 8916/8956 or 8616 closers for interior or exterior doors. Meets barrier-free requirements (adjustable size 1-6 or 5-6 +50%).
- Non-handed for regular, top jamb, and parallel arm applications.
- Backcheck standard. Controls opening motion during abusive or abrupt openings.
- Backcheck positioning valve standard. Maintains effective

backcheck range on parallel arm applications. Valve is accessible with closer installed.

- Optional delayed action adjustable with a separate valve.
- Corrosion-resistant aluminum closer body.
- Full metal cover and all stainless components are type 304 stainless steel.
- Stainless steel fasteners – all standard.
- Stainless steel pinion.
- Stainless steel spring adjusting screw.
- Stainless steel arm assembly.
- Stainless steel parallel arm bracket (specify P).
- Furnished with wood screws and machine screws.
- 8900—plastic full cover (FC).
- 8600—plastic dust cap.
- 8600—plastic slim style cover (COV).
- Optional stainless steel full cover (STA FMC) or full plastic slotted cover (FCSL).
- Available in non-hold open applications only.

Certification

- ANSI/BHMA A156.4 Grade 1 certified.
- UL and CUL listed.
- Meets UL10C for positive pressure.
- Meets ANSI/BHMA A117.1 and ADA for barrier-free accessibility.
- CSFM approved.



Closers and related components shall be finished with a prime coat and color top coat.

Optional Specifications

All closers to be furnished with stainless steel full covers or slotted plastic full covers.

All closers to have delayed action to provide delayed closing for unrestricted egress. The delayed action valve functions and adjusts independently of all other valves.

Specifications

All closers shall be DORMA STA 8900 or DORMA STA 8600 corrosion-resistant units. The closers will have aluminum alloy bodies with high compression steel springs and hardened piston racks. The closer pinion shall be stainless steel. All closers shall have a hydraulic backcheck to prevent uncontrolled opening of the door from 60°. All STA 8916 or STA 8616 closers shall have adjustable spring power sizes 1-6 capable of compliance with barrier-free code restrictions and shall have adjustability to meet on site conditions. The 8956 shall have adjustable spring power sizes 5-6 +50% additional closing force over size 6. The regular arm assembly, main arm, adjustment arm, and rod and shoe shall be constructed of stainless steel.

Finishes

Standard Sprayed Finishes

- Aluminum: 689
- Bronze: 691 (Dull), 690 (Statuary), or 695 (Dark Duranodic)
- Brass: 696 (Satin)
- Black: 693

Optional Finish

Stainless: 630 (Satin)

NOTE: Satin stainless steel finishes must be ordered with full metal cover (FMC) option.

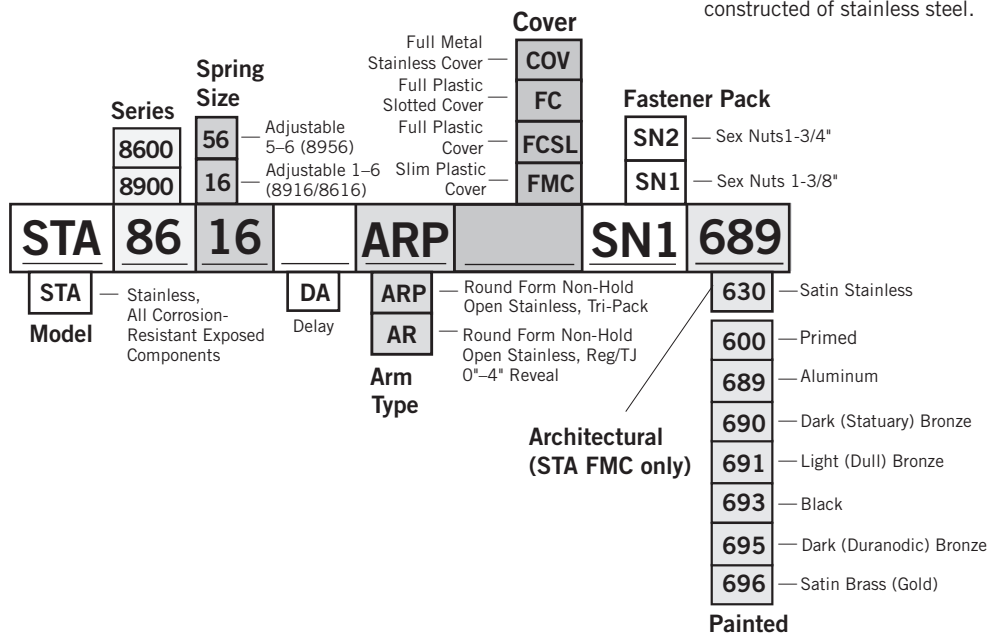
REDUCED OPENING FORCE INSTALLATIONS CAUTION

Manual door closers, including closers certified to conform to ANSI/BHMA 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 Low Energy Operators to meet reduced opening force requirements without affecting closing power.

Warranty

For details, refer to **DORMA Limited Warranty** on our website at go.dorma.com/terms.

HOW TO ORDER STA SERIES



Technical Drawing Symbols & Notes

- – Recommended application
- N/A – Not applicable/application not recommended
- ⊗ – Opening force 5 lb or less on interior doors

NOTE: The 8900 and 8600 **backcheck positioning** adjustment is specifically designed for parallel arm applications. It advances the backcheck to an approximate ANSI range similar to regular and top jamb applications. The backcheck range(s) within each parallel arm technical drawing reflect an **on** status. Regular and top jamb ranges reflect an **off** status. STA 8900 and STA 8600 Series closers are shipped with the backcheck positioning valve off.

REGULAR × ROUND FORM ARM

STA 8916 AR
STA 8956 AR

4-1/2" × 4-1/2" Butt Hinges

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

Size Selection Chart		Door Width						
Closer	Interior/ Exterior	2'-0" min.	2'-6" max.	3'-0" max.	3'-6" max.	4'-0" max.	4'-6" max.	5'-0" max.
STA 8916	Interior	•	•	⊗	⊗	⊗	⊗	N/A
	Exterior	•	•	⊗	⊗	⊗	N/A	N/A
STA 8956	Interior	N/A	N/A	N/A	N/A	•	•	•
	Exterior	N/A	N/A	N/A	•	•	•	N/A

Maximum Opening	Approximate Backcheck*	Approximate Delayed Action
180°	65°–180°	180°–65°

* Backcheck is advanced approximately 15° with positioning valve on.

TOP JAMB × ROUND FORM ARM

STA 8916 AR (0" to 4")
STA 8956 AR (0" to 4")

4-1/2" × 4-1/2" Butt Hinges

Minimum ceiling clearance 3-1/2 (89)

Minimum frame face for mounting closer 3".
Specify hand.
Backcheck positioning valve in "OFF" position.

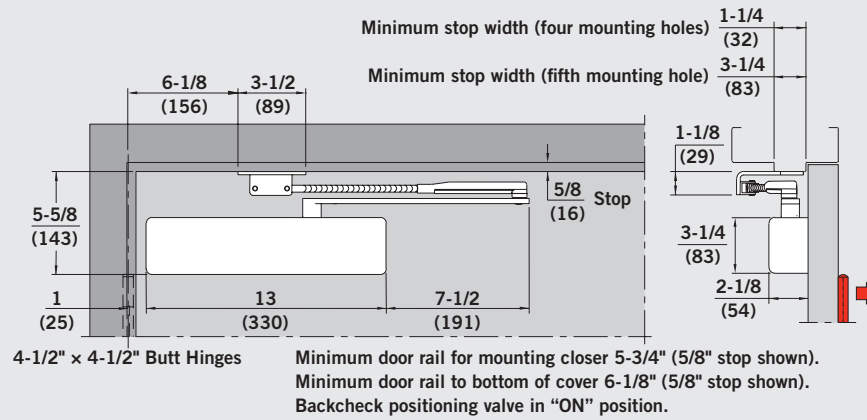
Size Selection Chart		Door Width						
Closer	Interior/ Exterior	2'-0" min.	2'-6" max.	3'-0" max.	3'-6" max.	4'-0" max.	4'-6" max.	5'-0" max.
STA 8916	Interior	•	•	⊗	⊗	⊗	⊗	N/A
	Exterior	•	•	⊗	⊗	⊗	N/A	N/A
STA 8956	Interior	N/A	N/A	N/A	N/A	•	•	•
	Exterior	N/A	N/A	N/A	•	•	•	N/A

Template Ref.	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"	AR	115°	70°–115°	115°–60°
			4"	AR	120°	75°–120°	120°–70°
Over 100°	1-3/4" (44)	8-3/8" (213)	0"	AR	180°	85°–180°	180°–80°
			4"	AR	180°	95°–180°	180°–95°

* Backcheck is advanced approximately 15° with positioning valve on.

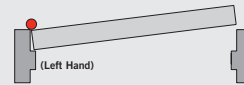
PARALLEL ARM × ROUND FORM ARM

STA 8916 ARP
 STA 8956 ARP
 (STA P86 bracket furnished standard)



Size Selection Chart

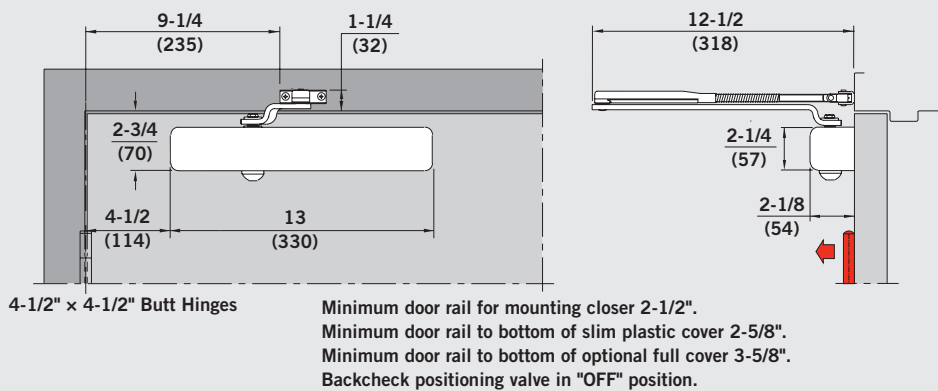
Closer	Interior/ Exterior	Door Width					
		2'-0" min.	2'-6" max.	3'-0" max.	3'-6" max.	4'-0" max.	4'-6" max.
STA 8916	Interior	•	•	⊘	⊘	⊘	N/A
	Exterior	•	•	⊘	⊘	N/A	N/A
STA 8956	Interior	N/A	N/A	N/A	•	•	•
	Exterior	N/A	N/A	•	•	•	N/A



Maximum Opening	Approximate Backcheck	Approximate Delayed Action	Minimum Door Width
180°	60°-180°	180°-70°	24"

REGULAR × ROUND FORM ARM

STA 8616 AR



Size Selection Chart

Closer	Interior/ Exterior	Door Width				
		2'-0" min.	2'-6" max.	3'-0" max.	3'-6" max.	4'-0" max.
STA 8616	Interior	•	•	⊘	•	•
	Exterior	•	•	⊘	•	•

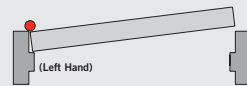
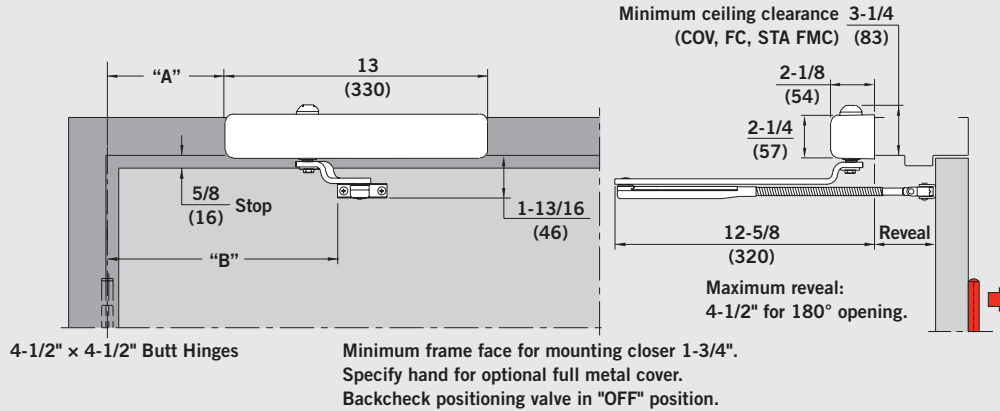


Maximum Opening	Approximate Backcheck*	Approximate Delayed Action
180°	65°-180°	180°-65°

* Backcheck is advanced approximately 15° with positioning valve on.

TOP JAMB × ROUND FORM ARM

STA 8616 AR
(0" to 4" reveal)



Size Selection Chart

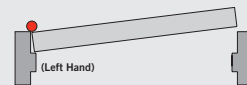
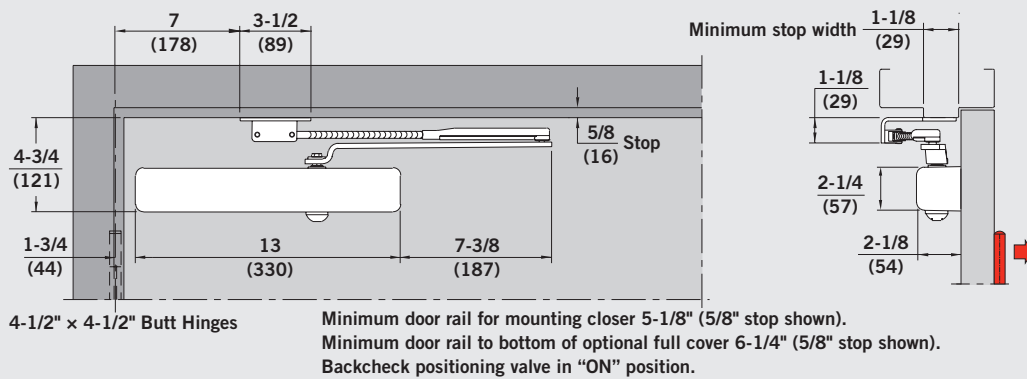
Closer	Interior/ Exterior	Door Width			
		2'-0" min.	2'-6" max.	3'-0" max.	3'-6" max.
STA 8916	Interior	•	•	⊘	•
	Exterior	•	•	⊘	•

Template Ref.	Dim "A"	Dim "B"	Reveal	Arm	Approximate Maximum Opening	Approximate Backcheck *	Approximate Delayed Action
To 180°	4-1/2" (114)	9-1/4" (235)	0"	AR	180°	70°-180°	180°-70°
			4"	AR	180°	75°-180°	180°-75°

* Backcheck is advanced approximately 15° with positioning valve on.

PARALLEL ARM × ROUND FORM ARM

STA 8616 ARP
(STA P86 bracket furnished standard)

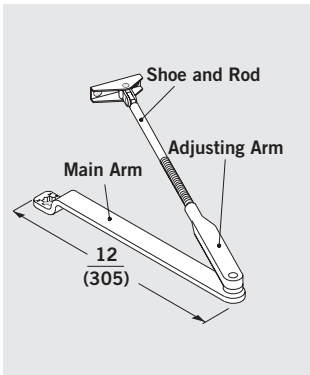


Size Selection Chart

Closer	Interior/ Exterior	Door Width			
		2'-0" min.	2'-6" max.	3'-0" max.	3'-6" max.
STA 8616	Interior	•	•	⊘	•
	Exterior	•	•	⊘	•

Maximum Opening	Approximate Backcheck	Approximate Delayed Action	Minimum Door Width
180°	60°-180°	180°-75°	24"

Round Form Arm

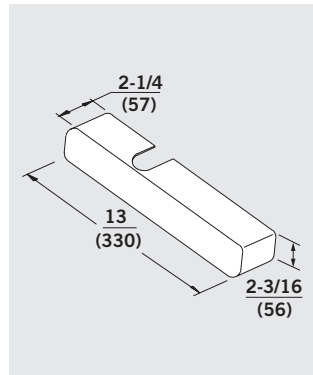


STA AR — Complete stainless steel arm assembly (0"-4" [0 mm-102 mm] reveal) with 10 mm rod. Arm is non-handed.

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

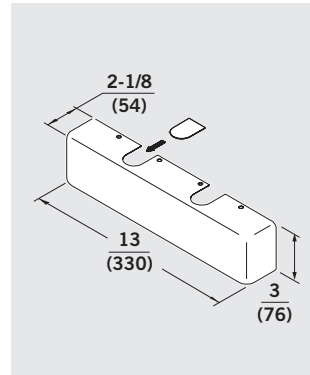
STA AMR04 — Regular non-hold open stainless steel main arm and adjusting arm. Accepts 10 mm rod.

Slim Plastic Cover



COV — Slim plastic cover furnished standard with STA 8600 Series closers.

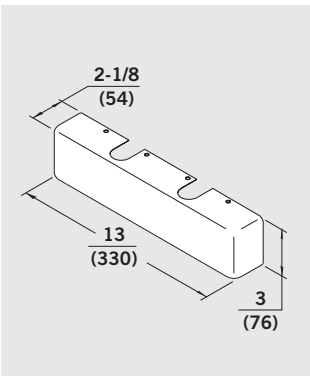
Full Plastic Cover



FC — Full plastic cover with interchangeable tab furnished standard with STA 8900 Series closers.

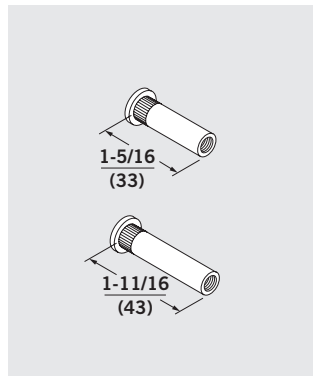
FCSL — Full plastic slotted cover with interchangeable tab. Mounting holes slotted for low ceiling conditions.

Full Metal Cover



STA FMC — Full stainless steel metal cover. Specify hand for top jamb applications.

Sex Nuts

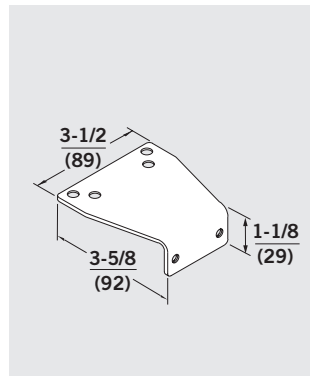


SNB1 — Sex nuts for 1-3/4" (44 mm) door.

SNB2 — 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.

Parallel Arm Bracket



STA P86 — Furnished standard with STA 8900/8600 ARP closers for parallel arm applications.



www.dorma.com



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