







# the perfect choice

The Yale® 3000 Series Architectural Door Closers offer the perfect combination of reliability, appearance and durability in today's market. With features such as staked valves, self-drilling/self-tapping screws, rack and pinion design and precise valve adjustment, and a complete range of arm and cover options, the Yale® 3000 can meet virtually any application challenge.

This U.L. listed, ANSI Grade 1 closer has a long history of proven quality. It is the ideal choice for upscale facilities that demand superior performance such as: conference centers, office buildings, courthouses, religious facilities, banks, nursing homes, restaurants, hotels and medical offices.

#### finishes

Product will be painted with a combination of waterborne acrylic and polyester powder coat. Closers will withstand 100 hours of salt spray. (The ANSI requirement is 25 hours.)

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| Sprayed Finishes                        |                     |                                 |       |            |             |  |  |  |
|---|---------------------|---------------------------------|-------|------------|-------------|--|--|--|
| Description                             | Specify Designation | Complements the                 | С     | Old        |             |  |  |  |
| Description                             | (ANSI/BHMA)         | following finishes              | Metal | Arch Metal | Designation |  |  |  |
| Aluminum                                | 689                 | 625, 628, 629, 630,<br>651, 652 | No    | No         | SB          |  |  |  |
| Statuary Bronze                         | 690                 | 613, 640, 695                   | No    | No         | STAT        |  |  |  |
| Dull Bronze                             | 691                 | 612, 637, 639                   | No    | No         | BL          |  |  |  |
| Black                                   | 693                 | 315                             | No    | No         | 315         |  |  |  |
| Medium Amber                            | 694                 | 312                             | No    | No         | 312         |  |  |  |
| Gold                                    | 696                 | 605, 606, 632, 633              | No    | No         | GB          |  |  |  |
| Dark Oxidized Satin Bronze - equivalent | 613E                | 613                             | Yes   | Yes        |             |  |  |  |
| Prime Coat                              | 600*                | _                               | No    | No         | SRI         |  |  |  |

# \* 600 is a special rust inhibiting prime coast. Closers can be ordered prime coat only (specify closer x 600). An additional charge applies if finish coat is required over prime coat (ex: 3501 x 600 x 689).

| Plated Finishes* | Specify Designation | Co    | Old Designation |                |  |
|------------------|---------------------|-------|-----------------|----------------|--|
| Flated Finishes" | (ANSI/BHMA)         | Metal | Arch. Metal     | Ou Designation |  |
| Bright Brass     | 605                 | Yes   | Yes             | US3            |  |
| Satin Brass      | 606                 | Yes   | Yes             | US4            |  |
| Bright Bronze    | 611                 | Yes   | Yes             | US9            |  |
| Satin Bronze     | 612                 | Yes   | Yes             | US10           |  |
| Bright Chrome    | 625                 | Yes   | Yes             | US26           |  |
| Satin Chrome     | 626                 | Yes   | Yes             | US26D          |  |

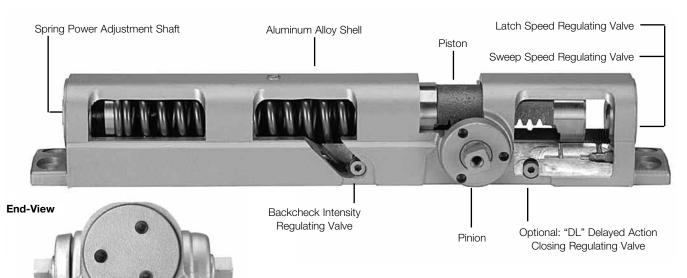
\* When a plated finish is ordered, arm and cover will be plated unless "cover only" is specified. 3100/3300 - available with plated arm only.

# 3000 series grade 1 door closer



## overview

Cutaway View





Series 3301 and 3501 door closers are designed to comply with requirements of the Americans with Disabilities Act (A.D.A.) and ANSI standard A117.1. All series 3301/3501 are ANSI/BHMA A156.4 Grade 1 certified. **EMA** (1) All Yale® series 3301/3501 closers with non-hold open arms are listed by Underwriters Laboratories for labeled fire doors. This includes compliance to UL10C for 3-hour assemblies. The product is manufactured in an ISO 9001 facility.

of The Americans with Disabilities Act or ANSI Standard A117.1, when adjusted to meet those requirements, may not provide adequate closing power to dependably close and latch the door.

openings required to meet the requirements

**CAUTION:** Door Closers for Low Opening Force

Sweep Speed

**Regulating Valve** 

### standard on all 3000 series closers

Applications: Door closers installed in

#### Features

Latch Speed

Regulating Valve

- Exceeds 15 million cycles
- Cast aluminum body
- Adjustable spring sizes 1 through 6
- Tri-packed (regular arm, top jamb and parallel arm mounting)
- Non-handed
- Staked valves
- Rack & pinion design
- 1-1/4" (32mm) diameter piston
- 5/8" (16mm) diameter pinion journals
- Separate and independent, latch, sweep and backcheck intensity valves
- 2-1/8" (54mm) projection (standard covers)
- All standard arm applications (with slim, full or metal covers) allow doors to swing 180 degrees, conditions permitting

- 3301 shipped with slim-line plastic cover
- 3501 shipped with full cover
- 25-year limited warranty

#### **Optional Features**

- Metal and architectural covers (3500 or 3501 only)
- Heavy-duty arms: Regular Rigid, Parallel Rigid, Holder/Stop, Holder/Stop Spring, UNI Stop™
- Delayed action
- Lead-lined metal cover (suffix MLL)



# fasteners/features

|                                |                              | Arm |    |      |             |    |                                       |     |       |  |
|--------------------------------|------------------------------|-----|----|------|-------------|----|---------------------------------------|-----|-------|--|
| Туре                           | Description                  |     | ΡΑ | ТJ   | Low Profile | PR | Holder/Stop,<br>Holder/Stop<br>Spring | UNI | UNI-J |  |
|                                |                              |     | D  | OOR  |             |    |                                       |     |       |  |
| SDST                           | Self Drilling Self Tapping   | S   | S  | S    | S           | S  | S                                     | S   | S     |  |
| MS                             | S Machine Screw              |     | S  | S    | S           | S  | S                                     | S   | S     |  |
| SN                             | Sleeve Nut                   | 0   | 0  | 0    | 0           | S  | S                                     | S   | S     |  |
| TBGN                           | Through-Bolts & Grommet Nuts | 0   | 0  | 0    | 0           | 0  | 0                                     | 0   | 0     |  |
| SMS                            | Sheet Metal Screws           | 0   | 0  | 0    | 0           | 0  | 0                                     | 0   | 0     |  |
| Torx®                          | Torx Drive Security Screw    | 0   | 0  | 0    | 0           | 0  | 0                                     | 0   | 0     |  |
|                                |                              |     | FI | RAME |             |    |                                       |     |       |  |
| SDST                           | Self Drilling Self Tapping   | S   | S  | S    | S           | S  | S                                     | S   | S     |  |
| MS                             | Machine Screw                | S   | S  | S    | S           | S  | S                                     | S   | S     |  |
| SMS                            | Sheet Metal Screws           | 0   | 0  | 0    | 0           | 0  | 0                                     | 0   | 0     |  |
| Torx Torx Drive Security Screw |                              | 0   | 0  | 0    | 0           | 0  | 0                                     | 0   | 0     |  |

#### S = standard; O = optional

**SN** are for use on unreinforced hollow metal doors or to prevent any hollow metal door from collapse/dimpling. They can also be used for thru bolting on wood doors. SN are supplied for 1-3/4" (44mm) thick doors unless specified for 2-1/4" (57mm) thick doors. **TBGN** are an alternative to SN for wood doors. TBGN are supplied standard for 1-3/4" (44mm) thick doors. They can be specified for 1-3/8"

**IBGN** are an alternative to SN for wood doors. IBGN are supplied standard for 1-3/4" (44mm) thick doors. They can be specified for 1-3/8" (35mm) thick doors.

**SMS** - when specified, closer will be packed with sheet metal screws for the door AND sheet metal screws plus machine screws for the frame. **TORX** screws with security pin are standard with Security Door Closers. Torx may be specified for all other series applications. Torx are only available with machine screw threads. Sheet metal screw threads or wood screw threads are not available.

Note: To order special fasteners with closers, specify model number x fastener (Ex: 3501 x 689 x TBGN)

#### features

#### **Aluminum Alloy Housing**

Closer bodies are constructed of a special aluminum alloy, carefully selected to accommodate interactive steel components and operating conditions.

#### **Rack & Pinion Operation**

Provides a smooth constant control of the door through its full opening and closing cycle. 180° door swing can be achieved when door, frame, hardware and arm function do not interfere.

#### Non-handed

With few exceptions all series and series 3301/3501 door closers are non-handed and can be installed on either right or left hand swing doors. Pinion shaft extends vertically through the closer body in both directions. Some options, as noted on page 5, will require that the hand of the closer be specified.

#### Sweep Speed Control Valve

Allows adjustment of door speed from the door's full open position down to approximately 10° from the closed position.

#### Latch Speed Control Valve

Allows adjustment of door speed from approximately 10° down to the door's fully closed position.

#### **Closer Fluid**

All door closers are supplied with a temperature stable, multi-viscosity fluid. This fluid will permit the door closer to perform within a wide temperature range: from very high to as low as -40°F.

#### **Tri-Packed**

3301/3501 come with screws, brackets and soffit plates to allow for regular, top jamb, and parallel arm installations.

#### Adjustable Backcheck Valve

Provides control of the door in the opening cycle, beginning at approximately 75° of door opening. It cushions the door opening when the door is forcibly opened beyond its pre-adjusted limits.

#### Standard Molded Covers

Molded of high-impact U.L. listed material. Standard covers are non-handed for all applications. See page 5 for optional covers.

#### Warranty

Limited 25-year warranty for defects and life of the building on the aluminum housing.



# features (cont.)-

door closer power options

Series 3301/3501 Multi-Sized Door Closer

Adjustable through the power range of sizes 1 through 6, as outlined in ANSI/BHMA specification A156.4.

The series 3000 also conforms to the minimum opening force requirements of the Americans with Disabilities Act (A.D.A) and ANSI/BHMA standard A117.1 for interior doors.

optional covers



#### **Optional Metal Cover**

This steel cover is non-handed for regular and parallel arm applications, but is handed for top jamb applications. Cover is available in sprayed or plated finishes.

#### **Optional Architectural Covers\***

Plastic: Architectural plastic covers are molded of high-impact U.L. listed material. They are non-handed and available in sprayed finishes.

Metal: The architectural metal covers are steel and non-handed for all applications. These covers are available in sprayed or plated finishes.

\* For Parallel Arm Applications — Consult factory for doors swinging more than 120°

**Optional ABS Cover** Consult factory for details.



# optional features

#### delayed action

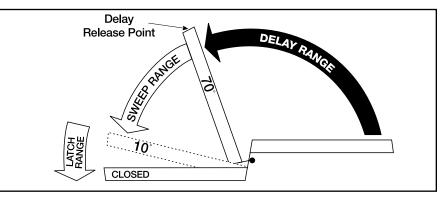
# Adjustable Delayed Action Closing

An optional hydraulic feature that adds a third speed range to the closing cycle. This feature becomes effective when the door is opened and released at any point beyond 70°. The amount of time delay depends upon the combination of the angle of door release and valve adjustment. The valve can be adjusted with a 1/8" (3mm) hex key from no delay time up to maximum delay times of:

| Door Opened and<br>Released at | Approximate Time<br>of Delay Cycle |
|--------------------------------|------------------------------------|
| 180°                           | 4-5 minutes                        |
| 120°                           | 2-3 minutes                        |
| 90°                            | 25-30 seconds                      |

#### Pressure Relief Safety Valve

The delayed action hydraulic system contains a pressure relief valve. Any time the door is forced toward the closed direction while it is in the closing cycle, the valve will open



and permit the door to close. This prevents damage to door, frame and closer.

#### Suggested Applications

Delayed Action closing allows slow-moving traffic to clear the opening before the door closer's normal closing cycle begins. This feature can be helpful in health care facilities such as hospitals and nursing homes. It provides sufficient time for persons on crutches or in wheelchairs to pass through a door without concern of it closing. At the same time, it can accommodate the facility's staff with movement of food service carts, beds, and other wheeled traffic.

Use of delayed action closers on many doors throughout industrial and commercial buildings can also assist the flow of traffic. Locations where additional time to clear the opening is advantageous are doors between office and factory/ warehouse facilities, doors to workshops or laboratories, kitchens and food processing areas.

#### arms

#### **Non-Hold Open**

Self-closes door every time door is opened. Auxiliary stop (by others) required except when using the Holder/ Stop, Holder/Stop Spring or UNI Stop™ arms.

#### Hold Open

Achieved by means of friction or ball and detent/ roller. Friction hold open has a range of 90° to 180° using template location and mechanical adjustment. Ball and detent or roller hold open is effective in a range of 85° to 110°.

Hold open arm door closers are not permitted to be used on fire door assemblies.

#### **Door Opening Degrees**

| Arm Function  | Regular Arm,<br>Top Jamb,<br>Parallel Arm | Parallel Rigid<br>Arm | Holder/Stop<br>Parallel Arm | Holder/Stop<br>Spring Parallel<br>Arm | UNI Stop™<br>Parallel Arm | UNI Stop™<br>Top Jamb | Low<br>Profile |
|---------------|---|-----------------------|-----------------------------|---------------------------------------|---------------------------|-----------------------|----------------|
| Non-Hold Open | 1   | 1                     | 85° to 110°                 | 85° to 110°                           | 85° to 110°               | 85° to 110°           | 1              |
| Hold Open     | 90° to 180°                               | 85° to 180°           | 85° to 110°                 | 85° to 110°                           | 85° to 110°               | 85° to 110°           | N/A            |

✓=180° trim and template permitting



## applications



#### **Regular Arm**

3301

This is the only pull side application where a double lever arm is used. It is the most power-efficient application for a door closer. Sufficient frame, door and/or ceiling clearance must be considered.



Since the arm assembly projects directly out from the frame, this application may present an aesthetics issue or be prone to vandalism.



#### Top Jamb

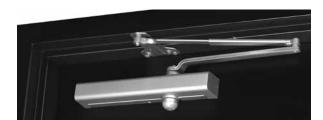
3301

For efficiency reasons this application provides the best alternative to the regular arm application. There must be sufficient frame face and/or ceiling clearance for this application. It requires a top rail on the door of just 2-1/4" (57mm). This application provides the best door control for doors in exterior walls that swing out of a building.



3501

The entire door closer and arm assembly project from the frame, similar to the regular arm application, where matters of appearance and malicious abuse can be of concern. Consideration must be given to depth of reveal.



#### Parallel Arm



This application provides the most appealing design appearance for a surface-mounted door closer having a double lever arm. This also makes it beneficial in vandalism-prone areas. It is on the push side of the door and the arm assembly extends almost parallel to the door. In the closed position, there is very little or no hardware projecting beyond the frame face in most situations.



Due to the geometry of the arm it is approximately 25% less power-efficient than a regular arm application. The entire closer and arm assembly are mounted below the frame stop. Top rail clearance dimensions will vary based on the type of cover used. (See page 13.)



# applications



Non-hold open arm shown

#### Parallel Rigid Arm

An enhanced variation of the standard parallel arm assembly that is intended for use in heavy traffic areas where auxiliary door stops are installed. Hold open available — specify hand when ordering.



Hold open arm shown

#### Holder/Stop Arm

Similar to the Parallel Rigid arm, this arm incorporates a stop at the arm's soffit plate to dead stop the door at a predetermined degree of door swing between 85° and 110°, in 5° increments. Prior to dead stop the door closer's backcheck feature slows the door speed to reduce the impact of the stop action.

The Holder/Stop arm is intended for use where an auxiliary door stop cannot be utilized and no more than moderate abuse is anticipated. Where more extreme conditions are expected, use of a UNI Stop<sup>™</sup> arm is recommended. Available with or without hold open. (Hold open strength is adjustable.)



#### Holder/Stop Spring Arm

This arm has all the characteristics of the Holder/Stop arm with an additional steel buffer spring that providesgreater protection at the end of the door opening cycle. For extreme conditions, use of a *UNI Stop* arm is recommended. Available with or without hold open.



#### **Regular Rigid Heavy-Duty Arm**

This double lever arm features a non-adjustable secondary arm. Orbitally riveted joints prevent tampering or disassembly. Prefix "R" to model number. Available non-hold open only.



## applications



Parallel

#### UNI Stop™ Arm

Can be used for either parallel arm or top jamb applications. *UNI Stop* arms combine the features of a double lever arm overhead door stop/holder with the backcheck feature of the door closer to reduce door stopping shock loads to a minimum. This arm uses a compression spring buffer at the soffit plate/arm shoe that absorbs 30 lbf. of force, 5° prior to the door's dead stop. The *UNI Stop* arm, coupled with the door closer's



Top Jamb

backcheck feature, proves the most controlled stop available with a surface door closer.

For parallel arm applications there are three different length arm assemblies. Each length is designed for a specific range of door widths, to provide precise door control. This further lessens the dead stop impact on the door's hinges/pivots.



#### **Regular Arm**

Allows closer to be installed where there is as little as 1" (25mm) of frame face ceiling clearance

#### Low Profile Arm



#### Parallel Arm

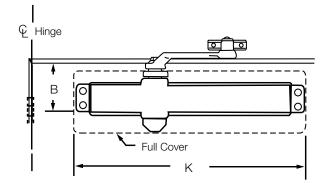
Allows closer to be installed 1/2" (13mm) higher up on door than standard parallel arm application.

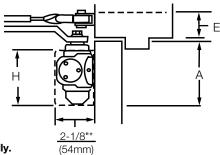
Supplied with 3380/3580, 3381/3581 series door closers for non-hold open installations only. Low profile arms have a reduced height elbow joint and a straight main arm. This enables the door closer to be installed in less vertical space.

Note: Low profile arm door closers are not supplied tri-packed.



regular arm





Mounting holes for closer body are spaced 3/4" (19mm) vertically x 12" (305mm) horizontally. Note: All measurements are Inches/mm.

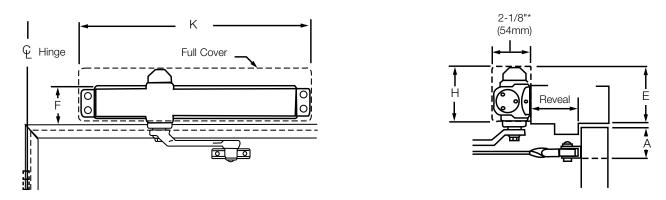
Maximum 180° door swing, conditions permitting

| Closer Covers<br>Series | Covers               | s E<br>Minimum Ceiling Clearance |      |               |                | B<br>Minimum Top Rail |                             |                             |                        | A<br>Minimum Top<br>Rail Clearance |                         | H<br>Closer<br>Height |                       |                       |                         |  |
|-------------------------|----------------------|----------------------------------|------|---------------|----------------|-----------------------|-----------------------------|-----------------------------|------------------------|------------------------------------|-------------------------|-----------------------|-----------------------|-----------------------|-------------------------|--|
|                         |                      |                                  |      |               | W/O Dr         | op Plate              |                             | 3146<br>Plate               |                        |                                    | Length                  | Teight                |                       |                       |                         |  |
|                         | NHO                  | Low<br>Profile                   | НО   | NHO/<br>HO    | Low<br>Profile | NHO/<br>HO            | Low<br>Profile              | NHO/<br>HO                  | Low<br>Profile         |                                    |                         |                       |                       |                       |                         |  |
| 3100                    | No Cover             |                                  |      |               |                |                       |                             |                             |                        |                                    |                         |                       |                       |                       | <u>12-3/4"</u><br>(324) |  |
| 3300                    | Slim Line<br>Plastic |                                  |      |               |                |                       | <u>2-3/8" 1-5/8" 1-1/2"</u> | <u>2-1/2" 2-3/8" 1-5/8"</u> |                        | <u>3-1/2"</u><br>(89)              | <u>3-3/8"</u><br>(86)   | <u>13"</u>            | <u>2-7/8"</u><br>(73) |                       |                         |  |
| 3500                    | Full Plastic         | <u>1-1/2"</u>                    | 1"   | <u>1-5/8"</u> | 1-5/8"         | <u>2-1/2"</u>         |                             |                             | 1-1/2"                 | <u>1-1/2"</u>                      | <u>1-5/8" 1-1/2"</u>    |                       |                       | (330)                 |                         |  |
| 3500M                   | Metal                | (38)                             | (25) | (41)          | (64)           | (60)                  | (41)                        | (38)                        | <u>4-1/4"</u><br>(108) | <u>4-1/8"</u><br>(105)             | <u>13-5/8"</u><br>(346) | <u>3-3/4"</u><br>(95) |                       |                       |                         |  |
| 3500A                   | Arch.<br>Plastic     |                                  |      |               |                |                       |                             |                             |                        |                                    | <u>3-5/8"</u><br>(92)   | <u>3-1/2"</u><br>(89) | 14"                   | <u>3-1/8"</u><br>(79) |                         |  |
| 3500MA                  | Arch.<br>Metal       |                                  |      |               |                |                       |                             |                             | <u>3-1/2"</u><br>(89)  | <u>3-3/8"</u><br>(86)              | (356)                   | <u>3"</u><br>(76)     |                       |                       |                         |  |

| Door \<br>Inche |           | Model Numbers |              |  |  |  |  |
|-----------------|-----------|---------------|--------------|--|--|--|--|
| Interior        | Exterior  | Non-Hold Open | Hold Open    |  |  |  |  |
| 30" (76)        | N/A       |               |              |  |  |  |  |
| 36" (91)        | 30" (76)  |               | 3311<br>3511 |  |  |  |  |
| 48" (122)       | 36" (91)  | 3301<br>3501  |              |  |  |  |  |
| N/A             | 48" (122) |               | 0011         |  |  |  |  |
| Unu             | sual      |               |              |  |  |  |  |



top jamb arm



Mounting holes for closer body are spaced 3/4" (19mm) vertically x 12" (305mm) horizontally. Note: All measurements are Inches/mm.

| Closer<br>Series | Covers               | Minim                | F<br>um Fram                  | e Face  |                       | E<br>imum Ce<br>Clearance     |   | A<br>Minimum Top Rail Clearance |                       |   |               |                |               |               |                | K<br>Closer<br>Length | H<br>Closer<br>Height   |                       |  |       |                   |
|------------------|----------------------|----------------------|-------------------------------|---|-----------------------|-------------------------------|---|---------------------------------|-----------------------|---|---------------|----------------|---------------|---------------|----------------|-----------------------|-------------------------|-----------------------|--|-------|-------------------|
|                  |                      |                      |                               |   |                       |                               |   |                                 |                       | W/O Drop Plate W/3146 Drop Plate With 3148/3547<br>Drop Plate |               |                |               |               |                |                       |                         |                       |  |       |                   |
|                  |                      | W/O<br>Drop<br>Plate | With<br>3146<br>Drop<br>Plate | With<br>3148,<br>3158,<br>3547 &<br>3547A<br>Drop<br>Plates | W/O<br>Drop<br>Plate  | With<br>3146<br>Drop<br>Plate | With<br>3148,<br>3158,<br>3547 &<br>3547A<br>Drop<br>Plates | NHO                             | Low<br>Profile        | но  | NHO           | Low<br>Profile | но            | NHO           | Low<br>Profile | но                    | _                       |                       |  |       |                   |
| 3100             | No Cover             |                      |                               |   |                       |                               |   |                                 |                       |   |               |                |               |               |                |                       | <u>12-3/4"</u><br>(324) |                       |  |       |                   |
| 3300             | Slim Line<br>Plastic |                      | <u>1-1/8"</u><br>(29)         | <u>1-1/2"</u><br>(38)                                       | <u>2-3/4"</u><br>(70) | <u>1-5/8"</u><br>(41)         | <u>1-1/2"</u><br>(38)                                       |                                 |                       |   |               |                |               |               |                |                       | <u>13"</u>              | <u>2-7/8"</u><br>(73) |  |       |                   |
| 3500             | Full<br>Plastic      | <u>1-3/4"</u>        |                               |   |                       |                               | <u>1-5/8"</u><br>(41)                                       |                                 | <u>2-1/4"</u><br>(57) | N/A   | <u>2-1/2"</u> | <u>3-3/8"</u>  | <u>2-3/4"</u> | <u>3-5/8"</u> | <u>4-3/8"</u>  | <u>3-3/4"</u>         | <u>4-5/8"</u>           | (330)                 |  |       |                   |
| 3500M            | Metal                | (44)                 |                               | <u>1-5/8"</u><br>(41)                                       | <u>3-3/4"</u><br>(95) |                               |   | (57)                            | 1077                  | (64)  | (86)          | (70)           | (92)          | (111)         | (95)           | (117)                 | <u>13-5/8"</u><br>(346) | <u>3-3/4"</u><br>(95) |  |       |                   |
| 3500A            | Arch.<br>Plastic     |                      | N/A                           | 1-1/2"  | <u>3"</u><br>(76)     | N/A                           | <u>1-1/2"</u>   |                                 |                       |   |               |                |               |               |                |                       | <u>14"</u>              | <u>3-1/8"</u><br>(79) |  |       |                   |
| 3500MA           | Arch.<br>Metal       |                      |                               | (38)  | <u>2-7/8"</u><br>(73) |                               | (38)  |                                 |                       |   |               |                |               |               |                |                       |                         |                       |  | (356) | <u>3"</u><br>(76) |

Note: Reveal range information is based upon 1-3/4" (44mm) doors hung on 4-1/2" wide hinges.

\* Projection is for Slim Line or Full Covers. Projection for Metal Covers = 2-3/16" (56mm). Projection for Architectural Plastic & Architectural Metal Covers = 2-1/4" (57mm).



top jamb arm

|           | Widths<br>s (cm) | Model Number  |              |  |  |  |  |
|-----------|------------------|---------------|--------------|--|--|--|--|
| Interior  | Exterior         | Non-Hold Open | Hold Open    |  |  |  |  |
| 30" (76)  | N/A              |               |              |  |  |  |  |
| 36" (91)  | 30" (76)         |               |              |  |  |  |  |
| 48" (122) | 36" (91)         | 3301<br>3501  | 3311<br>3511 |  |  |  |  |
| N/A       | 48" (122)        | 0001          | 0011         |  |  |  |  |
| Unu       | isual            |               |              |  |  |  |  |

Note: 3301/3501 series door closers are set at midpower range from the factory and can be adjusted for door sizes noted above.

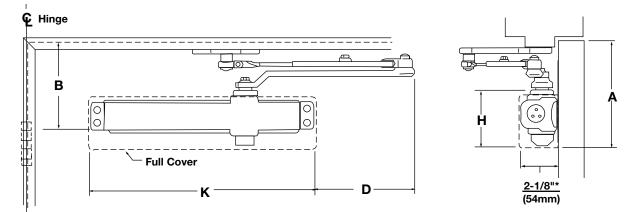
| Reveal Information           |      |                  |  |  |  |  |  |
|------------------------------|------|------------------|--|--|--|--|--|
| Reveal Range                 |      | um Door<br>ening |  |  |  |  |  |
| Inches (mm)                  | NHO  | Hold Open        |  |  |  |  |  |
| 2-3/4" (70) to 4-1/4" (108)  | 180° |                  |  |  |  |  |  |
| 4-1/4" (108) to 7" (178)     | 150° |                  |  |  |  |  |  |
| 2-1/8" (54) to 4-1/4" (108)  |      | 180°             |  |  |  |  |  |
| 4-1/4" (108) to 6-3/4" (171) |      | 150°             |  |  |  |  |  |

| Reveal Information (regular arm installed top jamb) |                      |           |  |  |  |  |  |
|---|----------------------|-----------|--|--|--|--|--|
| Reveal Range  | Maximum Door Opening |           |  |  |  |  |  |
| Inches (mm)   | NHO                  | Hold Open |  |  |  |  |  |
| 0 to 2-7/8" (73)                                    | 180°                 |           |  |  |  |  |  |
| 0 to 2-3/4" (70)                                    | 180°                 |           |  |  |  |  |  |
| 0 to 2-3/4" (70)                                    |                      | 180°      |  |  |  |  |  |

\*\* Drop Plate 3146, 3148, 3158, 3547 or 3547A

Note: Reveal range information is based upon 1-3/4" (44mm) doors hung on 4-1/2" wide hinges.

parallel arm



Mounting holes for closer body are spaced 3/4" (19mm) vertically x 12" (305mm) horizontally. Note: All measurements are Inches/mm.

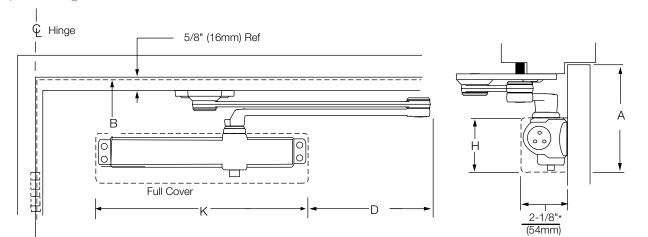
Maximum 180° door swing, conditions permitting.

| Closer<br>Series | Covers               |               | Minimum 1      | E<br>70p Rail 5/8 |      | Frame Stop                 |           | A<br>Top Rail Clearance |                        |                        |                         | H<br>Closer           | D<br>Arm               |  |        |           |
|------------------|----------------------|---------------|----------------|-------------------|------|----------------------------|-----------|-------------------------|------------------------|------------------------|-------------------------|-----------------------|------------------------|--|--------|-----------|
|                  |                      | W             | /O Drop Pla    | ate               | w    | /ith 3148/35<br>Drop Plate |           |                         |                        |                        |                         |                       | Length He              |  | Height | Extension |
|                  |                      | NHO           | Low<br>Profile | но                | NHO  | Low<br>Profile             | но        | NHO                     | Low<br>Profile         | НО                     |                         |                       |                        |  |        |           |
| 3100             | No Cover             |               |                |                   |      |                            |           |                         |                        |                        | <u>12-3/4"</u><br>(324) |                       | <u>8-1/8"</u><br>(206) |  |        |           |
| 3300             | Slim Line<br>Plastic |               |                |                   |      |                            |           | <u>6-1/4"</u><br>(159)  | <u>5-5/8"</u><br>(143) | <u>6-1/4"</u><br>(159) | <u>13"</u>              | <u>2-7/8"</u><br>(73) | <u>8"</u>              |  |        |           |
| 3500             | Full Plastic         | <u>5-1/4"</u> | 4-5/8"         | <u>5-1/4"</u>     | 3"   | 2-3/8"                     | <u>3"</u> |                         |                        |                        | (330)                   |                       | (203)                  |  |        |           |
| 3500M            | Metal                | (133)         | (117)          | (133)             | (76) | (60)                       | (76)      | <u>6-7/8"</u><br>(175)  | <u>6-1/4"</u><br>(159) | <u>6-7/8"</u><br>(175) | <u>13-5/8"</u><br>(346) | <u>3-3/4"</u><br>(95) |                        |  |        |           |
| 3500A            | Arch.<br>Plastic     |               |                |                   |      |                            |           | <u>6"</u><br>(152)      | <u>5-3/8"</u><br>(137) | <u>6"</u><br>(152)     | 14"                     | <u>3-1/8"</u><br>(79) | <u>7-5/8"</u><br>(194) |  |        |           |
| 3500MA           | Arch. Metal          |               |                |                   |      |                            |           | <u>5-7/8"</u><br>(149)  | <u>5-1/4"</u><br>(133) | <u>5-7/8"</u><br>(149) | (356)                   | <u>3"</u><br>(76)     |                        |  |        |           |

|           | Widths<br>s (cm) | Model N       | lumber       |
|-----------|------------------|---------------|--------------|
| Interior  | Exterior         | Non-Hold Open | Hold Open    |
| 30" (76)  | N/A              |               |              |
| 36" (91)  | 30" (76)         |               |              |
| 42" (107) | 36" (91)         | 3301<br>3501  | 3311<br>3511 |
| 48" (122) | 42" (107)        |               |              |
| N/A       | 48" (122)        |               |              |



parallel rigid arm

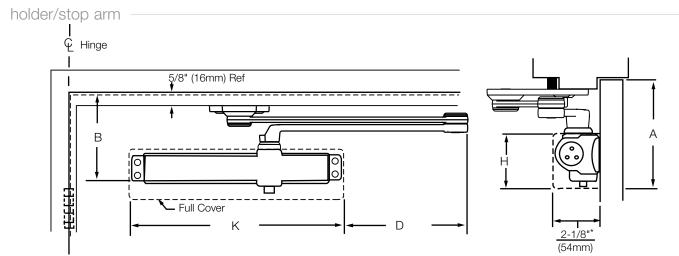


# Mounting holes for closer body are spaced 3/4" (19mm) vertically x 12" (305mm) horizontally. Note: All measurements are Inches/mm.

| Closer Series | Covers            | B<br>Minimum Top Rail |  | A<br>Minimum Top Rail<br>Clearance | K<br>Closer Length    | H<br>Closer Height    | D<br>Arm Extensions     |       |                         |                       |
|---------------|-------------------|-----------------------|--|------------------------------------|-----------------------|-----------------------|-------------------------|-------|-------------------------|-----------------------|
|               |                   | W/O<br>Drop Plate     | With<br>Drop Plate   |                                    |                       |                       |                         |       |                         |                       |
| 3100          | No Cover          |                       | $     \frac{\frac{5-7/8"}{(149)}}{(60)} \\     \frac{\frac{6-1/2"}{(165)}}{\frac{6"}{(152)}} $ |                                    |                       |                       | <u>12-3/4"</u><br>(324) |       |                         |                       |
| 3300          | Slim Line Plastic |                       |  |                                    | <u>13"</u><br>(330)   | <u>2-7/8"</u><br>(73) | <u>8"</u><br>(203)      |       |                         |                       |
| 3500          | Full Plastic      | 4-5/8"                |  |                                    |                       |                       |                         | (330) |                         |                       |
| 3500M         | Metal             | (117)                 |  |                                    |                       |                       | (00)                    |       | <u>13-5/8"</u><br>(346) | <u>3-7/8"</u><br>(98) |
| 3500A         | Arch. Plastic     |                       |  | <u>14"</u>                         | <u>3-1/8"</u><br>(79) | 7-1/2"                |                         |       |                         |                       |
| 3500MA        | Arch. Metal       |                       |  | <u>5-7/8"</u><br>(149)             | (356)                 | <u>3"</u><br>(76)     | (191)                   |       |                         |                       |

| Door Size (We<br>Inches |                      | Model Number     |                  |  |  |
|-------------------------|----------------------|------------------|------------------|--|--|
| Interior                | Interior Exterior    |                  | Hold Open        |  |  |
| 28" (71) - 32" (81)     | N/A                  |                  |                  |  |  |
| 33" (84)- 36" (91)      | 28" (71)- 32" (81)   |                  |                  |  |  |
| 37" (94)- 41" (104)     | 33" (84)- 36" (91)   | PR3301<br>PR3501 | PR3311<br>PR3511 |  |  |
| 42" (107)- 48" (122)    | 37" (94)- 41" (104)  |                  |                  |  |  |
| N/A                     | 42" (107)- 48" (122) |                  |                  |  |  |





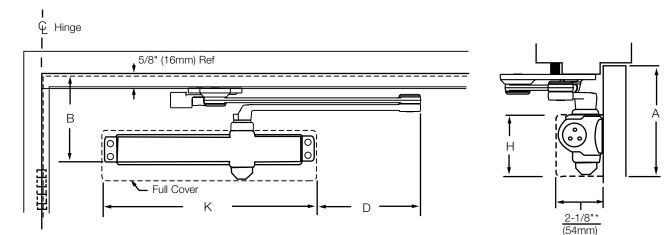
Mounting holes for closer body are spaced 3/4" (19mm) vertically x 12" (305mm) horizontally. Note: All measurements are Inches/mm.

| Closer Series | Covers            | Covers         | Covers                |                        | B<br>n Top Rail         | A<br>Minimum Top Rail<br>Clearance | K<br>Closer Length    | H<br>Closer Height     | D<br>Arm Extensions |  |
|---------------|-------------------|----------------|-----------------------|------------------------|-------------------------|------------------------------------|-----------------------|------------------------|---------------------|--|
|               |                   | W/O Drop Plate | With Drop Plate       |                        |                         |                                    |                       |                        |                     |  |
| 3100          | No Cover          |                |                       | <u>5-7/8"</u><br>(149) | <u>12-3/4"</u><br>(324) |                                    | <u>8"</u><br>(203)    |                        |                     |  |
| 3300          | Slim Line Plastic |                | <u>2-3/8"</u><br>(60) |                        | <u>13"</u><br>(220)     | <u>2-7/8"</u><br>(73)              |                       |                        |                     |  |
| 3500          | Full Plastic      | <u>4-5/8"</u>  |                       |                        |                         |                                    |                       | (330)                  |                     |  |
| 3500M         | Metal             | (117)          |                       |                        | <u>6-1/2"</u><br>(165)  | <u>13-5/8"</u><br>(346)            | <u>3-7/8"</u><br>(98) | <u>7-5/8"</u><br>(194) |                     |  |
| 3500A         | Arch. Plastic     |                |                       | <u>6"</u><br>(152)     | <u>14"</u>              | <u>3-1/8"</u><br>(79)              | 7-1/2"                |                        |                     |  |
| 3500MA        | Arch. Metal       |                |                       | <u>5-7/8"</u><br>(149) | (356)                   | <u>3"</u><br>(76)                  | (191)                 |                        |                     |  |

| Door Size (We<br>Inches |                      | Model Number |                |  |
|-------------------------|----------------------|--------------|----------------|--|
| Interior                | Exterior             | Stop Only    | Hold Open      |  |
| 28" (71) - 32" (81)     | N/A                  |              |                |  |
| 33" (84)- 36" (91)      | 28" (71)- 32" (81)   | 3321         |                |  |
| 37" (94)- 41" (104)     | 33" (84)- 36" (91)   | 3521         | 3321T<br>3521T |  |
| 42" (107)- 48" (122)    | 37" (94)- 41" (104)  |              |                |  |
| N/A                     | 42" (107)- 48" (122) |              |                |  |



holder/stop spring arms



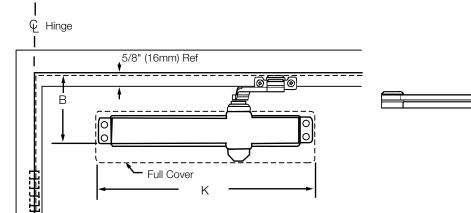
Mounting holes for closer body are spaced 3/4" (19mm) vertically x 12" (305mm) horizontally. Note: All measurements are Inches/mm.

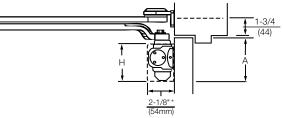
| Closer Series | Covers            | Covers | Covers          | Covers                 | Covers                  | Covers B<br>Minimum 1 |                        | A<br>Minimum Top Rail<br>Clearance | K<br>Closer Length | H<br>Closer Height | D<br>Arm Extensions |
|---------------|-------------------|--------|-----------------|------------------------|-------------------------|-----------------------|------------------------|------------------------------------|--------------------|--------------------|---------------------|
|               |                   |        | With Drop Plate |                        |                         |                       |                        |                                    |                    |                    |                     |
| 3100          | No Cover          |        |                 |                        | <u>12-3/4"</u><br>(324) |                       | <u>8"</u><br>(203)     |                                    |                    |                    |                     |
| 3300          | Slim Line Plastic |        | <u>2-3/8"</u>   | <u>5-7/8"</u><br>(149) | <u>13"</u><br>(330)     | <u>2-7/8"</u><br>(73) |                        |                                    |                    |                    |                     |
| 3500          | Full Plastic      | 4-5/8" |                 |                        |                         |                       |                        |                                    |                    |                    |                     |
| 3500M         | Metal             | (117)  | (60)            | <u>6-1/2"</u><br>(165) | <u>13-5/8"</u><br>(346) | <u>3-7/8"</u><br>(98) | <u>7-5/8"</u><br>(194) |                                    |                    |                    |                     |
| 3500A         | Arch. Plastic     |        |                 | <u>6"</u><br>(152)     | <u>14"</u>              | <u>3-1/8"</u><br>(79) | 7-1/2"                 |                                    |                    |                    |                     |
| 3500MA        | Arch. Metal       |        |                 | <u>5-7/8"</u><br>(149) | (356)                   | <u>3"</u><br>(76)     | (191)                  |                                    |                    |                    |                     |

| Door Size (We<br>Inches |                      | Model Number |                |  |
|-------------------------|----------------------|--------------|----------------|--|
| Interior                | Interior Exterior    |              | Hold Open      |  |
| 28" (71) - 32" (81)     | N/A                  |              |                |  |
| 33" (84)- 36" (91)      | 28" (71)- 32" (81)   |              |                |  |
| 37" (94)- 41" (104)     | 33" (84)- 36" (91)   | 3331<br>3531 | 3331T<br>3531T |  |
| 42" (107)- 48" (122)    | 37" (94)- 41" (104)  |              |                |  |
| N/A                     | 42" (107)- 48" (122) |              |                |  |



regular rigid heavy-duty arm





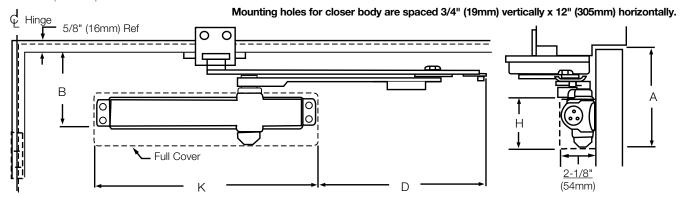
| Closer<br>Series | Covers               | B<br>Minimum<br>Top Rail |                      | A<br>Minimum<br>Top Rail | K<br>Closer<br>Length | H<br>Closer<br>Length |  |
|------------------|----------------------|--------------------------|----------------------|--------------------------|-----------------------|-----------------------|--|
|                  |                      | W/O Drop<br>Plate        | W/3146<br>Drop Plate | Clearance                |                       |                       |  |
|                  |                      | NHO                      | NHO                  | NHO                      |                       |                       |  |
| 3100             | No Cover             |                          |                      |                          | 12-3/4"<br>(324)      | 2-7/8"<br>(73)        |  |
| 3300             | Slim Line<br>Plastic |                          |                      | 3-1/2"<br>(89)           | 13"<br>(330)          |                       |  |
| 3500             | Full Plastic         | 2-1/2"                   | 1-5/8"               |                          | (000)                 |                       |  |
| 3500M            | Metal                | (64)                     | (41)                 | 4-1/4"<br>(108)          | 13-5/8"<br>(346)      | 3-3/4"<br>(95)        |  |
| 3500A            | Arch. Plastic        |                          |                      | 3-5/8"<br>(92)           | 14"                   | 3-1/8"<br>(79)        |  |
| 3500MA           | Arch. Metal          |                          |                      | 3-1/2"<br>(89)           | (356)                 | 3"<br>(76)            |  |

Mounting holes for closer body are spaced 3/4" (19mm) vertically x 12" (305mm) horizontally. Note: All measurements are Inches/mm.

| Door Size (Wo | Door Size (Wood or Metal) |                |  |  |
|---------------|---------------------------|----------------|--|--|
| Inches        | Inches (cm)               |                |  |  |
| Interior      | Exterior                  | Open Only      |  |  |
| 36" (91)      | 30" (76)                  |                |  |  |
| 42" (107)     | 36" (91)                  |                |  |  |
| 46" (117)     | 42" (107)                 | R3301<br>R3501 |  |  |
| 54" (137)     | 48" (122)                 | 1.0001         |  |  |
| N/A           | 52" (132)                 |                |  |  |



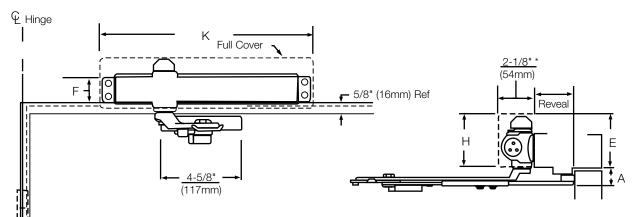
uni stop™ - parallel arm



| Closer Series | Door Width | Covers            |                        | B<br>n Top Rail       | A<br>Minimum Top Rail<br>Clearance | K<br>Closer Length      | H<br>Closer Height      | D<br>Arm Extensions     |                         |                         |
|---------------|------------|-------------------|------------------------|-----------------------|------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|               |            |                   | W/O Drop<br>Plate      | With Drop<br>Plate    | Clearance                          |                         |                         |                         |                         |                         |
|               | 28-32      |                   |                        |                       |                                    |                         |                         | <u>8-3/8"</u><br>(213)  |                         |                         |
| 3300          | 33-41      | Slim Line Plastic |                        |                       | 5-3/4"                             | <u>13"</u>              | 2-7/8"                  | <u>9-7/8"</u><br>(251)  |                         |                         |
|               | 42-48      |                   |                        |                       | (146) (330)                        |                         |                         |                         | (73)                    | <u>11-1/4"</u><br>(286) |
| 3500          |            | Full Plastic      |                        |                       |                                    |                         |                         | <u>8-3/8"</u><br>(213)  |                         |                         |
| 3500M         |            | Metal             |                        |                       | <u>6-3/8"</u><br>(162)             | <u>13-5/8"</u><br>(346) | <u>3-7/8"</u><br>(98)   | <u>8"</u><br>(203)      |                         |                         |
| 3500A         | 28-32      | Arch. Plastic     |                        |                       | <u>5-1/2"</u><br>(140)             | <u>14"</u><br>(356)     | <u>3-1/8"</u><br>(79)   | <u>7-7/8"</u><br>(200)  |                         |                         |
| 3500MA        |            | Arch. Metal       |                        |                       | <u>5-3/8"</u><br>(137)             |                         | <u>3"</u><br>(76)       | <u>7-1/2"</u><br>(191)  |                         |                         |
| 3500          |            | Full Plastic      | <u>4-3/4"</u><br>(121) | <u>2-1/2"</u><br>(64) | <u>5-3/4"</u><br>(146)             | <u>13"</u><br>(330)     | <u>2-7/8"</u><br>(73)   | <u>9-7/8"</u><br>(251)  |                         |                         |
| 3500M         |            | Metal             | . ,                    |                       |                                    |                         | <u>6-3/8"</u><br>(162)  | <u>13-5/8"</u><br>(346) | <u>3-7/8"</u><br>(98)   | <u>9-1/2"</u><br>(241)  |
| 3500A         | 33-41      | Arch. Plastic     |                        |                       |                                    |                         | <u>5-1/2"</u><br>(140)  | <u>14"</u>              | <u>3-1/8"</u><br>(79)   | <u>9-3/8"</u><br>(238)  |
| 3500MA        |            | Arch. Metal       |                        |                       | <u>5-3/8"</u><br>(137)             | (356)                   | <u>3"</u><br>(76)       | <u>9"</u><br>(229)      |                         |                         |
| 3500          |            | Full Plastic      |                        |                       | <u>5-3/4"</u><br>(146)             | <u>13"</u><br>(330)     | <u>2-7/8"</u><br>(73)   | <u>11-1/4"</u><br>(286) |                         |                         |
| 3500M         | 42-48      | Metal             |                        |                       |                                    | <u>6-3/8"</u><br>(162)  | <u>13-5/8"</u><br>(346) | <u>3-7/8"</u><br>(98)   | <u>10-7/8"</u><br>(276) |                         |
| 3500A         |            | Arch. Plastic     |                        |                       |                                    | <u>5-1/2"</u><br>(140)  | 14"                     | <u>3-1/8"</u><br>(79)   | <u>10-3/4"</u><br>(273) |                         |
| 3500MA        |            | Arch. Metal       |                        |                       | <u>5-3/8"</u><br>(137)             | (356)                   | <u>3"</u><br>(76)       | <u>10-3/8"</u><br>(264) |                         |                         |

| Door Widths (Wood or Metal)<br>Inches (cm) |                       | Model              |                    |       |  |
|--|-----------------------|--------------------|--------------------|-------|--|
| Interior Exterior                          |                       | Stop Only          | Hold Open          |       |  |
| 28" (71) - 32" (81)                        | N/A                   | x Specify          |                    |       |  |
| 33" (83) - 36" (91)                        | 28" (71) - 32" (81)   |                    |                    | Width |  |
| 37" (94) - 41" (104)                       | 33" (83) - 36" (91)   | UNI3301<br>UNI3501 | UNI3311<br>UNI3511 |       |  |
| 42" (107) - 48" (122)                      | 37" (94) - 41" (104)  | 0110001            | 0110011            |       |  |
| N/A  | 42" (107) - 48" (122) |                    |                    |       |  |

uni stop™ - top jamb arm



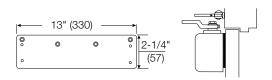
Mounting holes for closer body are spaced 3/4" (19mm) vertically x 12" (305mm) horizontally. Note: All measurements are Inches/mm.

| Closer Series | Covers               | F<br>Minimum Frame Face |  | E<br>Minimum Ceiling<br>Clearance |                       | A<br>Minimum Top Rail Clearance |  | K<br>Closer Length      | H<br>Closer Height    |
|---------------|----------------------|-------------------------|--|-----------------------------------|-----------------------|---------------------------------|--|-------------------------|-----------------------|
|               |                      | W/O Drop<br>Plate       | With 3148,<br>3158, 3547<br>& 3547A<br>Drop Plates | W/O Drop<br>Plate                 | With Drop<br>Plate    | W/O Drop<br>Plate               | With 3148,<br>3158, 3547<br>& 3547A<br>Drop Plates | 7                       |                       |
| 3300          | Slim Line<br>Plastic |                         | 1-1/2"   | 2-3/4"                            | <u>1-1/2"</u>         |                                 |  | <u>13"</u>              | 2-7/8"                |
| 3500          | Full Plastic         |                         | (38)   | (70)                              | (70) (38)             |                                 |  | (330)                   | (73)                  |
| 3500M         | Metal                | <u>1-3/4"</u><br>(44)   | <u>1-5/8"</u><br>(41)                              | <u>3-3/4"</u><br>(95)             | <u>1-5/8"</u><br>(41) | <u>1-7/8"</u><br>(48)           | <u>3-3/4"</u><br>(95)                              | <u>13-5/8"</u><br>(346) | <u>3-7/8"</u><br>(98) |
| 3500A         | Arch. Plastic        |                         | 1-1/2"   | <u>3"</u><br>(76)                 | <u>1-1/2"</u>         |                                 |  | 14"                     | 3-1/8"                |
| 3500MA        | Arch. Metal          |                         | (38)   | <u>2-7/8"</u><br>(73)             | <u>2-7/8"</u> (38)    |                                 |  | (356)                   | (79)                  |

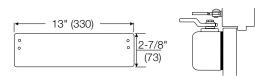
| Door Widths (Wood or Metal)<br>Inches (cm) |                       | Model                |                      |                           |
|--|-----------------------|----------------------|----------------------|---------------------------|
| Interior                                   | Exterior              | Stop Only            | Hold Open            |                           |
| 28" (71) - 30" (76)                        | N/A                   |                      |                      |                           |
| 31" (79) - 36" (91)                        | 28" (71) - 30" (76)   |                      |                      | x Specify Frame<br>Reveal |
| 37" (94) - 42" (107)                       | 31" (79) - 36" (91)   | UNIJ3301<br>UNIJ3501 | UNIJ3311<br>UNIJ3511 |                           |
| 43" (109) - 48" (122)                      | 37" (94) - 42" (107)  |                      |                      |                           |
| N/A  | 43" (109) - 48" (122) |                      |                      |                           |



regular arm

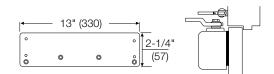


**Narrow Top Rail - #3146 Drop Plate:** For use where the narrow top rail of the door prevents the closer from being mounted directly on to the door surface. This drop plate must be used for any Series 3000 closer mounted on a top rail between 1-9/16" and 2-7/16" (40 and 62mm) in height, or any 3000 low profile closer mounted on a top rail between 1-7/16" and 2-5/16" (36 and 59mm) in height.



#### Exposed Back - #3445 Molded Full Cover Decorative Back Plate: For use on doors with glass lights where a closer

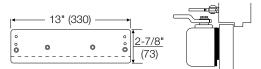
with a molded full cover is installed and the closer back is exposed. This plate covers the back of the installation to give a pleasing appearance from the reverse side.



**Concealed Door Holder - #3146 Drop Plate:** For use where a concealed door holder prevents normal mounting of the closer to the door. This is the same plate used for narrow rail mounting, but is inverted for this application to permit the mounting screws to clear the bottom of the door-holder preparation in the top rail of the door. This places the centerline of the plate's upper mounting screws at 2-3/16" (56mm) from the top of the door.

#### **Full Cover Installations**

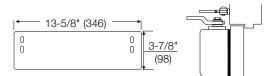
Closer Mounting Plates Slim Line Installations



#### Exposed Back/Narrow Top Rail -Exposed Back Concealed Door Holder -#3446 Molded Full Cover Drop Plate Kit: For use with molded full cover installation when a 3146 Plate is needed as a drop plate on a narrow top rail, or as a clearance plate for a concealed door holder, and the closer back is exposed. Kit contains a 3146 Drop Plate and a 3445

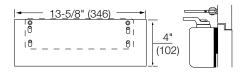
#### **Metal Cover Installations**

Decorative Plate.

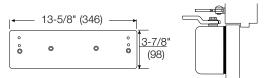


#### Exposed Back - #3545 Metal Cover Decorative Back

**Plate:** For use on doors with glass lights where a closer with a metal full cover is installed and the closer back is exposed. This plate covers the back of the installation to give a pleasing appearance from the reverse side.



Note: All measurements are Inches/mm.



**Concealed Door Holder - #3546 Metal Cover Drop Plate:** For use where a concealed door holder prevents the normal mounting of the closer to the door. This plate permits the mounting screws to clear the bottom of the door-holder preparation in the top rail of the door. This places the centerline of the plate's upper mounting screws at 2-3/16" (56mm) from the top of the door.

**Exposed Back/Narrow Top Rail - #3549 Metal Cover Drop Plate Kit:** For use with metal full cover installations, when a 3146 Plate is needed as a drop plate on a narrow top rail and the closer back is exposed. Kit contains a 3146 Drop Plate and a 3545 Decorative Plate.



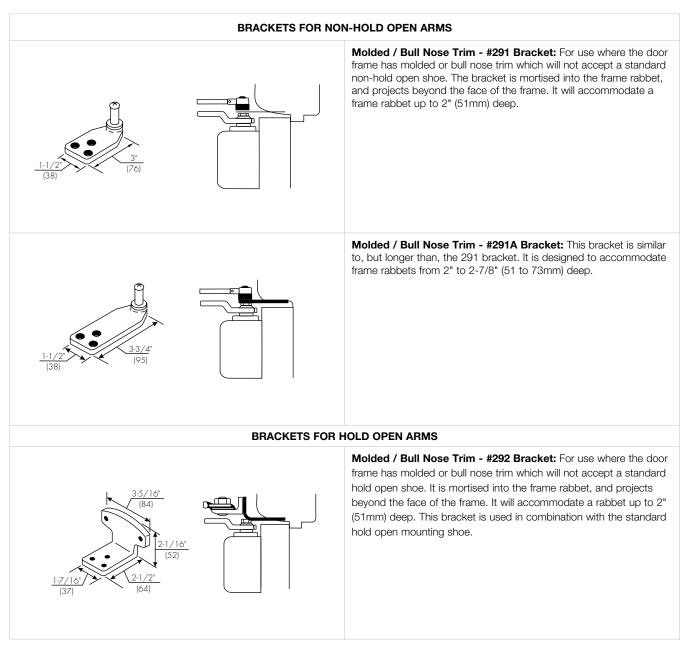
## accessories ------

regular arm -

| CLOSER MOUNTING PLATES A  | RCHITECTURAL PLA | STIC OR METAL COVER INSTALLATIONS   |
|---|------------------|---|
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$  |                  | <b>Exposed Back - #3545A Architectural Plastic or</b><br><b>Architectural Metal Cover Decorative Back Plate:</b><br>For use on doors with glass lights where a closer with an<br>architectural plastic or metal cover is installed and the closer<br>back is exposed. This plate covers the back of the installation<br>to give a pleasing appearance from the reverse side.  |
| $ \begin{array}{  c  } & 14" (356) & & & \\ \hline \circ & & & \circ \\ \circ & & & \circ \\ \bigcirc & \bigcirc & \bigcirc & \bigcirc & & \bigcirc & & \\ \hline 14" (356) & & & & \\ \hline 3-1/4" \\ \hline (83) \\ \hline \end{array} $ |                  | <b>Concealed Door Holder - #3546A Architectural Plastic</b><br>or Architectural Metal Cover Drop Plate: For use where a<br>concealed door holder prevents the normal mounting of the<br>closer to the door. This plate permits the mounting screws<br>to clear the bottom of door-holder preparation in the top rail<br>of the door. This places the centerline of the plate's upper<br>mounting screws at 2-3/16" (56mm) from the top of the door. |
| $ \begin{array}{c c}  & 14" (356) & & & \\  & & & & & \\  & & & & & \\  & & & &$  |                  | <b>Exposed Back/Narrow Top Rail - #3549A Architectural</b><br><b>Plastic or Architectural Metal Cover Drop Plate Kit:</b> For<br>use with architectural plastic or metal cover installations when<br>a 3146 plate is needed as a drop plate on a narrow top rail<br>and the closer back is exposed. Kit contains a 3146 Drop<br>Plate and a 3545A Decorative Plate.   |
| 13" (330) →   |                  |   |



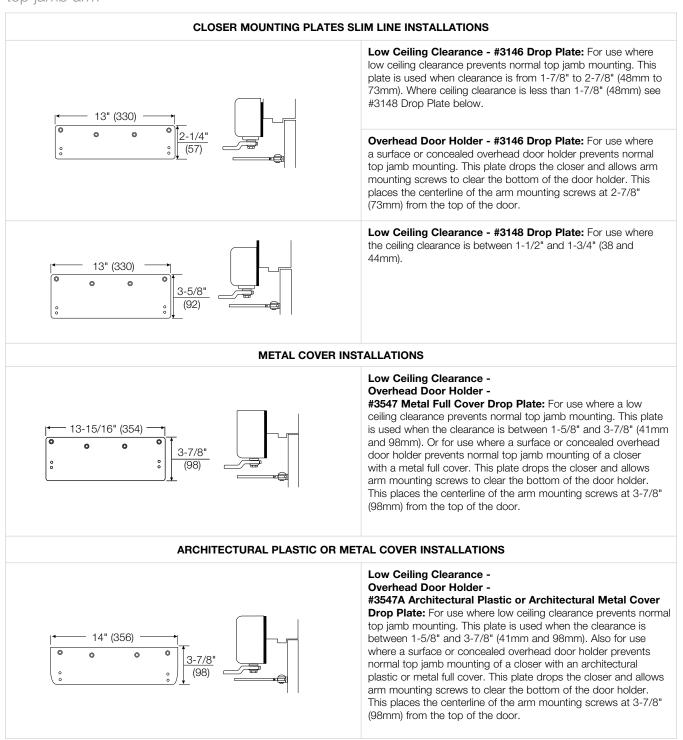
regular arm



Note: All measurements are Inches/mm.



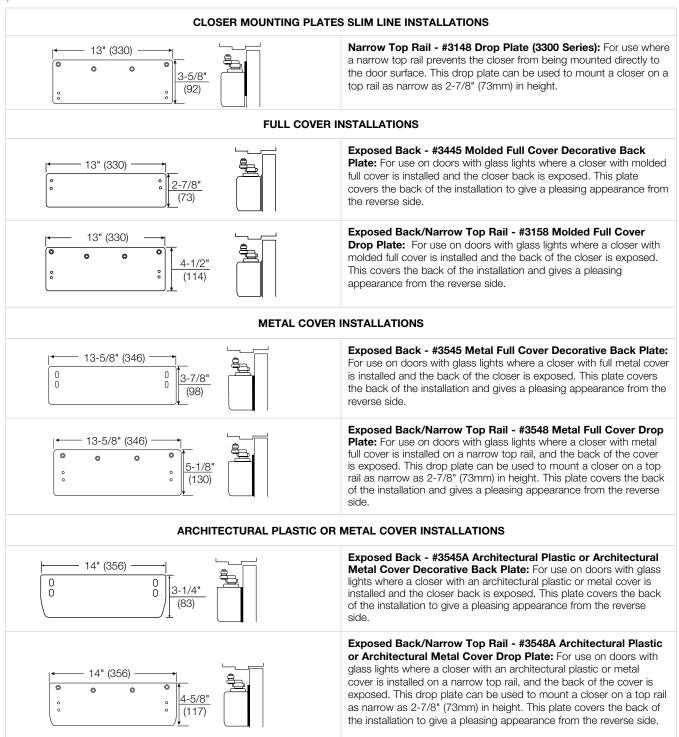
top jamb arm



Note: All measurements are Inches/mm.



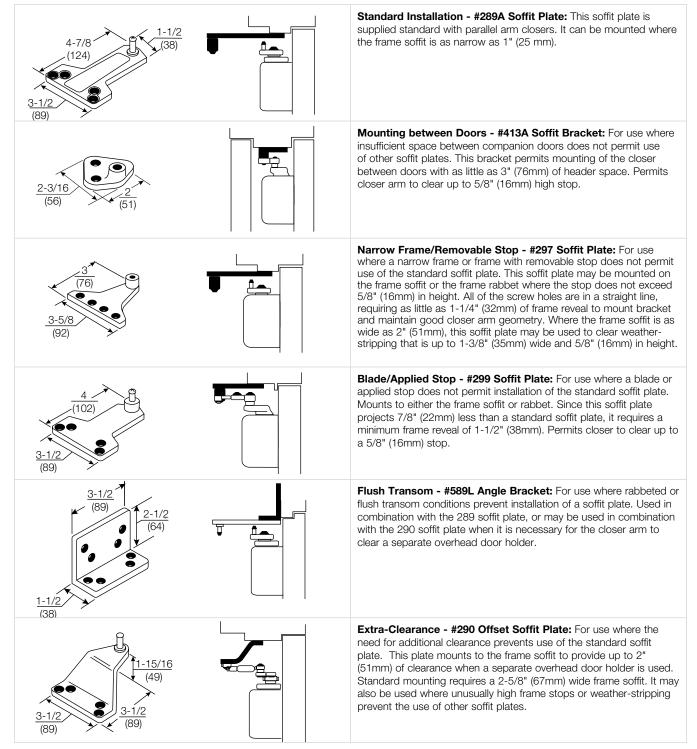
parallel arm -



Note: All measurements are Inches/mm.



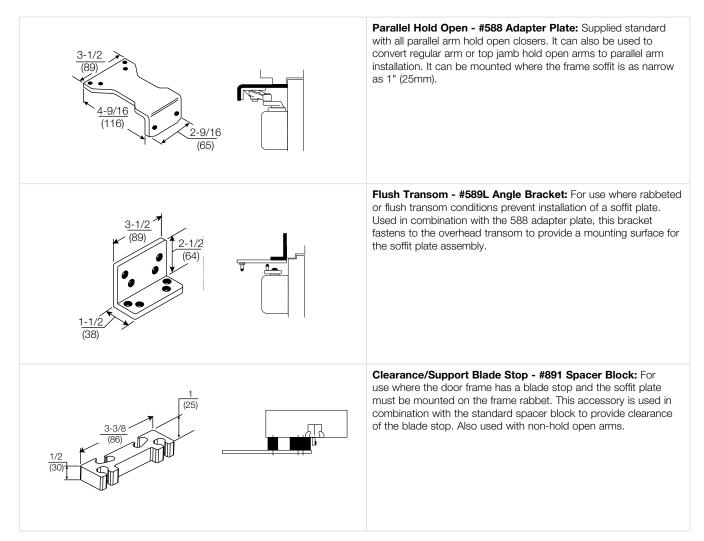
parallel arm - brackets for non-hold open arms



Note: All measurements are Inches/mm.



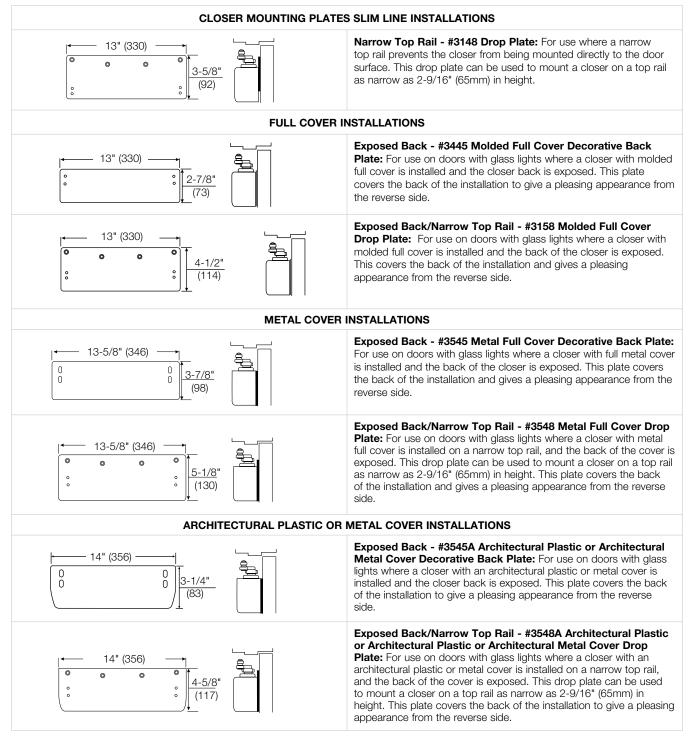
parallel arm - brackets for non-hold open and hold open arms



Note: All measurements are Inches/mm.



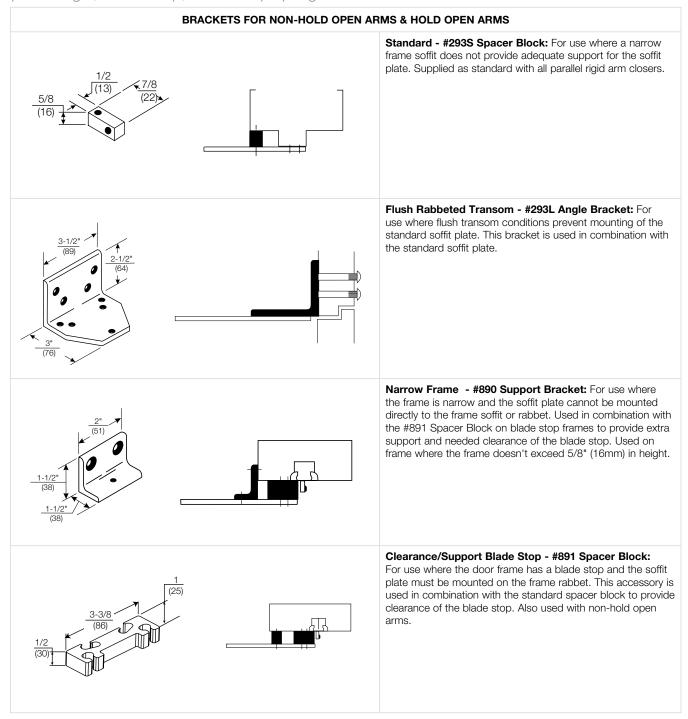
parallel rigid, holder/stop, holder/stop spring arms



Note: All measurements are Inches/mm.



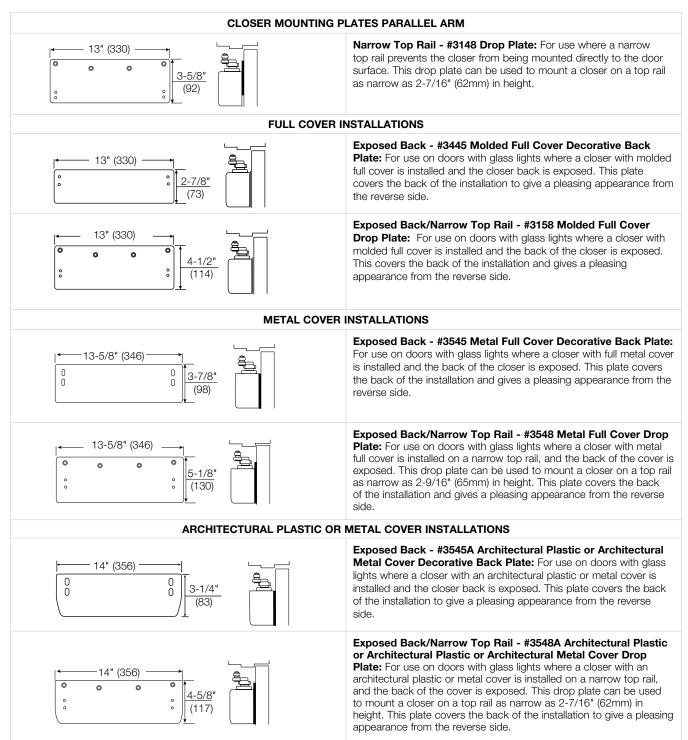
parallel rigid, holder/stop, holder/stop spring arms



Note: All measurements are Inches/mm.



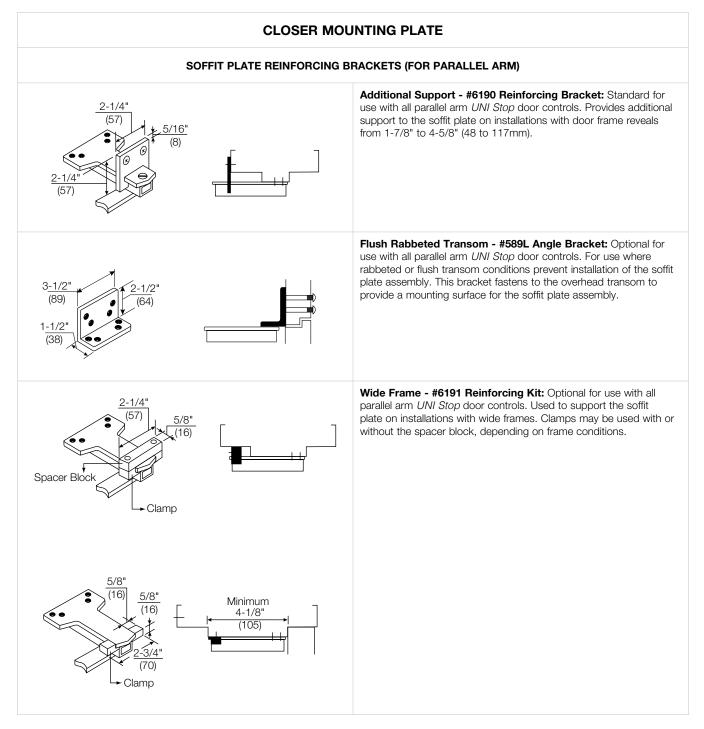
uni stop™ arm



Note: All measurements are Inches/mm.



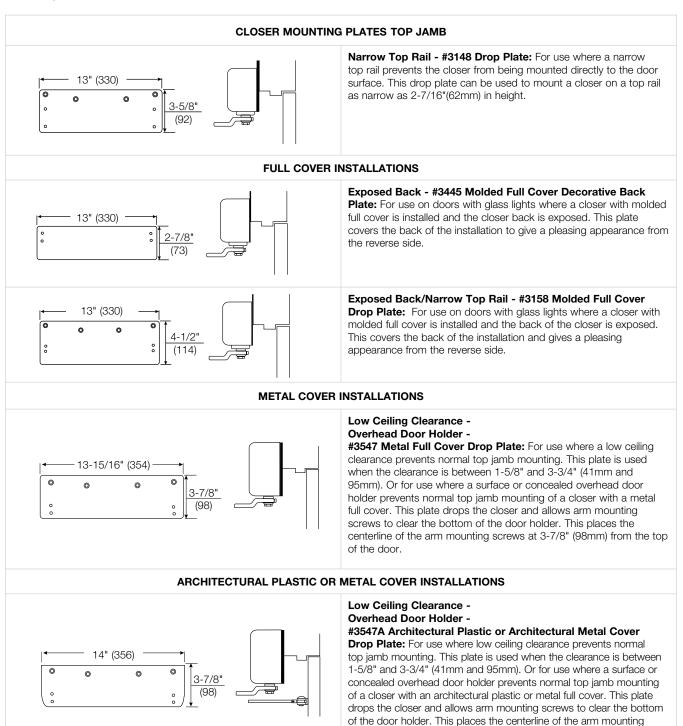
uni stop™ arm



Note: All measurements are Inches/mm.



uni stop™ arm



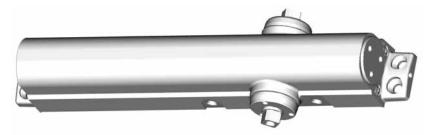
screws at 3-7/8" (98mm) from the top of the door.

#### Note: All measurements are Inches/mm.



## parts

door closer body assemblies



| Model   | Description                                |
|---------|--|
| 3101LAP | Multi-sized closer bodies 3101, 3301, 3501 |

#### LAP = Less All Parts

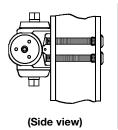
| Covers               | Type of Material |       |                  |                |
|----------------------|------------------|-------|------------------|----------------|
| <b>Closer Series</b> | Plastic          | Metal | Arch.<br>Plastic | Arch.<br>Metal |
| 3301                 | 3200P*           | N/A   | N/A              | N/A            |
| 3501                 | 3400P            | 3400M | 3400A            | 3400MA         |

#### fasteners



(Side view)

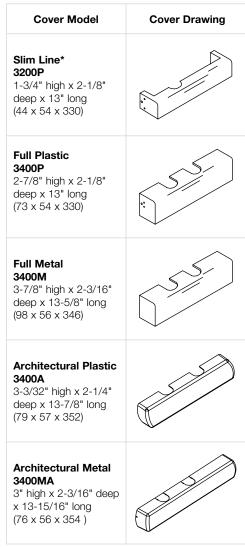
| Steel Door Application<br>Sex-nut / Sleeve-nut : "SN" (4 per pack) or<br>Sex-nut / Sleeve-nut & Screw: "SNB" (4 per pack) |          |             |  |  |
|---|----------|-------------|--|--|
| Door  | SN's     | SNB's       |  |  |
| 1-3/4"  | SN-134   | SNB134-38   |  |  |
| 2"  | N/A      | SNB200-38   |  |  |
| 2-1/4"  | SN-214   | SNB214-38   |  |  |
| S.S. SNB's 1-3/4"   | SN-134SS | SNB134SS-38 |  |  |



| Aluminum and Wooden Door Application<br>(Aluminum Door Shown)<br>Through-bolt & Grommet Nut : "TBGN" (4 per pack) |            |  |  |  |
|---|------------|--|--|--|
| Door  | TBGN's     |  |  |  |
| 1-3/8"  | TBGN138-38 |  |  |  |
| 1-3/4"  | TBGN134-38 |  |  |  |
| 2-1/4"  | TBGN214-38 |  |  |  |

Note: All measurements are Inches/mm.

#### covers



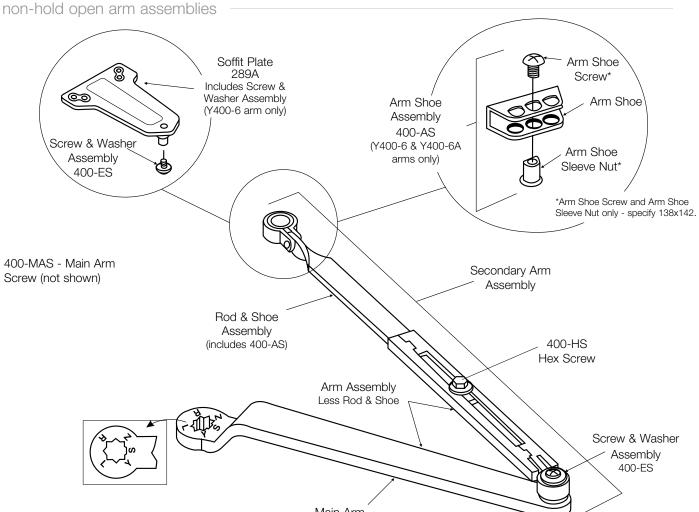
| Arm Type                     | Torx <sup>®</sup> Screw<br>Packs |
|------------------------------|----------------------------------|
| Reg., Par. & Top Jamb        | TX38                             |
| Parallel Rigid, Holder/Stop  | PRTX38                           |
| Regular Rigid Heavy-Duty Arm | RTX38                            |
| Uni Stop™ Arm                | UNITX38                          |

\*Pinion cap not included with Slim Line cover. Part #1639



# 3000 series grade 1 door closer

## parts -



Note: Mounting hardware included with all parts orders.

Main Arm

| Closer<br>Series   | Complete Arm Assembly   | Main <sup>1</sup> Arm Assembly<br>(length)(mm)<br>(includes 400-ES) | Secondary Arm<br>Assembly<br>(includes 400-ES) | Arm Assembly Less<br>Rod and Shoe | Rod & Shoe <sup>2</sup><br>Assembly (length)(mm) |
|--------------------|---|---|--|-----------------------------------|--|
| 3000               | Y400-1  |   | Y400-111                                       | Y400-1W                           | Y400-11 (8-7/8")(225)                            |
| TJ3000             | Y400-1A   | 400-1M<br>(11")(279)  | Y400-121                                       |                                   | Y400-11A (12-9/16")(319)                         |
| P3000              | Y400-6  |   | Y400-116                                       |                                   | Y400-16 (8-7/8")(225)                            |
| P3000 <sup>3</sup> | Y400-6A   |   | Y400-116A                                      |                                   | Y400-16A (12-9/16")(319)                         |
| 3000               | Y400-26 (Tri-Packed®<br>packaging includes<br>Y400-1 plus 289A plate) |   |  |                                   |  |

1. C/L to C/L length shown in parentheses.

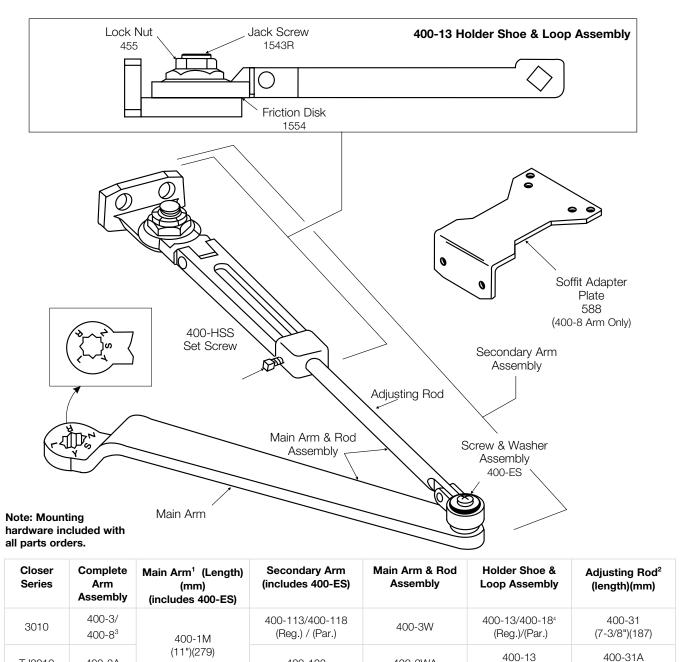
2. C/L of connecting link to end of rod shown in parentheses.

3. For 180° door swing when using a special template for doors hung on 6" to 8" (162mm to 203mm) wide throw hinges.



## parts

hold open arm assemblies



400-123

400-3WA

(10-13/16")(275)

400-18- Holder Shoe & Loop Assembly (400-13) with Soffit Adapter Plate (588)

1. C/L to C/L length shown in parentheses.

400-3A

- 2. C/L of connecting link to end of rod shown in parentheses.
- 3. Same as 400-3 but includes #588H soffit adapter plate.
- 4. Same as 400-13 but includes #588H soffit adapter plate

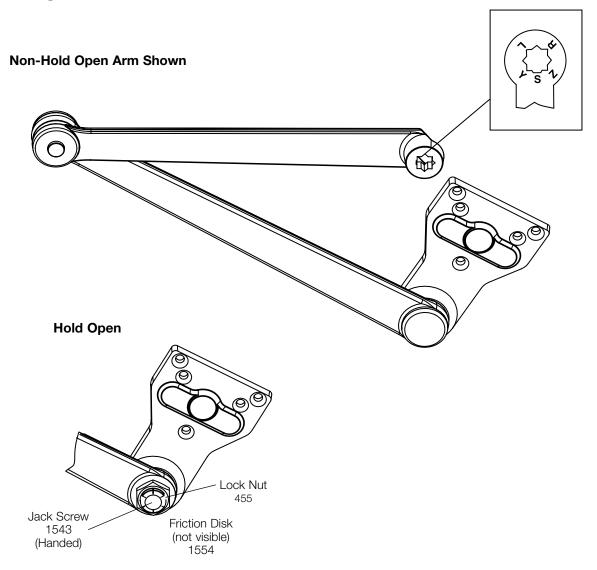
TJ3010

# 3000 series | grade 1 door closer



# parts —

parallel rigid arm assemblies



#### Note: Mounting hardware included with all parts orders.

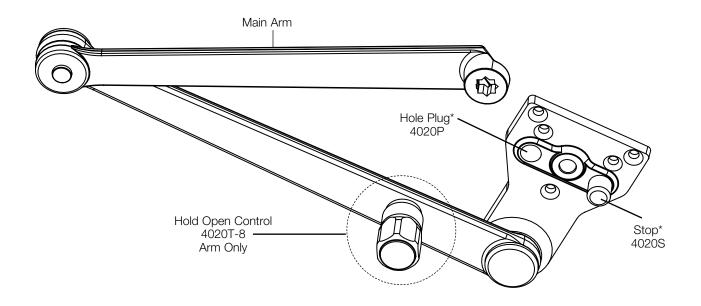
| Arm Function  | Complete Arm<br>Assembly |
|---------------|--------------------------|
| Non-Hold Open | PR400-5                  |
|               | PR400-8R (Right Hand)    |
| Hold Open     | PR400-8L (Left Hand)     |



## parts

holder/stop arm assemblies

#### Hold Open Arm Shown



#### Note: Mounting hardware included with all parts orders.

| Arm Function        | Complete Arm Package |
|---------------------|----------------------|
| Non-Hold Open       | 4020-5               |
| Thumbturn Hold Open | 4020T-8              |

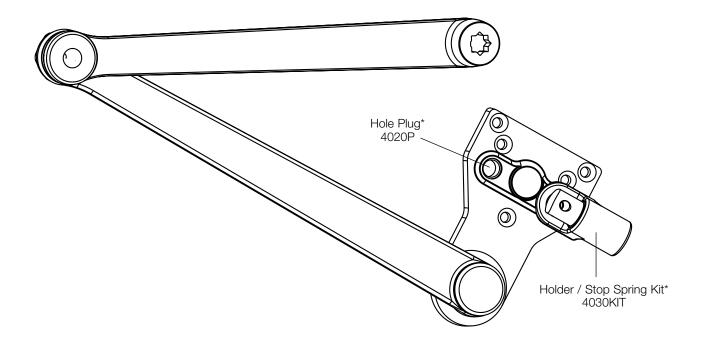
\* These parts and screw pack are included with complete arm assemblies.



# 3000 series | grade 1 door closer

## parts -

holder/stop spring arm assemblies



Note: Mounting hardware included with all parts orders.

| Arm Function        | Complete Arm Package |
|---------------------|----------------------|
| Non-Hold Open       | 4030-5               |
| Thumbturn Hold Open | 4030T-8              |

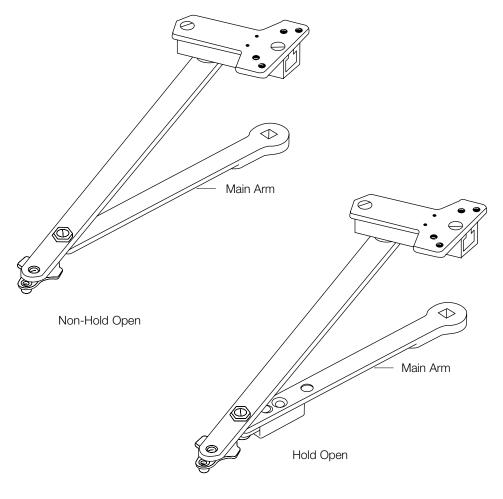
\* These parts and screw pack are included with complete arm assemblies.



# parts

uni stop™ arm assemblies

### Parallel Arm



#### Note: Mounting hardware included with all parts orders.

| Complete Arm Assembly    |                          |               |           |  |
|--------------------------|--------------------------|---------------|-----------|--|
| Door Width (cm)          | Main Arm Length*<br>(mm) | Non-Hold Open | Hold Open |  |
| 28" - 32"<br>(71- 81)    | 9-1/2" (241)             | 6100-11       | 6100-1    |  |
| 33"- 41"<br>(84 - 104)   | 11" (279)                | 6100-13       | 6100-3    |  |
| 42" - 48"<br>(107 - 122) | 12-1/2" (318)            | 6100-14       | 6100-4    |  |

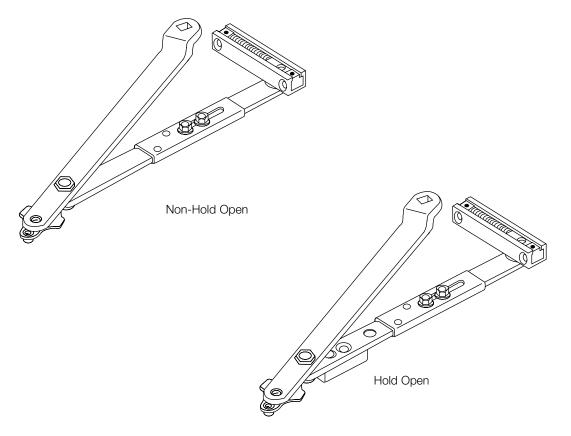


# 3000 series grade 1 door closer

# parts —

uni stop™ arm assemblies

## Top Jamb



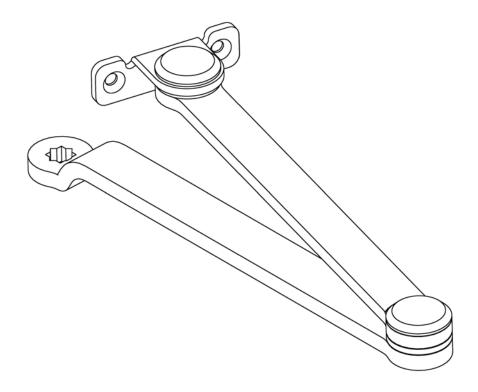
| Complete Arm Assembly |           | For Frame Reveals           |  |
|-----------------------|-----------|-----------------------------|--|
| Non-Hold Open         | Hold Open | (mm)                        |  |
| J6100-4               | J6100-7   | 2-1/8" - 3-1/4" (54 - 83)   |  |
| J6200-4               | J6200-7   | 1/2" - 2" (13 - 51)         |  |
| J6400-4               | J6400-7   | 3-3/8" - 4-1/4" (86 - 108)  |  |
| J6500-41              | J6500-71  | 4-3/8" - 5-3/8" (111 - 137) |  |
| J6500-42              | J6500-72  | 5-1/2" - 6-3/8" (140 - 162) |  |
| J6500-43              | J6500-73  | 6-1/2" - 7-3/8" (165 - 187) |  |
| J6600-4               | J6600-7   | 0 - 3/8" ( 0 - 10)          |  |

#### Note: Mounting hardware included with all parts orders.



# parts

regular rigid heavy-duty arm



Note: Mounting hardware included with all parts orders. Not available plated.

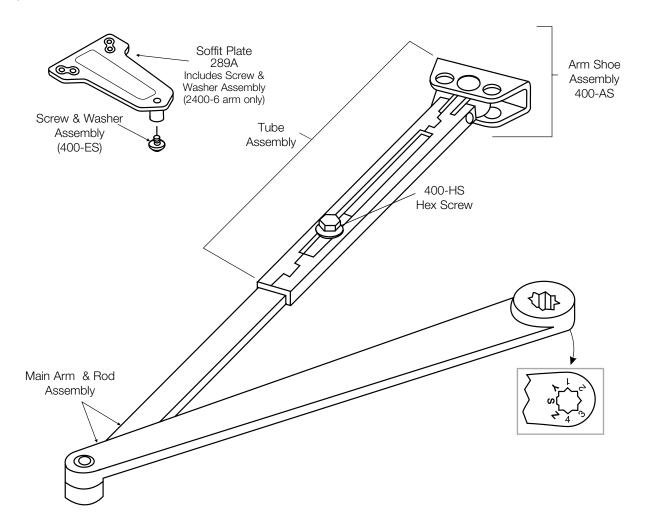
| Closer Series | Arm Function  | Complete Arm Package |
|---------------|---------------|----------------------|
| R3301/R3501   | Non-Hold Open | R400-1               |



# 3000 series grade 1 door closer

# parts -

low profile arm assemblies



Note: Mounting hardware included with all parts orders.

| Arm Application       | Complete Arm<br>Assembly | Main Arm & Adjusting<br>Rod Assembly | Tube & Shoe/Soffit Assembly |
|-----------------------|--------------------------|--------------------------------------|-----------------------------|
| Regular Arm           | 2400-1                   | 2400-1MR                             | 2400-1TS (With 400-AS)      |
| Parallel Arm          | 2400-6                   |                                      | 2400 CTC (M/Hb 220A)        |
| Tri-Packed® Packaging | 2400-26                  |                                      | 2400-6TS (With 289A)        |



# suggested specification

#### 3301/3501Series

Closers for interior and exterior doors shall be full rack-andpinion type with cast aluminum alloy shell. Closers shall be surface mounted and shall project no more than 2-1/8" from the surface of the door with standard cover. Closers shall be non-handed to permit installation on doors of either hand. Closer fluid shall contain lubricity and anti-oxidation agents. Closer fluid shall maintain stable viscosity to allow door closer to perform in temperatures ranging from extremely high to as low as -40°F. Closers shall have multi-size spring power adjustment to permit setting of spring from size 1 through size 6. Closers shall have two non-critical valves, hex key adjusted, to independently regulate sweep speed and latch speed. Closers shall have adjustable backcheck intensity controlled by a hex key adjusted valve.

[Closers shall have adjustable delayed action closing controlled by a hex key adjustable valve.]

Regular arm and top jamb closers shall have a non-hold open shoe permitting 15% ( + or – 7-1/2% ) power adjustment. \*\*Closers shall be enclosed in a [molded resin cover] [plated or sprayed metal cover], Closers to be Yale<sup>®</sup> [3301/3501] [3501M] [3501MA] [3501A].

\*\*For special arms insert that specification here (see column three on this page).

#### \*\*UNI Stop™ Arm

Door closers shall have a fixed door stop feature effective at one point selected at installation, from 85° - 110° in fivedegree increments. Door stop shall be cushioned by a shockabsorbing heavy-duty spring action effective at the [soffit plate] [arm shoe] pivot. [Closers shall be provided for parallel arm installation using a rigid steel main arm and secondary arm lengths proportional to the door width.] [Closers shall be provided for top jamb installation using a forged steel, rigid main arm and telescoping secondary arm adequate for the frame reveal of the openings.]

#### \*\*Holder/Stop Arm

Door closers shall have a field reversible door stop. Door closer shall have a feature with selectable on and off ball and detent hold open. Hold open tension shall be adjustable effective at one point selected at installation, from 85° - 110° in five degree increments. [Hold open mechanism shall have engage/disengage selection actuated by thumbturn]. Closers shall be provided for parallel arm installation using a forged rigid steel main arm and secondary arm.

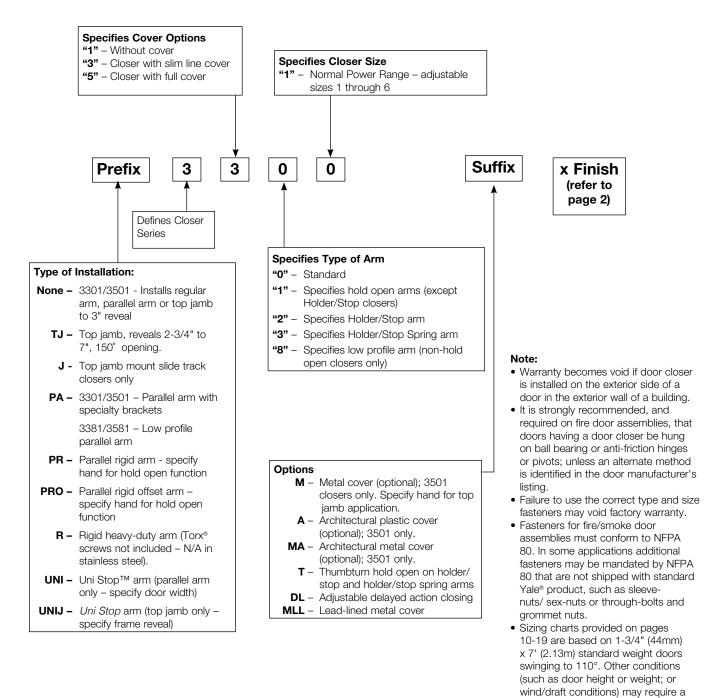
#### \*\*Holder/Stop Spring Arm

Door closers shall have built-in door stop [and holder] effective at one point selected at installation, from 85° - 110° in fivedegree increments. Door stop mechanism shall be reversible and have a buffer spring that engages prior to the dead stop feature, reducing shock loads to the door and frame assembly. Door stop mechanism shall be non-handed and attached to soffit plate. [Hold open mechanism shall have engage/ disengage selection actuated by thumbturn]. Closers shall be provided for parallel installation using a forged rigid steel main arm and secondary arm.



## how to order —

# For optimum protection of door and frame assemblies, always use auxiliary wall, floor or overhead door stop.



43

larger size closer.

250 lbs.

· Contact factory if door weight exceeds



# 3000 series grade 1 door closer

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