



# the perfect choice

The Yale<sup>®</sup> 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<sup>®</sup> 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 120 hours of salt spray. (The ANSI requirement is 25 hours.)

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Sprayed Finishes						
Description	Specify Designation (BHMA)	Complements the following finishes	Old Designation			
Aluminum	689	628, 625, 629, 630, 651, 652	SB			
Statuary Bronze	690	640, 613, 695	STAT			
Dull Bronze	691	612, 637, 639	BL			
Black	693	315	315			
Medium Amber	694	312	312			
Gold	696	605, 606, 632, 633	GB			
Prime Coat	600*	_	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*		C	Old Designation	
Flated Finishes		Metal		
Bright Brass	605E	Yes	Yes	US3
Satin Brass	606E	Yes	Yes	US4
Bright Bronze	611E	Yes	Yes	US9
Satin Bronze	612E	Yes	Yes	US10
Oxidized Oil Rubbed Bronze	613E	Yes	Yes	US10B
Bright Chrome	625E	Yes	Yes	US26
Satin Chrome	626E	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.



# overview

**Cutaway View** 



## compliance standards

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 3300/3500, 3301/3501 are ANSI/BHMA Grade 1 certified.
All Yale® series 3300/3500, 3301/3501 closers with non-hold open arms are listed by Underwriters Laboratories for labeled fire doors. This includes compliance to UL10C and UBC-72 (1997) for 3-hour assemblies. The product is manufactured in an ISO 9001 facility. These closers are also listed with the New York City Materials and Equipment Acceptance Division.

# standard on all 3000 series closers

required to meet the requirements of The

A117.1, when adjusted to meet those

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

Americans with Disabilities Act or ANSI Standard

requirements, may not provide adequate closing power to dependably close and latch the door.

Applications: Door closers installed in openings

#### Features

Latch Speed

**Regulating Valve** 

- Cast aluminum body
- 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

- 3300/3301 shipped with slimline plastic cover
- 3500/3501 shipped with full cover
- 10-year limited warranty

## **Optional Features**

Sweep Speed

**Regulating Valve** 

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

Additional Features	3300	3500	3301	3501
Sized springs 2, 3, 4, 5, 6 with 50% additional adjustment	Х	Х		
Adjustable spring sizes 1 through 6			Х	Х
Bi-packed (regular arm and top jamb mounting)	Х	Х		
Tri-packed (regular arm, top jamb and parallel arm mounting)			Х	Х



# fasteners/features

		Arm								
Туре	Description	RA	PA	ТJ	Low Profile	PR	Holder/Stop, Holder/Stop Spring	UNI	UNI-J	Slide Track
				DOO	OR					
SDST	Self Drilling Self Tapping	S	S	S	S	0	0	0	0	0
MS	Machine Screw	S	S	S	S	S	S	S	S	S
SN	Sleeve Nut	0	0	0	0	S	S	S	S	S
TBGN	Through-Bolts & Grommet Nuts	0	0	0	0	0	0	0	0	0
SMS	Sheet Metal Screws	0	0	0	0	0	0	0	0	0
Torx®	Torx Drive Security Screw	0	0	0	0	0	0	0	0	0
				FRA	ME					
SDST	Self Drilling Self Tapping	S	S	S	S	S	S	S	S	S
MS	Machine Screw	S	S	S	S	S	S	S	S	S
SMS	Sheet Metal Screws	0	0	0	0	0	0	0	0	0
Torx	Torx Drive Security Screw	0	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 1-3/8" (35mm) or 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" (35mm) 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: 8501 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 3300/3500 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 ten-year warranty for defects and life of the building on the aluminum housing.



# features (cont.)

door closer power options

## Series 3300/3500 Sized Door Closer

Available in five different power sizes (2, 3, 4, 5 or 6). Each power size is adjustable up to 50% stronger than the minimum closing force for that size, as outlined in ANSI/BHMA standard A156.4.

## 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 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 Released at	Approximate Time 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 slowmoving 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, Top Jamb, Parallel Arm	Δrm	Holder/Stop Parallel Arm	Holder/Stop Spring Parallel Arm	UNI Stop™ Parallel Arm	UNI Stop™ Top Jamb	Low Profile	Slide Track
Non-Hold Open	$\checkmark$	$\checkmark$	85° to 110°	85° to 110°	85° to 110°	85° to 110°	$\checkmark$	85° to 110°/180°
Hold Open	90° to 180°	85° to 180°	85° to 110°	85° to 110°	85° to 110°	85° to 110°	N/A	85° to 110°

✓=180° trim and template permitting