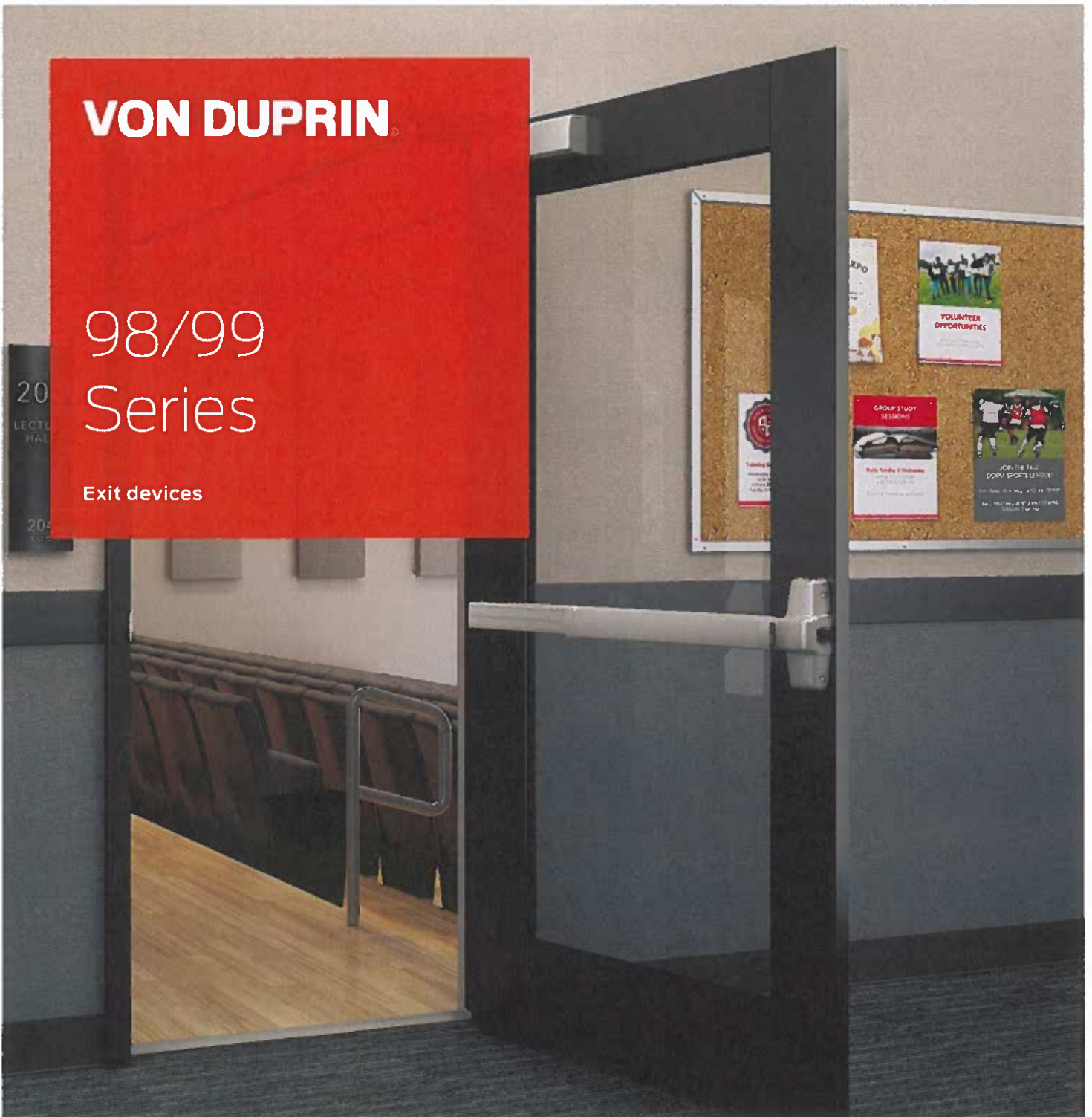


VON DUPRIN®

98/99  
Series

Exit devices



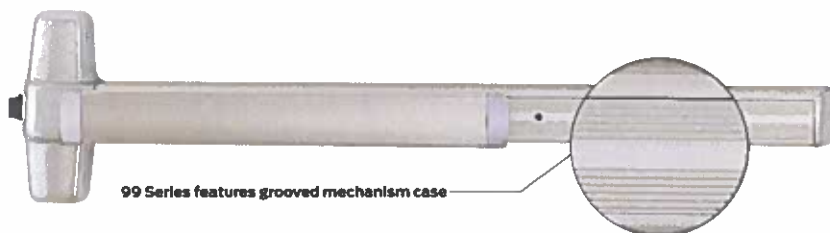
## Engineered for value and performance

Von Duprin® empowers its customers to embrace change by providing flexible solutions that can be modified over time, protecting your investment well into the future. Von Duprin 98/99 Series push pad devices have a universal center case design that is unique to the industry and provides superior flexibility—from adding trim, switching handing or adding new retrofit options, you can configure numerous variations in the field without replacing your device.

Von Duprin's exit devices offer durable solutions that are proven in the field to perform under heavy use and abuse and backed by a team of experts experienced in door hardware application and code compliance. Allegion stands behind every Von Duprin product we make with unparalleled customer support thanks to our team of experts based in the U.S. that average more than 15 years of experience, so you are assured to receive expert advice.



98 Series features smooth mechanism case



99 Series features grooved mechanism case

Von Duprin exit devices are available in two external surface styles, designated 98 and 99 Series.



**Latch bolt**  
Deadlocking latch bolt provides security and improved performance at standard device cost.



**The Quiet One®**  
A fluid damper decelerates the push pad on its return stroke and eliminates most noise associated with exit device operations. Furnished on all 98/99™ Series exit devices.

## Device types

### 98/99 Rim exit device



98 and 99 rim exit devices for all types of single and double doors with mullion, UL listed for panic exit hardware. Devices are certified to ANSI/BHMA A156.3 2014, Grade 1. The 98 device has a smooth mechanism case and the 99 device has a grooved case. The rim device is non-handed except when the following device options are used: SD (special dogging), -2 (double cylinder) or SS (signal switch). Covers stock hollow metal doors with 86 or 161 cutouts on single doors (may cover cutouts on pairs – consult template).

#### Specifications

Device functions	Device ships EO/DT/NL; Field selectable; For TP, K or L remove NL drive screw from device	
Device lengths	3' 2'4" to 3' (711mm to 914mm) Door size	4' 2'10" to 4' (864mm to 1219mm) Door size
Device centerline from finished floor	39 <sup>13</sup> / <sub>16</sub> " (1011mm)	
Center case	39 <sup>11</sup> / <sub>16</sub> " (1008mm) with mullion	
Mechanism case	8" x 2 <sup>3</sup> / <sub>4</sub> " x 2 <sup>3</sup> / <sub>8</sub> " (203mm x 70mm x 60mm)	
Projection	Pushbar neutral – 3 <sup>13</sup> / <sub>16</sub> " (97mm) Pushbar depressed – 3 <sup>1</sup> / <sub>16</sub> " (78mm)	
Latch bolt	Deadlocking, <sup>3</sup> / <sub>4</sub> " (19mm) throw	
Finishes	605, 606, 612, 625, 626/626AM, 628, 710, 711 and 643e (619 and 630 available with 98 Series only)	
Fasteners and sex bolts (SNB)	Includes screw pack for 1 <sup>3</sup> / <sub>4</sub> " (44mm) and 2 <sup>1</sup> / <sub>4</sub> " (57mm) thick metal or wood doors (Optional 425 SNB available, see page 64 for quantities)	

#### Features and options

##### Electrified options

LX	Latch bolt monitor switch
RX	Request to exit
RX2	Double request to exit
E	Electric locking and unlocking trim
EL	Electric latch retraction
QEL	Quiet electric latch retraction
SS	Signal switch
CX	Chexit delayed exit
ALK	Alarm exit kit
WP-RX	Waterproof request to exit
CON	Allegion Connect

##### Mechanical options

-2	Double cylinder
-2SI	Double cylinder with security indicator
AX	Accessible device
GBK	Glass bead kit
PN	Pneumatic latch retraction
QM	Quiet mechanical
SNB	Sex bolts
SEC	Security screws
WH	Weep holes
XP	Extra protection

##### Dogging feature

Hex key dogging standard

##### Dogging options

CD	Cylinder dogging
CD-CX	Chexit cylinder dogging
CDSI	Cylinder dogging with security indicator
HDSI	Hex dogging with security indicator
SD	Special center case dogging
LD	Less dogging
DI	Dogging indicator
CI	Cylinder dogging Indicator

##### Strikes

299 – Dull black

#### Accessories



##### 299 Strike

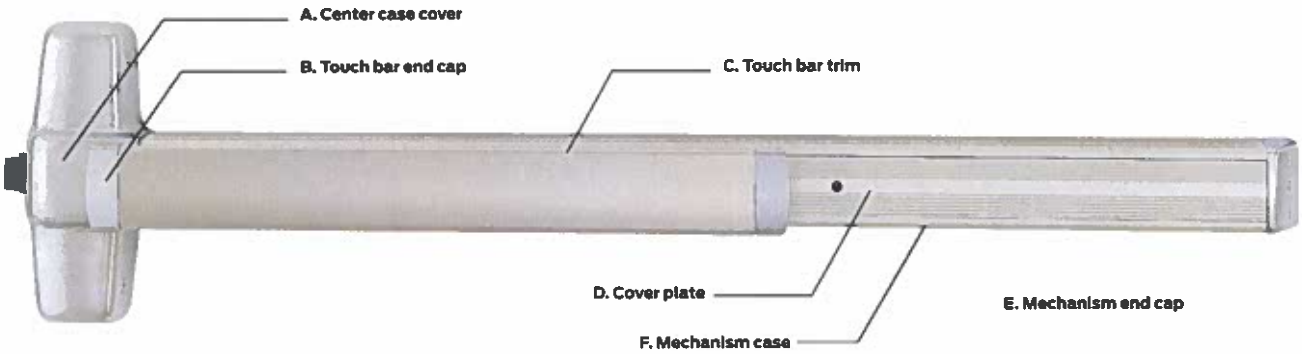
Ships standard, optional strikes available.



##### Hex key dogging

Comes standard on 98/99 rim exit devices.

## Device finish options



### Finishes

Color	BHMA number	A, B, E	C	D and F
Bright brass	605	Bright brass	Bright brass, 605	Buffed anodized
Satin brass	606	Satin brass	Satin brass, 606	Anodized
Satin bronze	612	Plated	Satin bronze, 612	Anodized
Satin bronze, oil-rubbed	613	Oil rubbed bronze	Oil rubbed bronze, 613	Powder coat
Bright chrome	625	Plated	Bright stainless steel, 629	Buffed anodized
Satin chrome	626	Plated	Satin stainless steel, 630	Anodized
Satin stainless steel'	630	Stainless steel	Satin stainless steel, 630	Anodized
Aluminum, anodized	628	Powder coat	Satin stainless steel, 630	Anodized
Duranodic dark bronze	710	Powder coat	Powder coat	Powder coat
Black	622	Powder coat	Powder coat	Powder coat
Aged bronze	643e	Relieved aged bronze	Relieved aged bronze	Aged bronze, no relief

**Trim options**

Optional trim

**Schlage® HL6 quiet hospital push/pull latch**

Von Duprin and Schlage® have collaborated on an exit device trim that provides both accessibility and performance. In combination, the 98/9975 mortise lock device along with the newly designed Schlage HL6 quiet hospital push/pull latch delivers an exit device with mortise lock durability that utilizes an easy to use, ADA compliant push/pull trim. The HL6 is now 50% quieter through dampened paddle action, reducing the noise associated with lock operation providing healthcare organizations a reliable solution for noise reduction initiatives. The 98/9975HL device is available in most standard architectural finishes, including antimicrobial options. Consult the HL Series [catalog](#) or [data sheet](#) for complete product information.



**392-7 Offset pull**

The 392-7 Offset pull is 1/4" round stainless steel, with a 7" center to center which matches the 98/99 center case. Often used with a night latch operation. 3 1/2" (89mm) offset with 1 1/2" (38mm) clearance.



**Vandal resistant trim:  
Ives VR910 and VR914 Series**  
VR910 black grip for softer touch and resilience to temperature extremes. VR914 grip in all stainless steel. Grip designed for comfortable operation.



**Features:**

- Stainless steel construction, 11 gauge (0.120" thick); 630 finish only
- Thru-bolts and rugged mounting screws for maximum fastening strength
- Built-in lock protector prevents vandalism to mortise latch bolt (available on certain models)
- Extra-tough stainless steel cylinder collar prevents pipe wrench or similar tool from damaging cylinder; tapered design prevents side impacts from transferring directly to cylinder; collar spins freely.
- Furnished with mounting screws for door thicknesses of 1 1/4" to 2 1/4"
- 1 1/2" (38mm) clearance from grip to door, total projection 1 1/8" (48mm)
- Consult the Ives catalog for more information

Model	For use with	Size
VR910DT and VR914DT	98/99 Rim or vertical rod device	5 1/2" x 11" (133mm x 279mm)
VR910NL and VR914NL	98/99 Rim or vertical rod device	5 1/2" x 11" (133mm x 279mm)
VR910M-DT and VR914M-DT	9875/9975 Mortise device	7 1/4" x 11" (184mm x 279mm)
VR910M-NL and VR914M-NL	9875/9975 Mortise device	7 1/4" x 11" (184mm x 279mm)

(handing required)

Introduction

How to order

Device types

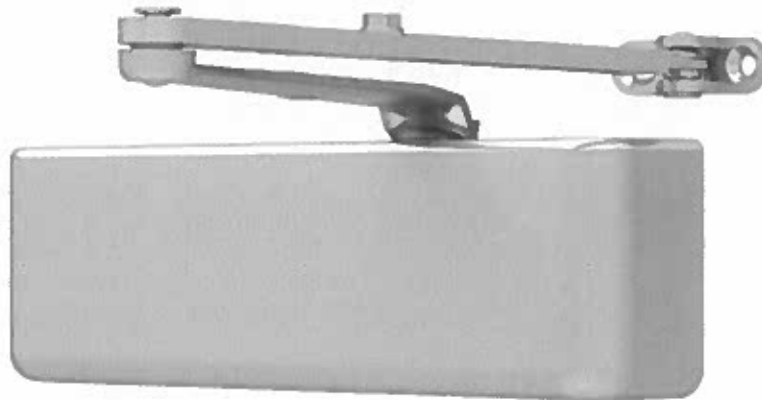
Trim options

Mechanical options

Electrified options

Accessories

Additional information

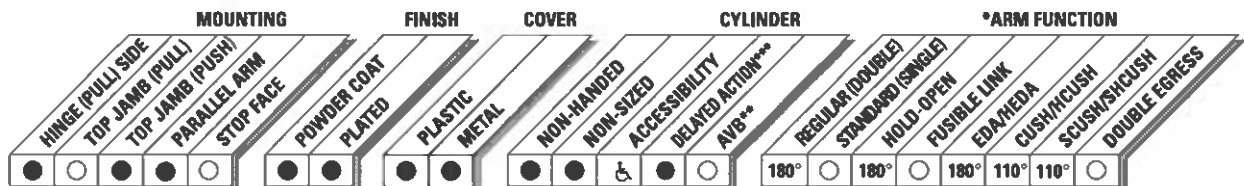


The 4040XP is LCN's most durable and flexible heavy duty closer designed for institutional and other demanding high traffic applications.

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	<b>Cover</b>	<ul style="list-style-type: none"> <li>■ Plastic, Standard</li> <li>■ Metal, Optional</li> </ul>
<b>Body Construction</b>	<ul style="list-style-type: none"> <li>■ Cast Iron Body</li> <li>■ Full Complement Bearings</li> <li>■ 1-1/2" Diameter Piston</li> <li>■ 3/4" Diameter Double Heat Treated Pinion Journal</li> </ul>	<b>Fasteners</b>	Self Reaming and Tapping Screws (SRT)
<b>Fluid</b>	All Weather Liquid X Fluid	<b>Mounting</b>	Hinge (Pull Side), Top Jamb (Push Side), Parallel Arm (Push Side)
<b>Handing</b>	Non-Handed	<b>Arms</b>	Regular Arm
<b>Templating</b>	Peel-n-Stick templates - 2-1/4" x 5" Mounting Hole Pattern	<b>Finishes/Colors/ Powder Coat</b>	<ul style="list-style-type: none"> <li>■ Aluminum (689)</li> <li>■ Statuary Bronze (690)</li> <li>■ Light Bronze (691)</li> <li>■ Black (693)</li> <li>■ Dark Bronze (695)</li> <li>■ Brass (696)</li> <li>■ Custom colors optional</li> </ul>
<b>Size</b>	Adjustable Spring Size 1-6, includes Patented Green Dial		<ul style="list-style-type: none"> <li>■ Optional SRI primer - powder coat only</li> <li>■ Optional plated finishes</li> </ul>
<b>Warranty</b>	30 years		

**Special  
Templates**

Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.



● AVAILABLE  
○ NOT AVAILABLE

♿ Closer available with less than 5.0 lbs. opening force on 36" door.  
\* Maximum opening/hold-open point with standard template.  
\*\* Advanced Variable Backcheck.  
\*\*\* Delay feature incorporates standard 4040 cylinder (not XP).

## 4000 Series mounted closers

### APPLICATIONS

- For aluminum, hollow metal, or wood swinging doors and frames.
- Can be used with hinge or pivot mounted door.
- Adapter plates and other installation accessories available for unusual conditions.

### FEATURES COMMON TO 4000 SERIES

- Each closer (except 4050, 4050T, 4040XP, 4040XPT, 4030, 4030T) is designed for a specific mounting: hinge side, top jamb, or parallel arm. 4040XP closer with regular or hold-open arm mounts hinge side or top jamb. 4030, 4040XP and 4050 regular parallel arm closers include 62PA SHOE required to parallel arm mount either regular or hold-open arm.
- Handed for right or left swinging doors, except for 4000T, 4030, 4030T, 4040XP, 4050, 4050T and 4040XPT.
- Closers to meet ADA reduced opening force requirements except 4000T.
- Adjustable hydraulic backcheck cushions opening swing prior to 90°.
- Separate regulation of general closing speed and latching speed.
- Joints in regular arm and shoe adapt to uneven trim.
- Reversible shoe to boost latching power on double lever arms.
- Available in a wide range of standard or optional custom powder coat finishes to blend with door and frame.
- Plated finishes available to accent door and frame.
- Not designed for exterior mounting or exposed to elements.

### DESIGN ASSISTANCE

LCN has been providing reliable solutions to unique door control problems since 1925. Design and specification assistance are only a phone call away.

Contact LCN for assistance or technical information at **877-671-7011** or **FAX 800-248-1460 (Order Entry)**, Fax **815-879-1495** for Product Support.

### WARRANTY

30 year limited warranty; 25 year limited warranty (4050). See General Information Section for complete warranty details.

### SPECIFICATIONS

Refer to "SPECIFICATIONS" section for suggested architectural specifications.

### MATERIALS

- High strength **cast iron** or **cast aluminum** (4050) cylinder.
- **Forged steel** main arms.
- One piece **forged steel** piston.
- **Double heat treated** pinion.
- LCN's all weather "**Liquid X**" fluid performs to temperature ranges from 120°F (49°C) to -30°F (-35°C) without any seasonal adjustment.
- LCN's standard all weather fluid performs to temperature ranges from 120°F (49°C) to -30°F (-35°C).
- **High efficiency, full complement**, low friction bearings.
- Tamper resistant regulating screws.
- Full rack and pinion hydraulic action.
- Quiet, low friction track and roller combination for all single lever arm (track style) closers.

### FINISHES

- Available in six standard or optional custom powder coat finishes to blend with door and frame.
- LCN's powder coat finishes surpass 100 hours of salt spray which is over four times the ANSI standard for corrosion resistance.
- For installations where a higher level of corrosive resistance is required, LCN offers an optional special rust inhibiting (SRI) pre-treatment. Closers that combine the exclusive LCN powder coat finish and the SRI pre-treatment exceed the ANSI standard for corrosion resistance even further.
- Plated finishes are available as an option to accent door and frame. (SRI not available with plated finishes).

### LISTINGS & APPROVALS

UL listed for self-closing doors without hold-open under "SWINGING DOOR CLOSERS"(GVEV) file R1943.

Tested and certified under ANSI Standard A156.4 Grade One. Consult factory for details.

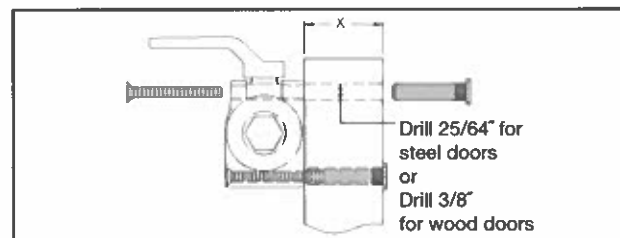
Consult factory for other listings such as; cUL, California State Fire Marshal, Bureau of Standards and Appeals.

### POSITIVE PRESSURE

LCN closers have been certified for three hours by UL to be in compliance with UL 10C. Contact LCN for specific details on door closer fire ratings.

### FASTENERS

4010, 4010T, 4020, 4020T, 4040XP, 4040XPT, 4050, 4050T, 4110, 4110T Series closers are shipped with: A standard SELF-REAMING and TAPPING SCREW (SRT) pack that contains Phillips head SRT screws to install the closer. 4000T series closers are shipped with: A standard WOOD and MACHINE SCREW (WMS) pack that contains Phillips head wood and machine screws to install the closer. 4030, 4030T series closers are shipped with: A standard WOOD and SELF-TAPPING MACHINE SCREW (WMS) pack that contains Phillips head wood and self-tapping machine screws to install the closer. Standard LCN thru bolts (TB) can be installed on 1-3/4" (44 mm) thick doors with 1/4"-20 machine screws. Optional thru bolt (TB) sizes are available for 1-5/8" (41 mm) or 1-3/8" (35 mm) door thickness, but this must be specified when ordering.



#### Notes:

1. For Thru Bolts, specify door thickness if other than 1-3/4" (44mm), represented in diagram as dimension "X".
2. Phillips head, metric machine screws are available, please specify.
3. LCN recommends the use of wood screws, available in optional WMS screw packs, for wood door applications.

### MAINTENANCE

Closers mounted according to LCN installation instructions require no periodic maintenance or adjustments.