CONCEALED CLOSER SERIES

APPLICATIONS
- For aluminum, hollow metal, or wood doors and frames.
- Can be used with hinge or pivot mounted door.
- Closers for 4” or minimum 1-3/4” head frame or 4” top rail.
- Mounting clips for wood frames and other installation accessories available for unusual conditions.
- For concealed in door closers consult factory for installations with pivots.

FEATURES COMMON TO CONCEALED CLOSERS
- Mountings for head frame or door top rail.
- Handed for right or left swinging doors. (except 6030)
- Closers to meet ADA reduced opening force requirements.
- Adjustable hydraulic backcheck cushions opening swing prior to 90°.
- Separate regulation of general closing speed and latching speed.
- Joints in arm and shoe adapt to uneven trim. (for double lever arms)

DESIGN ASSISTANCE
LCN has been providing reliable solutions to unique door control problems for over 85 years. 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 Application Engineering.

WARRANTY
10 year limited warranty. See General Information Section for complete warranty details.

SPECIFICATIONS
Refer to “SPECIFICATIONS”section for suggested architectural specifications.

MATERIALS
(Closers concealed in the door or frame)
- High strength cast iron cylinder.
- Forged steel main arms (except 6030).
- One piece forged steel piston.
- All weather fluid in overhead concealed models eliminates seasonal adjustments. From 120°F to -30°F.
- High efficiency, full compliment, low friction bearings.
- Tamper resistant regulating screws.
- Full rack and pinion hydraulic action.
- Quiet, low friction track and roller combination for all single lever (standard) arm closers.

FINISHES
- Available in six standard or a wide selection of 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.

LISTINGS & APPROVALS
UL listed for self-closing doors without hold-open under “SWINGING DOOR CLOSERS” (GVEV) file R 1943.

Tested and certified under ANSI Standard A156.4. 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 UBC 7.2 (1997) and UL 10 C. Contact LCN for specific details on door closer fire ratings.

FASTENERS
Standard WOOD and MACHINE SCREW (WMS) pack contains phillips head wood and machine screws to install the closer. TORX machine screws are available for some closers.

Note 1: Phillips head, metric machine screws are available, please specify.

MAINTENANCE
Closers mounted according to LCN installation instructions require no periodic maintenance or adjustments.
The concealed 2010 Series is a heavy duty closer designed to provide complete concealment. The single lever arm and roller assembly provide smooth, quiet door control and the choice of finishes and track functions meet virtually all architectural requirements.

The 2010 Series is UL & cUL listed for self-closing doors without hold-open. Tested and certified under ANSI Standard A156.4, grade one.

- Sized cylinders for interior doors to 5’ 0” and exterior doors to 4 ’0”.
- Handed for right or left swinging doors.
- For aluminum, hollow metal, or wood, doors and frames.
- Aluminum frame requires minimum 4” x 4” (102 mm) tube.
- Closers to meet ADA requirements. See 2010 Series page 6.
- Standard or optional custom powder coat finish.
- Optional plated finish on arm, fasteners and finish plate.
- Optional SRI primer for installations in corrosive conditions. (Available with powder coat finishes only.)
2010 SERIES

CONCEALED MOUNTING
For interior or exterior doors. Single acting cylinder in head frame. Concealed arm and track in door top rail.

MAXIMUM OPENING
Butt hinge template allows 180°, trim permitting. Limited to 110° when optional bumper is installed. Adjustable hold-open points from 85° to 110° with hold-open track.

Offset pivot template allows 110°, trim permitting. Limited to 95° when optional bumper is installed. Adjustable hold-open points from 75° to 95° with hold-open track.

Center pivot template allows 120°, trim permitting. Limited to 95° when optional bumper is installed. Adjustable hold-open points from 75° to 95° with hold-open track.

Options
- Standard track with Bumper.
- Hold-open track.
- Hold-open track with Bumper.
- Fire Shield.

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

**CYLINDER, 2010-3071**
Standard, handed, cast iron cylinder assembly with mounting plate. For various applications see “Table of Sizes” on 2010 Series page 6.

**ARM**

**STANDARD ARM, 2010-3077T**
Handed arm. Track roller not included with arm.

**TRACKS**

**STANDARD TRACK, 2010-3038**
Standard, non hold-open, non-handed track. Will accept hold-open clip and/or bumper assembly.

**STANDARD TRACK with BUMPER, 2010-3038B**
Optional, non hold-open, non-handed track with bumper. Will accept hold-open clip.

**HOLD-OPEN TRACK, 2010-3038H**
Optional, non-handed hold-open track. Will accept bumper assembly.

**HOLD-OPEN TRACK with BUMPER, 2010-3038HB**
Optional, non-handed hold-open track with bumper.

**INSTALLATION ACCESSORIES**

**FIRE SHIELD, 2010-420**
22 gauge steel liner mounts in the track mortise of the door’s top rail for 20 minute labeled wood doors.

**TRACK BUMPER, 2010-169**
Mounts in track to assist backcheck. Limits maximum opening. Consists of bumper, bumper post, and mounting screw. NOTE: Track bumper does not replace auxiliary stop.

**HOLD-OPEN CLIP, 2010-3054**
Mounts in track to provide hold-open function. Hold-open point controlled by clip location.

**TRACK ROLLER, 2010-3034**
Quiet, low friction roller assembly. Shoulder dimension “X” = 1/16” (2mm).
2010 SERIES

TABLE OF SIZES
Select closer based on width of door.
2010 Series cylinders available in size 1, 3, 4, 5, or 6.
Closing power of all 2010 Series closers may be increased 15%.
Specify next higher size closer where strong drafts exist.

EXTerior (and Vestibule) Door Width

<table>
<thead>
<tr>
<th></th>
<th>28”</th>
<th>30”</th>
<th>36”</th>
<th>42”</th>
<th>48”</th>
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<td></td>
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<tr>
<td>2014</td>
<td></td>
<td>size 4</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td>size 6</td>
<td></td>
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</table>

Minimum Door Width

Indicates recommended range of door width for closer size.

INterior Door Width

<table>
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<tr>
<th></th>
<th>28”</th>
<th>34”</th>
<th>38”</th>
<th>48”</th>
<th>54”</th>
<th>60”</th>
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<tr>
<td>2013</td>
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<td>size 3</td>
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<td></td>
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<tr>
<td>2014</td>
<td></td>
<td></td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>size 5</td>
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<tr>
<td>2016</td>
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<td></td>
<td></td>
<td></td>
<td>size 6</td>
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</table>

Minimum Door Width

CLOSER OPTIONS

HOW-TO-ORDER 2010 SERIES Closers

1. SELECT CYLINDER SIZE
   - 2011 (ADA)
   - 2013
   - 2014
   - 2015
   - 2016

2. SPECIFY HAND
   - RH
   - LH

3. SPECIFY FINISH
   - Standard Powder Coat __________
     Aluminum, Dark Bronze, Statuary,
     Light Bronze, Black, Brass.

Closer will be shipped with:
- FINISH PLATE,
- TRACK ARM,
- TRACK ROLLER,
- STANDARD TRACK,
- WOOD and MACHINE SCREW PACK,
unless options listed below are selected.

REDUCED OPENING FORCE 2010 Closers

CAUTION! Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

Refer to POWER OPERATORS section for information on systems that meet reduced opening force requirements without affecting closing power.

<table>
<thead>
<tr>
<th></th>
<th>36”</th>
<th>42”</th>
<th>48”</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.5* lbs.</td>
<td>2014</td>
<td>2014</td>
<td>2015</td>
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<tr>
<td>5.0* lbs.</td>
<td>2011</td>
<td>2011</td>
<td>2013</td>
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</table>

* Maximum opening force.

ORDERING INFORMATION

LCN®