

# 4640 Series

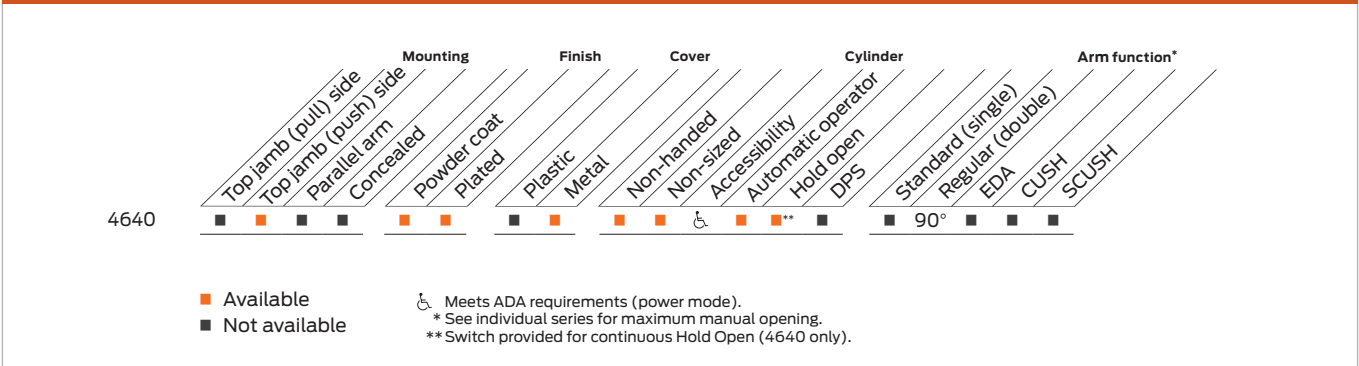


The 4640 auto equalizer is LCN's smart and reliable electrically powered low-energy automatic operator. It provides easy access for people with disabilities, or the elderly. Designed primarily for manual opening applications that occasionally required automatic opening.

## Features

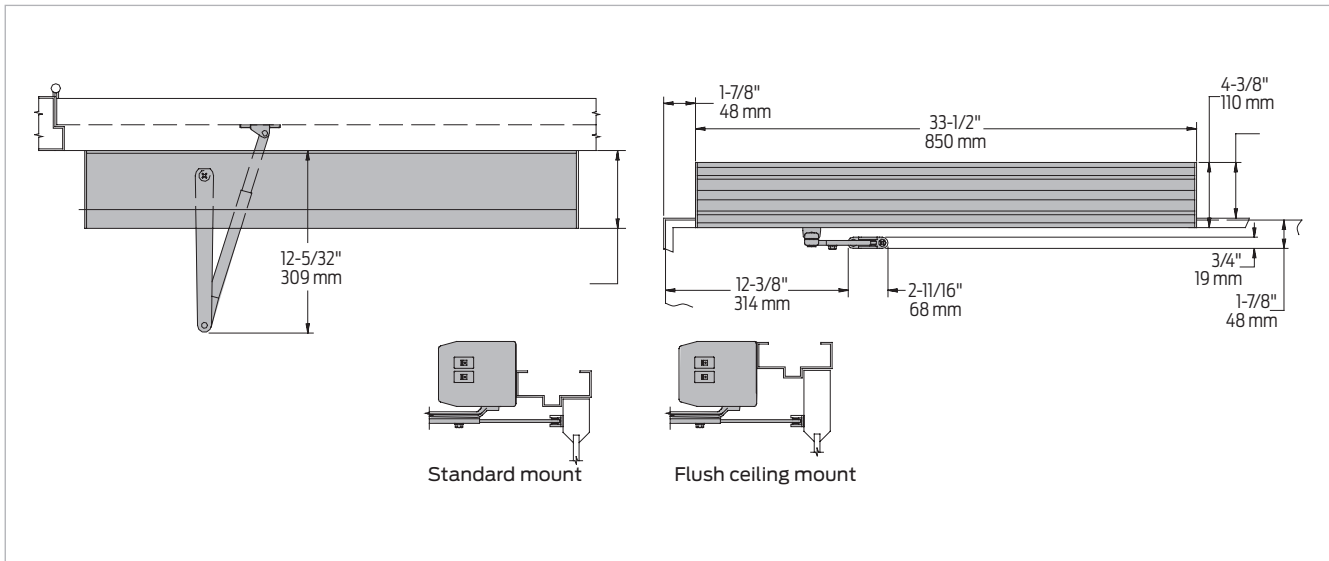
<b>Certifications</b>	Grade 1 - ANSI A117.1, A156.19, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	<b>Cover</b>	Metal Cover (MC)
<b>Body construction</b>	<ul style="list-style-type: none"> <li>Cast iron body</li> <li>Full complement bearing</li> <li>1 1/2" diameter piston</li> <li>3/4" diameter double heat treated pinion journal</li> </ul>	<b>Fasteners</b>	Wood and Machine Screws (WMS)
<b>Fluid</b>	All weather fluid	<b>Mounting</b>	Top jamb (push side)
<b>Handing</b>	Non-handed	<b>Arms</b>	<ul style="list-style-type: none"> <li>Regular Arm (REGARM), standard</li> <li>Long Arm (LONG), optional</li> </ul>
<b>Size</b>	Adjustable spring size 2-5	<b>Finishes/colors/ powder coat</b>	<ul style="list-style-type: none"> <li>689 Aluminum</li> <li>690 Statuary Bronze</li> <li>691 Light Bronze</li> <li>693 Black</li> <li>695 Dark Bronze</li> <li>696 Brass</li> <li>Custom colors optional</li> <li>Optional SRI primer - powder coat only</li> <li>Optional plated finishes*</li> </ul>
<b>Warranty</b>	2 years		*End caps are black

**Special templates** | Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.



## Mounting details

### Top jamb (push side) mounting



Butt hinges	Should not exceed 5" (127 mm) in width
Auxiliary stop	Recommended
Reveal	<ul style="list-style-type: none"> <li>4 1/2" (114 mm) allows up to 90° power opening and 100° manual opening</li> <li>8" (203 mm) allows up to 90° power opening and 100° manual opening with long arm where standard rod and shoe is replaced with optional long rod and shoe, 4640-79LR</li> </ul>
Top rail	<ul style="list-style-type: none"> <li>Minimum 1 3/4" (44 mm)</li> <li>Flush ceiling installation requires 3 3/4" (95 mm) minimum</li> </ul>
Head frame	Minimum 1 3/4" (44 mm) (the standard mounting plate is also used to meet flush ceiling conditions)
Opening time and force	<ul style="list-style-type: none"> <li>Variable by adjustments to the electronic control module located on the operator assembly</li> <li>Maximum hold open time adjustable up to approximately five minutes</li> </ul>
System diagram	See page 33 for typical system wiring and pages 34-35 for electrical data
Maximum opening	<ul style="list-style-type: none"> <li>Templating allows 90° power opening and 100° manual opening</li> <li>Consult factory for all pivot mounted installations</li> </ul>

Notes:

- Actuators are sold separately, see pages 100-117
- Comes with a digital control box utilizing a 4040XP heavy duty door closer with on-board diagnostics and power supply
- Has a factory default memory that include "No Destruct" drive system
- Guard rails or safety mats not required
- 4640 has easily accessible switches to provide on/off and continuous hold open functions
- CS options provides concealed on/off power switch
- Control module provides timing and sequential door functions, electric strike controls and adjustments for opening speed and force

# Accessories

## Cylinders



**4642-3971  
Cast Iron Cylinder  
Assembly (CYL)**  

- Non-handed
- Standard



**4642-3071  
Cast Iron Cylinder  
Assembly (CYL)**  

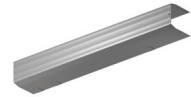
- Non-handed
- Mounting plate
- Includes; 4640-3454 Motor Clutch, 4640-3180 I/O Board Assembly and 4640-3462 Controller
- Standard



**4642-3071CS  
Cast Iron Cylinder Assembly (CYL)**  

- Non-handed
- Mounting plate
- Includes; 4640-3454 Motor Clutch, 4640-3180 I/O Board Assembly and 4640-3462 Controller
- Same as a 4640-3071 assembly except on/ off switch is concealed in endcap and no hold open switch is included (Separate key switches suggested)
- Optional

## Covers



**4640-72MC  
Metal Cover (MC)**  

- Non-handed
- Standard

## Arm



**4640-3077  
Regular Arm (REGARM)**  

- Non-handed



**4640-3077L  
Long Arm (LONG)**  

- Includes long rod and shoe, 4640-79LR for deep reveals



**4640-79  
Rod and Shoe**  

- For use with regular arm



**4640-79LR  
Long Rod and Shoe**  

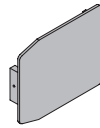
- Used for long arm with deep reveals

## Installation accessories



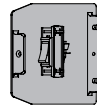
**4640-334  
Switch End Cap**  

- End cap (black powder finish coat only) with cut outs for installing on/off and hold open switches



**4640-334-2  
Blank End Cap**  

- Black powder coat only



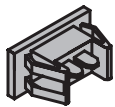
**4640-334CS  
Switch End Cap**  

- End cap and switch (black powder coat only) for concealed switch option



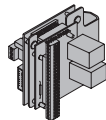
**4640-3179-1  
On/Off Switch Assembly**  

- Black rocker switch
- Plugs into high voltage PC board



**4640-3179-2  
Hold Open Switch Assembly**  

- Black rocker switch
- Field wired to low voltage PC board



**4640-3180  
PC Board Assembly**  

- High and low voltage PC boards connected to mounting bracket



**4640-3454  
Motor/Clutch Assembly**  

- A geared assembly in an LCN automatic operator that incorporates a "no destruct" feature



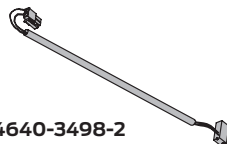
**4640-3462  
Control Box Assembly**  

- Digital controller with built-in 12/24 VDC power supply
- Programming and timing functions are adjusted on controller



**4640-3498-1  
Ribbon Cable Connector**  

- 16 wire ribbon cable connecting PC board assembly to controller



**4640-3498-2  
AC Power Cable**  

- 2 wire cable to connect 120 VAC from PC board assembly to controller

Introduction  
 Product selection guide  
 Pneumatic systems / Auto equalizers / 2610/4810/4820/4840/7900 Series  
 Electrohydraulic systems / Auto equalizers / 6400/4630/4640 Series  
 Electromechanical systems / Benchmark / 9130/9140/9150 Series  
 Electromechanical systems / Senior Swing / 2810/2850/2860/9530/9540/9550/9560 Series  
 Actuators and accessories

## Ordering information

### How-to-order 4640 Series operators

#### 1. Select finish

- Standard powder coat \_\_\_\_\_  
Aluminum (689), Dark Bronze (695),  
Statuary Bronze (690), Light Bronze  
(691), Black (693), Brass (696).

### Operator will be shipped with:

- Standard cylinder
- Metal cover
- Regular arm
- Wood and machine screws  
(unless options listed below are selected)

### Operator options

#### Cylinder assembly

- Cast Iron Cylinder Assembly (CYL)  
(concealed on/off switch)  
(separate key switches suggested)

#### Finish

- Custom Powder Coat (RAL) \_\_\_\_\_
- Plated finish \_\_\_\_\_

#### Screw packs

- Through Bolt<sup>1</sup> Wood and Machine Screws (TBWMS)
- Torx Machine Screws (TORX)
- Through Bolt<sup>1</sup> and Torx Machine Screw (TBTRX)

#### Special template

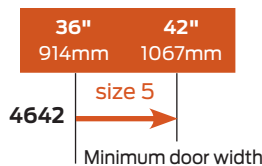
- ST- \_\_\_\_\_

1. Specify door thickness if other than 1 3/4".

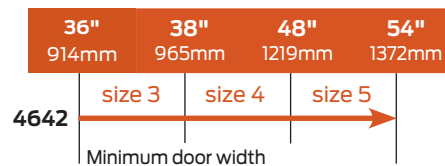
### Table of sizes

- Non-sized 4640 series cylinder is adjustable from size 2 through size 5 and is shipped set to size 3
- Closing power of 4640 Series closers may be increased 50%

#### Exterior (and vestibule) door width



#### Interior door width



➔ Indicates recommended range of door width for operator.  
Note: Minimum door width 36" (914mm).