CLOSER MOUNTS
*HINGE (PULL) SIDE
TOP JAMB (PUSH SIDE)
PARALLEL ARM (PUSH SIDE)

*HINGE (pull) side mount shown

Designed for maximum

versatility, the 1460, available

with multiple cover options, can

be used for both commercial and

institutional applications. This

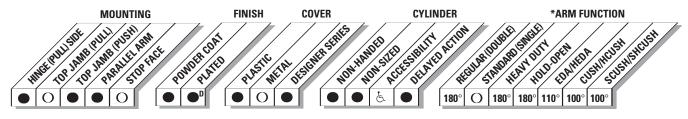
fully universal closer offers a

wide variety of options and new

fast and accurate installation.

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

- Standard 1460 series closer shipped with regular arm, a slim line plastic cover, and self reaming and tapping screws. See 1460 Series Pages 16 & 17 for options.
- Multiple cover options include; Standard (Slim line), Smooth Slim line (EC), Full and Designer Series.
- ► Non-sized (1-6) cylinder is adjustable for interior doors to 5'0" and exterior doors to 4'0".
- ► Closer mounts hinge side, top jamb and parallel arm on either right or left swinging doors.
- ► Closer meets ADA requirements. See 1460 Series page 18.
- ► Standard or optional custom powder coat finish.
- Optional plated finish on Designer Series metal cover, arm and fasteners.
- Optional SRI primer for installations in corrosive conditions.



- AvailableNot available
- Closer available with less than 5.0 lbs. opening force on 36" door.
- * Maximum opening/hold-open point with standard template.
- D = For Designer series only.



HINGE (PULL) SIDE MOUNTING

MAXIMUM OPENING

110°

- $\triangle = 57/8" (149 \text{ mm})$
- B= 10 7/8" (276 mm)

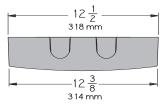
or *180°

- (A) = 27/8" (73 mm)
- (B) = 7.7/8" (200 mm)

Hold-open points up to maximum opening with hold-open arm.

*Frame and trim permitting.

Optional, Non-handed Designer Series Metal Cover



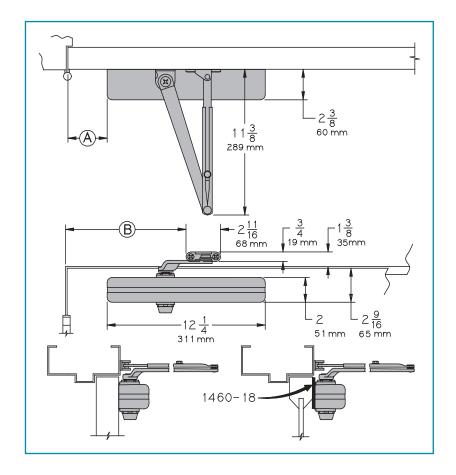


Options

- ► Delayed action cylinder.
- ► Hold-open arm.
- ► Full cover. (FC)
- ► Smooth Slim line cover. (EC)
- ► Designer Series metal cover. (DS1)

Special Templates

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

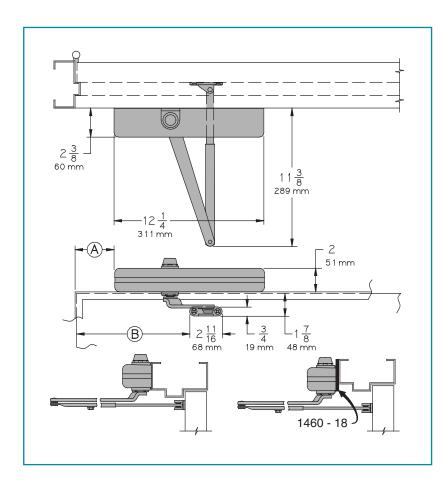


- ► **Butt Hinges** should not exceed 5" (127 mm) in width.
- Auxiliary Stop is recommended at hold-open point or where a door cannot swing 180°.
- ► **Reveal** should not exceed 3/4" (19 mm) for regular arm or 1/2" (13 mm) for hold-open arm.
- ➤ **Top Rail** less than 2 1/2" (64 mm) requires PLATE, 1460-18. With Full cover, use PLATE, 1460-18FC. Plate requires 1 1/2" (38 mm) minimum. With Designer Series metal cover, use PLATE, 1460-18DS1.
- ► **Clearance** of 2 3/8" (60 mm) behind door required for installation.
- ▶ Delayed Action Add suffix "DEL" to selected cylinder (eg. 1461 DEL). Delays closing from 110° to 65° or 160° to 75° depending on templating.

Delay time adjustable up to approximately 1 minute.

Bull Nose Trim requires SOFFIT SHOE, 1460-65.





- Butt Hinges should not exceed 5" (127 mm) in width.
- ► **Auxiliary Stop** is recommended at hold-open point or where a door cannot swing 180°.
- ➤ **Reveal** of 2 1/2" (64 mm) allows 180° opening with REGULAR HOLD-OPEN ARM. 3 1/2" (89 mm) allows up to 180° opening with REGULAR ARM or 180° with optional LONG HOLD-OPEN ARM when standard head and tube is replaced with optional LONG HEAD AND TUBE, 1460-78HL . 4 7/8" (124 mm) allows up to 140° with REGULAR ARM or LONG HOLD-OPEN ARM. 7" (178 mm) allows up to 140° opening with LONG ARM when standard rod and shoe is replaced with optional LONG ROD AND SHOE, 1460-79LR.
- ► **Top Rail** requires 1 7/8" (48 mm) minimum. 2 3/4" (70 mm) minimum with closer on PLATE, 1460-18.
- ► **Head Frame** less than 1 3/4" (44 mm) requires PLATE, 1460-18. For flush ceiling condition with 2" (51 mm) headframe, use PLATE, 1460-18. With Full cover, use PLATE, 1460-18FC. Plate requires 1 1/4" (32 mm) minimum. With Designer Series metal cover, use PLATE, 1460-18DS1.
- Delayed Action Add suffix "DEL" to selected cylinder (eg. 1460 DEL). Delays closing from 110° to 75° or 180° to 95° depending on templating. Delay time adjustable up to approximately 1 minute.

TOP JAMB (PUSH SIDE) MOUNTING

MAXIMUM OPENING

110°

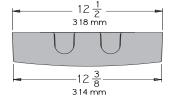
- $\triangle = 6.3/4" (169 mm)$
- (B)= 11 1/4" (286 mm)

180°

- (A) = 3'' (76 mm)
- $B = 7 \frac{1}{2}$ " (191 mm)

Hold-open points up to maximum opening with hold-open arm.

Optional, Non-handed Designer Series Metal Cover





Options

- ► Delayed action cylinder.
- ► Long arm, hold-open arm, long hold-open arm.
- ► Full cover (FC).
- ► Smooth Slim line cover (EC).
- ► Designer Series metal cover (DS1).

Special Templates

Customized installation templates or products may be available to solve unusual applications.

Contact LCN for assistance.



PARALLEL ARM (PUSH SIDE) MOUNTING

Optional mounting requires PA SHOE, 1460-62PA for REGULAR or HOLD-OPEN arms. Add prefix "P" to closer description (e.g. P1460). P1460 closer includes 1460-201 FIFTH HOLE SPACER to support PA SHOE.

MAXIMUM OPENING

Regular or hold-open arm can be templated for 100°

- $(A) = 4 \frac{1}{4}$ " (108 mm)
- $(B) = 9 \frac{1}{4} (235 \text{ mm})$

or 180°.

- (A) = 13/4" (44 mm)
- (B) = 6 3/4" (171 mm)

Hold-open points up to maximum opening with hold-open arm.

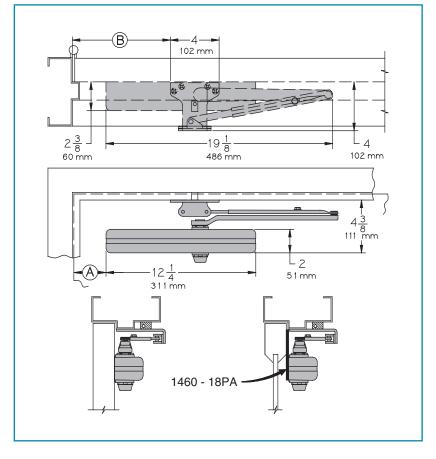
Options

- ► Delayed action cylinder.
- ► Hold-open, EDA, HEDA, CUSH, HCUSH arm, SPRING CUSH, SHCUSH arms.
- ► Full cover. (FC)
- ► Smooth Slim line cover. (EC)
- ▶ Designer Series metal cover. (DS1)

Special Templates

Customized installation templates or products may be available to solve unusual applications.

Contact LCN for assistance.

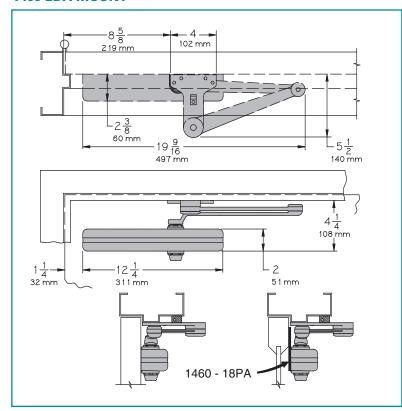


1460 REGULAR or HOLD-OPEN MOUNT

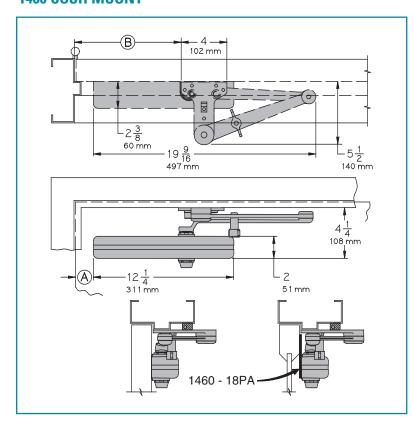
- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ► **Auxiliary Stop** is recommended at hold-open point, where a door cannot swing 180°, or where CUSH-N-STOP arm is not used.
- ► **Clearance** for 1460-62PA shoe is 4" (102 mm) from door face.
- ➤ **Top Rail** less than 4 3/8" (111 mm) measured from the stop requires PLATE, 1460-18PA. With Full cover, use PLATE, 1460-18PAFC. Plate requires 1 3/4" (44 mm) minimum. Plate requires 1 1/4" (32 mm) minimum. With Designer Series metal cover, use PLATE, 1460-18PADS1.
- ► **Head Frame** flush or single rabetted requires PA SHOE ADAPTER, 1460-418.
- ► **Stop Width** minimum 1" (25 mm).
- ► **Blade Stop** clearance, requires 1/2" (13 mm) BLADE STOP SPACER, 1460-61.
- ► **Auxiliary Shoe,** 1460-62A allows installation of regular arm with overhead holder/stop. Special templating required.
- Delayed Action Add suffix "DEL" to selected cylinder (eg. P1460 DEL). Delays closing from maximum opening to approximately 75°. Delay time adjustable up to approximately 1 minute.



1460 EDA MOUNT



1460 CUSH MOUNT



1460 EDA or CUSH-N-STOP MOUNTING

1460 closers ordered with EDA, CUSH or SPRING CUSH arms include 1460-201 FIFTH HOLE SPACER to support the shoe.

MAXIMUM OPENING

EDA template allows 110°. Hold-open point up to maximum opening.

CUSH arms can be templated for maximum opening/hold-open point at 85°,

- (A) = 23/8" (60 mm)
- (B) = 9.9/16" (243 mm)

90°,

- $(\widehat{A}) = 15/8" (41 mm)$
- $(B) = 9 \frac{1}{16}$ " (230 mm)

or 100°.

- (A) = 5/8" (16 mm)
- $(B) = 8 \frac{1}{16}$ " (205 mm)

Spring Cush hold-open points are approximately 5° less than templated stop point.

- ► Clearance for 1460-62EDA or CUSH shoe is 5 1/2" (140 mm) from door face.
- ► Head Frame flush or rabetted requires CUSH FLUSH PANEL ADAPTER, 1460-419.
- ► EDA or CUSH ARM requires SHOE SUPPORT, 1460-30 for fifth screw anchorage where reveal is less than 3 1/16" (78 mm).



CYLINDERS

CYLINDER, 1460-3071

Standard, non-handed cast iron cylinder assembly.

ARMS

REGULAR ARM, 1460-3077

Non-handed arm mounts hinge side or top jamb. P1460 closer includes PA SHOE, 1460-62PA required for parallel arm mounting.

PA SHOE, 1460-62PA

Required for parallel arm mounting.

LONG ARM, 1460-3077L

Optional, non-handed arm includes LONG ROD AND SHOE, 1460-79LR for top jamb mount with deep reveals.

HEAVY DUTY REGULAR ARM 1460-3077HD

Optional, heavy duty, forged, non-handed arm, mounts hinge side, top jamb or parallel arm (62PA required).

HEAVY DUTY LONG ARM 1460-3077HDL

Optional, heavy duty, forged, non-handed arm. Includes long rod and shoe, 1460-79LR for top jamb mounts with deep reveals.

HOLD-OPEN ARM, 1460-3049

Optional, non-handed arm mounts hinge side, top jamb or parallel arm (62PA required).

Hold-open adjustable at shoe.

LONG HOLD-OPEN ARM, 1460-3049L

Optional non-handed arm includes LONG HEAD AND TUBE, 1460-3048L for top jamb mount with deep reveals.

EXTRA DUTY ARM, 1460-3077EDA, 1460-3077EDA/G, 1460-3077EDA/145

Optional, non-handed parallel arm features solid forged steel main and forearm for potentially abusive installations. Optional 1460-3077EDA/G for blade stop clearance.

Optional 1460-3077EDA/145 for flush transom frame.

HEDA ARM, 1460-3049EDA

Optional handed arm, provides hold-open function adjustable at shoe.

CUSH-N-STOP® ARM, 1460-3077CNS

Optional, non-handed parallel arm features solid forged steel main arm and forearm with stop in soffit shoe.

HCUSH ARM, 1460-3049CNS

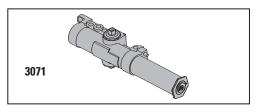
Optional non-handed arm, provides hold-open function with templated stop/hold-open points. Handle controls hold-open function.

SPRING CUSH ARM,1460-3077SCNS

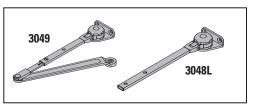
Optional, non-handed parallel arm for abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe.

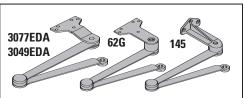
SPRING HCUSH ARM, 1460-3049SCNS

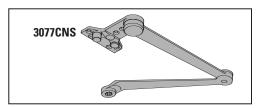
Optional, non-handed parallel arm for abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe. Handle controls hold-open function.

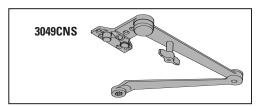


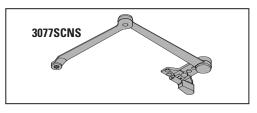


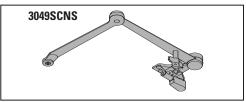












LCN CLOSERS PHO
121 W. RAILROAD AVE. FAX
P.O. BOX 100 www
PRINCETON. IL. USA 61356-0100 9/07

PHONE 800-526-2400 FAX 800-248-1460 www.lcn.ingersollrand.com



COVERS

COVER, 1460-72

Standard, non-handed, slim line plastic cover with feature strip.

LEAD LINED COVER, 1460-72LL

Optional non-handed cover.

FULL COVER, 1460-72FC

Optional, non-handed, plastic cover provides complete enclosure.

DESIGNER SERIES METAL COVER. 1460-72DS1

Optional, non-handed designer series metal full cover provides complete enclosure with a stylish look. Required for plating and custom powder coat option.

COVER, 1460-72EC

Optional, non-handed Smooth Slim line plastic cover.

INSTALLATION ACCESSORIES

PLATE, 1460-18/1460-18DS1/1460-18FC

Required for hinge side mount where top rail is less than 2 1/2" (64 mm).

Required for top jamb mounting where head frame is less than 1 3/4" (44 mm) or flush ceiling condition exists.

Plate requires minimum 1 1/2" (38 mm) minimum top rail or 1 1/4" (32 mm) head frame.

With full cover, use PLATE, 1460-18FC. With Designer Series metal cover, use PLATE, 1460-18DS1.

PLATE, 1460-18PA/1460-18PADS1/1460-18PAFC

Required for parallel arm mounting where top rail is less than 4 3/8" (111 mm), measured from the stop.

Plate requires 1 3/4" (44 mm) minimum top rail.

With full cover, use PLATE, 1460-18PAFC. With Designer Series metal cover, use PLATE, 1460-18PADS1.

CUSH SHOE SUPPORT, 1460-30

Provide anchorage for fifth screw used with CUSH arms where reveal is less than 3 1/16" (78 mm).

BLADE STOP SPACER, 1460-61

Lowers parallel arm shoe to clear 1/2" (13 mm) blade stop.

AUXILIARY SHOE, 1460-62A requires a top rail of 7" (178 mm). Optional shoe replaces -62PA for parallel arm mounting of regular arm with overhead holder/stop.

Special template required.

SOFFIT SHOE, 1460-65

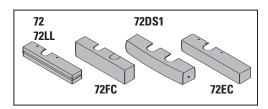
Adapts hinge side shoe to rounded or bull nose trim.

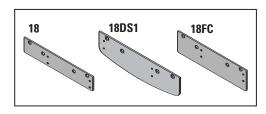
PA SHOE ADAPTER, 1460-418

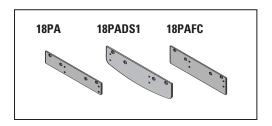
Provides horizontal mounting surface for parallel arm shoe on single rabetted or flush frame.

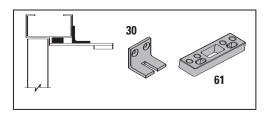
CUSH FLUSH PANEL ADAPTER, 1460-419

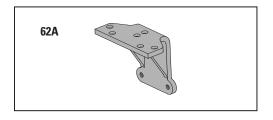
Provides horizontal mounting surface for CUSH shoe on single rabetted or flush frame.

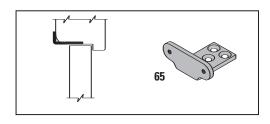


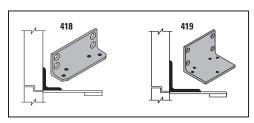












LCN CLOSERS 121 W. RAILROAD AVE. P.O. BOX 100 PRINCETON, IL, USA 61356-0100 PHONE 800-526-2400 FAX 800-248-1460 www.lcn.ingersollrand.com 9/07



TABLE OF SIZES Select closer based on width of door.

The spring power of a 1461 cylinder is field adjustable from size 1 through size 6 and is shipped adjusted to size 3.

Indicates recommended range of door width for closer size.

EXTERIOR (and VESTIBULE) DOOR WIDTH

	24"		3	0"	3	6"	4	2"	48
	610	mm	762	mm	914	mm	1067	mm	1219
*4	AC4	size	3	size	4	size	5	size	e 6
*14	40 I								→
N	Mini	mum							
Door									
Width									

INTERIOR DOOR WIDTH

_	4"		B" 48 [°]	<u> </u>	
610	mm {	864mm 965	mm 1219ı	mm 1372n	ım 1524mm
*1461	size 2	size 3	size 4	size 5	size 6
Mini Do	mum oor dth	* Adju	stable Size 1 thru	6	

REDUCED OPENING FORCE 1460 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.

	DOOR WIDTH	36"	42"	48"
E	8.5* lbs.	1461	1461	1461
	5.0* lbs.	1461	1461	1461

^{*} Maximum opening force

LCN_®

HOW-TO-ORDER 1460 SERIES CLOSERS

4	CE	LECT		
	► F-I		-110	ΙΝН

☐ Standard Powder Coat _	
Aluminum, Dark Bronze,	Tan, Statuary
Light Bronze, Black, Bras	S.

Closer will be shipped with:

- STANDARD CYLINDER,
- STANDARD COVER,
- REGULAR ARM,
- SELF-REAMING and TAPPING SCREWS, unless options listed below are selected.

CLOSER OPTIONS

CYLINDER

☐ Delayed Action (DEL)

COVER

- ☐ Lead Lined (LL)
- ☐ Full cover (FC)
- ☐ Smooth slim line cover (EC)
- ☐ Designer series metal full cover (non-handed)(DS1)

FINISH

- (non-handed designer series metal cover required)
- ☐ SRI primer

ARM

- ☐ Regular w/62PA (Rw/PA)
- ☐ Long (LONG)
- ☐ Regular w/62A (Rw/62A)
- ☐ Hold-Open (H)
- ☐ Hold-Open w/62PA (Hw/PA)
- ☐ Long Hold-Open(HLONG)
- ☐ Heavy Duty (HD)
- ☐ Heavy Duty w/62A (HD/62A)
- ☐ Heavy Duty w/62PA (HD/PA)
- ☐ Heavy Duty Long (HDL)
- ☐ EDA (optional -62G or -145)
- ☐ HEDA (specify right or left hand), (optional -62G or -145)
- ☐ Cush-N-Stop (CUSH)
- ☐ HCush (HCUSH)
- ☐ Spring Cush(SCUSH)
- ☐ Spring HCush (SHCUSH)

OPTIONAL SCREW PACKS

- ☐ TB* w/Self-Reaming and Tapping Screws (TBSRT)
- ☐ Wood & Machine Screw (WMS)
- ☐ TB*, Wood & Machine Screw (TBWMS)
- ☐ TORX Machine Screw (TORX)
- ☐ TB* & TORX Machine Screw (TBTORX)
 - * Specify door thickness if other than 1 3/4".

SPECIAL TEMPLATE

□ ST-

INSTALLATION ACCESSORIES

- ☐ Plate, 1460-18
- ☐ Plate, 1460-18DS1
- ☐ Plate, 1460-18FC
- ☐ Plate, 1460-18PA
- ☐ Plate, 1460-18PADS1
- □ Plate, 1460-18PAFC
- ☐ CUSH Shoe Support, 1460-30
- ☐ Blade Stop Spacer, 1460-61
- ☐ Auxiliary Shoe, 1460-62A
- ☐ Soffit Shoe, 1460-65
- ☐ PA Shoe Adapter, 1460-418
- ☐ CUSH Flush Panel Adapter, 1460-419

LCN CLOSERS 121 W. RAILROAD AVE. P.O. BOX 100 PHONE 800-526-2400 FAX 800-248-1460 www.lcn.ingersollrand.com

PRINCETON, IL, USA 61356-0100 9/07