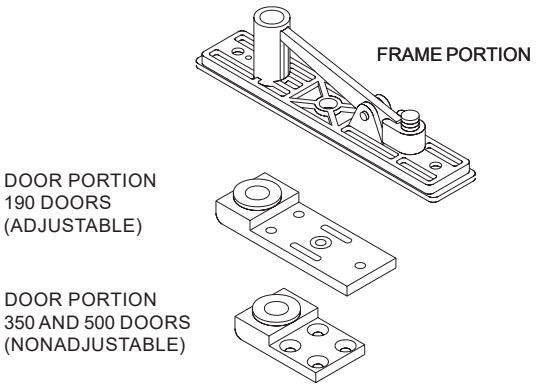
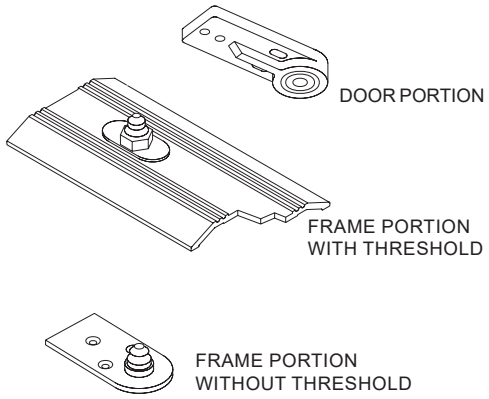


TOP CENTER PIVOT

Description: (Frame Portion) The “walking beam” frame pivot portion is cast aluminum with a hardened steel pivot pin. The pin is adjustable for additional extension through the transom bar/header. (Door Portion) Both door pivot portions are machined aluminum with oilite bronze self-lubricating bearings. All top center hung pivot parts are concealed.

Application: This pivot assembly is used in conjunction with center hung doors with floor closers. The adjustable portion for the 190 Narrow Stile Door provides for a one time only adjustment. Dimension 3" (76.2) long, 1-7/16" (36.5) wide, and 1/2" (12.7) at its thickest point. The 350 Medium Stile and 500 Wide Stile door pivot portion is nonadjustable. Dimensions 2-3/8" (60.3) long, 1-7/16" (36.5) wide, and 1/2" (12.7) at its thickest point.

Finish: The *frame portion* is natural cast aluminum with dress plate to match color of frame. The machined *door portion* is mill finish.

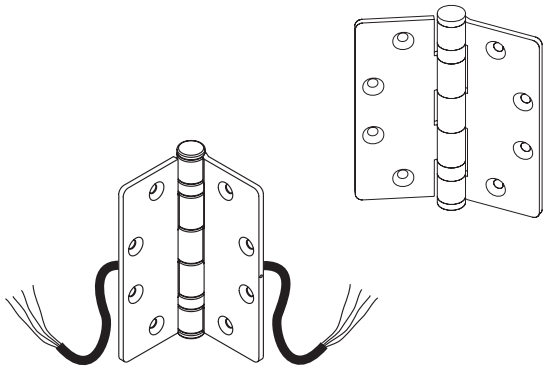


BOTTOM CENTER PIVOT

Description: The low profile center pivot for use with a threshold has an adjustable stainless steel pivot pin that is mounted and locked into the threshold. The center pivot for use without a threshold has a stainless steel pivot pin press fit into a stainless steel plate. The door portion is comprised of a roller bearing press fit into a cast aluminum pivot block.

Application: Both pivot portions, with or without threshold, are used on doors with concealed overhead closer control. On entrances with thresholds the pivot is anchored securely into the threshold. The frame portion is adjustable for proper door and frame clearance. The frame portion for use on doors without threshold is fastened directly to the floor. When no threshold is used, height adjustment is obtained by shimming the pivot block. The door pivot block is securely mounted to the bottom rail web.

Finish: Mill finish is standard for all bottom center pivot parts.



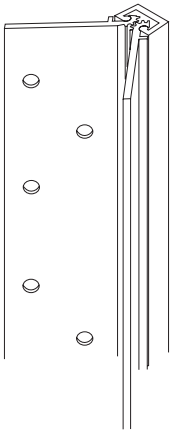
OPTIONAL EL version for access control applications.

BUTT HINGE

Description: Commercial quality 300 series stainless steel hinge with leafs of five knuckle two ball bearing construction. The hinge barrel is enclosed with button tips and incorporates a non-removable pin. The hinge is a radius corner, standard template butt of 4-1/2" x 4" (114.3 x 101.6). The hinge leaf thickness is 0.134 inches (3.4). It is also available in electric transfer model.

Application: The butt hinge is fully mortised into the door hinge stile and frame hinge jamb. Reinforcing plates are used in both the frame jamb and hinge stile for secure screw anchorage available. The use of an intermediate butt (1-1/2 pair per leaf) is suggested for doors in high traffic areas or for doors over 7'-6" (2,286).

Finish: Hinges are powder painted to blend with door finish.



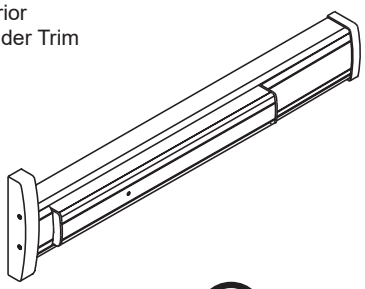
CONTINUOUS HINGE

Description: Aluminum Continuous Geared Hinges provides long-lasting solutions for high-traffic and high-impact doors. The continuous geared hinge extends the full length of the door and frame. The two center gears form a rotating joint and the door weight is supported and cushioned by molded bearings evenly spaced along the entire length of the interlocking leaves.

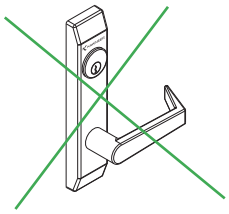
Application: The continuous geared hinge is the hinge to suitable in high-traffic and high-impact areas. The hinge is surface applied to the frame and door stile. Fasteners are staggered at approximately 6" (152.4 mm) on center. Compatible with Standard Entrance, Heavy Wall®, Tuffline®, Flushline® and Insulclad® Thermal Entrances.

Finish: Available in #17 Clear, #29 Black, and #40 Dark Bronze anodized finishes. Painted finishes available on a custom basis.

Exterior
Cylinder Trim



c UL US LISTED



KAWNEER 1686 CONCEALED ROD EXIT DEVICE

Description: The Kawneer 1686 Concealed Rod exit device is an exclusive to Kawneer customers. This exit device is UL Listed, is Hurricane Impact tested and Florida Product Approved. This device has the feature of rod adjustment without panel removal. Depression of the touchbar on the interior retracts the concealed rods from the transom bar and the threshold, allowing egress from the building. Upon closing, the top rod is released and frees the bottom rod to engage the threshold. The door is now relocked. A quick single point “dogging” feature in the housing deactivates the device and permits unrestricted traffic flow. Vertical rods and latch mechanisms are concealed in the vertical door stile. A 1-5/32" diameter mortised 5-pin cylinder with trim is required.

Application: Designed for use on single or pairs of doors. It is suited for medium and high traffic areas. Available on 190, 350, and 500 Standard Entrances, 350/500 IR, 350/500 Heavy Wall®, 350/500 Heavy Wall® IR Entrances, and AA® 250/425 Thermal Entrances.

Dimensions: Center line of touchbar to bottom of door 40" (1,016); height 3-3/16" (81); Projection 2-3/4" (70); Projection when dogged 1-13/16" (46).

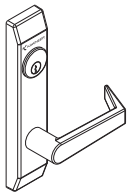
Finish: Clear and dark bronze.

Optional:

- 1686 MEL version for access control applications. (Mechanical Hex Key and Cylinder dogging not available)
- Cylinder dogging in lieu of hex key dogging.
- Exterior lever trim handle.

Exterior Cylinder

c UL US LISTED



KAWNEER 1786 RIM EXIT DEVICE

Description: The Kawneer 1786 Rim exit device is an exclusive to Kawneer customers. This exit device is UL Listed. This device has the same basic features as the concealed vertical rod device above. Its difference is in the latching mechanism. A 5/8" throw latch bolt in the rim of the housing engages an aluminum jamb or removable mullion mounted strike. Depression of the touchbar on the interior retracts the latch bolt and permits egress from the building.

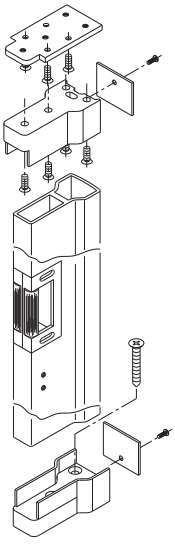
Application: Designed for use on single or pairs of doors. It is suited for medium and high traffic areas. Available on 190, 350, and 500 Standard Entrances, and 350/500 Heavy Wall® Entrances, and AA® 250/425 Thermal Entrances.

Dimensions: Center line of touchbar to bottom of door 40" (1,016); height 3-3/16" (81); Projection 2-3/4" (70); Projection when dogged 1-13/16" (46).

Finish: Clear and dark bronze.

Optional:

- 1786 MEL version for access control applications. (Mechanical Hex Key and Cylinder dogging not available)
- Cylinder dogging in lieu of hex key dogging.
- Exterior lever trim handle.

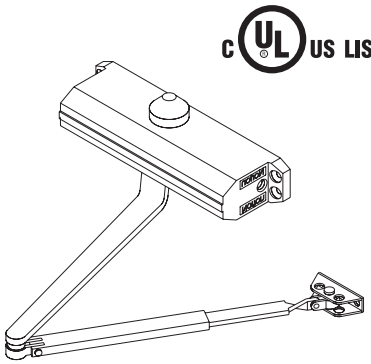


RM86 REMOVABLE MULLION

Description: This removable mullion is used with Kawneer 1786 Rim Exit Device.

Application: Designed for use with pairs of doors.

Finish: #17 Clear and #40 Bronze anodized.

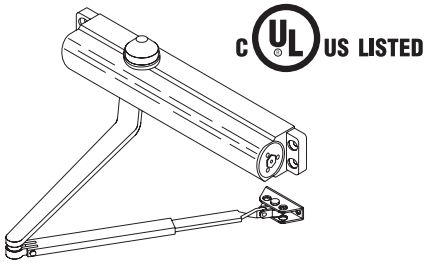


NORTON 1601

Description: The Norton 1601 is ANSI Grade 1 certified and is the standard offering in Kawneer's entrance package program. The compact closer design blends well with narrow aluminum door and frame sightlines. This versatile and rugged surface closer features hydraulic spring power controlled rack and pinion operation. The Norton 1601 offers adjustable spring sizes 1 - 6 and is ADA compliant for interior doors. The closer is non-handed, with separate adjustment for sweep and latch ranges are standard, an adjustment screw controls the back-check. Drop plates, corner brackets, and hold open arms are optional accessories.

Application: Closer mounting options are: Hinge (Pull) Side Mounting; the closer is mounted to the top door rail with the arm attached to the transom bar/header. Top Jamb (Push Side) Mounting; the closer is mounted to the transom bar/header. Parallel Arm (Push Side) Mounting; the closer is mounted to the top door rail with the arm and soffit plate attached to the transom bar/header. Parallel Arm mounting folds the closer arm parallel to the transom bar/header and minimizes the arm projection. The closer is suitable to areas of medium traffic volume.

Finish: Painted to match #17 finish and #40 finish.

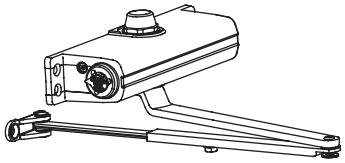


NORTON 8101

Description: A versatile, compact surface closer featuring spring and hydraulic powered rack and pinion operation. The closer incorporates field adjustable spring power and adjustable backcheck cushioning. The power can be adjusted by 50% by rotating the nut on the end of the closer to achieve an effective closer range of a size 2 through 6. The closer is non-handed with individual adjustable sweep speed and latch speed controls.

Application: See 1601 closer above.

Finish: Painted to match #17 finish or #40 finish.

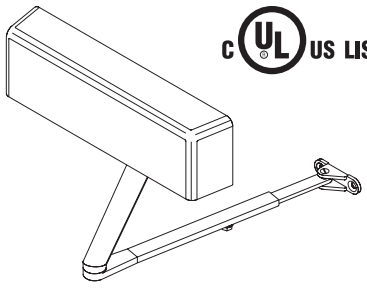


LCN 1260 SERIES

Description: A versitile closer incorporating spring and hydraulic powered rack and pinion operation with a 1-5 spring power adjustment. The 1261 is a one-piece cast iron closer to ensure relibility, extra leak protection, and longer closer life. An adjustable backcheck cushion is also standard. The 1261 is offered in a full range of arm options including heavy duty, extra duty, hold open, cush and stop, and spring cush. Adapter plates, cover, and other accessories are also offered. As with all LCN closers, a "peel and stick" template comes standard with each closer for faster closer installation.

Application: See 1601 closer above.

Finish: Painted to match #17 finish or #40 finish.

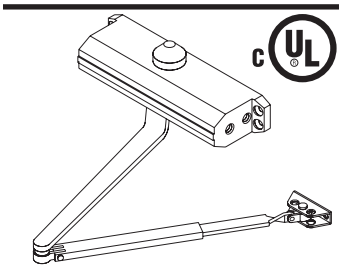


LCN 4040 XP

Description: A versatile closer incorporating spring and hydraulic powered rack and pinion operation. The closer spring power is field adjustable over a wide range for various power requirements. An adjustable back check cushions the opening swing prior to 90 degrees in all applications. Adapter plates, hold open arms, and other accessories are available.

Application: Closer mounting options are: Hinge (Pull) Side Mounting; the closer is mounted to the top door rail with the arm attached to the transom bar/header. Top Jamb (Push Side) Mounting; the closer is mounted to the transom bar/header. Parallel Arm (Push Side) Mounting; the closer is mounted to the top door rail with the arm and soffit plate attached to the transom bar/header. Parallel Arm mounting folds the closer arm parallel to the transom bar/header and minimizes the arm projection. The closer is adaptable to special applications and medium and heavy traffic volume.

Finish: Painted to match #17 finish, #29 finish or #40 finish.



FALCON SC 60

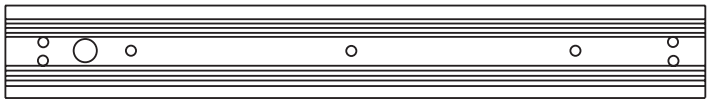
Description: This economical and adjustable spring surface closer features hydraulic spring power controlled rack and pinion operation. The closer is non-handed, with separate adjustments for sweep, latch and back check. The adjustable power shoe allows total closer power adjustment of 15%. Plates, Parallel Arms and Hold-Open Arms are optional accessories.

Application: See 1601 closer above.

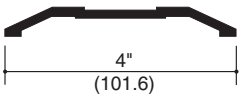
Finish: Painted to match #17 finish or #40 finish.

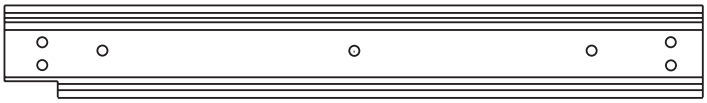
KAWNEER THRESHOLDS

Description/Application: Kawneer thresholds are factory fabricated and prepared for the appropriate hinging and locking hardware. They are extruded-mill finish aluminum and are engineered for maximum strength as an integral part of the door and frame. Threshold height from the finished floor is 1/2" (12.7 mm) except as noted.

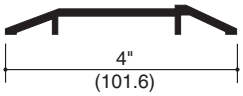


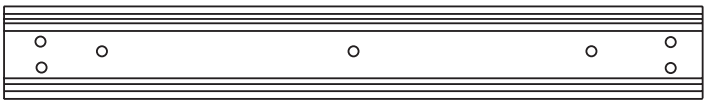
CENTER HUNG
For Concealed Overhead Closer



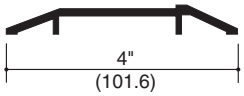


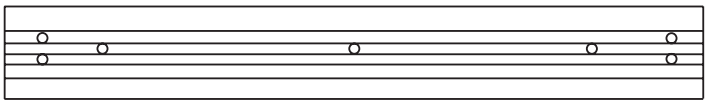
OFFSET PIVOT
For Overhead Closer



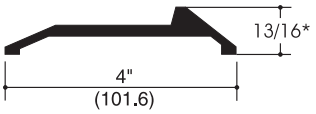


BUTT HUNG
For Overhead Closer





OPTIONAL
For Offset Pivot and Butt Hung Doors



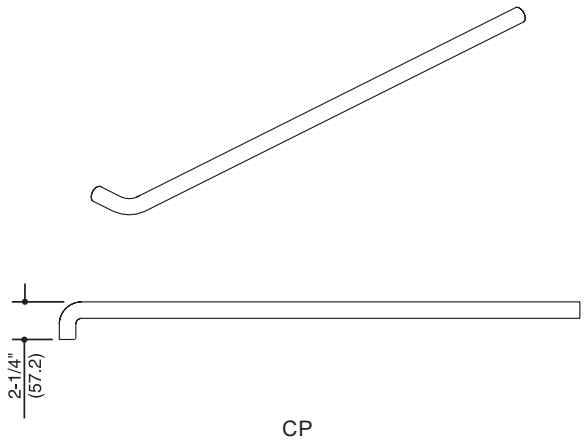
* On units that require ADA compliance the standard 1/2" high, offset pivot/butt hung threshold with bottom sweep will be supplied.

KAWNEER STANDARD "ARCHITECTS CLASSIC" HARDWARE

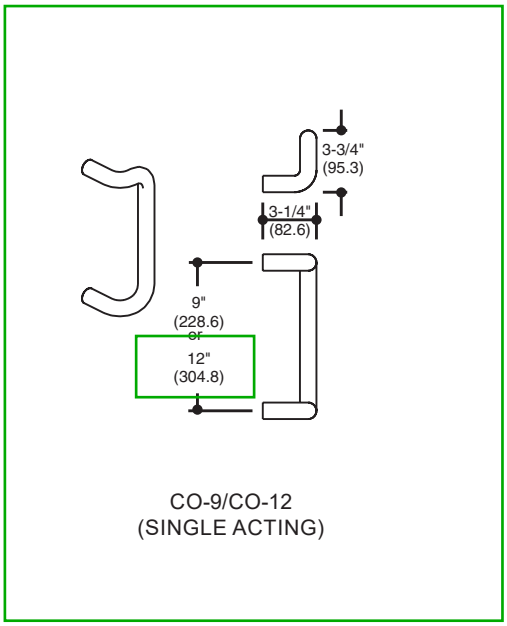
Description: Contemporary styled 1" (25.4) round bent bar is the basis for this hardware line.
A 90 degree offset pull is available in two centerline dimensions: 9" (228.6) and 12" (304.8).

Application: For use with single or double acting doors.
A CP single bend push bar and a pull handle for single acting doors.
Two CP push bars or two pull handles mounted back to back for double acting doors.
Secure attachment is obtained by through the door mounting.

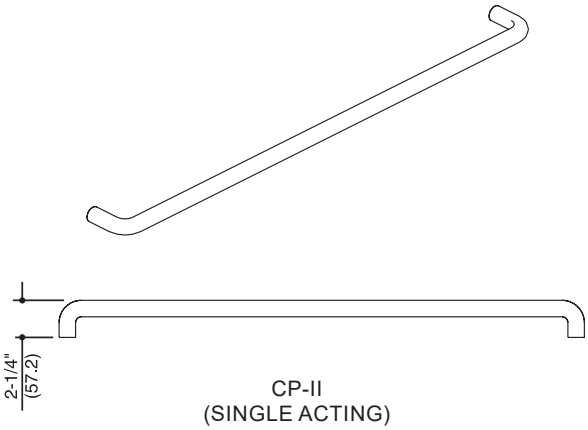
Finish: Hardware is available in:
#14 Clear anodize
#29 Black anodize
#40 Dark Bronze anodize
#44 Bronze - US10B oil rubbed
#45 Stainless Steel - US32 polished
#46 Stainless Steel - US32D dull
#47 Bright Brass (PVD) - US3



CP
(DOUBLE ACTING)



CO-9/CO-12
(SINGLE ACTING)



CP-II
(SINGLE ACTING)

NATIONAL GUARD PRODUCTS

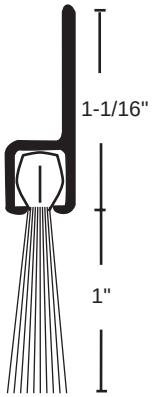
Project:
Submitted by:
Date:
Notes:

Nylon Brush Perimeter Seal or Sweep

D608

Perimeter & Door Sweep

Door Sweep Application only



Material
Aluminum alloy 6063, T5 temper
Synthetic polymer: Polyamide
Nylon brush

- Excellent abrasion resistance, flexibility and memory
- Moisture resistant
- Retains insecticides well
- Temperature range -70°F to 425°F
- Door Sweep application is Category H Smoke & Draft Control
- REACH and RoHS compliant
- Not effective against water penetration
- #6 x 3/4" stainless steel sheet metal screws furnished
- Screw holes slotted for adjustment

Finishes

D608A	Anodized Aluminum	Gray Brush
D608B	Gold	Black Brush
D608DKB	Dark Bronze	Black Brush

Options
FATT - Fast Attach Tape

4985 East Raines Road, Memphis, TN 38118 • 800-647-7874

LCN®

1461 Series

Door controls

Fire Rated: Tested on fire door assemblies in accordance with Australian Standards, refer fire door manufacturer for specific approval details

The LCN 1461 Series is a non-handed surface mounted closer designed for maximum versatility. A wide choice of options, mounting accessories and ease of installation make this a fully universal closer.

The LCN 1461 Series has been designed to be used on aluminium, hollow metal or wood swinging commercial interior/exterior doors and is ideally suited for hospitals, nursing homes, hostels, shopping centres, commercial buildings, hotels, educational and institutional applications.

Features

- Universal, fully reversible, non-handed door closer
- Closer cylinder constructed of high strength cast iron for increased durability
- Tested to 2,000,000 cycles
- Fully adjustable 1-6 spring strength to suit door size and site conditions
- Factory set to strength 3
- Standard closer offers 3 installation options
  - Regular (pull side)
  - Top jamb (push side)
  - Parallel arm (push side)
- Independent adjustment valves for adjusting backcheck, closing and latching speeds
- All adjustment valves are concealed behind the cover to prevent tampering
- Joints in arms and shoe brackets adapt to uneven mounting surfaces
- Stick-on template for fast, accurate installation. Cuts installation time in half
- Closers installed according to LCN installation instructions require minimal periodic maintenance or adjustments
- Cush-N-Stop® function has a built in stop incorporated into the arm to prevent damage to the closer, door or frame in the event of an abrupt stop
- The 30 year warranty provides specifiers and users with assured quality and performance

January 2014

Specification guide

Series	Function	Finish
LCN 1461 series LCN1461	Regular ..... R Hold open ..... HO Delayed action ..... DA Cush-N-Stop® ..... CNS Hold open Cush-N-Stop® ..... CNS-HO	Aluminium ..... ALUM

1. Series
   Select the desired series e.g. LCN 1461 series LCN1461
2. Function
   Select the required function LCN1461HO
3. Finish
   Select the desired finish e.g. Aluminium LCN1461HOALUM

Selection Chart

Strength	Exterior door	Interior door
1 - 2	NA	610mm - 864mm
3	610mm - 762mm	864mm - 965mm
4	762mm - 914mm	965mm - 1219mm
5	914mm - 1067mm	1219mm - 1372mm
6	1067mm- 1219mm	1372mm - 1524mm

Specifications	
Door type	Timber or metal
Door size	External door 610mm - 1219mm Internal door 610mm - 1524mm
Applications	Regular - pull side mount Parallel arm - push side mount Top jamb - push side mount
Adjustment controls	Closing speed Latching speed Delayed action Backcheck
Strength	1-6 adjustable
Options	Hold open arm Cush-N-Stop® arm Hold open Cush-N-Stop® arm Adaptor plate Parallel arm drop plate Square metal cover
Finishes	Aluminium, satin stainless steel (optional cover only), polished stainless steel (optional cover only)
Warranty	30 year mechanical

The LCN 1461 is designed for reduced opening force which when set to a 1 strength makes it suitable for use by people who are frail, aged or disabled. This closer can operate at between 14-20Nm from initial opening up to 90º

Caution! Where door closers are installed and adjusted to meet reduced opening force requirements, there maybe insufficient power to reliably close and latch the door, depending on prevailing operating conditions

Note In areas of high wind pressure and/or air conditioning pressures or doors located in exceptionally heavy traffic or oversized/ heavy doors, the LCN 4041 series closers or LCN automatic door operators are recommended

Regulating controls

The LCN 1461 has independent regulators to control

Closing speed	Adjustment to increase or decrease the speed at which the door closes. This allows the appropriate momentum to close the door in a safe and secure manner. Closing speed adjustment operates from the maximum opening to 15º
Latching speed	The latching speed allows the door to close quietly and firmly. It can be adjusted to increase or decrease the speed at which the door finally closes. This assists the final stage of the closing cycle to help overcome stubborn latchbolts or air pressure conditions. The latching speed adjustment operates from 15º to closing
Backcheck	Adjustable hydraulic backcheck provides a cushioning effect when the door is forcibly thrown open to prevent damage to the closer, door and frame. The backcheck adjustment allows the level of resistance in the latter stage of opening to be set at the level required. Backcheck is effective from 75º. Backcheck is a requirement for all fire rated closers
Delayed action	Enables door closing action to be delayed for an adjustable period of time before resuming normal closing, allowing slow moving traffic to pass through. Delay action can be adjusted up to a delay time of approximately 1 minute. Operational zone of delay is between 180º to 75º
Power adjustment	Spring strength may be increased or decreased by turning the allen head screw located in the end of the door closer body

Functions

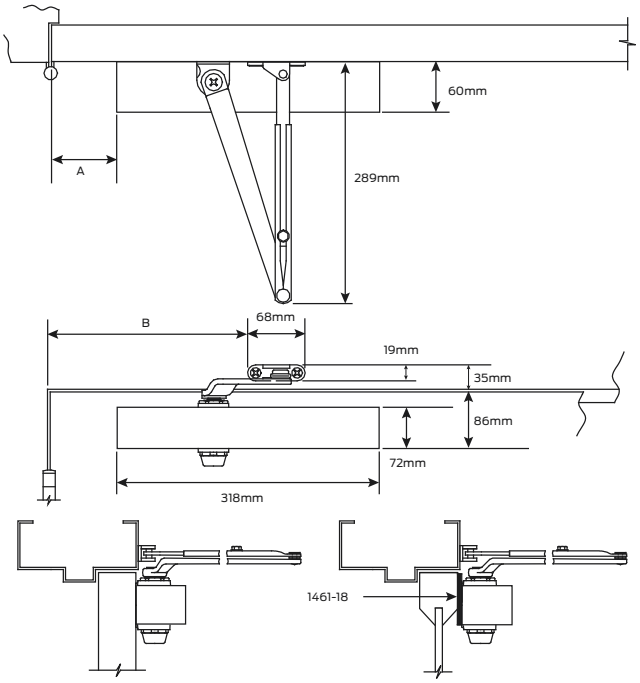
Regular	For applications where the door must fully close after each opening
Hold open	Suitable for doors where the door may need to be left in a hold open position. The hold open function can be set to hold open at a single point. Hold open closers can not be used on fire doors
Delayed action	Delayed action closers have an inbuilt adjustable control that delays the closing of the door, for up to approximately 1 minute
Cush-N-Stop®	Used predominantly on outward swinging doors in situations where it is not practical to fit a door stop. The Cush-N-Stop® function has a built in stop incorporated into the arm to prevent damage to the closer, door or frame in the event of an abrupt stop. It is recommended that metal door frames be reinforced where the arm attaches to the transom. Maximum door opening 100º
Hold open Cush-N-Stop®	Provides the same function as the Cush-N-Stop®, but has the added feature of a hold open function in the arm, which is engaged/disengaged by a tee handle. Maximum door opening 100º

Mounting details

Regular (pull side) mounting

Regular mounting has a maximum opening of 180°, with frame and trim permitting. The hold open arm allows the door to be set at one given hold open point up to the maximum opening. The reveal should not exceed 19mm for a regular arm or 13mm for a hold open arm. Top rail less than 64mm requires adaptor plate. Adaptor plate requires a 38mm minimum top rail. Clearance of 70mm behind door is required for 90° installation. Delayed action closer delays closing from 110° to 65° or 160° to 75° depending on templating

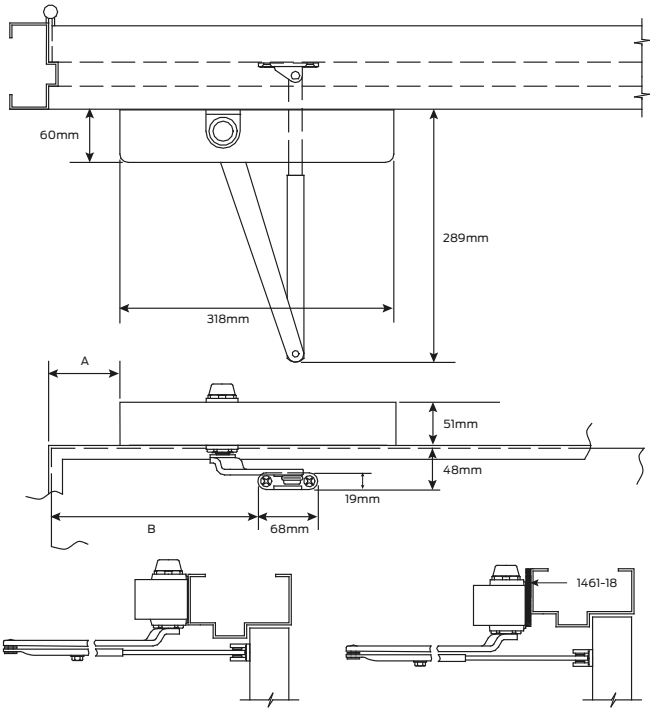
Maximum opening 110°
A = 169mm
B = 286mm
Maximum opening 180°
A = 76mm
B = 191mm



Top jamb (push side) mounting

Top jamb mounting has a maximum opening of 180°. The hold open arm allows the door to be set at a given hold open point up to the maximum opening. A reveal of 64mm for hold open arms and 89mm for regular arms allows a 180° opening. Top rail less than 48mm requires adaptor plate. Adaptor plate requires a 70mm minimum top rail. For situations where the head frame is less than 44mm or a flush ceiling condition exists with a 51mm head frame, an adaptor plate is required. Adaptor plate requires a 32mm minimum head frame. Delayed action closer delays closing from 110° to 75° or 180° to 95° depending on templating.

Maximum opening 110°
A = 169mm
B = 286mm
Maximum opening 180°
A = 76mm
B = 191mm

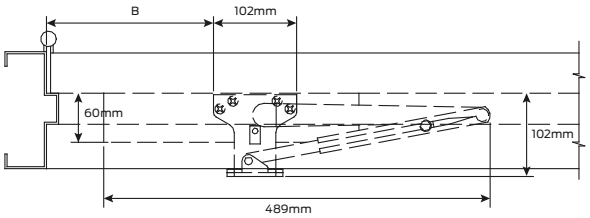


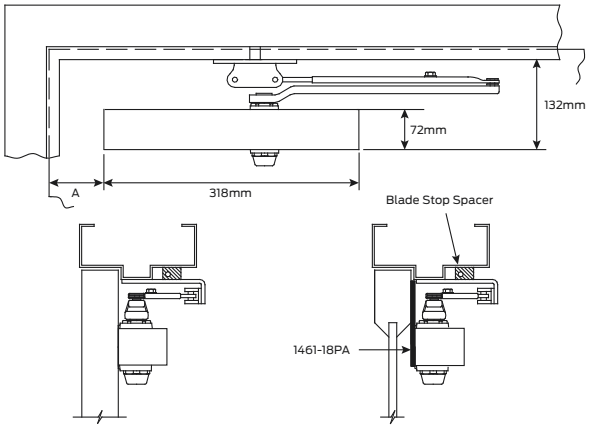
Mounting details

Parallel arm (push side) mounting

Parallel arm mounting has a maximum opening of 180°. The hold open arm allows the door to be set at one given hold open point up to the maximum opening. Clearance for the PA shoe is 102mm from door face. Top rail less than 108mm measured from the stop requires drop plate. The drop plate requires a 44mm minimum top rail. Minimum stop width is 25mm. Blade stop clearance requires 13mm blade stop spacer. Delayed action closer delays closing from maximum opening to approximately 75°. When installing closers in parallel arm configuration, strength may be needed to be adjusted upwards to compensate for power reduction

Maximum opening 100°
A = 108mm
B = 235mm
Maximum opening 180°
A = 44mm
B = 171mm

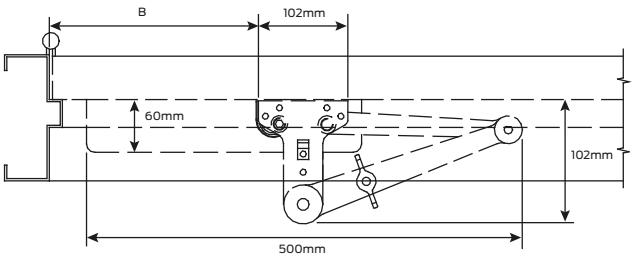


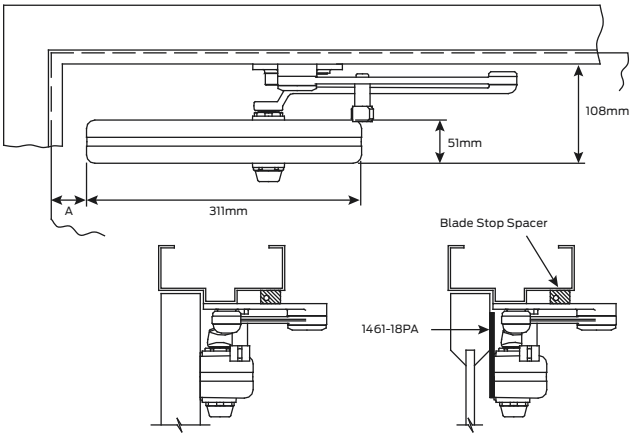


Cush-N-Stop® (push side) mounting

Cush arms can be templated for the following maximum opening/hold open points:
1. 85° - A = 60mm & B = 243mm
2. 90° - A = 41mm & B = 230mm
3. 100° - A = 16mm & B = 205mm

Clearance for the cush shoe is 140mm from door face. Top rail less than 108mm measured from the stop requires drop plate. The drop plate requires a 44mm minimum top rail



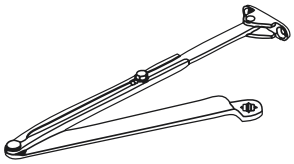


January 2014

1461 Series accessories

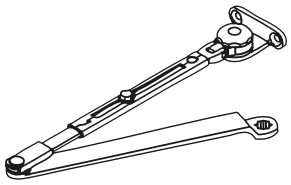
Regular arm 1460-3077

Standard, non-handed arm mounts hinge side or top jamb. For parallel arm mounting, a PA shoe is also required
Finish: Aluminium



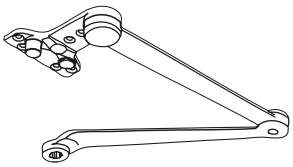
Hold open 1460-3049

Non-handed, hold open arm mounts hinge side or top jamb. For parallel arm mounting, a PA Shoe is also required. Hold open adjustable at shoe
Finish: Aluminium



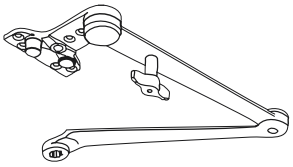
Cush-N-Stop® arm 1460-3077CNS

Non-handed parallel arm features solid forged steel main arm and forearm, with stop in soffit shoe
Finish: Aluminium



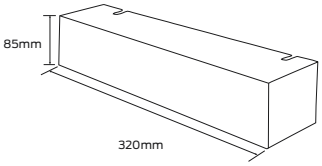
Hold open Cush-N-Stop® arm 1460-3049CNS

Non-handed arm, provides hold open function with templated stop/ hold open points. Handle controls hold open function
Finish: Aluminium



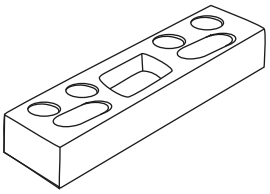
Metal cover 1460-MC

Non-handed cover, providing complete enclosure of closer body
Finishes: Polished stainless steel, satin stainless steel



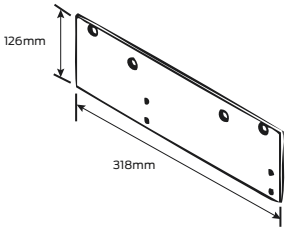
Blade stop spacer 1460-61

Lowers parallel arm shoe to clear 13mm blade stop



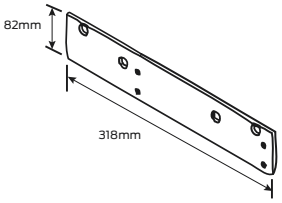
Drop plate 1460-18PAFC

Mounting plate required for parallel arm mounting configuration where top rail is less than 114mm, measured from the stop. A drop plate requires a 44mm minimum top rail



Adaptor plate 1460-18FC

Mounting plate required top jamb mounting where head frame is less than 60mm or a flush ceiling condition exists



PA shoe 1460-62PA

Required for parallel arm mounting configurations
Finish: Aluminium