

Catalog Cuts

for

PROJECT XYZ

Sorted by Manufacturer

Prepared By

QUALITY HARDWARE CORPORATION

3411 E. 10 MILE RD.

WARREN MI 48091

Phone (586) 880-0158 Fax (586) 880-0166

Created 10/14/2013

Catalog Cut Summary

Mfgr	Description	Item#	Catalog Number
B/O	CYLINDER		(PROVIDED BY OTHERS)
B/O	WEATHER SEAL		(PROVIDED BY THE DOOR & FRAME MFR)
B/O	CONCEALED PULL		(PROVIDED BY THE DOOR MFR)
B/O	ACCESS CONTROL		(PROVIDED BY THE SECURITY CONTRACTOR)
B/O	WIRING DIAGRAM		(PROVIDED BY THE SECURITY CONTRACTOR)
GLY	OVERHEAD HOLDER		904H
IVE	WALL STOP		WS447
IVE	SURFACE BOLT		SB453-8-TB
IVE	CONTINUOUS HINGE		112HD 83"
IVE	CONTINUOUS HINGE		112HD 83" X EPT
IVE	GLOBAL CUT		GLOBAL CUT
LCN	CUSH SHOE SUPPORT		4110-30
LCN	SURFACE CLOSER		4111 EDA
LCN	SURFACE CLOSER		4111 SHCUSH SRI
LCN	SURFACE CLOSER		4111 SHCUSH
LCN	SURFACE CLOSER		4111 SCUSH
NGP	DOOR SWEEP		C627DKB 36"
NGP	DOOR SWEEP		C627DKB 48"
NGP	ASTRAGAL		158NDKB 84"
NGP	THRESHOLD		425HDDKB X 40" SSMS/LA
NGP	THRESHOLD		425HDDKB X 52" SSMS/LA
NGP	THRESHOLD		425HDDKB X 76" SSMS/LA
SCE	DOOR POSITION SWITCH		679-05 HM
VON	POWER SUPPLY		PS902

Catalog Cut Summary

Mfgr	Description	Item#	Catalog Number
VON	POWER SUPPLY		PS902-2RS
SCH	STOREROOM LOCK		L9080L LLL 03B L283-150
VON	ELECTRIC STRIKE		6223 FSE DS (VOLTAGE REQUIREMENTS REQUIRED)
VON	POWER TRANSFER		EPT-10
VON	PANIC HARDWARE		RX-QEL 98NL-OP 3' LESS TRIM 299
VON	PANIC HARDWARE		RX-QEL 98NL-OP 4' LESS TRIM 299

90 Series Surface Overhead Door Holders/Stops



90 Series Heavy-Duty

Glynn-Johnson 90 series holders and stops are the most rugged models available for heavy-duty applications. The channel is surface-mounted to the door, most often with six bolts, and the jamb bracket is surface mounted to the jamb, requiring minimal door and frame preparation.

These versatile units can be used in conjunction with most surface-applied door closers. The provided templates allow for variable mounting positions, ranging from 85° to 110° Hold-Open/Stop angle. These templates are designed for installation in almost all types of doors, including doors with conventional butt-type hinges or specialty hinges.

Four Models:

- 90H Series Hold-Open Model
- 90S Series Stop-Only Model
- 90F Series Friction Hold-Open Model
- 90SE Series Special Stop-Only Model

Five Sizes:

- Simple
- Standardized
- Each model is available in five sizes

Three Options:

- J—Angle Jamb Bracket
- SHIM—Blade Stop Shim Kits
- SOC—Pin-in-Socket Security Screw Package

Unmatched Convenience:

- Non-Handed
- Improved Compatibility with Door Closers
- Single-Acting Doors
- Interior/Exterior Applications
- Durable
- Easy to Install
- Improved Corrosion Resistance
- Function Conversion Kits Available

Materials and Finishes:

In 300 series Stainless Steel, Brass and Steel substrates, these models are available in the largest selection of finishes in the industry. Stainless Steel models offer the highest resistance to corrosion. Available in the following finishes:

Finish	Description
US3	Polished Brass
US4	Satin Brass
US10	Satin Bronze
US10B	Oil Rubbed Bronze
US32	Polished Stainless Steel
US32D	Satin Stainless Steel
SP4	Powder Coat Brass
SP10	Powder Coat Bronze
SP28	Powder Coat Aluminum
SP313	Powder Coat Dark Bronze
SPBLK	Powder Coat Black
652	Chrome-like Coating

Models

Glynn-Johnson 90 series door holders and stops provide long-lasting protection for doors, frames and hardware. All models incorporate a heavy-duty channel/slide-arm design and offset jamb bracket. This unique design allows for simple field modification of functions, should user requirements change.

90H Series Hold-Open

(Suffix H) Hold-Open models provide a convenient method of holding the door open at a predetermined position for short or long periods of time, permitting an unobstructed traffic flow through the opening. The Hold-Open function can easily be turned on or off by simply rotating the serrated knob on the bottom of the channel. This knob engages the Hold-Open mechanism, allowing the door to be held open at a predetermined position ranging from 85° to 110°. When the knob is flipped over, it acts as a stop and shock absorber.

The tension on the Hold-Open mechanism can be adjusted using a phillips screwdriver to offset air currents or other exterior conditions. The Hold-Open tension adjustment is located on the top of the slider in the channel.

90S Series Stop-Only

(Suffix S) When the Hold-Open function is not a requirement, Stop-Only models provide a reliable method of door control. Stop-Only models provide the same shock-absorbing capability as Hold-Open models. The Stop-Only model may be used on fire doors.

90F Series Friction Hold-Open

(Suffix F) Friction Hold-Open models are ideal for patient room doors, wardrobe and closet doors or similar applications where multiple Hold-Open positions are desired. The friction tension can be adjusted through the top of the channel using an allen wrench. The friction tension adjustment is located on the top of the slider in the channel.

90SE Series Special Stop-Only

(Suffix SE) When Stop-Only models are used in conjunction with single-point, Hold-Only electronic door closers, the Stop-Only function may be ordered without the shock-absorbing mechanism. Used as an auxiliary stop, these models prolong the life of the closer. The stop location is adjusted using an allen wrench on the stop block located in the channel.

Note: Caution should be taken when using this option in other applications, as the elimination of the shock-absorbing spring can put added stress on the door and frame.

Application Information

UL Classification

The 90 series Stop-Only models are classified by Underwriters Laboratories (UL) as Miscellaneous Fire Door Accessories. This classification applies to use on either Hollow Metal Fire Doors or Wood Fire Doors. These units may be used on doors of any rating. As a reminder, the Miscellaneous Fire Door Accessories (GVUX) section is defined by UL as: "Miscellaneous fire door accessories are intended in the individual Listings. The accessories have been investigated to determine that when installed in accordance with the manufacturer's instructions, the accessories do not adversely affect the fire rating of the fire door and/or fire door frames."

Dead-Stop Templating:

Dead-stop templating is recommended for applications where a wall or similar obstruction is placed at an opening angle of 110° or less (i.e., doors that open back-to-back). Dead-stop templating can be applied to Hold-Open, Stop-Only and Friction models. The Dead-Stop position is the point at which the shock-absorbing spring is fully compressed. Therefore, when Dead-Stop Templating is used, the initial degree of opening will be 5° to 7° less than the Dead-Stop opening.

Example: If the holder is templated to a 100° Dead Stop, the door will hold open at an angle between 93° and 95° but no further than 100°

Note: Do not use dead-stop templating on the 90SE Series since there is no shock-absorbing spring.

Environmental Considerations:

Environmental factors should always be considered when specifying overhead holders and stops. Doors that are positioned on a building's exterior or subject to corrosive conditions should be equipped with a holder constructed primarily of stainless steel or brass materials. For interior applications, steel is acceptable, though brass substrates generally provide a more attractive architectural-grade finish.

Function Conversion Kits

- FK90H—Converts a 90F or a 90S unit into a 90H unit. To order specify FK90H.
- FK90F—Converts a 90H or a 90S unit into a 90F unit. To order specify FK90F.
- FK90SE—Converts a 90H, 90F or a 90S unit into a 90SE unit. To order specify FK90SE—Finish.
- No kit is needed to convert a 90H or 90F unit into a 90S unit.

Options

Suffix J (Angle Jamb Bracket):

An angle jamb bracket is available for converting standard models to hinge-side or flush transom mounting. The angle jamb bracket affixes to the standard jamb bracket. If ordered with the unit add suffix J. If needed separately order 90J by finish needed.

Suffix SOC (Pin-in-Socket Security Screws):

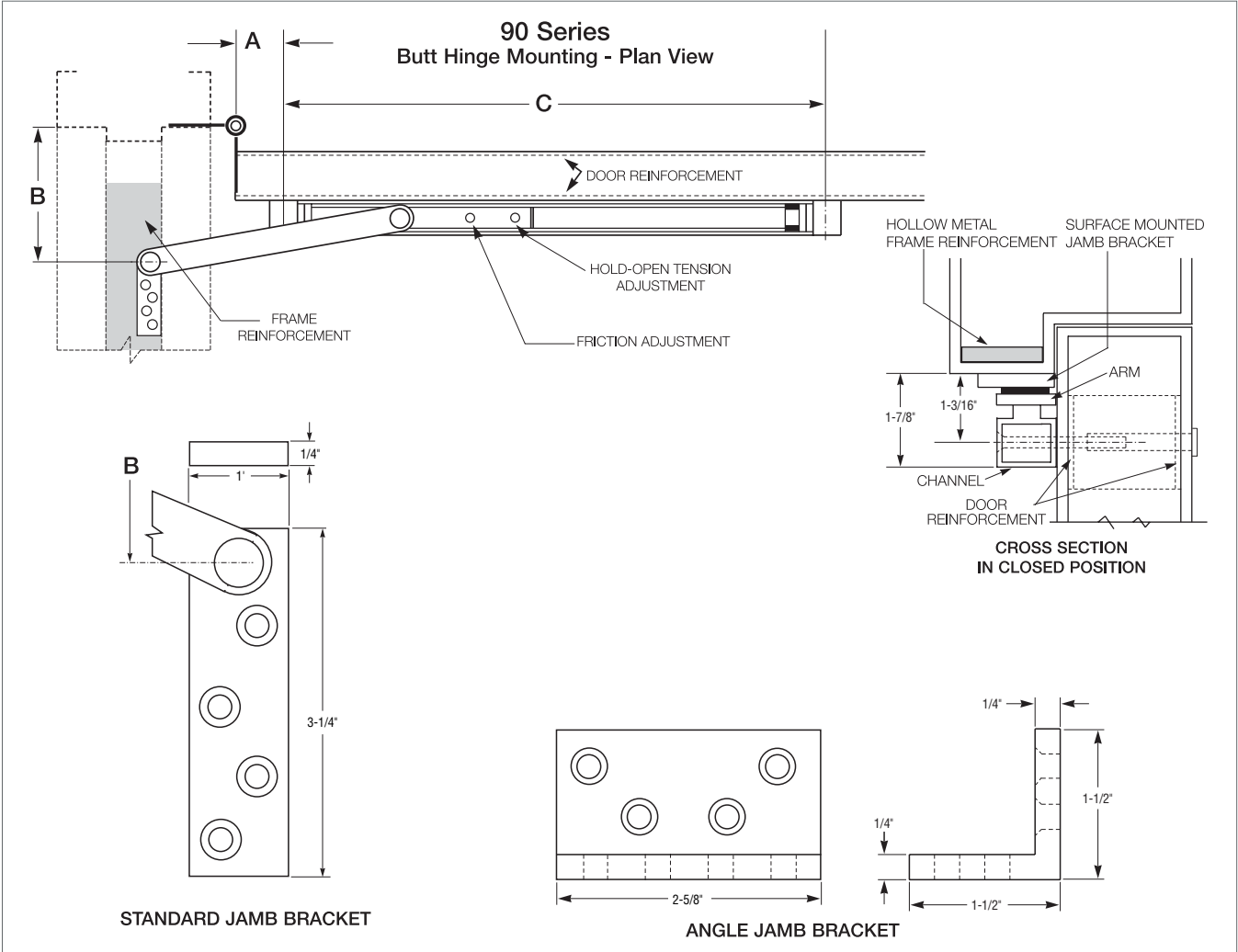
A screw package with pin-in-socket screws for mounting the door bracket and the jamb bracket is provided instead of the standard screw package.

Suffix SHIM (Blade Stop Shims):

Shim kits are available in 3 sizes
 90 SHIM1 is a 1/4" Shim Kit
 90 SHIM2 is a 1/2" Shim Kit
 90 SHIM3 is a 3/4" Shim Kit

If ordered with overhead, add suffix SHIM (1, 2 or 3). If needed separately order 90 SHIM (1, 2 or 3)—Finish.

90 Series Surface Overhead Door Holders/Stops



90 Series Sizing Chart								
BUTTS/OFFSET PIVOTS					CENTER HUNG			
SIZE	DOOR OPENING	STOP ONLY	HOLD OPEN	FRICTION	DOOR OPENING	STOP ONLY	HOLD OPEN	FRICTION
1	----	----	----	----	----	----	----	----
2	23-1/16"-27"	902S	902H	902F	27-1/16"-33"	902S	902H	902F
3	27-1/16"-33"	903S	903H	903F	33-1/16"-39"	903S	903H	903F
4	33-1/16"-39"	904S	904H	904F	39-1/16"-45"	904S	904H	904F
5	39-1/16"-45"	905S	905H	905F	45-1/16"-51"	905S	905H	905F
6	45-1/16"-51"	906S	906H	906F	51-1/16"-59"	906S	906H	906F

Note: This chart illustrates the most common types of hinging and door opening sizes.
For unusual door details, contact Glynn-Johnson for availability.

BHMA/ANSI, A156.8 & FED. Spec. Cross Reference		
G-J Model	BHMA*	FED. Spec.
902 - 906H	C02511	1161
902 - 906S	C02541	1161A
902 - 906F	C02531	—

* First numeral (0) designates optional material.
To specify:
Brass material, change 0 to 1 (i.e. C12511)
Stainless Steel material, change 0 to 5 (i.e. C52511)
Steel material, change 0 to 8 (i.e. C82511)

The template information on this page is for reference only and is not intended to serve as an installation template.
For complete dimensional information, refer to Glynn-Johnson template book.



How to Order

	<u>90</u>	<u>4</u>	<u>H</u>	-	<u>US32D</u>	-	<u>J</u>
Overhead Series:							
90							
Size (Door Opening Using Butts or Offset Pivots):							
2	(23-1/16"-27")						
3	(27-1/16"-33")						
4	(33-1/16"-39")						
5	(39-1/16"-45")						
6	(45-1/16"-54")						
Function:							
H	Hold-Open						
F	Friction Hold-Open						
S	Stop-Only						
SE	Special Stop-Only						
Finishes:							
US3	Polished Brass						
US4	Satin Brass						
US10	Satin Bronze						
US10B	Oil Rubbed Bronze						
US32	Polished Stainless Steel						
US32D	Satin Stainless Steel						
SP4	Powder Coat Brass						
SP10	Powder Coat Bronze						
SP28	Powder Coat Aluminum						
SP313	Powder Coat Dark Bronze						
SPBLK	Powder Coat Black						
652	Chrome-like Coating						
Options:							
J	Angle Jamb Bracket						
SHIM	Blade Stop Shims—						
	SHIM1—1/4" Kit						
	SHIM2—1/2" Kit						
	SHIM3—3/4" Kit						
SOC	Pin-in-Socket Security Screws						

Wall Stops

WS443

Features:

- Constructed in brass.
- Ideal for interior or exterior use.
- Non-marring rubber tip.
- Packed with expansion shield and lead shield.
- Meets ANSI/BHMA 156.16, L12021 for brass and L32021 for aluminum.
- Finishes: US3, US4, US5, US10, US10B, US14, US15, US15A, US26, US26D, US28.

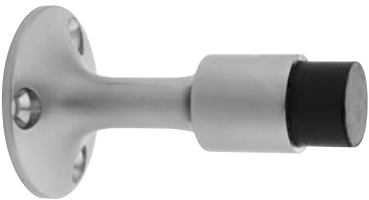


Product No.	Base Diameter	Overall Projection
WS443	2-1/4"	3-11/16"

WS447

Features:

- Constructed in brass or aluminum.
- Ideal for interior or exterior use.
- Non-marring rubber tip.
- Furnished with 3 mounting holes for drywall mounting.
- Packed with wood screws.
- Meets ANSI/BHMA 156.16, L12011 for brass and L32011 for aluminum.
- Finishes: US3, US4, US5, US10, US10B, US14, US15, US15A, US26, US26D, US28.



Product No.	Base Diameter	Overall Projection
WS447	2-1/4"	3-11/16"

Surface Bolts

SB453

- Surface Bolt has 1-3/16" throw for maximum security.
- Strong tension springs prevent creep.
- Ideal for all types of doors.
- Available 8", 12", 18" or 24" lengths.
- Units packed with standard screws for added security.
- Units packed with both a universal top strike (T) and a mortise bottom strike (B).
- Constructed of heavy duty steel.
- 8" and 12" Bolts are UL listed up to 3 hours when used on the inactive door of a pair up to 10' in height.
- Meets ANSI/BHMA A156.16 L84161
- Finishes: US2C, US10, US10B, US26D.
- Optional Sex Bolts available.
- Optional Thru Bolts available.



Dimensions:

Bar: 3/4" Wide x 1/4" Thick
Overall Width: 2-1/32"
Overall Projection: 1-5/16"
Top Strike: 1-1/2" x 1-1/2" Angle, 3/16" Thick
Bottom Strike: 3-1/2" Long x 1-5/8" Wide x 1/8" Thick

How to Order:

SB453-

Length:
8 for 8"
12 for 12"
18 for 18"
24 for 24"

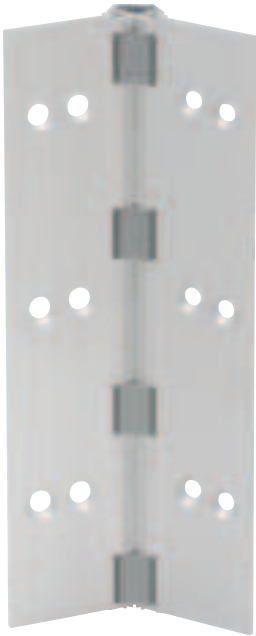
Strike:
TB Top and Bottom Strike

Finishes:
US2C (available in all lengths)
US26D (available in 8" and 12" lengths)
US10 (available in 8" length only)
US10B (available in 8" and 12" lengths)

Aluminum Geared Continuous Hinges

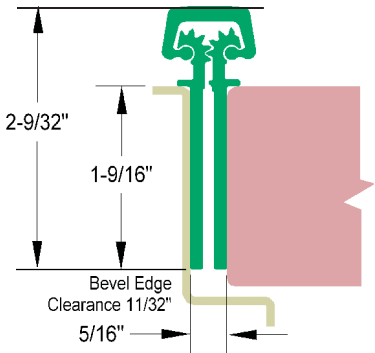
Ives 112HD

Full Mortise



Concealed Hinge
Flush Mounted, No Inset
Non Handed

Standard Mounting Hardware
12-24 X 1/2" Steel Self Tapping Screws
#12 x 1-1/2" Flathead Wood Screws
Optional Security Fasteners Available



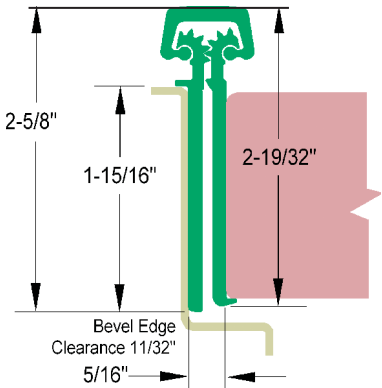
Ives 224HD

Full Mortise



Concealed Hinge
Door Edge Protector
1/16" Door Inset
Non Handed

Standard Mounting Hardware
12-24 X 1/2" Steel Self Tapping Screws
#12 x 1-1/2" Flathead Wood Screws
Optional Security Fasteners Available



Pin and Barrel Continuous Hinges

General Information

Lengths

83", 85", 95", 120"

Custom Lengths are available, consult factory

Barrel Type

Twin Self Lubricated Nylon Bearings with Stainless Steel Pin.

Door Weight

Each hinge can hold a door up to 600 lbs (Rivet nuts recommended) and a max door width of 4'0".

ANSI Certified

All Ives Pin and Barrel Hinges certified to ANSI 156.26, Grade 2.

UL Listed

All Ives Steel and Stainless Steel Pin and Barrel Hinges are tested and approved UL 10C (3 hr).

Field Modifications

All Ives Pin and Barrel Continuous Hinges can be cut to length during installation. If more than 6" from bottom of hinge, additional modifications may be necessary (see instructions for further information).

Electrification Options

Only available for the Full Mortise Hinges

Electric Power Transfer (EPT)

Electric power transfer provides a means of transferring power from the door frame to the edge of a swinging door. Ives Continuous Hinges provide cut outs to fit Von Duprin EPT-2, EPT-10 and PNT-1 devices.

Electrical Through-Wire (TW)

Provides electric power transfer from the frame to the door in order to supply power to an electrified mortise or cylindrical locks, exit devices with electric latch retraction, and/or electric strikes (pairs of doors). Through-wire is rated for 3.5 amp continuous and 16 amp pulse. Offers 4 wire (TW4) or 8 wire (TW8).

Electrical Through-Wire + Monitoring (TWM)

Combines electric through-wire with monitoring the status of the door showing open or closed; offers 4 wire (TW4M) or 8 wire (TW8M).

Exposed Electric Contacts (EC)

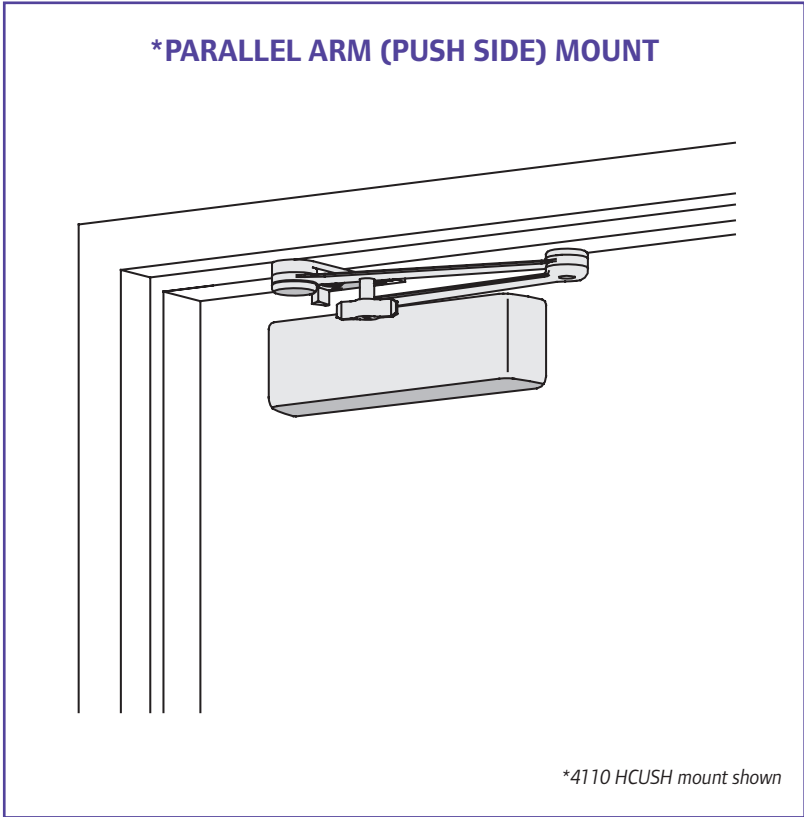
Provides electric power from the building to the door when in closed position. Rated for 50V AC/DC at 1 amp. Comes with 2 (EC2) or 4 (EC4) contacts.

LCN 4110 SERIES

FEATURES

The 4110 is LCN's best performing heavy duty closer designed specifically for institutional and other rugged high traffic applications.

- ▶ Cast Iron
- ▶ Extra Duty Forged Steel Arm Standard
- ▶ Double Heat Treated Steel Pinion
- ▶ All Weather Fluid
- ▶ Advanced Variable Backcheck
- ▶ LCN "Green Dial" Spring Force Indicator
- ▶ UL & cUL Listed
- ▶ Peel-n-Stick Templates for Fast and Accurate Installations



- ▶ Standard 4110 series closer is shipped with Extra Duty arm, standard plastic cover, 4110-201 FIFTH SCREW SPACER and self reaming and tapping screws. See 4110 Series pages 59 & 60 for options.
- ▶ Sized cylinders adjustable for interior doors to 5'0" and exterior doors to 4'0".
- ▶ Non-sized cylinder adjustable for interior doors to 4'6" and exterior doors to 3'6".
- ▶ Closer mounts parallel arm, specify right or left swinging door.
- ▶ 4111 cylinder meets ADA requirements. See 4110 Series page 61.
- ▶ Standard or optional custom powder coat finish.
- ▶ Optional plated finish on metal cover, arm and fasteners.
- ▶ Optional SRI primer for installations in corrosive conditions is available with powder coat only.
- ▶ The 4110 Series is UL and cUL listed for self-closing doors without hold-open.
- ▶ Tested and certified under ANSI Standard A156.4, grade one.



MOUNTING					FINISH		COVER		CYLINDER					**ARM FUNCTION					
HINGE (PULL SIDE)	TOP JAMB (PULL)	TOP JAMB (PUSH)	PARALLEL ARM	STOP FACE	POWDER COAT	PLATED	PLASTIC	METAL	NON-HANDED	NON-SIZED	ACCESSIBILITY	DELAYED ACTION	AVB***	REGULAR (DOUBLE)	STANDARD (SINGLE)	HOLD-OPEN	FUSIBLE LINK	EDA/HEDA	CUSH/HCUSH
○	○	○	●	○	●	●	●	●	○	○	○	○	○	○	○	180°	180°	110°	110°
									○	○	○	○	○					○	○

● 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

LCN 4110 SERIES

PARALLEL ARM (PUSH SIDE) MOUNTING

MAXIMUM OPENING

EDA or Fusible Link arm can be templated for

100°,

(A) = 5 15/16" (151 mm)

(B) = 7 1/4" (184 mm)

140°,

(A) = 4 7/16" (113 mm)

(B) = 5 3/4" (146 mm)

or 180°.

(A) = 2 15/16" (75 mm)

(B) = 4 1/4" (108 mm)

Hold-open points up to maximum opening with HEDA or Fusible Link arm.

CUSH arm can be templated for maximum opening at

85°,

(A) = 8 5/16" (211 mm)

(B) = 9 5/8" (244 mm)

90°,

(A) = 7 11/16" (195 mm)

(B) = 9" (229 mm)

100°,

(A) = 6 7/16" (164 mm)

(B) = 7 3/4" (197 mm)

or 110°.

(A) = 5 9/16" (141 mm)

(B) = 6 7/8" (175 mm)

Hold-open point at maximum opening with HCUSH arm.

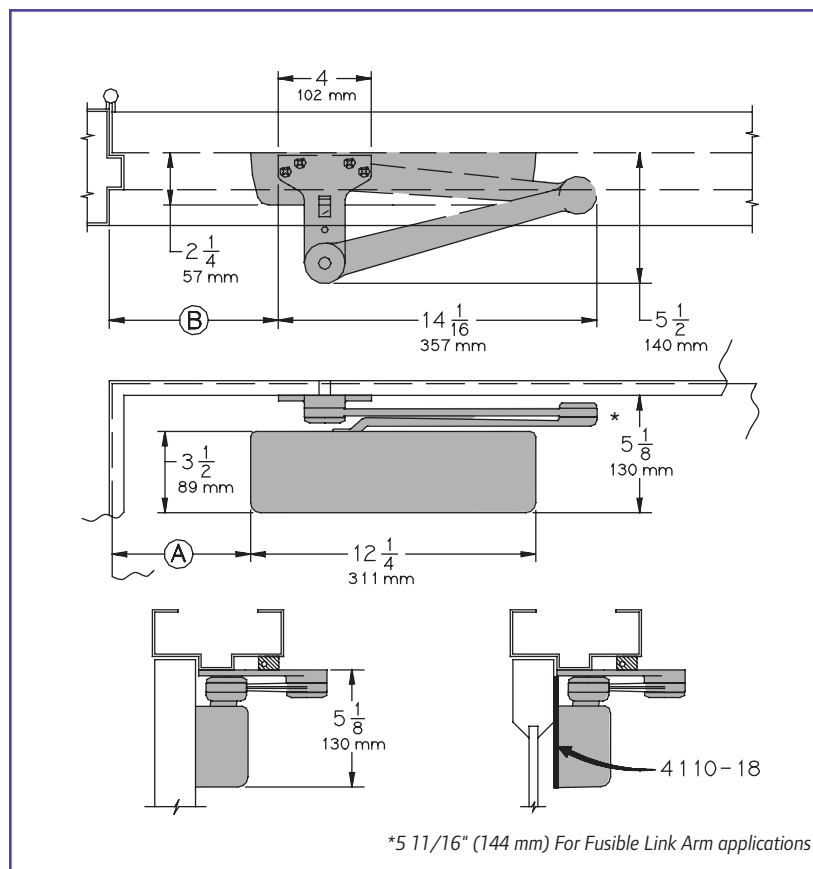
Spring Cush hold-open points are approximately 5° less than templated stop point.

Options

- ▶ Size 6 or non-sized cylinder.
- ▶ Delayed Action and/or Advanced Variable Backcheck cylinder.
- ▶ HEDA, CUSH, HCUSH, SPRING CUSH, SPRING HCUSH or Fusible Link arm.
- ▶ Metal cover.

Special Templates

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



- ▶ **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 EDA, or CUSH shoe is 5 1/2" (140 mm) from door face.
- ▶ **Top Rail** less than 5 1/8" (130 mm) measured from stop requires PLATE, 4110-18. Plate requires 2" (51 mm) minimum measured from the stop.
- ▶ **Stop Width** minimum 1" (25 mm).
- ▶ **Head Frame** flush or rabbeted requires CUSH FLUSH PANEL ADAPTER, 4110-419.
- ▶ **Reveal** less than 2 3/4" (70 mm), use CUSH SHOE SUPPORT, 4110-30 with CUSH arms.
- ▶ **Blade Stop Spacer**, 4110-61 required to clear 1/2" (13 mm) blade stop.
- ▶ **Cush Arm** requires CUSH SHOE SUPPORT, 4110-30 for fifth screw anchorage with CUSH arms.
- ▶ **Delayed Action** Add suffix "DEL" to selected cylinder (eg. 4114 DEL). Not available with 4115 or 4116 cylinder. Delays closing from maximum opening to approximately 70°. Delay time adjustable up to approximately 1 minute.
- ▶ **Advanced Variable Backcheck** cylinder starts backcheck at approximately 45° instead of the normal 75°. Add suffix "AVB" to selected cylinder.

LCN 4110 SERIES

ACCESSORIES

CYLINDERS

CYLINDER, 4110-3071

Standard, handed cast iron cylinder assembly.

For various applications see "Table of Sizes" on 4110 Series page 61.

COVERS

COVER, 4110-72

Standard, non-handed plastic cover.

METAL COVER, 4110-72MC

Optional, handed cover. Required for plated finishes and custom powder coat finishes.

ARMS

EXTRA DUTY ARM, 4110-3077EDA, 4110-3077EDAG

Non-handed parallel arm features forged, solid steel main and forearm for potentially abusive installations.

Optional 4110-62G thick hub shoe for blade stop clearance.

HOLD-OPEN ARM 4110-3049EDA

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

FUSIBLE LINK ARM, 4110-3049FL

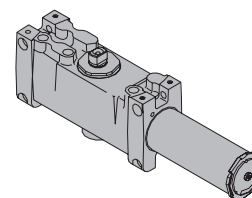
Optional, handed arm releases hold-open function adjustable at shoe when exposed to temperatures above 165° F.

NOTE: Check local codes before specifying FL arms. NOT A life safety product!

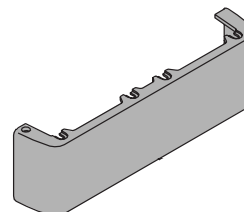
CUSH-N-STOP ARM, 4110-3077CNS

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

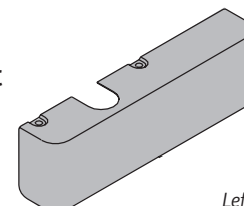
3071



72



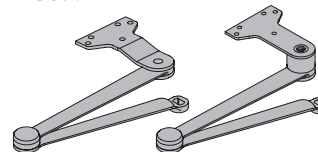
72MC



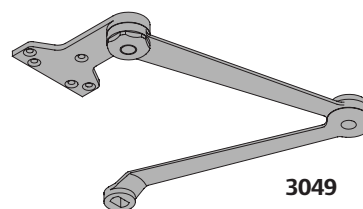
Left Hand Shown

3077

3077EDAG

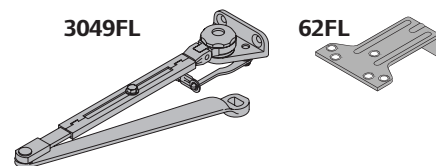


3049

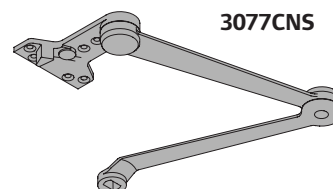


3049FL

62FL



3077CNS



LCN 4110 SERIES

H-CUSH Arm 4110-3049CNS

Optional handed arm provides hold-open function with templated stop/hold-open points.

Handle controls hold-open function.

SPRING CUSH ARM, 4110-3077SCNS

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 H-CUSH ARM, 4110-3049SCNS

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.

INSTALLATION ACCESSORIES

PLATE, 4110-18

Required for push side mount where top rail is less than 5 1/8" (130 mm), measured from the stop.

Plate requires minimum 2" (51 mm) minimum top rail.

Plate also used with CUSH Arm installations.

CUSH SHOE SUPPORT, 4110-30

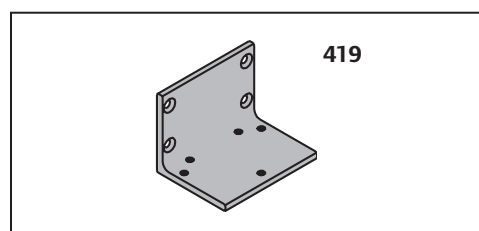
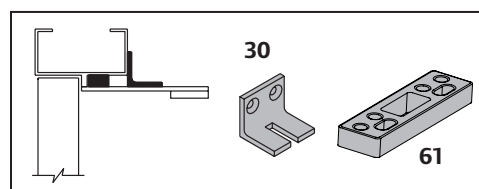
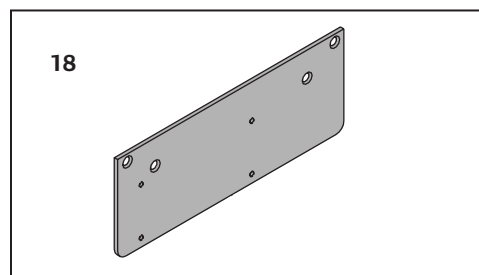
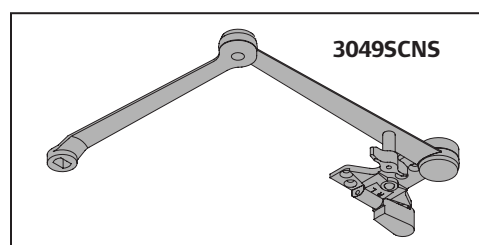
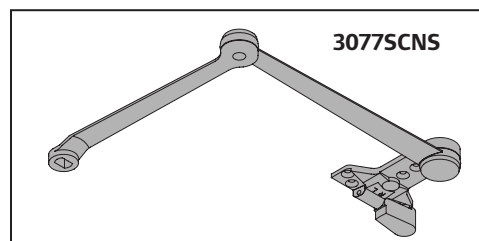
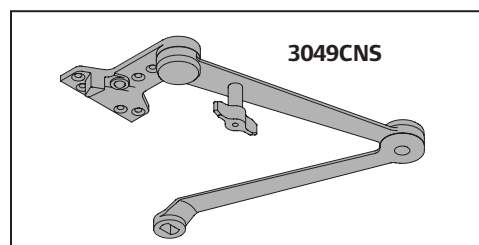
Provides anchorage for fifth screw used with CUSH arm, where reveal is less than 3 1/16" (78 mm).

BLADE STOP SPACER, 4110-61

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

PA FLUSH PANEL ADAPTER, 4110-419

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



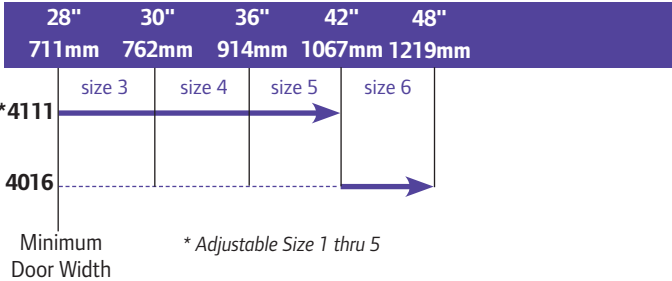
LCN 4110 SERIES

TABLE OF SIZES

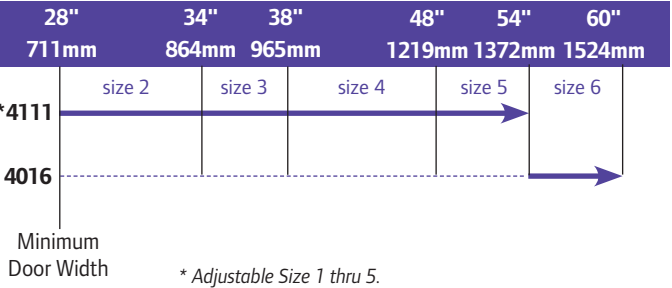
Select closer based on width of door.
The spring power of non-sized 4111 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3.
Sized 4110 series cylinders 6.
Delayed action not available with 4116 cylinder
H - CUSH and SPRING H-CUSH arm not available with 4116 cylinder.

—————> Indicates recommended range of door width for closer size.

EXTERIOR (and VESTIBULE) DOOR WIDTH




INTERIOR DOOR WIDTH



REDUCED OPENING FORCE 4011 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 AUTOMATIC OPERATORS section for information on systems that meet reduced opening force requirements without effecting closing power.

	DOOR WIDTH	36"	42"	48"
	8.5* lbs.	4111	4111	4111
	5.0* lbs.	4111	4111	4111

* Maximum opening force

HOW-TO-ORDER 4110 SERIES CLOSERS

1. SELECT CYLINDER SIZE

- ☐ 4111 (adjustable from size 1 to 5)
- ☐ 4116 (DEL, SHCUSH or HCUSH arm not available)

2. SPECIFY HAND

- ☐ RH
- ☐ LH

3. SELECT FINISH

- ☐ Standard Powder Coat _____
Aluminum, Dark Bronze, Statuary,
Light Bronze, Black, Brass.

4110 CLOSER OPTIONS

Closer will be shipped with:

- STANDARD COVER,
 - FIFTH SCREW SPACER,
 - EDA ARM,
 - SELF-REAMING and TAPPING SCREWS
- unless options listed below are selected.

CYLINDER

- ☐ Delayed Action ((DEL), not available with 4116)
- ☐ Advanced Variable Backcheck (AVB)

COVER

- ☐ Metal (MC)

FINISH

- ☐ Custom Powder Coat (RAL) _____
(handed metal cover required)
- ☐ Plated Finish, US _____
(handed metal cover required)
- ☐ SRI primer

SPECIFY ARM

- ☐ Hold-Open Extra Duty (HEDA)
- ☐ Fusible Link, 165° F (FL)
- ☐ Cush-N-Stop (CUSH)
- ☐ H-Cush-N-Stop (n/a with 4116 cylinder)
(HCUSH)
- ☐ Spring Cush (SCUSH)
- ☐ Spring H-Cush (n/a with 4116 cylinder)
(SHCUSH)
- ☐ Extra Duty (EDA)
- ☐ H-Extra Duty (HEDA)

SCREW PACK

- ☐ TB*, Self-Reaming & Tapping (TBSRT)
- ☐ Wood & Machine Screw (WMS)
- ☐ TB*, Wood & Machine Screw (TBWMS)
- ☐ TORX Machine Screw (TORX)
- ☐ TB* & TORX Machine Screw (TBTRX)

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

INSTALLATION ACCESSORIES

- ☐ Plate, 4110-18
- ☐ CUSH Shoe Support, 4110-30
- ☐ Blade Stop Spacer, 4110-61
- ☐ PA Flush Panel Adapter, 4110-419

SPECIAL TEMPLATE

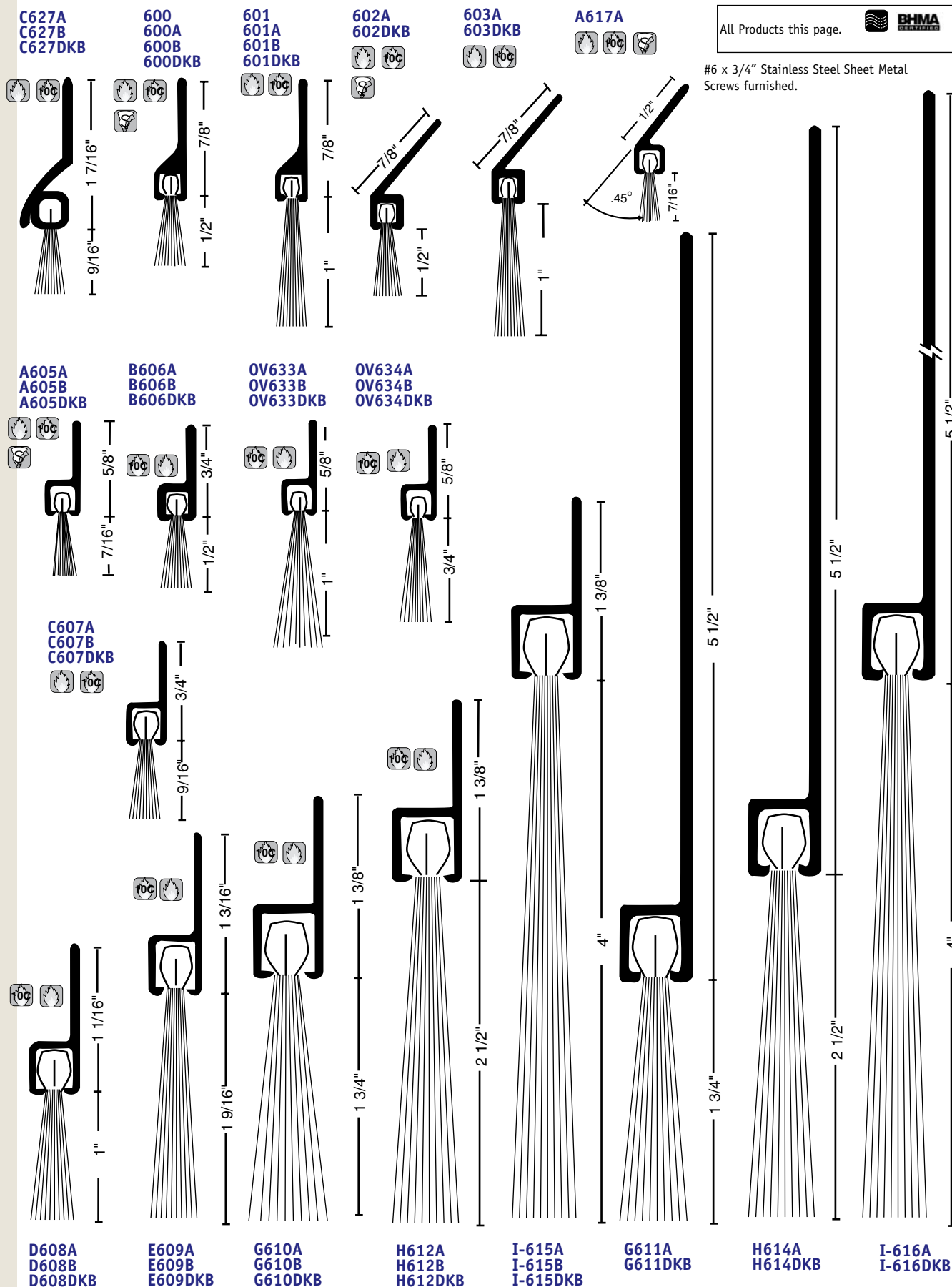
- ☐ ST- _____



National Guard Products, Inc.
PROTECTION, INSIDE OUT

Toll Free Phone 1-800-647-7874
Toll Free Fax 1-800-255-7874

Wild Hair® - Nylon Brush Seals





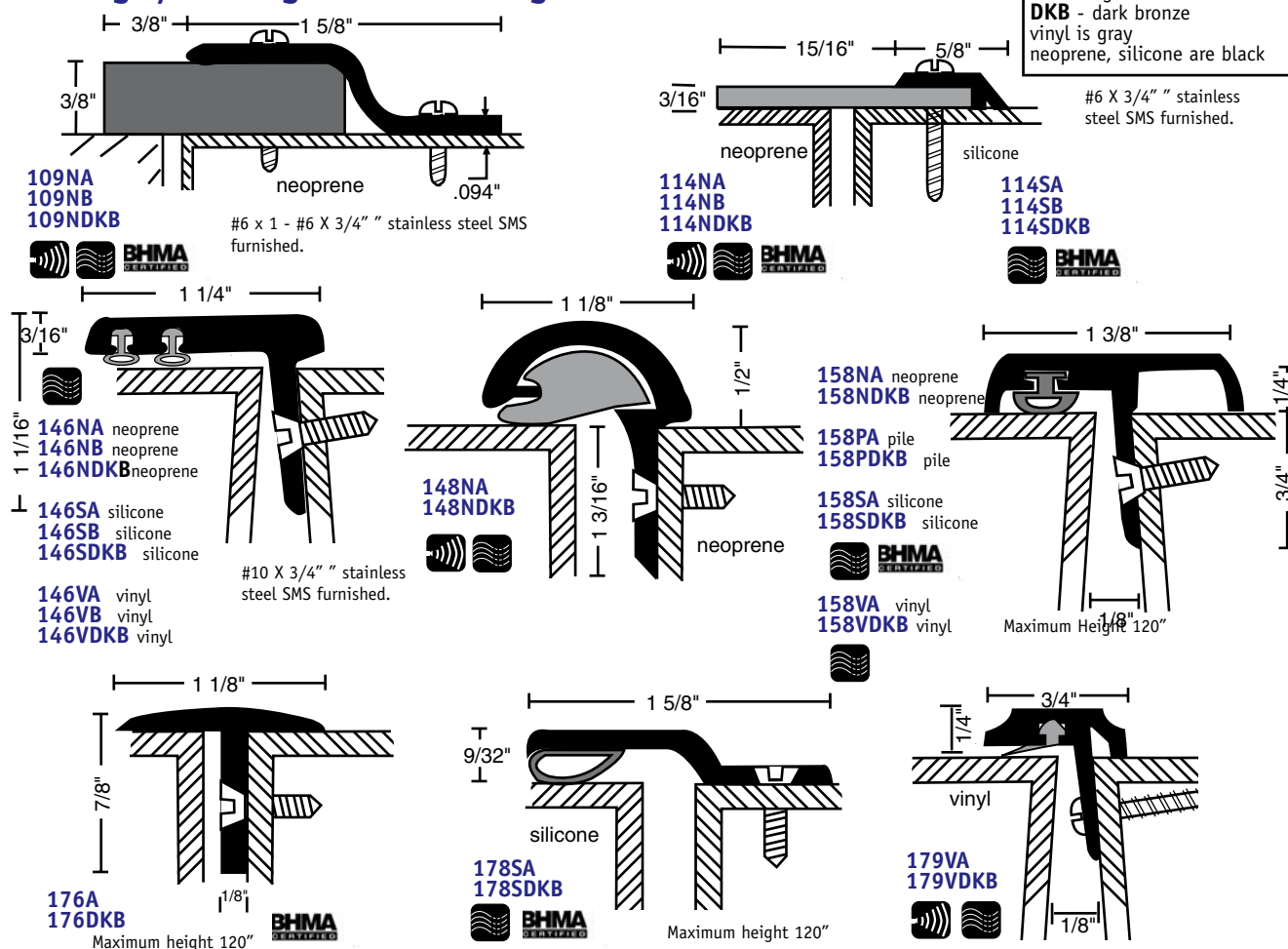
National Guard Products, Inc.

PROTECTION, INSIDE OUT

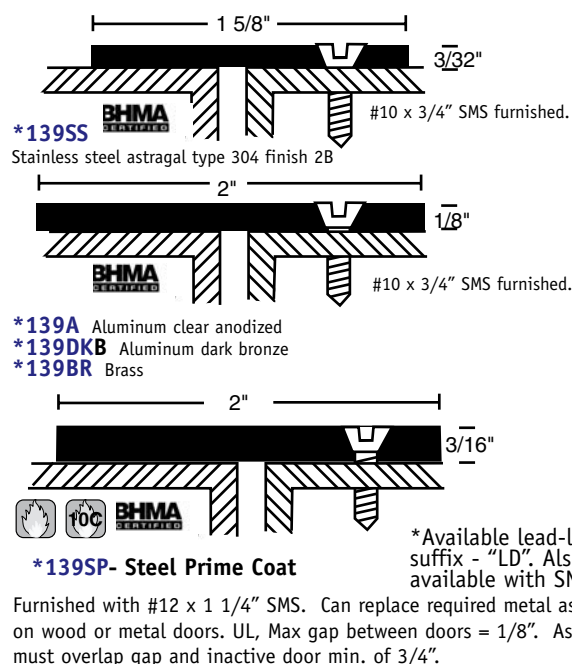
Toll Free Phone 1-800-647-7874
Toll Free Fax 1-800-255-7874

Astragals - Overlapping Surface Mounted

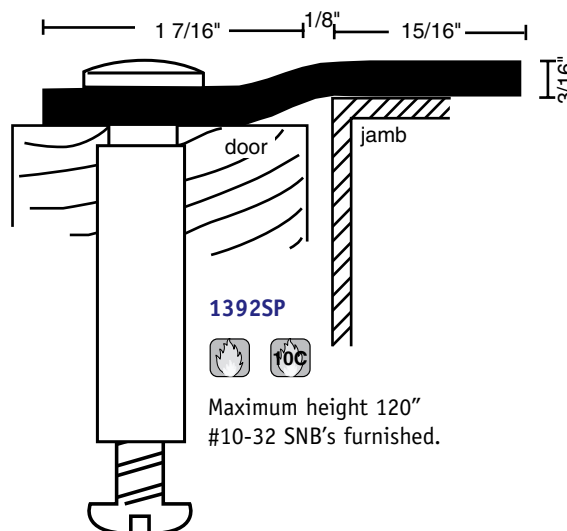
Astragal/Meeting Stile Gasketing



Solid Metal Astragal Seals



Steel Security Astragal





National Guard Products, Inc.
The products you count on. The people you trust.

Phone: 800-647-7874
Fax: 800-255-7874

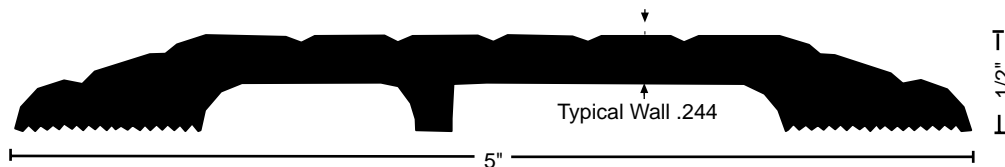
www.ngp.com

HEAVY DUTY THRESHOLDS

- * For use where forklift or vehicular traffic occurs.
- * Greatly exceeds ANSI A156 .21 load test requirements.
- * Optional "SIA" (Slick It Ain't) fused slip-resistant finish recommended in moisture prone areas.

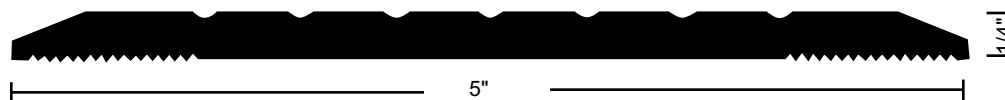


All thresholds this page



425HD 1.6 lbs./ft.

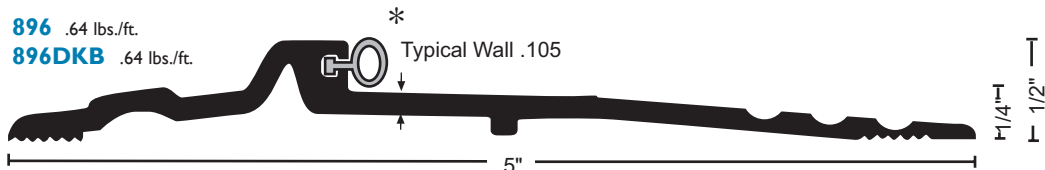
425HDDKB 1.6 lbs./ft.



513HD 1.4 lbs./ft.

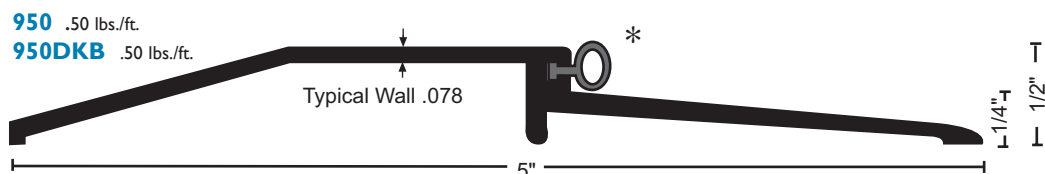
513HDDKB 1.4 lbs./ft.

ADA COMPLIANT BUMPER SEAL THRESHOLDS



896 .64 lbs./ft.

896DKB .64 lbs./ft.



950 .50 lbs./ft.

950DKB .50 lbs./ft.

Excellent for use with
Automatic Door Bottoms

FASTENERS

#10 x -1-1/2" FH zinc plated wood screws are included on mill finish thresholds. Zinc plated antique bronze finish screws are provided to match DKB finish.

MATERIALS & FINISHES

- Aluminum mill finish
- DKB - Aluminum dark bronze finish

Slip Resistant SIA Finish



All thresholds are available with our slip resistant, non-skid finish for better traction. Suffix "SIA".



Bumper Seal

Seals against the door providing weather resistance

Vinyl ("V") supplied unless other material is specified

Options:

Neoprene ("N")

Silicone ("S")





Accessories

Electronic Horns and Door Position Switches

Electronic Horns



Specifications

- Current Draw:
Less than 14 mA @ 12 V
Less than 28 mA @ 24 V
Less than 71 mA @ 24 V, with strobe
- Operating Temperature:
32°F to 120°F
- Anechoic Room @30 V 102 dba
- UL Reverbrant Room @30 V 88 dba

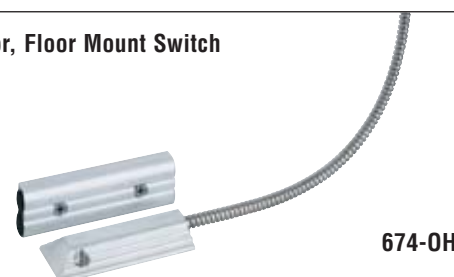
Features

- Electric horns are designed for use as an immediate local audible warning device incorporated in a security system. 1910 Selica Horns have eight combinations of volume, tone, and code that are easily user configurable. Strobe and latching combinations are also available.
- Units are flush and surface mountable using a standard one or two gang electrical box. Surface and flush mounting kits are included with all horns.
- All horns are off white in color and come with a skirt for a clean finish.
- Designed for indoor use only.
- Available in four models:
1910-1 Horn 12/24 VDC
1910S-1 Horn with Strobe 24 VDC
L1910-1 Horn with Latching 24 VDC
L1910S-1 Horn with Strobe and Latching 24 VDC

Door Position Switches

Door position switches come in a variety of shapes and sizes and are designed for monitoring a wide range of applications, including door positions, roof hatches, gates etc.

Overhead Door, Floor Mount Switch



674-OH

Concealed SPDT Magnetic Switches

For Wood Doors
and Frames
0.3 Amps @ 30 VDC



679-05

For Hollow Metal Doors
and Frames
0.3 Amps @ 30 VDC



679-05 HM

For Wood Doors
and Metal Frames
0.3 Amps @ 30 VDC



679-05 WD

Mortise Mount Mechanical SPDT Ball Switch

0.5 Amps @ 28 VDC



7803

Concealed/Flush Mount

For aluminum, wood and hollow
metal doors
0.25 Amps @ 30 VDC



7764

Surface Mount

For aluminum, wood and hollow
metal doors
0.25 Amps @ 30 VDC



7766



PS902

2 amp Power Supply

Overview

Schlage's comprehensive line of power supplies and option boards were designed to address the changing needs of the access control market.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This new design eliminates the need for racks and side connectors. The flat mounting of the option boards also provides for easier access to the terminal blocks for connection of electrified devices (such as electrified strikes, electromagnetic locks, card readers, etc).

Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues) when signal provided.

* All PS900 Series of power supplies and option boards have been tested and certified to meet UL 294.



*Photo as shown includes optional board(s)
Please contact your local sales office or visit the support section on our website for configuration assistance.*

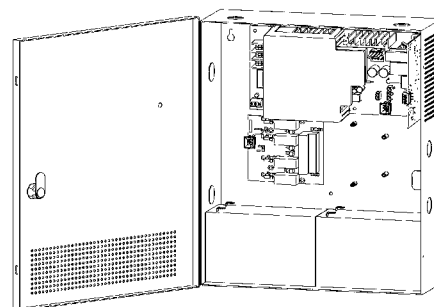
System Components
PS902 Power Supply

Features and Benefits

- 2A @ 12/24 VDC output, field selectable with jumper
- Class 2 Rated power limited output
- Universal 120 -240 VAC input
- Low voltage DC, regulated and filtered
- Single polarized connector for distribution board
- Fused primary input
- AC input and DC output monitoring circuit w/ LED indicators
- Cover mounted AC input indication
- Hinged cover w/ lock down screws
- High voltage protective cover

OPTIONS

- Emergency Interface Relay (FA)
- Battery Backup
- 2 relay QEL panic device control board
- 4 relay distribution board
- 4 relay distribution board with logic
 - Field configurable for:
 - Time delay function
 - Auto operator
 - Security interlock
- 8 fused output distribution board
- 8 PTC output distribution board



PS902

PS902 Power Supply Specifications	
Specification	Description
Input Voltage	120/240 VAC, 50/60 Hz, universal input
Output Voltage	2A @ 12 or 24 VDC Field selectable with jumper Switching supply, 5% regulation, 240mVpp max ripple
Enclosure	Grey / Baked enamel 14"H x 12"W x 4"D Eight 1/2" x 3/4" Knockouts NEMA Grade 1 Hinged cover with lock down screws
Operating Temperature	32°-120° F (0°-49° C)
Certifications	UL 294 Class 2 RoHS FCC Part 15
Option Board Compatibility	900-BB: Battery Backup 900-BBK: Battery Backup Kit (backup board and battery pack) 900-FA: Fire Alarm 900-2RS: 2 Relay Control Board 900-4R: 4 Relay Output Board 900-4RL: 4 Relay Logic Board 900-8F: Fused 8 Zone Distribution Board 900-8P: PTC 8 Zone Distribution Board
AC Primary Fuse Size	3.15A, 250v, 5 x 20mm SLOW-BLOW
Battery Fuse Size	7.5A 32v ATO blade style
DC Output Protection	Overload protection - current limited foldback circuit
Indicators	LED indicators: -AC input (visible on outside of enclosure) -DC output Isolated SPDT contacts to monitor AC power status
Weight (Power Supply)	Approx. 9.0 lbs
Weight (Each Battery)	4.0 lbs
AC Input Termination	3 position terminal block with protective cover Wire capacity: 10 AWG max.
DC Output Termination	2 position terminal block Wire capacity: 12 AWG max.
Distribution board connectors	1
Fire Alarm board connector	Yes
Keylock	Optional



L-Series Commercial Locks

Nothing is tougher.

At Schlage we know that every product you specify has to stand up to constant use and abuse. Your building's locking systems face an additional challenge – keeping people and other assets safe while delivering constant, reliable performance. Schlage L-Series Extra Heavy Duty Mortise Locks are built to withstand the rigors of daily use without fail.

We don't compromise on security.

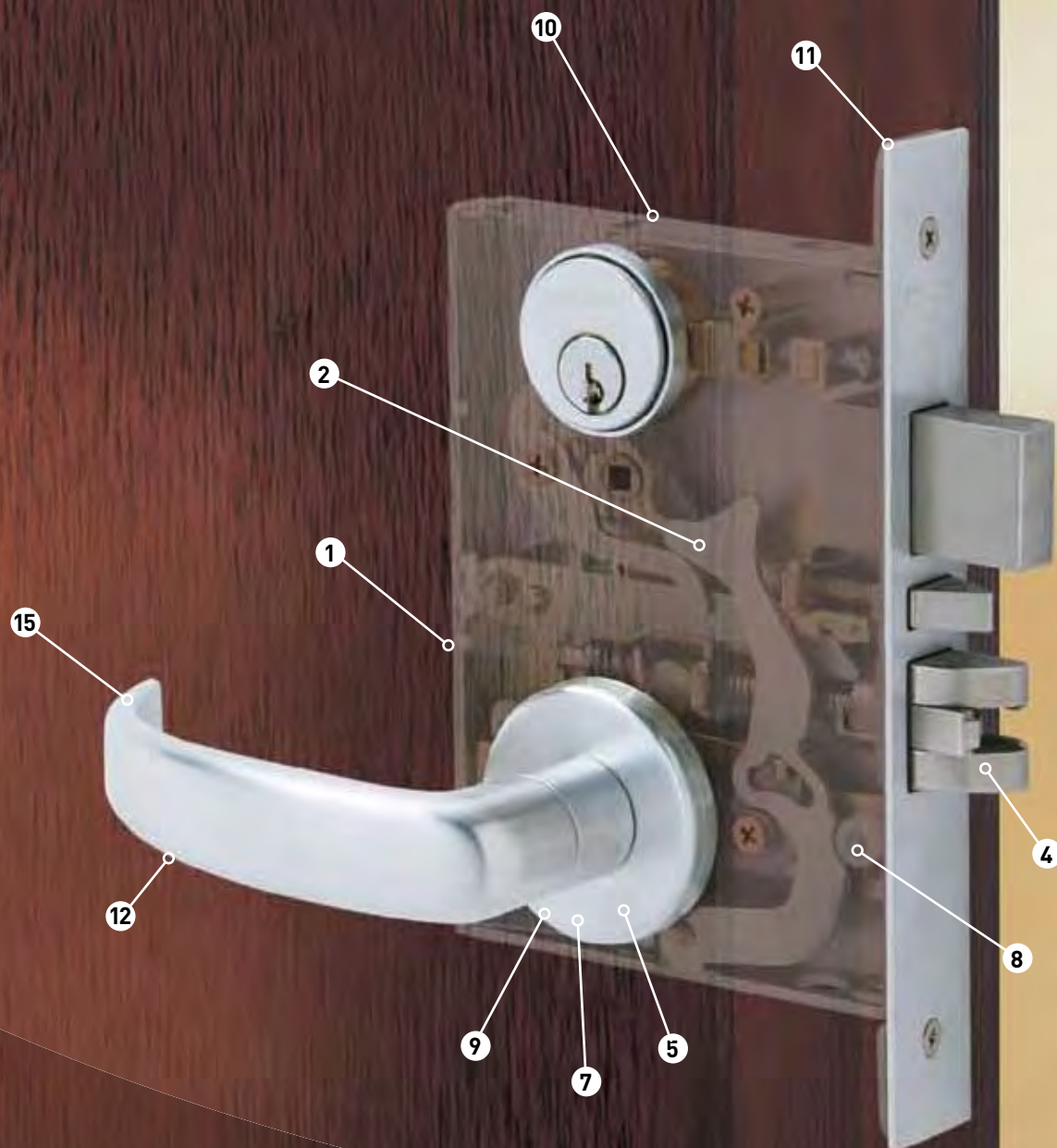
The safety and security of your clients' buildings is something we take very seriously. That's why every Schlage lock and deadbolt undergoes intensive testing to determine its ANSI grade level:

- Cycle tests
- Door impact tests
- Bolt strength tests
- Resistance tests
- Warped door tests

We pay attention to these details so you can focus on creating a functional and aesthetically pleasing environment for your clients. In fact, every one of our L-Series locks meets ANSI Grade 1 standards for safety.



Real Security Sets You Free.™



Vandlgard®

The L-Series Vandlgard is ideal for areas subject to abuse or anywhere vandalism is likely to be present. Vandlgard prevents damage to internal lock components caused by excessive force from kicking, hitting or standing on the lever to gain access.

It's easy to retrofit standard L-Series locks with Vandlgard using the Vandlgard Retrofit Kit and an instructional DVD that shows installation on existing hardware.

danmark Lever Designs

615

Material: Forged brass and
cast stainless steel



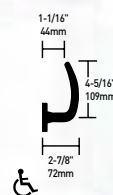
621

Material: Forged brass and
cast stainless steel



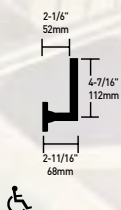
695

Material: Forged brass and
cast stainless steel



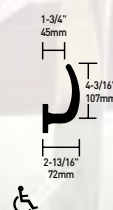
615

Material: Forged brass and
cast stainless steel



690

Material: Forged brass and
cast stainless steel



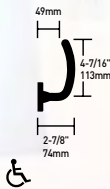
Finish Key



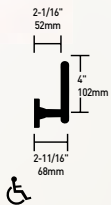
630
Stainless Steel



660
Material: Forged brass and
cast stainless steel



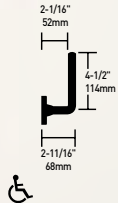
650
Material: Forged brass and
cast stainless steel



696
Material: Forged brass and
cast stainless steel



640
Material: Forged brass and
cast stainless steel



L-Series Commercial Levers

High Performance Meets High Style

Bright and brushed finishes in brass, bronze, chromium, stainless steel and more.

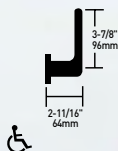
Knobs or levers. Sleek sophistication or classic elegance. The L-Series collection offers the choices you need – and a few that might surprise you.

Lever Designs and Finishes



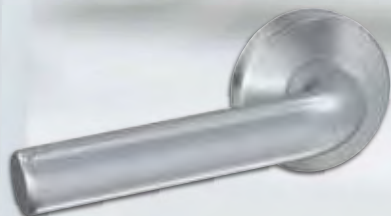
01

Material: Forged brass and cast stainless steel
Finishes: 605, 606, 609, 610, 619, 625, 626, 629, 630



03

Material: Forged brass, bronze and cast stainless steel
Finishes: 605, 606, 609, 610, 611, 612, 613, 616, 619, 625, 626, 629, 630



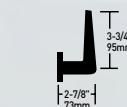
02

Material: Forged brass and cast stainless steel
Finishes: 605, 606, 609, 610, 619, 625, 626, 629, 630



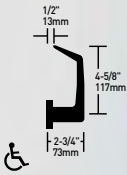
05

Material: Forged brass, bronze and cast stainless steel
Finishes: 605, 606, 609, 610, 619, 625, 626, 629, 630

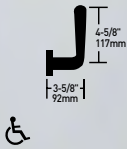




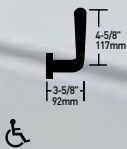
06
Material: Forged brass, bronze and cast stainless steel **Finishes:** 605, 606, 609, 610, 611, 612, 613, 616, 619, 625, 626, 629, 630



07
Material: Forged brass, bronze and cast stainless steel **Finishes:** 605, 606, 609, 610, 611, 612, 613, 616, 619, 625, 626, 629, 630



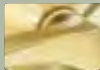
12
Materials: Forged brass, bronze and cast stainless steel **Finishes:** 605, 606, 609, 610, 611, 612, 613, 616, 619, 625, 626, 629, 630 Specify door hand



Finish Key



605
Bright Brass



606
Satin Brass



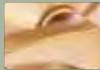
609
Antique Brass



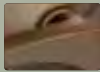
610
Bright Brass, Blackened



611
Bright Bronze



612
Satin Bronze



613
Oil Rubbed Bronze



616
Antique Bronze



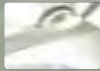
619
Satin Nickel



625
Bright Chromium Plated



626
Satin Chromium Plated



629
Bright Stainless Steel



630
Satin Stainless Steel

Lever Designs and Finishes



17

Material: Forged brass, bronze and cast stainless steel

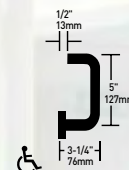
Finishes: 605, 606, 609, 610, 611, 612, 613, 616, 619, 625, 626, 629, 630



93

Material: Extruded brass, bronze or stainless steel

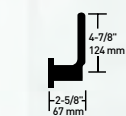
Finishes: 605, 606, 609, 610, 611, 612, 613, 616, 619, 625, 626, 629, 630



18

Material: Forged brass, bronze and cast stainless steel

Finishes: 605, 606, 609, 610, 619, 625, 626, 629, 630



Omega

Material: Forged brass, bronze and cast stainless steel

Finishes: 605, 606, 609, 610, 613, 619, 625, 626, 629, 630





ASTI

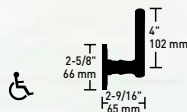
Material:

Solid forged brass

Finishes: 605, 606,

609, 610, 611, 619,

625, 626



41 (D Orbit)

Material: Heavy wrought
bronze, or stainless steel

Finishes: 605, 606, 612, 613,
625, 626, 629, 630



Merano

Material:

Solid forged brass

Finishes: 605, 606,

609, 610, 611, 619,

625, 626



42 (D Plymouth)

Material: Heavy wrought,
bronze, or stainless steel

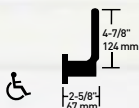
Finishes: 605, 606, 612, 613,
625, 626, 629, 630



St. Annes

Material: Solid
forged brass

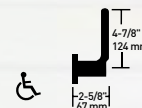
Finishes: 619, 626



Accent

Material: Solid
forged brass

Finishes: 619, 626



Escutcheons and Roses

Choose from three types of escutcheon and four rose sizes to add tough, durable performance to your lockset.

Escutcheons



L Full Face

Material: Cold-forged brass, bronze or stainless steel

Finishes: 605, 606, 612, 613, 619, 625, 626, 629, 630

Size: 8" x 1 3/4" x 7/16"
(203 mm x 44 mm x 11mm)



L Concealed

Material: Cold-forged brass, bronze or stainless steel

Finishes: 605, 606, 612, 613, 619, 625, 626, 629, 630

Size: 8" x 1 3/4" x 7/16" (203 mm x 44 mm x 11 mm)



N Escutcheon

Material: Heavy wrought reinforced brass, bronze or stainless steel

Finishes: 605, 606, 612, 613, 619, 625, 626, 629, 630

Size: 8" x 2 9/16" x 7/16"
(203 mm x 65 mm x 11 mm)



Roses



A Wrought Rose

2 1/8" (54 mm) diameter

Available for use on L-Series knob and lever designs.

Order by letter designation corresponding to the design and diameter desired.



B Wrought Rose

2 9/16" (65 mm) diameter

Available for use on L-Series knob and lever designs.

Order by letter designation corresponding to the design and diameter desired.



Avanti (AVA)

2 5/8" (67 mm) diameter

Available for use on L-Series knob and lever designs.

Order by letter designation corresponding to the design and diameter desired.



Merano (MER)

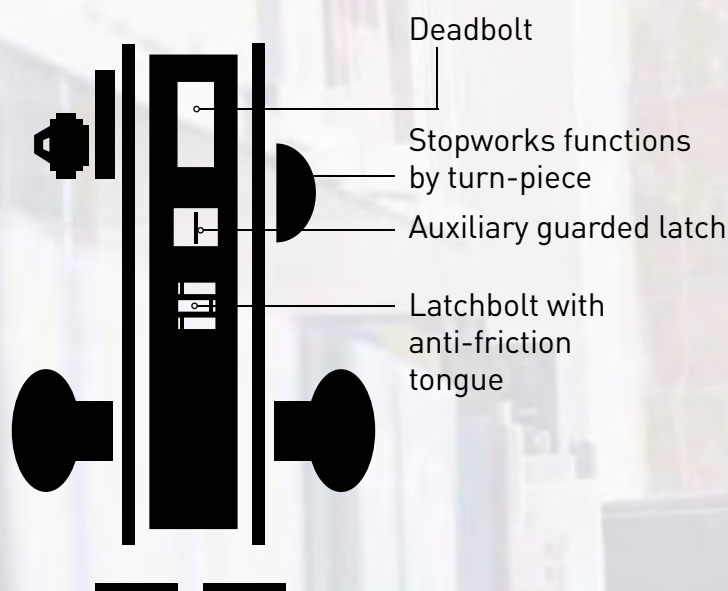
2 5/8" (67 mm) diameter

Available for use on L-Series knob and lever designs.

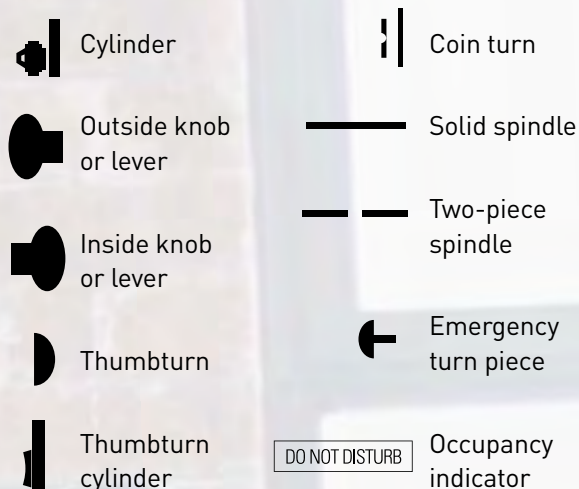
Order by letter designation corresponding to the design and diameter desired.

Lock Functions

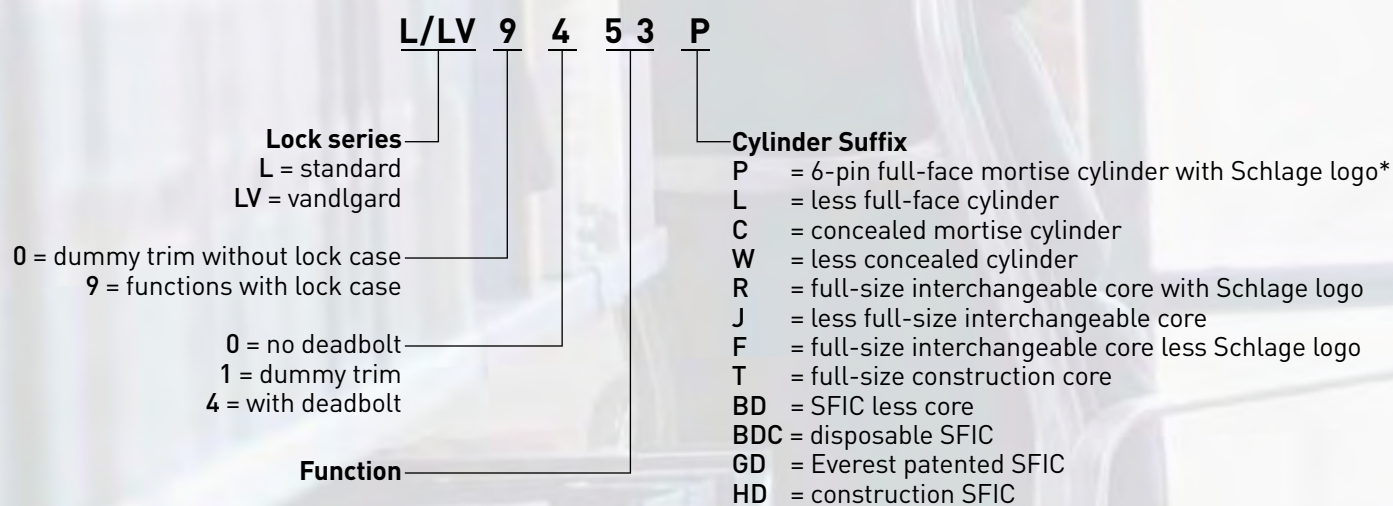
Lock Components



Symbol Key



Product Identification Guide












SFIC = Small Format (Best® style) Interchangeable Core

To order less Schlage logo, specify lock "with K510-612 faceplate."

LV = Vandlgard® function allows exterior lever to rotate freely down while remaining securely locked.



*In a double-door application where the dummy will be used as the strike order 10-091 Armored Front Strike separately.

Lock Functions | ANSI A156.13, Series 1000


Schlage	ANSI		Schlage	ANSI	
	L9010 F01 Passage Latch	Latchbolt retracted by knob/lever from either side at all times. Inside lever is always free for immediate egress.		L9444 LV9444 Privacy with Deadbolt and Coin Turn Outside	Latchbolt retracted by knob/lever from either side. Deadbolt thrown or retracted by inside thumbturn or outside coin turn. Throwing deadbolt locks outside knob/lever. Rotating inside knob/lever simultaneously retracts deadbolt and latchbolt, and unlocks outside knob/lever. Rotating outside coin turn retracts deadbolt and unlocks outside knob/lever. Specify per L283-056 for Torx screws. Available with rose trim only. Inside lever is always free for immediate egress. (Previously XL11-868)
	L9040 LV9040 Bath/Bedroom Privacy Lock	Lock Latchbolt retracted by knob/lever from either side unless outside is locked by inside thumbturn. Turning inside knob/lever or closing door unlocks outside knob/lever. To unlock from outside, remove emergency button, insert emergency thumbturn (furnished) in access hole and rotate. Inside lever is always free for immediate egress..		L0170 Half Dummy Trim	Knob/lever on one side fixed by mounting bar.
	L9044 LV9044 Privacy With Coin Turn Outside	Latchbolt retracted by knob/lever from either side unless outside is locked by inside thumbturn or outside coin turn. Operating inside knob/lever, closing door, rotating inside thumbturn or rotating outside coin turn unlocks outside knob/lever. Specify per L283-056 for Torx® screws. Available with rose trim only. (Previously XL11-868)		L0172 Full Dummy Trim	Knob/lever on both sides fixed by mounting bar.
	L9440 LV9440 F19 Privacy With Deadbolt	Latchbolt retracted by knob/lever from either side. Deadbolt thrown or retracted by inside thumbturn. Throwing deadbolt locks outside knob/lever. Rotating inside knob/lever simultaneously retracts deadbolt and latchbolt, and unlocks outside knob/lever. To unlock from outside, remove emergency button, insert emergency thumbturn in access hole and rotate. Inside lever is always free for immediate egress. (Previously XL11-761)		L9175 Half Dummy Trim with Lock Case	Fixed knob/lever on one side inoperable. Includes lock case and armored front. Options same as L9176 below.
				L9176 Full Dummy Trim with Lock Case	Fixed knob/lever on both sides. Includes lock case and blank armor front. May be ordered with optional XL11-743 armored front with cutout to receive deadbolt.

Lock Functions | Single Cylinder Non-Deadbolt Functions

	Schlage	ANSI	
	L9050 LV9050 Office and Inner Entry Lock Latchbolt retracted by knob/lever from either side unless outside is made inoperative by key outside or by turning inside thumbturn. When outside is locked, latchbolt is retracted by key outside or by knob/lever inside. Outside knob/lever remains locked until thumbturn is returned to vertical or unlocked by key. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever is always free for immediate egress.	F04	
	L9056 LV9056 L9050 with Automatic Unlocking Latchbolt retracted by knob/lever from either side unless outside is made inoperative by key outside or by rotating inside thumbturn. Outside knob/lever unlocked by key outside or thumbturn. Rotating inside knob/lever simultaneously retracts latchbolt and unlocks outside knob/lever. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever is always free for immediate egress. (Previously XL11-776)		
	L9070 LV9070 Classroom Lock Latchbolt retracted by knob/lever from either side unless outside is locked by key. Unlocked from outside by key. Inside knob/lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever is always free for immediate egress.	F05	
	L9076 LV9076 Classroom Holdback Lock Latchbolt retracted by knob/lever from either side unless outside is locked by key. When locked, latchbolt retracted by key outside or knob/lever inside. Auxiliary latch deadlocks latchbolt when door is closed. Depress inside knob/lever and turn key 360° for holdback feature. Inside lever is always free for immediate egress.	F06	
	L9080 LV9080 Storeroom Lock Latchbolt retracted by key outside or by knob/lever inside. Outside knob/lever always inoperative. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever is always free for immediate egress.	F07	
	L9080EL LV9080EL Electrically Locked (Fail Safe) Outside knob/lever continuously locked by 24VAC or DC. Latchbolt retracted by key outside or by knob/lever inside. Switch or power failure allows outside knob/lever to retract latchbolt. Auxiliary latch deadlocks latchbolt when door is closed. Inside knob/lever always free for immediate exit. Inside lever is always free for immediate egress.		

	Schlage	ANSI
	L9080EU LV9080EU Electrically Unlocked (Fail Secure) Outside knob/lever unlocked by 24VAC or DC. Latchbolt retracted by key outside or knob/lever inside. Auxiliary latch deadlocks latchbolt when door is closed. Inside knob/lever always free for immediate exit. Inside lever is always free for immediate egress.	
	L9080EL-RX LV9080EU-RX Request to Exit (RX) Electrified Lock Same as L9080EL and L9080EU functions. In addition, a micro switch positioned inside the lock case monitors the retractor crank, and is actuated when rotation of the inside or outside knob/lever rotates the retractor hub. The switch signals the use of that opening to security systems, allowing a non-disruptive means of immediate egress. Specify per L283-059 for normally closed contacts (default). Specify L283-125 for normally open contacts. Inside lever is always free for immediate egress. (Previously XL11-807)	


Lock Functions | Single Cylinder Deadbolt Functions



Schlage **ANSI**


L9453 **F20**
LV9453
Entrance Lock

Latchbolt retracted by knob/lever from either side unless outside is locked by 20° rotation of thumbturn. Deadbolt thrown or retracted by 90° rotation of thumbturn. When locked, key outside or knob/lever inside retracts deadbolt and latchbolt simultaneously. Outside knob/lever remains locked until thumbturn is restored to vertical position. Throwing deadbolt automatically locks outside knob/lever. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever is always free for immediate egress.




L9456 **F13**
LV9456
Corridor Lock

Latchbolt retracted by knob/lever from either side. Deadbolt thrown or retracted by key outside or inside thumbturn. Throwing deadbolt locks outside knob/lever. Turning inside knob/lever simultaneously retracts deadbolt and latchbolt and unlocks outside knob/lever. Inside lever is always free for immediate egress.




L9465
Closet/Storeroom Lock

Latchbolt retracted by knob/lever from either side. Deadbolt thrown or retracted by key outside.




L9473 **F21**
Dormitory/Bedroom Lock

Latchbolt retracted by knob/lever from either side. Deadbolt thrown or retracted by key outside or thumbturn inside.




L9480
LV9480
Storeroom Lock With Deadbolt

Latchbolt retracted by key outside or by lever or knob inside. Outside knob/lever always fixed. Deadbolt thrown or retracted by key outside or thumbturn inside. Turning inside knob/lever simultaneously retracts both deadbolt and latchbolt. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever is always free for immediate egress. (Previously XL11-591)



L9485
LV9485
Prison Function Lock


Latch retracted by key outside or knob inside. Outside knob always free spinning. Deadbolt only thrown or retracted by guard's key. Inside knob becomes fixed when deadbolt is thrown. Prisoner's key only retracts latchbolt. Furnished standard with tamper resistant Torx® screws. Specify per XL11-557.



Schlage **ANSI**

L9485
LV9485
Hotel or Restroom Lock


Latchbolt retracted by key outside or by knob/lever inside. Outside knob/lever always fixed. Deadbolt thrown or retracted by inside thumbturn. When deadbolt is thrown, all keys become inoperative except emergency or display keys. Turning inside knob/lever retracts both deadbolt and latchbolt simultaneously. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever is always free for immediate egress.



DO NOT DISTURB

L9486 **F15**
LV9486
Hotel or Restroom Lock with "Do Not Disturb" Indicator


Latchbolt retracted by key outside or by knob/lever inside. Outside knob/lever always fixed. Deadbolt thrown or retracted by inside thumbturn. When deadbolt is thrown, "DO NOT DISTURB" plate is displayed. All keys become inoperative except emergency or display keys. Turning inside knob/lever retracts both deadbolt and latchbolt simultaneously. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever is always free for immediate egress.



OCCUPIED

L9486 x L583-375
LV9486 x L583-375
L9486 with "Occupied" Indicator

Latchbolt retracted by key outside or by knob/lever inside. Outside knob/lever always fixed. Deadbolt thrown or retracted by inside thumbturn. When deadbolt is thrown, "OCCUPIED" plate is displayed and all keys become inoperative except emergency keys. Turning inside knob/lever simultaneously retracts both deadbolt and latchbolt. Auxiliary latch deadlocks latchbolt when door is closed. (Previously XL11-580) Inside lever is always free for immediate egress.








OCCUPIED




L9496
Privacy with "Occupied" Indicator

Knob/lever retracts latchbolt from either side. Deadbolt thrown or retracted by key outside (retraction by key required in the event of an emergency) or inside thumbturn. Throwing deadbolt locks outside knob/lever and displays "OCCUPIED" plate. Rotating inside knob/lever simultaneously retracts both deadbolt and latchbolt and unlocks outside knob/lever. Inside lever is always free for immediate egress. (Previously XL11-885)





Lock Functions | Double Cylinder Non-Deadbolt Functions

	Schlage	ANSI
	L9060 LV9060	F09
	Apartment Entrance Lock	
	Latchbolt retracted by knob/lever from either side unless outside is locked by key from inside. When locked, latchbolt retracted by key outside or knob/lever inside. Auxiliary latch deadlocks latch- bolt when door is closed. Inside lever is always free for immediate egress.	
	L9071 LV9071	
	Classroom Security Lock	
	Latchbolt retracted by knob/lever from either side unless outside is locked by key from either side. When locked, latchbolt retracted by key outside or knob/lever inside. Auxiliary latch deadlocks latchbolt when door is locked. Inside lever is always free for immediate egress.	
	L9077 LV9077	
	Classroom Security Holdback Lock	
	Latchbolt retracted by knob/lever from either side unless outside is locked by key from either side. When locked, latchbolt retracted by key outside or knob/lever inside. Auxiliary latch deadlocks latchbolt when door is locked. Depress inside knob/lever and turn key 360° for holdback feature. Inside lever is always free for immediate egress.	
	L9082 LV9082	F30
	Institution Lock*	
	Latchbolt retracted by key from either side. Knob/lever on both sides always inoperative. Auxiliary latch deadlocks latchbolt when door is closed.	
	L9082EL LV9082EU	
	L9082 Electrically Locked or Electrically Unlocked Both Sides*	
	EEL: Outside and inside knob or lever continually locked electrically. Latchbolt retracted by key either side. Switch or power failure allows outside and inside knob/lever to retract latchbolt. Auxiliary latch deadlocks latchbolt when door is closed. EU: Outside and inside knob/lever unlocked electrically. Latchbolt retracted by key either side. Switch or power failure keeps inside and outside knob/ lever locked. Auxiliary latch deadlocks latchbolt when door is closed. (Previously XL11-452)	





Lock Functions | Double Cylinder Deadbolt Functions

	Schlage	ANSI
	L9457 LV9457	
	Classroom Security Lock	
	LLatchbolt retracted by knob/lever from either side. Deadbolt thrown or retracted by key from either side. Throwing deadbolt locks outside knob/lever. Turning inside knob/lever simultaneously retracts deadbolt and latchbolt and unlocks outside knob/lever. Inside lever is always free for immediate egress.	
	L9466 LV9466	F14
	Store/Utility Room Lock*	
	Latchbolt retracted by knob/lever from either side. Deadbolt thrown or retracted by key from either side.	
	L9482 LV9482	
	Institution Lock with Deadbolt*	
	Latchbolt retracted by key from either side. Knob/lever on both sides always inoperative. Deadbolt thrown or retraced by key either side. Auxiliary latch deadlocks latchbolt when door is closed. Specify per XL11-543.	



Lock Functions | Full Mortise Deadlocks

	Schlage	ANSI
	L9460 LV9460	F17
	Cylinder x Thumbturn Lock	
	Deadbolt thrown or retracted by key outside or thumbturn inside.	
	L9462 LV9462	F16
	Double Cylinder Lock*	
	Deadbolt operated by key from either side.	
	L9463 LV9463	
	Classroom Lock	
	Deadbolt thrown or retracted by key from outside. Inside thumbturn cylinder retracts deadbolt, but cannot project it.	
	L9464 LV9464	F18
	Cylinder Lock	
	Deadbolt thrown or retracted by key from one side. No trim on opposite side.	







Lock Functions | Full Mortise Deadlocks Cont.

	Schlage	ANSI
	L9460 x XL11-635 L9460 with Pull	
	Knob/lever both sides fixed. Deadbolt thrown or retracted by key outside or thumbturn inside.	
	L9460 x XL11-886 Single Cylinder Deadlock with Pull	
	Dadbolt thrown or retracted by key outside or thumbturn inside. No latch, but inside knob or lever is spring-loaded. Rotating inside knob/lever also retracts deadbolt. Fixed outside knob/lever.	
	L9462 x XL11-886 Double Cylinder Deadlock with Pull	
	Dadbolt thrown or retracted by key from either side. No latch, but inside knob/lever is spring-loaded. Rotating inside knob/lever also retracts deadbolt. Fixed outside knob/lever.	
	L9464 x XL11-886 Deadlock with Pull	
	Dadbolt thrown or retracted by key from one side. No latch, but inside knob/lever is spring-loaded. Rotating inside knob/lever also retracts deadbolt. Fixed outside knob/lever.	

Special Functions

	L9040 LV9040 Privacy With Turns Both Sides	
	Latchbolt retracted by knob/lever from either side unless outside is locked by inside or outside thumbturn. Operating inside knob/ lever, closing door or rotating either thumbturn unlocks outside knob/lever. Specify per XL11-446.	
	L9110 x XL11-741 Full Dummy Trim with Lock Case*	
	Spring-loaded knob/lever both sides. Includes lock case and blank armored front. May be ordered with optional XL11-743 armored front with cutout to receive deadbolt	

Lock Functions | Small Mortise Deadlocks

	Schlage	ANSI
	L460 Cylinder x Thumbturn Lock	E06071
	Dadbolt thrown or retracted by key outside or thumbturn inside.	
	L462 Double Cylinder Lock*	E06061
	Dadbolt operated by key from either side.	
	L463 Classroom Lock	E06091
	Dadbolt thrown or retracted by key from outside. Inside thumbturn cylinder retracts deadbolt, but cannot project it.	
	L464 Cylinder Lock	E06081
	Dadbolt thrown or retracted by key from one side. No trim on opposite side.	
	L480 Door Bolt	
	Dadbolt thrown or retracted by thumbturn from one side. No trim on opposite side.	
	L496 Deadbolt with "Occupied" Indicator	
	Dadbolt thrown or retracted by key outside or thumbturn inside. When deadbolt is thrown "OCCUPIED" plate is displayed. (Previously XL11-911)	

*In a double-door application where the dummy will be used as the strike order 10-091 Armored Front Strike separately.

Caution: Double cylinder locks on residences and any door in any structure which is used for egress are a life safety hazard in times of emergency and their use is not recommended. Installation should be in accordance with existing codes only.

Electrified Lock Function

Applications:

Security control centers, cashier rooms, fire safety exits, stairwell doors, telephone equipment rooms, computer rooms, hospital equipment and narcotics storage areas.

Regulating Devices:

Recognition Systems, Inc., HandReaders, wall switches, security consoles, access card readers, thermo-sensitive devices, smoke and fire alarms, telephone access controls, automatic time devices and computerized controls.



All installations should be in accordance with local electrical codes and National Electrical Code, NFPA 70.

Electrical Requirements for EL or EU

Voltage: 24V AC or 24V DC (maximum 29V, minimum 20V)
Peak Current: Amps 1.3 at 5 to 10 second intervals
Holding Current: Amps .135 between peak current intervals
Operating Temperature: Maximum +151° F, minimum -31° F

Micro Switch Electrical Requirements for Request to Exit (RX) Function

Amps: 1.0
Volts: 24 AC or DC
Peak Load: Amps, 5; volts, 250 AC or DC

Replacement Kit

L283-053 – Solenoid and driver, EL or EU



L9080EL LV9080EL

Electrically Locked (Fail Safe)

Outside knob/lever continuously locked by 24V AC or DC. Latchbolt retracted by key outside or by knob/lever inside. Switch or power failure allows outside knob/lever to retract latchbolt. Auxiliary latch deadlocks latchbolt when door is closed. Inside knob/lever always free for immediate exit.

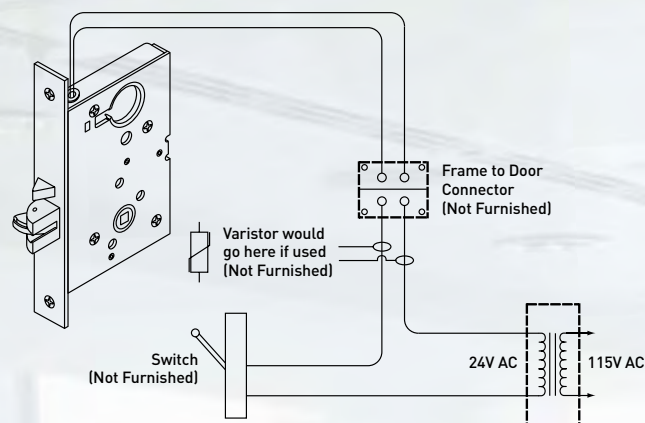


L9080EU LV9080EU

Electrically Unlocked (Fail Secure)

Outside knob/lever unlocked by 24V AC or DC. Latchbolt retracted by key outside or knob/lever inside. Auxiliary latch deadlocks latchbolt when door is closed. Inside knob/lever always free for immediate exit.

Typical Wiring Diagram for Electrified L-Series Locks



Typical Installation

- Electrified L-Series locks contain a transistorized circuit that provides full voltage to the solenoid upon initial application of electrical power and at 5 to 10 second intervals.
- Each lock should preferably have its own 24-volt transformer. Two or more locks may be operated in parallel from a single transformer, provided it has the necessary current rating.

NOTE: DO NOT connect locks in series from a higher voltage rated transformer.

- We DO NOT recommend that these locks be connected to a supply circuit that also contains electromagnetic devices. If an electromagnetic device is connected to the supply circuit, the resulting transient voltages could damage the lock. The transient voltage must be carefully suppressed at the equipment producing them before connecting the lock to the same circuit.
- A varistor rated at 35 volts (peak recurrent) may be used for transient voltage protection.



L9080EL-RX L9080EU-RX

Request to Exit (RX) Electrified Lock

Same as L9080EL and L9080EU functions. In addition, a micro switch positioned inside the lock case monitors the retractor crank, and is actuated when rotation of the inside or outside knob/lever rotates the retractor hub. The switch signals the use of that opening to security systems, allowing a non-disruptive means of immediate egress. Specify per L283-059 for normally closed contacts (default). Specify L283-125 for normally open contacts. [Previously XL11-807]

Specifications

Handing:

L9000-Series lock bodies are field-reversible without disassembly.
L400-Series locks are non-handed, except L463.

Door Thickness:

1³/₄" (44 mm) standard. 1³/₈" (35 mm) to 2¹/₂" (64 mm) optional. Over 2¹/₂" (64 mm) door ranges vary by function and trim. Specify door thickness if other than 1³/₄".

Backset:

2-3/4" (70 mm) only.

Armored Front:

L9000-Series: 1¹/₄" x 8" x 7/32" (32 mm x 203 mm x 6 mm) standard.
1¹/₁₆" x 8" x 17/32" (27 mm x 203 mm x 6 mm) optional.

L400-Series: 4⁷/₁₆" x 3⁵/₈" x 1" (113 mm x 92 mm x 25 mm)

Case Size:

L9000-Series: 4⁷/₁₆" x 6¹/₁₆" x 1" (113 mm x 154 mm x 25 mm)

L400-Series: 4⁷/₁₆" x 3⁵/₈" x 1" (113 mm x 92 mm x 25 mm)

Spacing:

Knob or lever to cylinder, 3⁷/₈" (98mm); knob or lever to thumbturn hub, 2¹¹/₁₆" (68mm).

Bolts:

1" (25mm) throw stainless steel deadbolt and 3/4" (19mm) throw stainless steel latch with anti-friction tongue.

Exposed Trim:

Knobs: #41 and #42 heavy-duty wrought brass, bronze or stainless steel knobs match D-Series knobs.

Levers: Forged brass or bronze and cast stainless steel. Designs available to match ND-Series levers.

93 Lever Design: Extruded brass, bronze or stainless steel.

Mediterranean Designs: Forged-brass lever and rose.

Escutcheons: L escutcheons are cold-forged brass or bronze and stainless steel. N escutcheons are heavy wrought reinforced brass, bronze and stainless steel.

Trim Combinations: Available with knob both sides, lever both sides, or knob and lever with rose or escutcheon both sides.

Strike:

L9000-Series: ANSI curved lip strike 1¹/₄" x 4⁷/₈" (32 mm x 124 mm) x 1³/₁₆" (30 mm) lip to center with dust box standard. L400-Series: 1¹/₈" x 3⁵/₈" (29 mm x 92 mm) with dust box.

Cylinder & Keys:

6-pin Everest C123 keyway cylinder with two patented keys standard.

Keying Options:

Interchangeable core and Primus high security cylinders. Master keying, grand master keying and construction keying.

Certifications

ANSI:

L9000: ANSI A156.13 Series 1000, Grade 1 Operational and Security, UL Listed for 3-hour fire door (except L9076 and L9007). With interchangeable core cylinders: Grade 2 Security.

With Concealed Shell Cylinder: A156.13 Grade 1 Operational and Security. ANSI/ASTM F476-76 Grade 40, UL Listed. L400: ANSI A156.5 Grade 1

California State Reference Code:

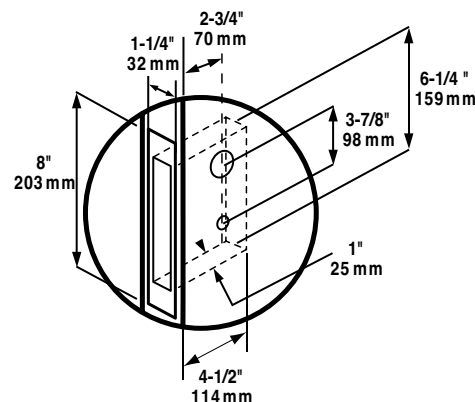
(Formerly Title 19, California State Fire Marshal Standard) All levers with returns

comply; levers return to within 1/2" of door face.

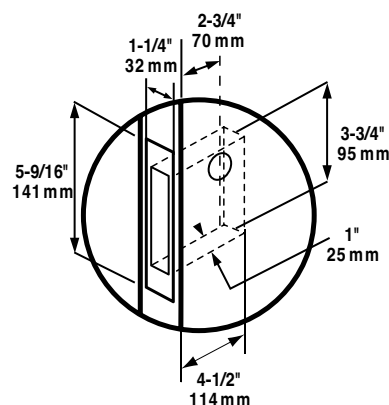
UL / cUL:

All locks listed for A label single doors, 4' by 10'. Letter F and UL symbol on latch front indicate listing. Electrified functions are UL19X Listed for single-point locking applications. UL437 Listed locking cylinder optional: specify Primus 20-500 Series cylinder.

Door Preparation for L9000 Series



Door Preparation for L400 Series



How to Order

To order Schlage products, descriptive data should be in the same sequence as shown.

Line Item	Qty	Product	Outside		Inside		Hand	Front	Strike	Door Thickness	Ext	Dim	Additional Details
			Des	Fin	Des	Fin							
1	2	3	4	5	6	7	8	9	10	11	12	13	14

1 Line item number

2 Quality

3 Complete model number with function and cylinder type

To order cylinder options, change "P" at the end of the model number as follows:



L9453P Standard

L9453L Less standard cylinder. For Primus cylinder, specify this option and order Primus cylinder separately.

L9453C With temporary plastic construction cylinder. Double cylinder functions ordered less cylinder are furnished with these construction cylinders to maintain timing of key cams.



L9453J Prepared for full size interchangeable core, less core. For Primus core, specify this option and order Primus core separately.

L9453R With full-size conventional interchangeable core installed. Order control keys separately.

L9453T With full-size (temporary) construction core installed. Order all keys separately.



L9453BD Prepared for small format (Falcon, Best, etc.) interchangeable core (SFIC), less core.

L9453GD With Everest B Family restricted keyway small format core installed. Order control keys separately.

L9453HD With small format keyed brass construction core installed. Order all keys separately.



L9453BDC With small format disposable plastic construction core installed.

4/5 Outside design / finish. Specify tactile warning (knurling) here as "8" before lever design, e.g. 803. To specify complete design, combine the numeric knob or lever design with the alpha rose or escutcheon design. Example: 03L, 93A, 42B. When ordering Mediterranean design levers with L escutcheons, specify AST/00L, AVA/00L or MER/00L.

6/7 Inside design/finish. Leave blank if same as outside.

8 Hand. One hand per line item.

9 Front (use "Strike" field on Schlage form). Leave blank for standard armored front or enter number for narrow front.

10 Strike. Leave blank for standard or specify part number for optional strike. LLL = Less Strike.

11 Door thickness, if non-standard. Example: 200 = 2".

12 Extension, to specify whether thick door is extended inside (EI), outside (EO), differently (ED) or equally (EE).

13 Dimension for strike lip lengths. See strike page for availability of specific dimensions with specific strikes.
 100 = 1" 114 = 1 1/4" 112 = 1 1/2" 200 = 2"
 118 = 1 1/8" 138 = 1 3/8" 134 = 1 3/4"

14 Keying detail (e.g. key symbol, keyway, bitting) and other special requirements.

Example

Line Item	Qty	Product	Outside		Inside		Hand	Front	Strike	Door Thickness	Ext	Dim	Additional Details
			Des	Fin	Des	Fin							
1	50	L9453P	03A	626			RH		10-091				
2	50	L9453P	03A	626			LH		10-091				
3	10	L9040	03A	626			RH			138			
4	10	L9040	03A	626		625	LH	09-668		138			
5	50	L9456P	07L	626		625	RH	09-668					
6	50	L9456P	07L	626			LH						

Note: Schlage order forms are available at no charge by contacting your IR Security & Safety Consultant or Customer Service.

VON DUPRIN®

6223, 6224, 6224AL, 6226 ELECTRIC STRIKES

6223

Closed back electric strike for use with mortise locks **without deadbolt** or cylindrical locks on 1³/₄" (44mm) or 2¹/₄" (57mm) thick double door (hollow metal, aluminum or wood) applications. Designed to replace Von Duprin 3091 and 3092, mortise applications only — 4³/₄" (120mm) minimum stile required.

6224

Closed back electric strike for use with mortise locks **without deadbolt** or cylindrical locks on 1³/₄" (44mm) or 2¹/₄" (57mm) thick double door (hollow metal, aluminum or wood) applications. Designed to replace Folger Adam 310-2³/₄.

6224AL

Closed back electric strike for use with mortise locks **without deadbolt** or cylindrical locks on 1³/₄" (44mm) or 2¹/₄" (57mm) thick

aluminum double door applications. Designed to replace Folger Adam 310-2RF.

6226

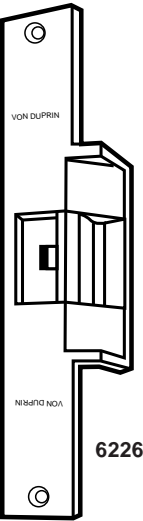
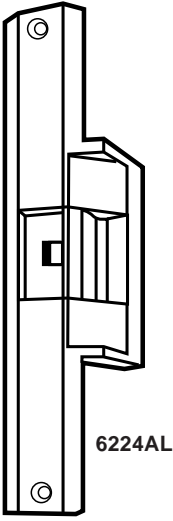
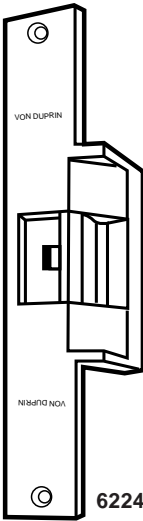
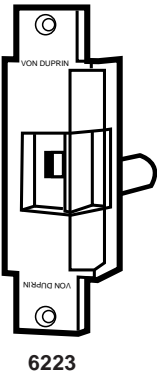
Closed back electric strike for use with mortise locks **without deadbolt** or cylindrical locks on 1³/₄" (44mm) or 2¹/₄" (57mm) thick double door (hollow metal, aluminum or wood) applications. Designed to replace Folger Adam 310-2.

FEATURES

- All Stainless Steel Construction
- Accepts 3/4" (19mm) Throw Latchbolt
- Six Finishes
- Non-handed
- Fail Secure
- Plug Connectors

OPTIONS

- Fail Safe
- Dual Monitor Switches
- Entry Buzzer



SPECIFICATIONS	12V	24V
Resistance in Ohms ± 10% @ 70°F	21	72
Watt-seated @ 70°F	7.5	8
Amps-seated @ 70°F	.6	.33
Amps-inrush @ 70°F	.6	.33

UL listed Burglary Resistant CVXY and Electric Strike for fire doors or frames GXAY (fail secure only). ANSI E59321

DIMENSIONS AND CONFIGURATIONS

6223	6224	6224AL	6226

VON DUPRIN® Accessories

Electrical Power Transfer

Electric Power Transfer provides a means of transferring electrical power from a door frame to the edge of a swinging door. The units are completely concealed when the door is in the closed position, and are ideally suited for installations involving abuse or heavy traffic.

Two models are available; EPT-2, two 18 gauge wires and EPT-10, ten 24 gauge wires.

The EPT-2 and EPT-10 are UL listed as “miscellaneous door accessory.”

Pneumatic Controls

PNT-1 is available for pneumatic latch retraction exit devices. Appearance and dimensions are identical to EPT models.

UL listed for use on fire doors.

Door Applications

- Up to 5” butt hinges - 180° Swing
- 5 1/2” butt hinges - 130° Swing
- 6” butt hinges - 110° Swing
- 3/4” butt offset pivots - 180° Swing

Not for use with swing clear hinges or center-hung pivots.

SPECIFICATIONS	
Housing	— 9” x 1¼” x 1⅝” (229mm x 32mm x 38mm)
EPT-2	— Two 18 gauge wires Up to 2 amps @ 24VDC, with a 16 amps maximum surge
EPT-10	— Ten 24 gauge wires, up to 1 amp @ 24VDC, with a 16 amps maximum surge
PNT-1	— 5/32” Tubing

TO ORDER, SPECIFY:

1. EPT-2, EPT-10 or PNT-1
2. Finish, SP28 or SP313



UL Listed as “Miscellaneous” Fire Door Accessory” GVUX

Junction Box

High quality NEMA 1, junction boxes provide convenient installation, available in three models. These surface mounted units are 10” (254mm) high, 10” (254mm) wide and 6” (152mm) deep and includes hinged door with twist turn lock. 24 position terminal strip will accept from 24 to 12 gauge wire.

Five models:

- JB7** Junction box only.
- JB7-R1** Junction box with SPDT Relay.
- JB7-R2** Junction box with DPDT Relay.
- JB7-R3** Junction box with DPDT Relay on Make Relay.
- JB7-R4** Junction box with DPDT Relay on Brake Relay.



VON DUPRIN® 98/99™ Rim Exit Device



299 Strike



98 and 99 rim exit devices for all types of single and double doors with mullion, UL listed for Panic Exit Hardware. Devices are ANSI A156.3 – 2001 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). See Opposite page for available outside trim and device functions. Covers stock hollow metal doors with 86 or 161 cutouts on single doors (may cover cutouts on pairs – consult template).




The 98/99 devices are available in the following finishes: US3, US4, US10, US26, US26D, US28, 313AN, 315AN and US32D for the 98 device only. See page 52 for component finishes and the inside cover for finish chips.





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 914 mm)	Door Size
	4'	2'10" to 4' (864 mm to 1219 mm)	Door Size
Strikes	299 – Dull Black Optional Strikes – see page 39		
Dogging Feature	Hex key dogging standard		
Dogging Options	CD	Cylinder Dogging	see page 48
	SD	Special Center Case Dogging	see page 48
	LD	Less Dogging	see page 48
Electric Options	LX	Latchbolt Monitor Switch	see page 42
	RX	Pushpad Monitor Switch	see page 42
	RX2	Double Pushpad Monitor Switch	see page 42
	E	Electric Locking & Unlocking	see page 44
	EL	Electric Latch Retraction	see page 43
	SS	Signal Switch	see page 43
	CX	Chexit Delayed Exit	see page 45
	ALK	Alarm Exit Kit	see page 42
Miscellaneous Options	PN	Pneumatic Latch Retraction	see page 48
	-2	Double Cylinder	see page 48
	GBK	Glass Bead Kit	see page 49
Fasteners & Sex Bolts (SNB)	Includes 1 ¾" (19mm) – 2 ¼" (57mm) Wood & Metal Doors Optional SNB available for device, see next page for quantities		
Latch Bolt	Deadlocking, ¾" (19mm) throw		
Device Centerline from Finished Floor	39 13/16"	(1011 mm)	
	39 11/16"	(1008 mm) with Mullion	
Center Case Dimensions	8" x 2 ¾" x 2 ¾" (203mm x 70mm x 60mm)		
Mechanism Case Dimensions	2 ¼" x 2 ¼" (57mm x 57mm)		
Projection	Pushbar Neutral – 3 13/16" (97 mm) Pushbar Depressed – 3 1/16" (78 mm)		

See page 53 for How to Order specification

VON DUPRIN® 98/99™ Rim Exit Device Standard Trim

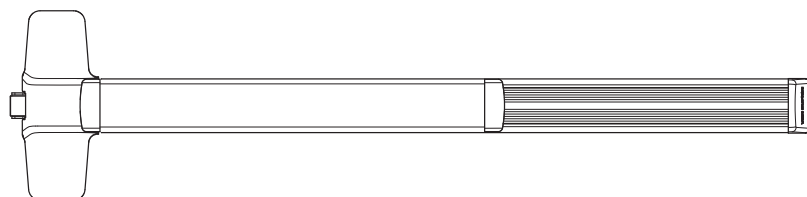
	Exit only	Dummy Trim Pull when Dogged	Night Latch Key Retracts Latchbolt	Night Latch Key Retracts Latchbolt Optional Pull Required
				
Product Description	98EO 99EO	98DT 99DT	98NL 99NL	98NL-OP 99NL-OP
Trim Description	---	990DT	990NL-R/V	110NL-MD 110NL-WD
Escutcheon Plate Size	---	3" x 14 ³ / ₁₆ " x ³ / ₃₂ " (76x360x2mm)	3" x 14 ³ / ₁₆ " x ³ / ₃₂ " (76x360x2mm)	---
Pull Center to Center	---	5 ¹ / ₂ " (140mm)	5 ¹ / ₂ " (140mm)	---
Projection	---	2" (51mm)	2" (51mm)	---
ANSI Function	01	02	03	03
Cylinder Type	---	---	Rim	Rim
Optional Trim (See pages 32 – 34)	x990EO x992EO x994EO x996EO	x991K-DT x992L-DT x994L-DT x996L-DT x696DT x697DT	x991K-NL x992L-NL x994L-NL x996L-NL x696NL x697NL	
Optional #425 Sex Bolt Quantity for Device	6	2	2	6

	Lever Key Locks & Unlocks	Lever – Night Latch Key Retracts Latchbolt	Lever – Blank Escutcheon Always operable (No Cylinder)	Lever Dummy Trim Pull when Dogged
				
Product Description	98L 99L	98L-NL 99L-NL	98L-BE 99L-BE	98L-DT 99L-DT
Trim Description	996L-R/V	996L-NL-R/V	996L-BE-R/V	996L-DT-R/V
Escutcheon Plate Size	2 ³ / ₄ " x 10 ³ / ₄ " x ²⁷ / ₃₂ " (70x273x21mm)	2 ³ / ₄ " x 10 ³ / ₄ " x ²⁷ / ₃₂ " (70x273x21mm)	2 ³ / ₄ " x 10 ³ / ₄ " x ²⁷ / ₃₂ " (70x273x21mm)	2 ³ / ₄ " x 10 ³ / ₄ " x ²⁷ / ₃₂ " (70x273x21mm)
Pull Center to Center	---	---	---	---
Projection	2 ⁷ / ₈ " (73mm)	2 ⁷ / ₈ " (73mm)	2 ⁷ / ₈ " (73mm)	2 ⁷ / ₈ " (73mm)
ANSI Function	08	09	---	02
Cylinder Type	Rim	Rim	---	---
Optional Trim (See pages 32 – 34)	x992L x994L	x992L-NL x994L-NL	x992L-BE x994L-BE	x992L-DT x994L-DT
Optional #425 Sex Bolt Quantity for Device	2	2	2	2

For optional trims and functions see pages 32-34

VON DUPRIN®

Quiet Electric Latch Retraction - QEL



About the product

The QEL option provides electronic control of an exit device and is ideally suited for environments where limited operational noise is desired. The QEL option allows for the electronic unlatching of exit devices for continuous push-pull operation and/or access control and can be activated through a building automation system, access control system or by a control system operator.

The device always provides mechanical egress but can also be tied to an access system to unlatch when a credential is presented or may be held unlatched (dogged) for extended periods to provide free entry. If manual dogging is also required, special center case dogging is available for rim devices, specify SD-QEL. The SD-QEL option is not available on the 9875 or 9975 devices.

QEL devices are also useful with automatic door operators, and may be applied to fire-rated applications when under the control of an automatic fire alarm system.

Features and Benefits

- Quiet operation both mechanically and electrically
- On-board installation and troubleshooting diagnostics built into power supply and device
- Automatic calibration – automatically adjusts latch throw and pull
- Pushbar is pulled in electronically for quieter operation when dogged
- Vandal resistant – detects and responds to vandals
- Built-in time delay

System Components / Compatible Products

QEL is an option for 98/99 series (including XP) and 33a/35a Series devices.

The PS873 with the 871-2Q option card are required system components.

A single PS873 power supply will support up to four QEL devices.

The QEL option does not include the power transfer from door to frame, the power supply, or the control operator. Refer to Von Duprin catalog for information on EPT-2 power transfer and the PS873 power supply.

Specifications Compliance

- Devices are BHMA Certified to ANSI/BHMA A156.3 (2001) Grade 1 for Exit Devices
- Devices are UL and cUL Listed as “Panic Hardware” (UL 305) and as “Fire Exit Hardware” (UL 10C)
- The PS873 and 871-2Q Board are UL Listed as “Burglary-Resistant Electric Locking Mechanism Accessory” (UL 1034) for Class 2 Circuit Applications.
- The QEL Conversion Kit is UL Classified under “Accessories for Single-Point Locks and Latches and Fire Exit Hardware” (UL 10C)

To order, specify:

- Standard — Use prefix QEL, *example QEL99L.*
- Special Center Case Dogging — Use prefix SD-QEL, *example SD-QEL99L.*

About Ingersoll Rand Security Technologies

Ingersoll Rand Security Technologies is part of Ingersoll Rand Company Limited a global provider of products and services that make environments safe secure and productive. Von Duprin is among its industry leading brands with an unparalleled reputation for quality and innovation. Celebrating its 100th year, Von Duprin is credited with introducing the first exit device in 1908 and today continues to provide the industry's best exit devices and trim.