

# 6300 Series

Surface mounted strike for rim exit devices

## Overview

Von Duprin electric strikes are known for their reliability, durability and security. The 6300 Series strike is designed to withstand abuse with its heavy-duty stainless steel certification construction is fully UL 1034 and UL 10C listed ANSI/BHMA Grade 1.

The 6300 Series strike is designed for use with a variety of rim exit devices. As an electrified strike, it allows remote release of a locked door by activating a movable lip (keeper) using an entry/exit button or credential reader and can be a cost effective means for managing access. It is ideal for aftermarket applications and designed to install without modifying or altering the door frame.

Designed for fail-secure (FSE) only mode, the 6300 Series strike achieves compliance with UL10C for 3-hour fire-rated openings. It also enables field-selectable 12 or 24 VDC with AC conversion optional.

To assure the proper selection of an electric strike on new applications, lockset compatibility charts are shown on the next page. When using a lockset not listed or when retrofitting a strike to an existing application, please contact Von Duprin Technical Support for application assistance.



- Designed for use with rim exit devices
- Heavy-duty stainless steel construction in BHMA 630 satin finish
- Surface mounted requires no alteration or cutting to existing frame
- Field selectable voltage 12VDC or 24VDC
- Plug-in voltage connectors included for ease of installation and removal during strike servicing
- Non-handed design provides greater flexibility
- Suitable for interior and exterior doors
- UL 10C 3-hour fire-rated (fail secure only)
- UL 1034 listed for burglary-resistant electric door strikes
- UL 294 listed for access control system
- CSFM California State Fire Marshal listed
- ANSI/BHMA A156.31, Grade 1 certified
- Static strength: 1500 lbs
- Dynamic strength 70 ft-lbs
- Endurance 2,000,000 cycles

#### 6300 Series power requirements Model Voltage Current Duty Amps Ohms 6300 12V DC Continuous 0.50 22 6300 24V DC Continuous 0.24 89

Continuous duty = Energized 1 minute or more

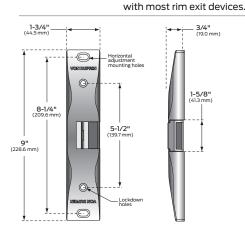
#### Rim exit device compatibility 6300 strikes

Manufacturer	Model Number
Von Duprin	VD 22/22-F Rim
Von Duprin	VD 33A/35A Rim*
Von Duprin	VD 55 Rim
Von Duprin	VD 88 Rim
Von Duprin	VD 98/99 and 98/99-F Rim
Falcon	Falcon 24/24-F Rim*
Falcon	Falcon 25/25-F Rim
Falcon	Falcon 19/19-F Rim
Falcon Doromatic	Falcon Doromatic 1590*
Falcon Doromatic	Falcon Doromatic 1790*
Falcon Doromatic	Falcon Doromatic 2090*
*Stile and frame condition	n may affect compatibility.

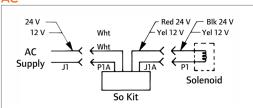
#### Model specifications

Model Specific	Cations
Model number	6300
Retrofits model	N/A
Latchbolt throw	3/4"
Face plate length	9"
Projection	3/4"
Lockset	Rim exit device
Number of doors	Single or pair with mullion
Door/frame type	Hollow metal, aluminum and wood
EB (entry buzzer)	Optional
Certifications/ Listings	ANSI/BHMA A156.31 Grade 1, UL 1034, UL 10C, UL 294, CSFM
Application notes	Surface mounted electric strike ideal for aftermarket applications. Strike designed for use

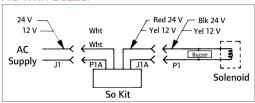
with Von Duprin 98/99, however it can be used



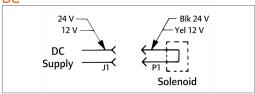
#### AC



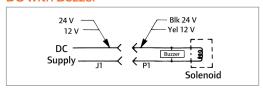
#### AC with buzzer



#### DC

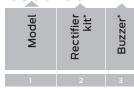


#### DC with Buzzer



## Ordering information





#### \* Optional

#### Selections correspond with the numbers above

1	Model
6300	Surface mounted strike for rim exit devices
2	Rectifier kit (optional)
S012	Converts 12 VAC voltage to 12 VDC to operate the solenoid
S024	Converts 24 VAC voltage to 24 VDC to operate the solenoid
3	Buzzer (optional)
EB	Entry buzzer

#### Standard features

- Power failure mode: Fail-secure only (FSE)
- Voltage: field selectable 24 VDC or 12 VDC
- Finish: stainless steel, satin (BHMA 630/US32D)

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# QEL exit device

A quieter way to make an entrance.

Recent studies show a change of shift at a hospital can reach an unhealthy 113 decibels (dB). To put that into perspective, a symphony orchestra plays at 110 dB. This noise can cause patients to lose sleep, have a higher blood pressure and/or heart rate, and be more disappointed with the hospital services as a whole. Not only are patients receiving negative symptoms, but caregivers become more stressed and fatigued in a noisier environment. Hospitals are doing everything they can to eliminate excess noise to keep their patients and employees happy and healthy!

#### That's where Von Duprin steps in.

When the QEL is used in place of standard electronic latch retraction, the noise level can be reduced to that of a quiet conversation.

Contact your local Allegion representative to learn how the QEL can have a positive impact on your patient satisfaction scores. Visit www.allegion.com, or give us a call 877-671-7011.



## Designed for easier, quieter performance.

Hospital nurseries and patient rooms, libraries, museums and theaters require electrified hardware that operates at whisper-quiet levels. The new Von Duprin QEL couples the reliability and high performance Von Duprin is known for, with quieter operation that won't disrupt meetings, performances or study. In fact, Von Duprin offers one of the quietest entrance/exit solutions when paired with our mechanical and electronic products.



#### **QEL Enhancements**

Modular design. Allows you to upgrade your openings without replacing your existing exit device. A variety of kits are available to meet your specific needs - from retrofitting your mechanical devices to upgrading your solenoid driven EL devices.

You can upgrade an EL to a QEL without changing the Von Duprin or Schlage power supply. If you're tired of the noisy solenoid driven EL's, you can upgrade to a QEL without ordering any new boards for your power supply.

The lower power requirements allow for 4X the wire run. The power supply and QEL device can now be up to 800 ft. away from each other. This allows customers to conveniently mount their power supply with more options, and even centralize them in certain cases.

The new QEL is compatible with any Schlage or Von Duprin power supply through the use of a 900-2RS board. The QEL will also work with an existing PS873 power supply.

Available for 33A/35A, 94/95 and 98/99 series exit devices.

#### Features and Benefits

#### Quietest operation both mechanically and electrically.

**Auto adjust latch retraction.** This feature allows for the latch throw and

On-board Diagnostics. The QEL board has electronic LED's that provide

#### Push pad is pulled in electronically when activated.

**Second try activation.** If the QEL experiences any interference

Vandal Resistance. When the push pad is forcefully pull out while

To learn more, visit www.allegion.com, or give us a call 877-671-7011.

The Healing Power Of Silence." CBSNews. CBS Interactive, 11 Feb. 2009. Web. 21 Sept. 2012. <a href="http://www.cbsnews.com/2102-204\_162-1653740.html?tag=contentMain">http://www.cbsnews.com/2102-204\_162-1653740.html?tag=contentMain</a> Moeller, Nicklas. "Achieving Effective Acoustics in Hospitals." Achieving Effective Acoustics in Hospitals. N.p., 02 Aug. 2012. Web. 21 Sept. 2012. <a href="http://www.hconews.com/print/35554">http://www.hconews.com/print/35554</a>. "Soundproofing & More Soundproofing! Products, Tips and Free Expertise - Decibel Chart." Soundproofing & More Soundproofing! Products, Tips and Free Expertise - Decibel Chart. N.p., n.d. Web. 24 Sept. 2012. <a href="http://www.controlnoise.com/decibel-chart/">http://www.controlnoise.com/decibel-chart/</a>

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# RX and LX

Monitoring switches



## Overview

The RX and LX features are used to signal the use of an opening. The exit devices are equipped with one internal SPDT switch that monitors the pushpad (RX) and one internal SPDT switch that monitors the latch bolt (LX.) The device can be connected to a security console, or may be used as a single door alarm when used with a horn and power supply. A continuous current electric transfer must be used for transferring power from the frame to the door. The RX and LX switches should not be used to control a load, but as a signaling switches. The RX and LX switches are available in a low current (LC) switches which are most commonly used in a computer operated monitoring system.

## Features and benefits

 UL listed FVSR SA163 panic hardware and/or GXHX R4505(N) fire exit hardware

#### RX/LX electrical rating

Standard	Up to 2.0 Amps @ 24VDC maximum			
Low current (LC)	below 50 Milliamps at 24VDC			

#### To order RX or LX, specify

- Standard Use prefix RX or LX, example RX99EO or LX33AEO
- Low current Use prefix RX-LC or LX-LC, example RX-LC98EO or LX-LC35AEO
- RX2 standard (RX only) Use prefix RX2, example RX299EO or RX233AEO

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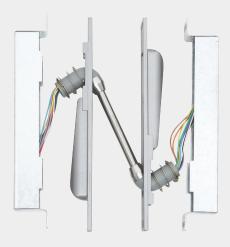


# Electrical power transfer

## Overview

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.



- UL Listed for use on fire doors
- UL listed as Miscellaneous Door Accessory
- Ball-and-socket joint construction provides cut and pinch protection for wiring
- Built for heavy traffic and high abuse openings

## Door applications

- Up to 5" butt hinges 180° swing.
- $5\frac{1}{2}$ " butt hinges  $130^{\circ}$  swing.
- 6" butt hinges 110° swing.
- 3/4" offset pivots 180° swing.

Not for use with swing clear hinges, center-hung pivots, pocket pivots or balanced doors.

Door applications shown are for 1 3/1" door thickness, for all other applications contact Technical Support to confirm compatibility.

#### Finishes

- SP28 (sprayed aluminum)
- SP313 (sprayed duranodic)

Dimensions				
Housing	9" X 1 ½ X 1 5/8 (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 AMPS @ 24VDC, with a 16 AMPS maximum surge			
PNT-1	5/32" tubing			

#### To order, specify

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

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# E996L

Electrified breakaway lever trim

## Overview

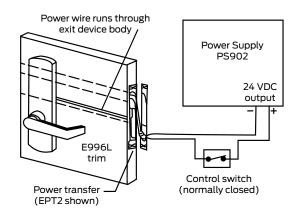
E996L electrified breakaway lever trim provides remote locking and unlocking capabilities while incorporating the patented breakaway trim design. The E996L comes furnished standard in Fail-Safe (FS) condition and can be field converted to Fail-Secure (FSE) where allowed. The E996L is also furnished standard with cylinder operation for NightLatch (NL) function, or with Blank Escutcheon (BE).

When electrically unlocked the unit operates as a normal lever trim. When electrically locked, the lever feels locked, but when more than 35 pounds of torque pressure is applied, the breakaway lever feature engages.



- Wide variety of finishes and lever styles
- Retro-fit kits available

Electrical specifications			
Solenoid	Continuous duty 24VDC		
Solenoid draw	0.22 AMPS		



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# 6400 Series

Modular strike for mortise and cylindrical locksets

## Overview

The 6400 electric door strike from Von Duprin is designed to be modular and highly configurable to fit nearly any mortise or cylindrical lock. This versatile strike allows the installer to insert and lock-in the deadbolt keeper or plug and deadlatch ramp anywhere within its  $3^1/_8$ " vertical opening to fit the latch position and functional needs. This, combined with a  $^1/_8$ " horizontal adjustment, makes this easy-to-install design a good fit for installations where misalignment or a tight fit may be a problem.

As a 3-hour UL 10C listed strike, the 6400 Series is intended as a fail-secure only solution for fire-rated openings. Its durability and quality are shown by its grade 1 certification as a heavy-duty stainless steel strike with over 2,000,000 endurance cycles.

Use it as a time-saving, "go to" strike. The 6400 comes ready for use with prewired plug-in connectors for 12 or 24 VDC voltage that can be changed over to 12 or 24 VAC without a converter kit, two faceplates — one each for offset and centerline locks as well as a trim filler plate, mounting tabs and shims and a self-adhesive template for frame cuts. An optional "plug in" latchbolt monitor is also available and can be added in the field at any time after installation.



- Modular design fits cylindrical and nearly any mortise lock
- Heavy-duty stainless steel construction in BHMA 630 satin finish
- Vertical adjustments allow for alignment with a wide variety of mortise locks with offset latches
- Horizontal adjustment of up to 1/8" improves fit on tight door preps
- Can accommodate up to 1" deadbolt (for night latch only)
- Field selectable voltage 12 or 24VDC and 12 to 24VAC
- Plug-in voltage connectors are included for ease of installation and removal during strike servicing
- Optional plug-in latchbolt monitor can be added in the field
- Non-handed, unique internal solenoid design prevents keeper from heating up
- Low current draw (0.19 amps @ 24 VDC)
- Suitable for interior and exterior doors
- 3-hour fire-rated to UL 10C (fail secure only)
- UL 1034 listed for burglary-resistant electric door strikes
- UL 294 listed for access control system
- CSFM California State Fire Marshal listed
- ANSI/BHMA A156.31, Grade 1 certified
- Static strength: 1500 lbs
- Dynamic strength 70 ft-lbs
- Endurance 2,000,000 cycles

## Lockset compatibility

Vertical adjustment of the deadbolt keeper or deadlatch ramp allows for alignment with a wide variety of mortise locks with offset latches. Accommodates up to 1" deadbolt\* Up to 1/8" horizontal adjustment for misaligned frames. \* Night-latch function only, bolt will not release

6400 Series power requirements						
Model	Mode	Voltage	Duty	Sound	Amps <sup>1</sup>	Ohms <sup>2</sup>
6400	Fail-locked	12 VDC	Continuous	Silent	.375	37
6400	Fail-locked	24 VDC	Continuous	Silent	.190	148
6400	Fail-locked	12-24 VAC	Intermittent	Buzz	.280565	37

Intermittent duty = Energized less than 1 min. with duty ratio 1:5; Continuous duty = Energized 1 min. or more.

- 1 Ratings are based on maximum current draw at +10°C and include initial power-up current draw.
- <sup>2</sup> Nominal resistance at +25°C +/- 7% tolerance.

## Wiring Instructions

Use the appropriate wire harness supplied.

- 12V for 12VDC & 12-24VAC
- 24 for 24VDC only

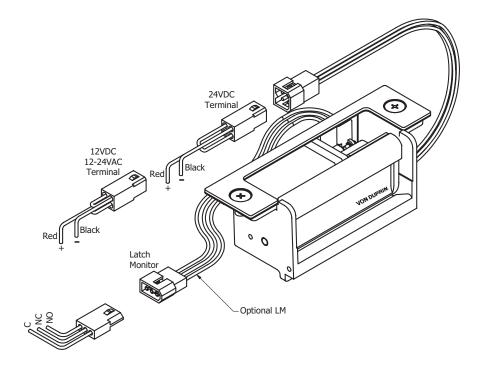
Attach the red wire to (+) positive of the power supply. Attach the black wire to the (-) negative of the power supply. If using AC power, polarity is not observed.

Note: If a suppression diode is required for access control, observe proper polarity.

#### Latch monitor wires

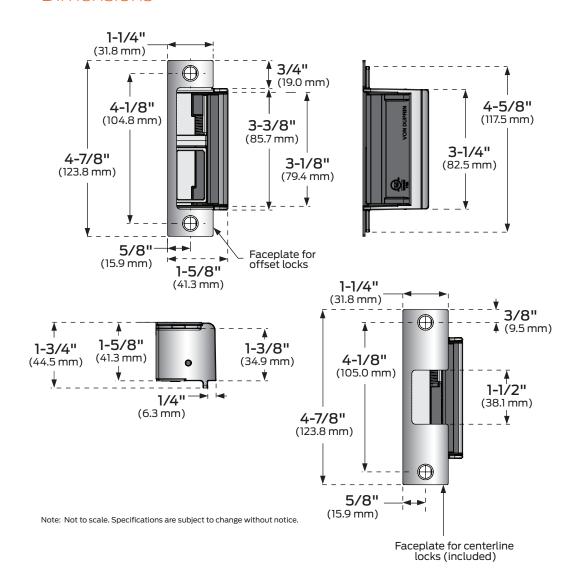
Black = Common (C)

Blue = Normal Close (NC)
Orange = Normal Open (NO)



Model specifications				
Model number	6400			
Latchbolt throw	3/4" (also accomodates 1" deadbolt as a nightlatch only - no release)			
Face plate length	4 <sup>7</sup> / <sub>8</sub> "			
Backbox depth	13/4"			
Finish	US 32D/BHMA 630			
Lockset	Cylindrical, mortise, mortise exit			
Number of doors	Single			
Door/frame type	Hollow metal, aluminum & wood			
Options	EB (entry buzzer)			
Certifications/ Listings	ANSI/BHMA A156.31 Grade 1, 3-hour fire rated to UL 10C (FSE only), UL 1034, UL 294, CSFM			
Application notes	Modular electric strike ideal for aftermarket applications. Fail-secure only for fire-rated openings.			

#### **Dimensions**



## Ordering information



#### Selections correspond with the numbers above

1	Model
6400	Modular Strike
2	Buzzer (optional)
EB	Entry buzzer

#### Accessories

 LM6400 Latchbolt monitor - indicates when door is latched (ships separately)

#### Standard features

- Power failure mode: Fail-secure only (FSE)
- Voltage: Field selectable 12 or 24 VDC and 12 or 24 VAC voltage
- Finish: Stainless steel, satin (BHMA 630/US 32D)
- Centerline and offset face plates included
- Also includes: two plug-in voltage connectors, self-adhesive template for frame cuts, trim filler plate, mounting tabs and shims, as well as tamper-resistant screws with a security driver bit

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## LL

Electric latch retraction



## Overview

The Electric Latch (EL) feature provides remote latch retraction ability to exit devices. A control station operator can flip a switch to retract the latch bolt and immediately change an exit door to push-pull operation. A powerful, continuous solenoid retracts the latch bolt, either for momentary unlatching, or for extended periods of time. The EL feature is an alternative to manual dogging. This feature is available for 98/99 and 33A/35A Series rim, mortise and vertical rod exit devices. There are three dogging options available with the EL feature:

- EL electric latch retraction with no manual dogging
- HD-EL electric latch retraction with manual hex key dogging
- SD-EL electric latch retraction with special center case cylinder dogging (Note: this option is not available on some exit devices. Please refer to price book.)

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

- UL approved for Class II circuit applications
- UL listed FVSR SA163 panic hardware and/or GXHX R450(N) fire exit hardware (consult device catalog for fire rated models)
- Retro-fit kits available to add the EL feature to non-EL devices
- Integrates with reader, strike and software to complete any access control system

EL electrical specifications			
Solenoid Continuous duty 24VDC			
Inrush	16 Amps		
Holding .3 Amp			

#### Wire length and gauge

		Wire length (feet) <sup>1</sup>	Wire gauge (AWG)
	EL 33A/35A	0-500	12
		0-300	14
		0-200	16
a*	All other EL 98/99 and EL 33A/35A device types	0-250	12
		0-150	14
		0-100	16
b*	Control switch	0-1200	18

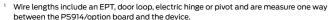
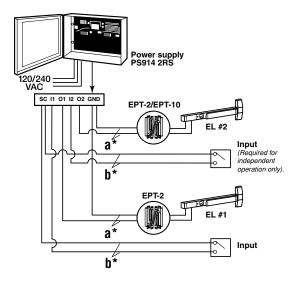


Table is applicable to devices that have shipped after August 2012.

#### To order, specify

- Standard Use prefix EL, example EL99L or EL33AL
- Hex key dogging Use prefix HD-EL, example HD-EL99L or HD-EL33AL
- Special center case dogging (98/99 only) Use prefix SD-EL, example SD-EL99L, handing is required for Special Dogging devices, specify RHR or LHR



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# Concealed vertical cable system

Concealed vertical cable system for 33/3549A and 98/9949 devices

## Overview

This revolutionary patent pending concealed vertical cable (CVC) system uses proven cable technology in a whole new way. Giving doors that require a vertical exit device the same strength and security in a system that's easy to install and maintain. Concealed in the door, the cables and components are protected from use and abuse and provide improved aesthetics.

Building settling and door sagging are problematic with openings and can be challenging to resolve with traditional concealed rod solutions. With our cable solution, should the building settle and cause the door to sag, the bottom latch height can be raised or lowered by one person without removing the door from the frame.

If a simple repair or modification is required, the cable system and latches can be removed and reinstalled by one person without removing the door from the frame.

Designed for use with Von Duprin 98/99 and 33A/35A Series exit devices.



Our field sizeable concealed cables. install in minutes and give you maximum security with minimal maintenance.

- System provides enhanced security.
  - Available multi-point latching solution with "U" shaped top latchbolt and bottom bolt provides greater security and deadlocking.
  - Cable flexibility allows system to maintain positive latching in less than ideal conditions - door to frame alignment, door usage or HVAC stack pressure.
- Adaptable cable system eliminates the challenges of traditional rods.
  - Flexible, stainless steel, enclosed cable system installs as one assembly allowing the installer to test the system functionality before installing in door.
  - Cable flex allows for the device to function properly even if the latches and device center line are not aligned vertically.
- Field sizeable, stainless steel cables with Teflon® liner prevent corrosion and increase system strength.
  - Newly designed cable system allows cables to be sized while at the door. Minimizes sizing errors and provides peace of mind knowing you have the right cable, every time.
- Simplified maintenance.
  - Bottom latch height is easily adjustable through the side of the door without removing the door from the frame.
  - Entire system can be installed and removed from the door with one person without removing the door from the frame.

## A solution that meet's everyone's needs

Available options: All current 98/99 and 33/35A mechanical, electrical and trim options (Exception TL and TL-BE).

Replacement parts available: Inner cable available as replacement part.

Available configurations: Standard full-length cable assembly or available less bottom latch (LBL). Integrated Steelcraft solution: Cable system can be ordered pre-installed direct from Steelcraft.

Compliance: NFPA 101, NFPA 5000, NFPA 80, IBC, NBCC, FBC, ADA, NEC Class 2. Mechanical certifications: UL305, CAN/ULC-S132, UL 10C, BHMA A156.03.

Electrical certifications: UL294 Delayed Egress, BHMA A156.24, CSFM Delayed Egress.

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# Monitor strikes

## Overview

Monitor strikes are designed to offer remote door monitoring through the use of a signal switch mounted in the strike to monitor the latch bolt. This series of monitor strikes is designed for use with Von Duprin and most other manufacturers' rim, mortise, surface and concealed vertical rod exit devices and cylindrical, mortise and unit type locks.

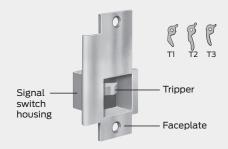
The monitor strike replaces the standard door strike. The tripper in the monitor strike is depressed when the latch bolt is fully inserted in the strike. The stainless steel tripper activates an electric switch.



## Features and benefits

UL listed as "miscellaneous door accessory"

## Monitor strike overview



#### Monitor strike electrical rating

SPDT switch (single pole double throw)

24VDC @ 2 Amps (resistive)

Note: Tripper selection is based on the throw and shape of the latch bolt.





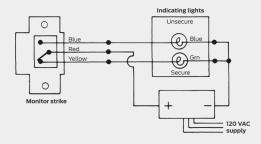


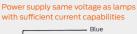
Model specific	ations						
Model #	4263 Rim or surface vertical rod exit devices		4268-T1 Rim fire exit devices		4582	4582 Mortise or cylindrical locks	
Lockset					Mortise or cylino		
# Doors	Single or pa	air	Single or pa	ir	Single or pair		
Compatibility (with tripper type)	Von Duprin  Monarch  Yale®	22, T3 2227, T1 33A/35A, T3 3327A/3527A, T3 44, T1 55, T1 88, T1 8827, T1 98/99, T3 9827/9927, T1 Rim, T3 (³/₄₀" [19mm] throw) 1500, T1 (⁵/ℯ₀" [16mm] throw)	Von Duprin	22/22-F 33A/35A 88/88-F 98/99 98-F/99-F	Schlage  Falcon Arrow™ Corbin Ruswin®  Yale®	<sup>3</sup> / <sub>4</sub> " (19mm) Cyl., T2 L90, T2 <sup>5</sup> / <sub>8</sub> " (16mm) ML (LR), T2 <sup>5</sup> / <sub>8</sub> " (16mm) ML (LR), T1 <sup>5</sup> / <sub>8</sub> " (16mm) ML (LR) 5999 ML (LR), T2 <sup>5</sup> / <sub>8</sub> " (16mm) ML (LR), T2	
Certifications			UL list (GXF	•	UL List (GXHX R4504) fire exit hardware		
Application notes	1		2		3		

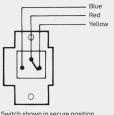
#### **Application notes:**

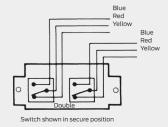
- The 4263 is non-handed and features horizontal adjustment to compensate for misalignment of door and frame. 4263 may be used with a mullion. Tripper selection (-Tl or -T3) is based upon the lock to be used with.
- 2. The 4268 features horizontal adjustment to compensate for misalignment of door and frame. 4268-Tl is not for use with mullions.
- 3. For use on single or pair of doors with ANSI 115.3 frame cutout (frame modification required.) Tripper selection (-T1 or -T2) is based upon the lock to be used.

## Basic monitor strike circuit















#### Model specifications

Model #	4570-T1		4670-T1		4690-T2	4690-1-T2
Lockset	Cylindrical locks  Single or pair		Cylindrical lock	KS	Concealed vertical rod exit devices	Concealed vertical rod exit devices  Narrow stile pair of doors
# Doors			Single or pair Single or pair			
Compatibility (with tripper type)	Schlage	¹/29" (13mm) Cyl. ⁵/89" (14mm) Cyl	Schlage	¹/29" (13mm) Cyl. ⁵/89" (14mm) Cyl.	Von Duprin 3347A-F 3347A	Von Duprin 3347A
	Falcon	<sup>1</sup> / <sub>29</sub> " (13mm) Cyl. <sup>9</sup> / <sub>169</sub> " (14mm) Cyl.	Falcon	<sup>1</sup> / <sub>29</sub> " (13mm) Cyl. 9947 <sup>9</sup> / <sub>169</sub> " (14mm) Cyl. 9947F		
	Adams Rite®	4510 8400	Adams Rite®	4510 8400		
	Arrow™	<sup>1</sup> / <sub>29</sub> " (13mm) Cyl.	Arrow™	<sup>1</sup> / <sub>29</sub> " (13mm) Cyl.		
	Best®	<sup>9</sup> / <sub>169</sub> " (14mm) Cyl.	Best®	<sup>9</sup> / <sub>169</sub> " (14mm) Cyl.		
	Corbin Russwi	n® 5/89" (16mm) Cyl.	Corbin Russwii	n® 5/89" (16mm) Cyl.		
	Dexter®	<sup>7</sup> / <sub>169</sub> " (11mm) Cyl.	Dexter®	<sup>7</sup> / <sub>169</sub> " (11mm) Cyl.		
	Kwikset®	<sup>1</sup> / <sub>29</sub> " (13mm) Cyl.	Kwikset®	¹/ <sub>29</sub> " (13mm) Cyl.		
	Precision™	1040 Automatic Flush Bolt <sup>1</sup>	Precision™	1040 Automatic Flush Bolt <sup>1</sup>		
	Sargent®	¹/29" (13mm) Cyl.	Sargent®	¹/ <sub>29</sub> " (13mm) Cyl.		
	Yale®	¹/29" (13mm) Cyl.	Yale®	<sup>1</sup> / <sub>29</sub> " (13mm) Cyl.		
Certifications					UL list (GXHX R4504) fire exit hardware	
Application notes	1		2		3	4

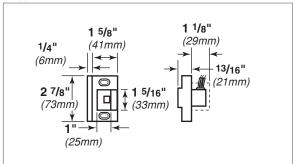
<sup>1</sup> Special template required

#### **Application notes:**

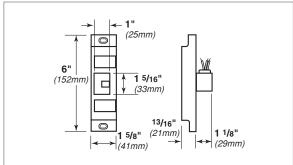
- 1. For use on single or pair of doors with ANSI 115.2 frame cutout (frame modification required.) 4570-T1 is only used with T1.
- For use on single or double doors with ANSI 115.3 fame cutout (frame modification required.)
   4670-T1 is only used with T1.
- 3. For use with pair of doors where one leaf has concealed vertical rods. 4690-T2 is only used with T2
- 4. For use with pair of doors where both leaves have concealed vertical rods. 4690-1-T2 is only used with T2.

#### **Dimensions**

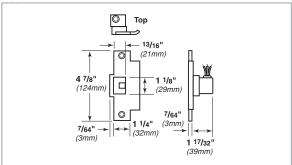
#### 4263



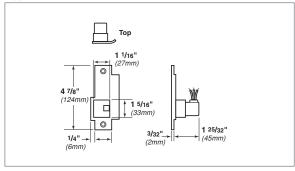
#### 4268-T1



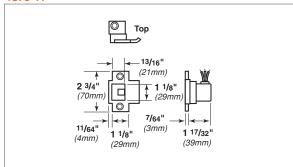
#### 4570-T1



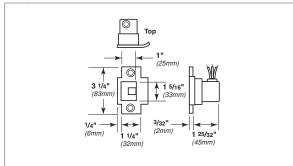
#### 4582



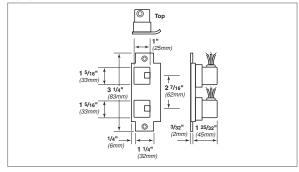
#### 4670-T1



#### 4690-T2



#### 4690-1-T2



#### To order, specify

- Model
- Tripper T1, T2 or T3
- Handing required on model 4582
- Specify LHR or RHR
- Finish: US3, US4, US10, US10B, US26, US26D

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# ALK Alarm kit



## Overview

The ALK battery alarm kit is a simple yet effective way to deter unauthorized use of an opening. While the exit device is still a means of egress, the ALK kit contains an internal horn. When the touch bar is depressed, the horn sounds to provide an audible means of signaling that the opening has been violated. The alarm kit can be armed or disarmed by key. The horn is rated at 85 decibel.

The key switch uses a standard  $1\frac{1}{4}$ " (32mm) mortise cylinder with a straight cam (Schlage 20-001, B502-191 cam). The unit operates on one standard 9-volt alkaline battery.

Alarm kits are available with a choice of two switch kits, RX or LX. RX monitors the touchpad and is furnished standard. LX optional latch bolt monitoring is recommended for use with surface vertical rod exit devices or when alarm needs to sound from both the exit device and trim side of the door. Specify ALK-LX.

The ALK is available in two styles, 33A/99ALK, grooved cover and 35A/98ALK, smooth cover.

- 24VDC Input and External Inhibit standard
- External Inhibit provides remote arming and disarming
- Automatically re-arms with 1½, 3 or 4½ minute time delay upon request
- Horn emits intermittent low battery alert signal
- Includes 6" x 20" decal for application on door "EMERGENCY EXIT ONLY. ALARM WILL SOUND."

#### 98/99 Series

#### Minimum door openings

Device	3' (914mm) Length	4' (1219mm) Length
98/98-F/99/99-F	2' 10" (864mm)	3' 4" (1016mm)
9875/9875-F/9975/9975-F	2' 10" (864mm)	3' 4" (1016mm)
9827/9827-F/9927/9927-F	2' 10" (864mm)	3' 4" (1016mm)
9857/9857-F/9957/9957-F	2' 10" (864mm)	3' 4" (1016mm)
9847/9847-F/9947/9947-F	2' 9" (864mm)	3' 3" (991mm)
9848/9848-F/9948/9948-F	2' 9" (864mm)	3' 3" (991mm)
9849/9849-F/9949/9949-F	2' 9" (864mm)	3' 3" (991mm)
9849/9849-F/9949/9949-F	2' 9" (864mm)	3' 3" (991mm)

#### 33A/35A Series

#### Minimum door openings

Device	3' (914mm) Length	4' (1219mm) Length
33A/35A	2' 9" (838mm)	3'3" (991mm)
3327A/3527A	2' 8" (813mm)	3' 2" (966mm)
3347A/3347A-F 3547A/3547A-F	2' 8" (813mm)	3' 2" (966mm)
3348A/3348A-F 3548A/3548A-F	2' 8" (813mm)	3' 2" (966mm)

#### To order, specify:

- Standard 98 ALK or 99 ALK
- Cylinder dogging CD98 ALK or CD99 ALK
- Special center case dogging SD98 ALK or SD99 ALK
- Auto reset AR 1 ½ , 3 or 4 ½

#### To order, specify:

- Standard 33A ALK or 35A ALK
- Cylinder dogging CD33A ALK or CD35A ALK <sup>1</sup>
- Auto reset ALK-AR3
- 1 When the ALK is used, standard dogging is removed. If cylinder dogging is required for 3' or 4' doors the ALK can be moved to the hinge side of the device and standard cylinder dogging can be added.

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# The first UL certified exit device to meet the new California Building Code Operating Force requirement

#### **VON DUPRIN**

#### AX exit devices

Featuring the 98/99, 33/35A and 22 Series devices



## Changes to California Building Code effective January 1, 2014



There were many changes to the new California Building Code that took effect January 1st, 2014. One change impacting operable door hardware, including panic hardware, was the new requirement in chapter 11B for hardware to operate with a maximum of 5 pounds of force operation. "Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2N) maximum".

#### Von Duprin has the solution certified by UL to "Meet California Building Code (2013) Sec. 11B-309.4"

In order to ensure compliance, Von Duprin and UL tested the products both before and after cycling. **The testing was administered as follows:** 

- I. Unloaded operating forces must be below 5 lbs. before cycling.
- 2. Cycle device to 100,000 cycles.
- 3. Unloaded operating forces must be below 5 lbs. after cycling.
- 4. Loaded operating forces must be below 50 lbf. with a 250 lb. load on the door after cycle (Safety).

#### Von Duprin AX offering

Series	Device Type	Functions	
98/99 Fire & panic	AX98/99 AXXP98/99	Exit only / Dummy trim Night latch / Night latch - Optional Pull Lever / Lever-Blank Escutcheon Lever-Rigid-Dummy trim Lever-Rigid-Night latch	
	AX98/9927 LBR AX98/9949 LBL AX98/9950WDC-LBL		
94/95 Fire & panic	94/9547	Exit only / Dummy trim Night latch / Lever / Lever-Blank Escutcheon / Lever-Rigid-Dummy trim Lever-Rigid-Night latch	
33/35A Fire & panic	AX33/35A	Exit only / Dummy trim Night latch / Night latch - Optional Pull Lever / Lever-Blank Escutcheon Lever-Rigid-Dummy trim	
	AX33/3549A LBL AX33/3349A-F LBL AX33/3549A-F LBL-AFL		
22 Fire & panic	AX22 AX2227-LBR	Exit only / Dummy trim Night latch / Night latch - Optional Pull Lever / Lever-Blank Escutcheon	

### How to identify the Von Duprin AX device

- 1. Look for the "AX" Prefix in the door schedule and/or specification.
- 2. In the field, look for the California Compliance note on the UL Label and the AX Device Label. Both labels can be found on the center. case cover of the exit device as shown below.





AX Device label



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Learn more: ax.allegion.com



# E7500

Electric mortise lock



#### Overview

E7500 electric mortise lock has all the versatility and advantages of the standard mortise lock device, plus the advantage of being electrically controlled by a remote switching device, an access control system or an automatic fire alarm system. The E7500 is available for use with the 98/99 Series devices.

The E7500 controls the locking of the outside trim. When unlocked, the door remains latched, preserving the fire rating of the door and making it particularly useful where codes permit locking, but require unlocking during a fire emergency.

The E7500 locks and unlocks electrically and cannot be locked or unlocked mechanically. The outside trim cylinder retracts the latch bolt for mechanical override, night latch function. An SPDT signal monitors the outside trim condition (locked or unlocked) and a second SPDT signal switch to monitor the latch bolt.

- UL listed FVSR SA163 panic hardware and/or GXHX R4504(N) fire exit hardware
- Field reversible handing
- 24VDC continuous duty solenoid
- Tamper resistant
- Corrosion resistant
- Internal solenoid
- Fail Safe or Fail Secure optional<sup>1</sup>
- Some fire codes will require "Fail Safe" (FS) operation for stairwell doors. Be sure to specify the correct operation for you application

E7500 electrical specifications			
	12VDC	24VDC	
Solenoid	.60 Amp	.30 Amp	
Switches	Up to 2.0 Amp	s @ 24VDC maximum	

#### Minimum requirements

- PS902
- EPT-10

#### To order, specify

- Use prefix "E", example E9975
- FS or FSE
- Voltage and current

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# Quiet Electric Latch Retraction-QEL

Featuring 98/99, 94/95 and 33A/35A series exit devices



## Overview

Quiet electric latch retraction (QEL) provides electronic control of an exit device for environments where limited operational noise is desired. The QEL option is Von Duprin's solution of choice for hospitals, libraries, museums and theaters where ambient noise can be disruptive. It is available on all Von Duprin 98/99, 94/95 and 33A/35A series exit devices.

These devices always provide mechanical egress. The electrified latch retraction can also be activated by an access system or building automation system to unlatch the exit device momentarily. Often the QEL is used with a credential reader and access control system to unlock the door momentarily for authorized users.

The QEL can also be configured to electronically retract the latch for an extended period of time to allow free entry. This is a convenient alternative to mechanical dogging. If manual dogging is required, the hex dogging option is available, to order specify HD-QEL. Special center case dogging is also available for 98/99 rim and vertical systems, specify SD-QEL.

The QEL option is available on panic devices and fire rated devices. Fire rated openings have several additional requirements. They must be self latching and self closing. To satisfy these requirements the QEL must be paired with an automatic operator and under the control of an automatic fire alarm system when used on fire rated openings.

- QEL option available on all 98/99, 94/95 and 33A/35A series exit devices
- Energy efficient motorized latch retraction utilizes standard 2 amp power supply, enabling longer wire runs from power source
- Quiet operation in both mechanical and electronic states
- Modular design allows for a simplified installation
- On-board installation and troubleshooting diagnostics built into device
- Auto adjust latch retraction automatically adjusts latch throw and pull
- Pushbar is pulled in electronically for quieter operation when dogged
- Vandal resistant detects and responds to events of attack and tampering

## 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 QEL Conversion Kit is UL Classified under "Accessories for Single-Point Locks and Latches and Fire Exit Hardware" (UL 10C)

## Electronic specifications

QEL electrical load		
Voltage	24 VDC	
Current	1.0 A Inrush (0.5 sec) 0.14 A Holding	
QEL wire run lengths		

QEL wire run lengths		
Distance (one way)	Wire gauge	
200'	18 AWG	
320'	16 AWG	
500'	14 AWG	
800'	12 AWG	

#### Accessories

The QEL has a low in rush current = 1.0 amps, so it can be used with standard Schlage power supplies. When powering multiple components, verify that the amperage requirements of all components combined does not exceed the power supply output rating, see table below for output ratings.

Schlage	Schlage	Schlage
PS902	PS904	PS906
up to 2 amps	up to 4 amps	up to 6 amps

The QEL device is compatible with the following equipment: PS900 Series power supplies - PS902, 904, 906, 914; 900 Series Option Boards - 900-2RS, 900-4R, 900-4RL, 900-2Q; PS873 Power Supply including 871-2, 871-2Q, 873-4TD/AO Option Boards. The power transfer is also sold separately. Please refer to Von Duprin catalog for more information on EPT-2/EPT-10 power transfers and PS900 series power supplies.

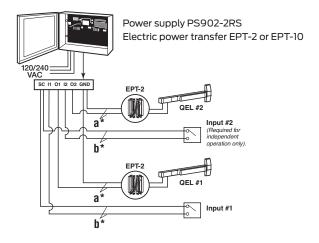
## How to order

- Standard Use prefix QEL, example QEL99L.
- Special Center Case Dogging Use prefix SD-QEL, example SD-QEL99L.
- Hex Dogging Use prefix HD-QEL, example HD-QEL99L.

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## Popular application







# 33/3550AWDC 98/9950WDC Series

Two-point latch for wood door applications

## Overview

The Von Duprin wood door concealed (WDC) system is available on the 98/99 and 33/35A series. This solution is designed specifically for wood door applications where exit devices are required. Instead of traditional rods, concealed vertical cables are utilized. Making use of this proven technology enables quick installation and allows for easy maintenance.

This WDC system provides superior security without compromising aesthetics. The innovative latch design provides superior strike engagement and deadlocking without the need for additional hardware. In addition, the prep for concealed cables requires less material to be removed, which protects the structural integrity of the wood door. This allows the hardware to be more discrete than traditional concealed vertical rod systems that require unsightly metal wraps.

Allegion offers solutions for any opening within your facility with consistent design elements throughout. All WDC finishes and lever designs suite with the existing 98/99, 33A/35A, and 94/95 series devices; as well as with the Schlage LM9200 series, L mortise lock, and LT tubular locks. Furthermore, we maintain an unwavering commitment to quality and reliability, so you can be sure that at critical moments of life safety your device will perform.



## Key features

- Concealed vertical cables instead of rods for guick installation and adjustment
- Latches are designed for optimized door prep, retaining the structural integrity of the door
- Self-adjusting bottom bolt that deadlocks in any adjustment position providing enhanced security
- Accessible adjustment from edge of door
- Fire-rated applications without the use of metal wraps, up to 45 minutes.
   90 minute rating available with use of metal wrap
- Over 30 lever designs that suite with other Von Duprin exits devices (33A/35A, 98/99, and 94/95 series) and Schlage Locks (L mortise locks, LM9200 series, and LT tubular locks).

## Product detail

- Latches are designed for optimized door prep, retaining the structural integrity of the door
- 2 Concealed vertical cables instead of rods for quick installation & adjustment
- 3 Accessible adjustment from edge of door
- 4 Self-adjusting bottom bolt that deadlocks in any adjustment position providing enhanced security

## Ordering instructions

9850WDC Series exit device								
Prefix	Device Series/ Type	Trim Functions	Rating	Suffix	Finish	Door opening height	Trim Option/ Finish	Lever Style
QEL	9850WDC	L	F	LBL	US26D	7'	996L/US26D	06
Exit de	vice specification	<b>is</b>	ical and o	lectronic (	ontions are	availahlo		

Exit device specifi	cations	
Prefix	Additional mechanical and electronic options are available, See product catalogs or price book for more information.  CS - Complete cable system	
Device Series/Type	33/3550AWDC Vertical cable device 98/9950WDC Vertical cable device	
Trim Functions	See product catalogs or price book for additional functions.	
Rating	<b>F</b> - Fire rated door hardware (Note: requires fire rated wood door) <b>Blank</b> - Panic exit hardware	
Suffix	LBL - Less bottom latch LCS - Less cable system (device only)	
Finish	US3, US4, US10, US15*, US26, US26D, US28, US32D*, 313, 315, 643e (-AM - Antimicrobial available with US26D and US32D) *for 35 and 98 series devices only	
Door opening height	Specify door opening height (distance from bottom of frame header to finished floor) 6'8" - 10'0" - non fire rated doors 6'8" - 8'0" - fire rated doors	
Handing	<b>LHR</b> (Left hand reverse) <b>RHR</b> (Right hand reverse)	
Trim option / Finish	See product catalogs or price book for additional trim options and finishes.	
Lever style	Standard levers: 01, 02, 03, 05, 06, 07, 12, 16, 17, 18, ACC, AST, LAT, LON, MER, STA Decorative levers: M51, M52, M53, M54, M55, M56, M57, M61, M62, M63, M81, M82, M83, M84, M85	



The Von Duprin WDC series is specifically designed to suite with the following products:



#### Von Duprin 98/99 exit devices

Grade 1

Von Duprin created the first exit device in 1908, and continues to redefine the industry today with unsurpassed quality and industry-unique features such as concealed vertical cables. The 98/99 Series exit device is intended for stardard-stile doors.



#### Von Duprin 33A/35A exit devices

Grade 1

Offering the same innovative features as the 98/99, the 33A/35A Series is intended for narrow stile doors.



#### Schlage L Series mortise locks

Grade 1

Schlage L Series locks have long been the industry standard for mortise locks, with a comprehensive offering of functions and options to support any opening need.

2



#### Schlage LT Series tubular locks

The perfect compliment to the Schlage L or LM Series and Von Duprin exit devices. The LT Series tubular lock provides a consistent look and feel at a lower price point for less demanding applications.







# E996L, E7500

Electrified trims

## Overview

#### E996L- Electrified breakaway lever trim

E996L Electrified Breakaway lever trim provides remote locking and unlocking capabilities while incorporating the patented Breakaway trim design.

The 24VDC solenoid can be energized from a distant controller, thus allowing access control of the opening. The control of stairwells in high-rise buildings is a common application for this trim. When electrically unlocked the unit operates as a normal lever trim. When electrically locked, the lever feels locked, but when more than 35 pounds of torque pressure is applied, the Breakaway lever feature engages.

The E996L is available in either standard in a fail safe (FS) or fail secure (FSE) condition, but can also be field converted to fail secure (FSE) where allowed. The trim can be ordered with a device, added to an existing 98/99 series device application, or a conversion kit can be added to an existing 996L Breakaway lever trim. On new construction applications, the E996L trim will require less door prep.

The E996L is available with a blank escutcheon (BE) function, or with cylinder operation for night latch (NL) function.

The E996L electrified trim replaces the current "E" electric feature on 98/99 series rim devices. Consult factory for requirements.

#### E7500- Electric mortise lock

The electric mortise lock device has all the versatility and advantages of the standard mortise lock device, plus the advantage of being electrically controlled by a remote switching device, an access control system or an automatic fire alarm system. The device features the 7500 mortise lock. The E7500 controls the locking of the outside trim. When unlocked, the door remains latched, preserving the fire rating of the door and making it particularly useful where codes permit locking but require unlocking during a fire emergency. The outside trim cylinder retracts the latch bolt for mechanical override of night latch function. Only available with TP, K or L functions.

The E7500 lock contains a SPDT signal to monitor the outside trim condition (locked or unlocked) and a second SPDT signal switch to monitor the latch bolt.



### Features and benefits

#### E996L

- Fail safe or fail secure, can also be converted to fail secure in the field
- Conversion kits available to add to existing 996L trim
- Available with blank escutcheon function or cylinder operation for night latch function

#### E7500

- Field reversible handing
- 24 VDC continuous-duty solenoid
- Fail safe or fail secure optional<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Some fire codes will require fail safe (FS) operation for stairwell doors. Be sure to specify the correct operation for your application.

## E996L specifications

Solenoid	24VDC
Solenoid draw	0.22 AMPS

#### To order, specify

Note: To order, please reference Von Duprin catalog and price book

- Use "E" prefix, example E996L
- When ordering with device specify trim series with "E" prefix, example 9927L-BE 3' US26D E996L.
- Device type, R/V (rim/surface or concealed vertical rod) or M (mortise)
- Fail Safe (FS) or Fail Secure (FSE)
- RHR is furnished standard if not specified. Field reversible.
- Lever style (06 lever is furnished standard)
- Finish: US3, US4, US10, US10B, SP313, US26, US26D, SPBLK, US15

## E7500 specifications

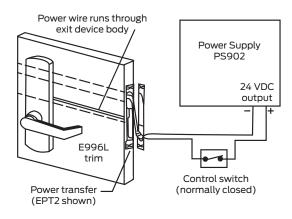
Solenoid	.60 Amps @ 12VDC
	.30 Amps @ 24VDC
Each switch	Up to 2.0 Amps @ 24CDC
	Maximum

The E option does not include the power transfer from door to frame. the power supply or the control operator. (Refer to EPT-10 and PS902 or PS914 power supply)

#### To order, specify

Note: To order, please reference Von Duprin catalog and price book

- Use prefix "E," example E9975
- FS or FSE
- Voltage and current



#### E996L Electrical wiring

- Power input for E996L is 24 VDC
- Two wires on the trim are non-polarized (18 AWG minimum)

#### Standard features:

- Field reversible handing
- 24 VDC continuous duty solenoid

#### Optional features:

- Fail safe (locked when energized, unlocked when deenergized or during power failure). Specify with suffix "FS."
- Fail secure (unlocked when energized, locked when de-energized or during power failure). Specify with suffix "FSF."
- 24 VAC (with SO option)
- 12 VDC
- 12 VAC (with SO option)

Note: Some fire codes will require "Fail Safe" (FS) operation for stairwell doors. Be sure to specify the correct operation for your application.

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## Overview

GUARD-X provides secure, alarmed code-compliant protection for secondary exits. GUARD-X exit alarm lock readily identifies the door on which it is mounted as an emergency exit and secures the opening against unauthorized use. It is ideal for deterring theft in restaurants and retail establishment such as: discount stores, grocery stores, drug stores, clothing stores and sporting goods stores.

- UL listed for panic exit hardware (UL305)
- Tested in accordance to ANSI A156.3 Grade 1 panic hardware (250,000 cycles)
- Quick installation with an easy-to-use adhesive back template
- Non-handed design allows installer to mount for either hand by just removing and reversing the "Emergency Exit - Alarm Will Sound" sign built into the device
- Three finishes available: SP28, 313, 315
- Heavy duty construction with stainless steel deadbolt with cast aluminum latch case
- Only authorized person with a key can re-latch or reset the alarm after unauthorized exit
- 100-decibel alarm
- Armed and disarmed by key
- Alarm is powered by standard 9V battery or hardwired using optional PT790 power supply

Dimensions - outside trim	
Touchbar height to finished floor	40" (1016mm) at center
Door width range	36" to 48" (914mm to 1219mm)
Touchbar projection	
Neutral	4 <sup>1</sup> / <sub>8</sub> " (103mm)
Depressed	2 <sup>3</sup> / <sub>4</sub> " (70mm)
Latch case housing	7" X 4 ¹/16" X 4 ¹/8"
	(179mm X 103mm X 105mm)
Device length	32 ½" (826mm)
Minimum stile requirement	
Single door	5 7/8"
Double door	61/4"

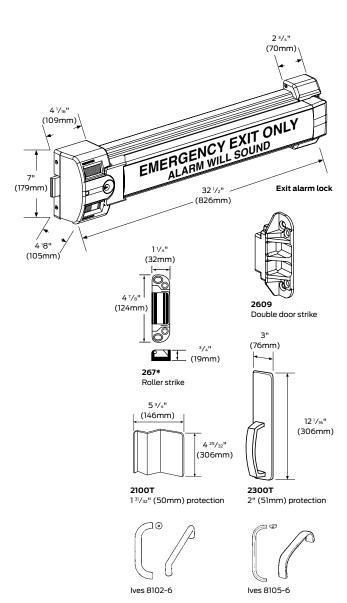
Note: Von Duprin trim does not thru-bolt to the Guard-X Ives door pulls 8102-6 and 8105-6 offer dimension that align and thru-bolt to the Guard-X exit lock - order separately from Ives.

#### To order, specify

- Model number 2670- Includes strike, screw pack and battery.
- Finish US28, 313AN or 315AN
- French or Spanish sign, when required English with Braille is standard.

#### Accessories

- Sex nuts and bolts (6 #325)- when required.
- PT790 9-volts external power supply when required.
- 210DT X 050140 or 230DT X 050140 when required.
- 3216 rim cylinder when required.



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### 4200 Series

Electric strike for cylindrical locks and deadlatches



4200 Series is designed to offer versatility in two commercial-duty electric door strike models. They are a great choice for applications where interior traffic control is the primary function. And with their solid construction and heavy-duty stainless steel faceplate, they meet ANSI/BHMA Grade 1 for endurance and dynamic strength.

Designed for compatibility with a wide range of cylindrical devices, they are able to address a broad range of needs. You'll find 4200 Series strikes work with all Schlage and Falcon cylindrical locks as well as those of many other manufacturers.

These reliable strikes are easy to order, configure and install. Field selectable options include changing fail safe and fail secure modes without disassembly. They also feature a 12/24 dual-voltage solenoid for field wiring of either input voltage. Factory orderable options include an entry buzzer and rectifier kits to provide even greater flexibility and available parts include square or round cornered ANSI faceplates.



### Features and benefits

- Designed for cylindrical applications
- Capable of four in-field configurations
- Shallow 1-3/8" backbox depth
- Field selectable 12/24 VDC voltage
- Non-handed, internal solenoid design
- Low current draw for PoE installations
- Field selectable power failure mode (fail-safe/fail-secure) without disassembly
- Heavy-duty stainless steel faceplate
- Latchbolt monitoring available (4212 model)
- Options include entry buzzer and rectifier kits
- Suitable for interior and exterior doors
- Meets ANSI/BHMA A156.31, Grade 1 for endurance and dynamic strength
- Meets ANSI/BHMA A156.31, Grade 2, 1000 lbs static strength
- Dynamic strength 70 ft-lbs
- Endurance 500,000 cycles

### Lockset compatibility

The 4200 series is compatible with all Schlage and Falcon cylindrical locks as well as cylindrical and deadlatch locks of many other manufacturers.

- The 4211 is compatible with locksets with 5/8" (15 mm) throw latchbolts, or up to 3/4" (19mm) throw latchbolts with a 1/8" door gap.
- The 4212 is compatible with locksets with 1/2" (12.7mm) throw latchbolts, or up to 5/8" (15 mm) throw latchbolts with a 1/8" door gap.

4200 Series power requirements					
Model	Voltage	Current	Duty	Amps	Ohms
4211 or 4212	12V	DC	Continuous	0.20	
4211 or 4212	24V	DC	Continuous	0.10	

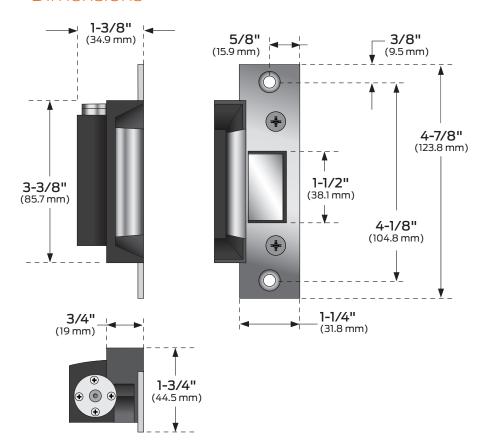
#### 4212 Latchbolt monitor switch rating: 30VDC at 0.20 A

The 4200 series requires a DC regulated power supply, and the Schlage PS900 series power supplies are recommended.

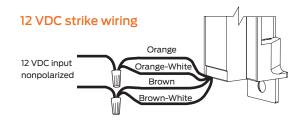
Continuous duty = Energized 1 minute or more

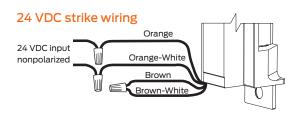
Model speci	fications			
Model number		4211	4212	
Retrofits model		HES 5200, RCI 6 Series	HES 5000, RCI 6 Series	
Latchbolt throw		3/4"	5/8"	
Latchbolt monitor	rswitch		•	
Face plate length		4 1/8"	4 1/8"	
Backbox depth		13/8"	13/8"	
Finish (faceplate)		BHMA 630/US32D		
Lockset	Cylindrical	•	•	
	Deadlatch		•	
	Mortise			
Number of doors	Single	•	•	
or doors	Pair			
Frame type	Hollow metal	•	•	
	Aluminum		•	
	Wood			
Options	EB (entry buzzer - fail-secure only)	•	•	
	S012 & S024 rectifier kit for AC to DC operation	•	•	

### **Dimensions**

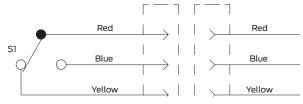


### Wiring





### Latchbolt monitoring switch (4212 only)



Switch shown with latch status tripper depressed

### Ordering information



\* Optional

#### Selections correspond with the numbers above

1	Model
4211 4212	See model specification chart to make the proper selection See model specification chart to make the proper selection
4212	See model specification chart to make the proper selection
2	Rectifier kit (optional)
S012	Converts 12 VAC voltage to 12 VDC to operate the solenoid
S024	Converts 24 VAC voltage to 24 VDC to operate the solenoid
3	Buzzer (optional)
EB	Entry Buzzer, with fail-secure (FSE) configured

#### Standard features

- Power failure mode: Field configurable fail-secure/fail-safe
- Voltage: Field configurable 12 VDC/24 VDC dual voltage solenoid
- Finish: BHMA 630/US32D satin stainless steel
- Includes mounting tabs, fail secure conversion hex key, wood and machine screws, plus a suppressing diode.

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## WS9827/9927 WS9857/9957

Multi-point exit device

### Overview

The Von Duprin 98/99 Series exit device is designed with durability to withstand the toughfest of environments. The WS9827/9927 and WS9857/9957 multi-point two and three point exit device incorporate reinforced components to help ensure the building and its occupants are kept safe from wind and projectile debris. These devices are the leading choice for severe weather protection both the WS 27 and WS 57 device styles are certified to comply with building codes such as FEMA 361 and Florida Building Code. Making these devices ideal for Tornado Storm Shelter applications.

Since pioneering the first exit device in 1908, Von Duprin life safety products have provided unparalleled quality, performance and flexibility for schools, hospitals, stadiums and public buildings. These products come with the support and customer care only offered by Von Duprin. Providing the confidence and peace of mind that at critical moments of life safety.



### Features and benefits

- Uniquely designed center case
- Vertical rods designed to reinforce the strength of the door
- Reinforced top and bottom latch housing with strengthening strap
- Stamped end cap mounting bracket
- Top soffit latch with reinforced ratchet release bracket
- Cast latch covers
- Stronger latch mounting screws
- Thru-bolted attachment points

### WS9827/9927 Windstorm ratings

- Door applications 8'0" x 8'0" (2438mm x 2438mm) pairs (swinging same direction); 4'0" x 8'0" (1219mm x 2438mm) single (non-fire rated only) flush hollow metal
- Florida Building Code Compliance
   Compliance to TAS 201, TAS 202, TAS 203; design load
   rating +150/-150 PSF (245 mph wind zone); Enhanced
   Hurricane Protection (EHPA) ASTM E1996; ANSI/ICC 500 (245 mph wind zone)
- UL-FEMA 361
   Compliance to TAS 201, TAS 202, TAS 203; design load rating +150/-150 PSF (245 mph wind zone); Enhanced Hurricane Protection (EHPA) ASTM E1996; ANSI/ICC 500 (245 mph wind zone)

### WS9857/9957 Windstorm ratings

- Door applications
   4'0" x 8'0" (1219mm x 2438mm) single
   (panic and fire rated) flush hollow metal
- UL-FEMA 361
   Certified 4'0" x 8'0" (1219mm x 2438mm) single (panic and fire rated) flush hollow metal
- These devices are listed with Steelcraft Paladin™ Doors for tornado listing and Steelcraft H and HE-Series Doors for hurricane listings

Specifications	
Device functions	Device ships EO (Exit only). For TP (Thumbturn), K (Knob), or L (Lever). Remove NL drive screw from device
Device lengths	3': 2'4" to 3' (71mm to 914mm) Door size
	4': 2'10" to 4' (864mm to 1219mm) Door size
Strikes	Bottom – 304L Unfinished
Dogging feature	Hex key dogging standard (Panic)
Dogging options	CD Cylinder Dogging
	LD Less Dogging
Electrical	LX Latchbolt monitor switch
options	RX Pushpad monitor switch
	RX-2 Double pushpad monitor switch
	ALK Alarm exit kit
	SS Signal switch
	QEL Quiet Electric Latch
	E996L E-Trim
Fasteners & sex	Includes 1 3/4" (44mm) Metal Doors
bolts (SNB)	SNB furnished for top & bottom
	latches and device (required)
Device centerline from finished floor	39 ½" (1003mm)
Door undercut	½" (7mm)
Center case dimensions	8" x 2 <sup>3</sup> / <sub>4</sub> " x 2 <sup>3</sup> / <sub>8</sub> "
Mechanism case dimensions	2 ¼" x 2 ¼" (57mm x 57mm)
Top & bottom	4 ½" x 2 ½" x 1 ½"
latch case	(114mm x 64mm x 48mm)
Vertical rods	½" (13mm) round tubing, standard
	rods accommodate 7' (2134mm) door
	Top rod length is 36 ¼" (921mm)
	Bottom rod length is 31 3/4" (806mm)
Projection	Pushbar Neutral – 3 <sup>13</sup> / <sub>16</sub> " (97mm)
	Pushbar Depressed – 3 1/16" (78mm)
Finishes	US3, US4, US10, US26, US26D, US28,
	313, 315 and US32D*
	*US32D available on WS9827 and WS9857 devices only
Certifications	
General	Panic Hardware UL 305
certifications	Fire Exit hardware UL 10 C
	UL ANSI/ICC 500 F5 Tornado Applications
WS 9827/9927	Rating 3 hours pair of doors (double egress),
	90 minute pairs (swinging same direction)
	Door size 8'0" x 8'0" (2438mm x 2438mm) hollow metal
	Bool Size of A of (2430Hill A 2430Hill) Hollow Hieldl

WS 9857/9957

Rating 3 hours single door,

Door size 4'0" x 8'0" (1219mm x 2438mm) hollow metal









### Trim guide

	Exit only (EO)	Thumbturn keylocks and unlocks	Thumbturn blank escutcheon	Lever key locks and unlocks	Lever blank escutcheon
Product description	WS9927EO	WS9827TL	WS9827TL-BE	WS9827L	WS9827L-BE
	WS9827EO	WS9927TL	WS9927TL-BE	WS9927L	WS9927L-BE
	WS9857EO	WS9857TL	WS9857TL-BE	WS9857L	WS9857L-BE
	WS9957EO	WS9957TL	WS9957TL-BE	WS9957L	WS9957L-BE
Trim	None	377Tx990DT	377T-BEx990DT	996L-R/V	996L-BE-R/V
Escutcheon plate		2 1/16"x 5 1/2" x 2 5/8"	2 <sup>3</sup> / <sub>4</sub> "x 10 <sup>3</sup> / <sub>4</sub> " x <sup>27</sup> / <sub>32</sub> "	2 <sup>3</sup> / <sub>4</sub> "x 10 <sup>3</sup> / <sub>4</sub> " x <sup>27</sup> / <sub>32</sub> "	2 <sup>3</sup> / <sub>4</sub> "x 10 <sup>3</sup> / <sub>4</sub> " x <sup>27</sup> / <sub>32</sub> "
size		(65mm x 140mm x 67mm)	(70mm x 273mm x 21mm)	(70mm x 273mm x 21mm)	(70mm x 273mm x 21mm)
Projection		3 1/4" (83mm)	3 ½" (83mm)	2 1/8" (73mm)	2 ⅓" (73mm)
ANSI function	1	11		8	
Cylinder type		1 1/4" (32mm) Mortise		Rim	
Required 425 sex bolt quantity	6	2	2	2	2

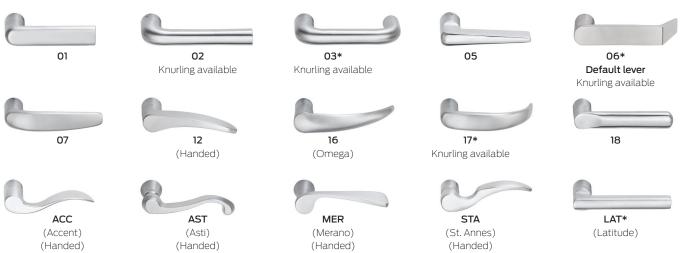
### Lever styles

### M Collection decorative levers



### ·· Available in Stainless Steel substrate ONLY.

#### Standard levers



<sup>\*</sup>Available in Stainless Steel - specify SS when ordering

### Ordering information

WS -	98	- 27 -	- EO -	06 -	· F -	- ALK -	3' -	- US26 -	LHR
Prefix	Series	Device style	Function	Lever style	Fire exit	Alarm kit	Device length	Finishes	Handing
1	2 3 4	4 5 (	7	8 9	10				

### Selections correspond with the numbers above.

### See price book for specific configuration options.

1	Prefix
	Quiet Electric Latch Retraction Latch Bolt monitoring Request to Exit Double Request to Exit Signal Switch Windstorm esignate WS; may select an one prefix.
2	Series
98 99	Series 98 - smooth Series 99 - grooved
3	Device Style
27	Two point latch mounted vertical rod device
57	Three point latch mounted vertical rod device
4	Function
EO K L TL	Exit Only Knob Lever (Classroom) Thumbturn

5	Lever style
Standard	
Decorativ	re
	e book or product catalog for lever style
options.	
6	Fire exit devices
F	Fire exit device
7	Alarm kit
ALK	Alarm kit
8	Device length
3'	Device (2'4" - 3' Door size)
4'	Device (2'10" - 4' Door size)
9	Finishes
US3 US4 US10 US26 US26D US28 US32D* 313 315 *For the \	Brass, Polished Brass, Satin Bronze, Satin Chrome, Polished Chrome, Satin Anodized, Aluminum Stainless Steel, Satin Dark Bronze Black WS9827 and WS9857 Devices only

10	Handing	
RHR LHR	Right Hand Reverse Left Hand Reverse	



## PS914

4 amp high in rush power supply



### Overview

Von Duprin power supply and option board products were designed to meet the specific requirements of electrified fire exit devices.

Installation is simplified by utilizing a flat mounting design and polarized locking connectors for option boards. This 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 panic devices, strikes, card readers, etc.).

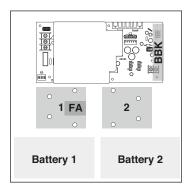
Common to the line of PS900 Series power supplies is a constant output rating at both 12v and 24v settings, universal 120 VAC to 240 VAC input, and polarized option board connectors. New fire alarm interface board mounting allows outputs to be configured as switched (power cut) or unswitched (power continues)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

### Features and benefits

- 4A @ 12/24 VDC constant output, field selectable with jumper
- Designed for use with electrified panic devices requiring high in rush current
- Provides low-voltage, Class 2, filtered and regulated power
- Universal 120-240 VAC, fused primary input
- Two polarized option board connectors
- AC input and DC output monitoring circuit with LED indicators
- Externally visible AC input indicator with isolated SPDT contacts
- High-voltage protective cover for AC circuitry (not shown)
- Battery back-up board auto-selects voltage
- Optional Fire Alarm plug-in board available
- UL 294, ULC-S318, RoHS, and FCC Part 15 certified

### Configuration options

Available option board, fire alarm and battery backup connection locations:



#### **Exit device support**

Von Duprin QEL	Up to 81	
Von Duprin EL	Up to 8 <sup>1,2</sup>	
Falcon EL	Up to 8 <sup>1,2</sup>	

<sup>1.</sup> Requires the use of two 900-4RL option boards

<sup>2.</sup> Distance from power supply may be limited with multiple EL applications - consult technical support for wire run lengths

	specifications
Specification	Description
Input voltage	120/240 VAC, 50/60 Hz, universal input
Output voltage	4A @ 12 or 24 VDC Field selectable with jumper Switching supply, 5% regulation, 360mVpp max ripple
Enclosure	Grey/baked enamel 14" $\times$ 12" $\times$ 4" (H $\times$ W $\times$ D) Eight $^{1}$ / $_{2}$ " $\times$ $^{3}$ / $_{4}$ " knockouts Hinged cover with lock down screws
Operating temperature	32° - 120°F (0° - 49°C)
Certifications	ANSI/UL 294 ULC-S318 RoHS FCC Part 15 Class 2
Battery backup (install on main board)	900-BB: Battery backup board only 900-BBK: Battery backup kit (backup board plus battery pack)
Available option boards	900-FA: Plug-in fire alarm (must be installed on option board) 900-2RS*: 2 Relay option board capable of individual or sequential operation for single and pair door applications 900-4R*: 4 Relay option board 900-4RL*: 4 Relay option board with integrated logic and individual or sequential operation capability for controlling security interlocks, auto operators and time delay function 900-8F*: Fused, 8 zone option board 900-8P*: PTC, 8 zone option board
AC primary fuse size	6.3A, 250v, 5 x 20mm
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.
Option board connectors	2
Fire alarm board connector	Yes (requires connection on option board)
Keylock	Optional
Accessories	900-BAT: Backup battery pack

<sup>\*</sup> Compatible with plug-in fire alarm board (900-FA)

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## Guide to selecting a power supply

The PS900 Series provides a variety of flexible options allowing you to design custom solutions to address a broader range of applications. This brief guide will help you configure the proper solution based on the unique characteristics of your opening. If at any point in the system design or installation process you need assistance, you can turn to the security and safety consultants at Allegion for support.

#### 1. Sizing a supply

Simple as they may seem, power supplies play a critical role in your access control system. They protect devices downstream by providing filtered and regulated power. To begin with you must determine the number of devices that will be connected to the power supply and the type of device - electric strikes, electromagnetic locks, electrified mechanical locks, exit devices, automatic operators or accessories such as pushbuttons. Each type of device has specific current demands. For example, high in-rush exit devices pull a significant current to retract or unlock the device and then drop to a lower holding current. If a device has an in-rush current you also need to determine how long the in-rush current lasts.

Power supplies convert high voltage AC power into the low voltage DC outputs required by most access control devices. Begin by checking the input voltage to ensure that it is compatible with your buildings source AC power. The PS900 Series, for example, features a universal 120-240 VAC input. All devices fed from a power supply must accept the same output voltage — typically 12 VDC or 24 VDC. To calculate the total load, add the peak current draw of all devices in the system to determine the required amperage of the supply.

### **Quick survey**

Gather the following information to determine the necessary size of the power supply:

- ☐ Number of devices
- ☐ Type of devices
- ☐ In-rush current requirements
- □ Duration of in-rush current

### Sizing a supply

Calculate the peak current draw of all devices in the system to determine the required amperage of the supply.

- **PS902** up to 2 amps
- **PS904** up to 4 amps
- **PS906** up to 6 amps

	Allegion product	Current draw	Voltage
	PR10	110 mA	Linear: 5-16VDC
·	SM10	195 mA	Linear: 5 - 16VDC
ders	MT11	170 mA	Linear: 5 - 16VDC
Card readers, Biometrics	MT15	200 mA	Linear: 5 - 16VDC
ard	MTK15	230 mA	Linear: 5 - 16VDC
U	HandKey II	12V AC/DC - 580 mA 24V AC/DC - 300 mA	12 to 24VDC 12 to 24VAC 50-60Hz
	AD-300	250 mA	12VDC or 24VDC
	PIM400-TD2	250 mA	12VDC or 24VDC
w	PIM400-485	250 mA	12VDC or 24VDC
oc k	PIB300-2D	250 mA	12VDC or 24VDC
<b>Electronic locks</b>	PIM400-1501	400 mA	PoE 802.3af compliant power injector
lect	WRI400	500 mA	12VDC or 24VDC
ш	REPTR400	500 mA	12VDC or 24VDC
	ECK/GCK400	500 mA	12VDC or 24VDC
	CT5000	250 mA	12VDC or 24VDC
	ND Series	24VAC - 350 mA 24VDC - 150 mA	24VDC or 24 VAC
	L Series	Peak - 1.3 A, 5 - 10 second intervals Holding - 135mA between peak intervals	24VDC or 24 VAC
ices	QEL	1.4 A inrush (0.5 sec) 0.14 A Holding 2.0 A calibration	24VDC
Electrified mechanical devices	E996L 98/99 Series trim	0.22 A	24VDC
Elec	E360L 33A/35A Series trim	.50 A	24VDC
Ĕ	DE5101	24VDC - 300mA without maglocks	24VDC
	E7500	12VDC - 600 mA 24VDC - 300 mA	12VDC or 24VDC
	EL¹	16 A inrush (0.5 sec) 0.3 A holding current	24VDC
	Chexit/RCM <sup>1</sup>	16 A inrush (arming 0.5 sec) 0.4 A continuous	24VDC
	5100 Series	12VDC - 0.38 A 24VDC - 0.19 A	12VDC or 24VDC field selectable
	6100 Series	12VDC - 0.6 A 24VDC - 0.33 A	12VDC or 24VDC
trikes	6200 Series	12VDC - 0.6 A 24VDC - 0.33 A	24VDC standard 12VDC and AC optional
Electric strikes	6300 Series	12VDC - 0.5 A 24VDC - 0.24 A	12VDC or 24VDC field selectable
Ш	6400 Series	12VDC - 0.375 A 24VDC - 0.190 A	12VDC or 24VDC field selectable
	4200 Series	12VDC - 0.20 A 24VDC - 0.10 A 30VDC - 0.20 A	12VDC or 24VDC field selectable

	Allegion product	Current draw	Voltage
	M420/M450	12VDC - 0.75 A 24VDC - 0.38 A	12VDC or 24VDC
	M490	12VDC - 0.65 A 24VDC - 0.35 A	12VDC or 24VDC
Electromagnetic locks	40	12VDC32 A 24VDC - 0.15 A	12VDC or 24 VDC
	70	12 VDC - 0.25 A 24VDC - 0.12 A	
	72	12VDC - 0.50 A 24VDC - 0.25 A	
	320M	12VDC - 0.45 A 24VDC - 0.23 A	12VDC or 24VDC
	GF3000	12VDC - 0.90 A 24VDC - 0.45 A	12VDC or 24VDC
	390RFK	12VDC - 0.65 A 24VDC - 0.45 A	12VDC or 24VDC

#### Note

- All devices fed from a power supply must accept the same output voltage.
- Battery powered devices not included in above reference table. Please refer to data sheets for more information.

#### 2. Choosing option boards

Check for fire door labels on the door and frame. If an opening is fire rated code requires that the door have positive latching, which fail-secure hardware provides.

- Fail-secure hardware is locked when power is removed. Power is applied to unlock the door.
- For applications, such as stairwell re-entry doors, where access is required upon fire alarm, fail-safe hardware is applied. Fail-safe hardware is unlocked when power is removed. Power is applied to lock the door.

The PS900 Series offers the 900-FA option board which cuts power to downstream devices when the fire alarm is activated to allow for fail-safe/fail-secure conditions. For the PS902 the 900-FA board can be connected directly to the main printed circuit board (PCB) on the supply. For the rest of the PS900 Series power supplies the 900-FA board must be connected to another option board.

900-FA: Emergency interface relay integrates with fire alarm and is used to cut power in case of emergency

#### 3. Application

The PS900 Series allows you to address a wide range of applications with options boards that can be combined and configured in countless ways. A complete operational description of the opening is essential. How many doors are there? Is logic or sequencing required?

- 900-4R: 4 independently controlled relays to power multiple devices
- **900-2RS:** 2 relay EL panic device control board providing time delay between the firing of the outputs
- **900-4RL:** 4 relay board with integrated logic for controlling security interlocks, auto operators and time delays
- **900-8F:** 8 individually fuse protected outputs, giving the flexibility to power multiple devices and provide another layer of protection
- **900-8P:** 8 positive thermal coefficient (PTC) protected outputs

#### **Quick survey**

Identify if the opening is fire rated or has special requirements, such as re-entry upon fire alarm. Then identify if it requires hardware for fail-safe, fail-secure, or both conditions upon loss of power or fire alarm. Always consult your local AHJ for requirements of the opening if it is unclear.

#### **Quick survey**

Provide a complete operational description of the opening.

#### 6. Battery back up

Upon loss of building power it is important that your access control devices still function properly. The 900-BBK board provides up to four hours of backup power at the same output voltage as the power supply. There is a dedicated location on the supply for the 900-BBK board that nothing else can go on so in most cases it does not take away space from other option boards. The exception to this is the PS906. The PS906 can accommodate: a.) two option boards and a 900-BBK kit, or b.) three option boards and no 900-BBK kit.

■ **900-BBK:** Battery backup kit (includes battery backup board and two 7A/hr. batteries) and provides up to four hours of backup power when cycled every 5 minutes at full load

Number of connectors	PS902 <sup>1</sup> (2 amps)	PS904 <sup>1</sup> (4 amps)	PS906 <sup>1</sup> (6 amps)
Option boards	1	2	3 <sup>2</sup>
Battery backup board	1	1	1

 $<sup>1\ \ \</sup>text{One fire alarm board can be connected directly to the PS902. If a fire alarm board is desired for the PS904 or PS906 it alarm board is desired for the PS904 or PS906 it alarm board is desired for the PS904 or PS906 it alarm board can be connected directly to the PS902. If a fire alarm board is desired for the PS904 or PS906 it alarm board can be connected directly to the PS904 or PS906 it alarm board can be connected directly to the PS904 or PS906 it alarm board is desired for the PS904 or PS906 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected directly to the PS908 it alarm board can be connected as a supplication of the PS908 it alarm board can be connected as a supplication of the PS908 it along the PS90$ must be connected to an option board.

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### **About Allegion**

Allegion (NYSE: ALLE) creates peace of mind by pioneering safety and security. As a \$2 billion provider of security solutions for homes and businesses, Allegion employs more than 8,000 people and sells products in more than 120 countries across the world. Allegion comprises 27 global brands, including strategic brands CISA® Interflex®, LCN®, Schlage® and Von Duprin® For more, visit www.allegion.com.



**ALLEGION** 

**Quick survey** 

□ Yes

□ No

Is access control still required in

the event of a power outage:

 $<sup>{\</sup>tt 2\ If\ battery\ back-up\ is\ installed,\ only\ two\ additional\ option\ boards\ can\ be\ used.}$ 



## Quiet solutions

For healthcare

### Overview

Hospitals and other healthcare environments have special requirements for noise reduction, and most facilities currently exceed the recommended guidelines.

Loud environments affect everyone in a healthcare environment. It's been proven that excessive noise can cause patients to lose sleep, heal at a slower rate, and be less satisfied with their overall care experience. But patients aren't the only ones who are affected. Physicians and staff become more stressed and fatigued in a noisy environment which can cause an increased number of mistakes, reduced productivity and less friendly dispositions.

There are many sources of noise, but facilities can eliminate excess noise and create quieter environments by implementing solutions of any size.

Quiet openings can be beneficial in all areas, but especially:

- Care areas where patients are sleeping and healing
- Work areas/stations where concentration is important
- Busy traffic areas such as hallways
- Chapels or auditoriums where noise can be disturbing
- Office or administrative areas















### Solutions that create a quiet environment.

Allegion understands that healthcare environments are unique and offers innovative solutions that reduce the noise of openings throughout the facility and deliver the reliability and performance that we're known for.

#### The Ouiet One® exit devices from Von Duprin

Push pads on exit devices can be noisy and disruptive. Von Duprin exit devices utilize a specially designed mechanical damper that decelerates the push pad on the push and return stroke, eliminating most of the noise associated with exit device operation.

Standard on all Von Duprin 98/99 Series standard and 33A/35A Series narrow stile exit devices

#### Von Duprin Quiet Electric Latch (QEL)

Traditional electronic latch retraction on exit devices utilizes magnetic solenoids that result in a loud and abrupt sound when operated. The motor driven latch retraction used on the Von Duprin QEL is more energy efficient and provides much quieter operation.

- Paired with "Quiet One" technology, the QEL is the quietest operating latch retraction solution
- Option on all Von Duprin 98/99, 33A/35A, and 94/95 Series exit devices
- Modular design and retrofit kits make it possible to easily upgrade existing mechanical or legacy electronic latch (EL) devices

#### Von Duprin pneumatic controlled exit devices

Pneumatic controlled exit devices operate using compressed air and are ideal for applications that require quiet and efficient electronic latch retraction, especially in hazardous areas where electronics are not permitted.

Option on all Von Duprin 98/99 and 33A/35A Series exit devices

#### Von Duprin Concealed Vertical Cable system (CVC)

Traditional concealed or surface vertical latching devices use rigid metal rods to retract the latches. Rods installed within or on the surface of the door can rattle and cause unwanted noise. The CVC system uses enclosed cables that do not lift up or down like traditional rods and operate quietly within the door.

- Available with 98/99 and 33A/35A Series exit devices integrates with existing devices and trims
- Option for the cable system to be pre-installed in doors direct from Steelcraft

#### LCN pneumatic powered auto operators

Pneumatic powered auto operators uses the power of compressed air to power the operator; therefore, are quieter compared to electric counterparts that use motors and gearboxes.

Available on LCN pneumatic powered auto operators 2610, 4810, 4820 and 4840

#### LCN slam-free door control

For free opening doors you want to control, but aren't required by code to use a closer, LCN's unique closer design removes the spring and hydraulics control the opening and closing speed, reducing noise.

Available on most LCN 4000 Series closers

#### Silencers and sweeps

The use of silencers, sweeps and other solutions reduce the sound made by doors when closing, and the noise that can be heard through a closed door.

#### **Door audits**

Conducting regular door audits ensures that doors are operating as intended and allow for adjustments to be made to any openings that may be making extra noise due to equipment that isn't working properly.

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## AX exit devices

Featuring the 98/99, 94/95, 33/35A and 22 Series devices

# The exit device that requires only 5 lbs. of force to operate

The AX was born out of a need to provide the market with a solution that meets the 2010 ADA Standards for Accessible Design (Chapters 404.2.7 and 309.4) that state the force reqiured to activate operable parts shall be 5 lbs. maximum. The 2013 California Building Code (Chapter 11B-309.4) adopted virtually identical requirements that went into effect January 1st, 2013.

Since pioneering the first exit device in 1908, Von Duprin life safety products have provided unparalleled quality, performance and flexibility for schools, hospitals, stadiums and public buildings. These products come with the support and customer care only offered by Von Duprin. Providing the confidence and peace of mind at critical moments of life safety.

## AX device specification requirements

Provide exit devices tested to ANSI/BHMA A156.3 Grade 1, [OPTION for specific compliant products/applications: UL certified to meet maximum 5 pound requirements according to the 2010 ADA Standards for Accessible Design (Chapters 404.2.7 and 309.4) and California Building Code (Chapter 11B-309.4)] and UL listed for Panic Exit or Fire Exit Hardware.



## How to identify the Von Duprin AX device

1. Look for the "AX" Prefix in the door schedule and/or specification.

2. In the field, look for the Compliance note on the UL Label and the AX Device Label. Both labels can be found on the center case cover of the exit device as shown below.



Contact Allegion today at 888.925.4359 or ax.allegion.com to learn how the AX device can help you provide accessibility without compromise.

AX98/99 Series Specifications		
Device types	AX98/99 - Rim AXXP98/99 - Rim AX98/9927 - LBR AX98/9950 WDC - LBL AX98/9949 - LBL & LBL-AFL - Concealed Vertical Cable Less Bottom Latch	
Device functions	EO, DT, NL, NLOP, L, LBE, LDT, LNL	
Device lengths	3' / 4'	
Rating	Panic and Fire	
Electric options	EL - Electric latch retraction LX - Latchbolt monitor switch LXLC - Latchbolt monitor switch low current LXRX - Latchbolt pushpad monitor LXRXLC - Latchbolt pushpad monitor low current RX - Pushpad monitor switch RXLC - Pushpad monitor switch low current RX2 - Double pushpad monitor switch ALK - Alarm kit SS - Signal switch	
Mechanical options	GBK - Glass bead kit -2 - Double cylinder SNB - Sex bolts SEC - Security screws WP - Weep holes	
Dogging options (Panic only)	Hex key dogging = Standard CD - Cylinder dogging DI - Dogging indicator LD - Less dogging SD - Special dogging	
	<b>65</b> Special as999	

AX94/95 S	Series Specifications
Device types	AX94/9547
Device functions	EO, DT, L, LDT, LBE, LNL
Device lengths	3' / 4'
Rating	Panic and Fire
Electric options	LX - Latchbolt monitor switch
AX33/35A	Series Specifications
Device types	AX33/35A - Rim AX33/3549 - LBL & LBL-AFL - Concealed Vertical Cable Less Bottom

Device types	AX22 - Rim AX2227 - LBR
Device functions	EO, DT, NL, NLOP, L, LBE
Device lengths	3' / 4'
Rating	Panic and Fire
Electric options	LX - Latchbolt monitor switch RX - Pushpad monitor switch RX2 - Double pushpad monitor switch ALK - Alarm kit
Mechanical options	GBK - Glass bead kit
Dogging options (Panic only)	Hex key dogging = Standard LD - Less dogging

Device functions	EO, DT, NL, NLOP, L, LBE, LDT
---------------------	-------------------------------

Latch

Device lengths 3'/4' Rating Panic and Fire (3349 LBL/AFL only) Electric

options

LX - Latchbolt monitor switch LXLC - Latchbolt monitor switch low current LXRX - Latchbolt pushpad monitor

EL - Electric latch retraction

LXRXLC - Latchbolt pushpad monitor low current **RX** - Pushpad monitor switch

RXLC - Pushpad monitor switch low current RX2 - Double pushpad monitor switch

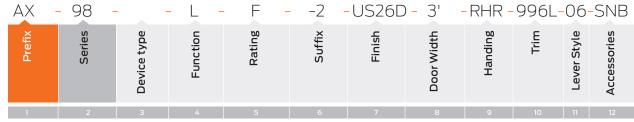
SS - Signal switch Mechanical GBK - Glass bead kit SEC - Security screws options

**ALK** - Alarm kit

WP - Weep holes

Dogging Hex key dogging = Standard CD - Cylinder dogging options LD - Less dogging (Panic only)

### Ordering information



**Device Type** 

### Selections correspond with the numbers above. See price book for specific configuration optio 3

1	Prefix
AX*	Accessible Device
EL	Electric latch retraction
LX	Latchbolt Monitor Switch
LXLC	Latchbolt Monitor Switch Low Current
LXRX	Latchbolt Pushpad Monitor
LXRXLC	Latchbolt Pushpad Monitor Low Current
RX	Pushpad Monitor Switch
RXLC	Pushpad Monitor Switch Low Current
RX2	Double Pushpad Monitor Switch
SS	Signal Switch
*Must bo	specified: may select more than one profix

*Must be specified; may select more than one prefix.

2	Series
98 99 94 95 33A 35A 22	Series 98 - smooth Series 99 - grooved Series 94 - smooth Series 95 - grooved Series 33A - grooved Series 35A - smooth Series 22

Contact Allegion today at 888.925.4359 or ax.allegion.com to learn how the AX device can help you provide accessibility without compromise.

27 47	Rim Surface Vertical Rod Concealed Vertical Rod Concealed Vertical Cable
4	Function
EO DT NL NLOP L LBE LDT LNL	Exit Only Dummy Trim Night Latch Night Latch - Optional Pull Lever Lever - Blank Escutcheon Lever, Rigid - Dummy Trim Lever, Rigid - Night Latch
5	Rating
N/A F	Panic Fire-rated
6	Suffix
-2 LBL/LBR LBL-AFL WH	

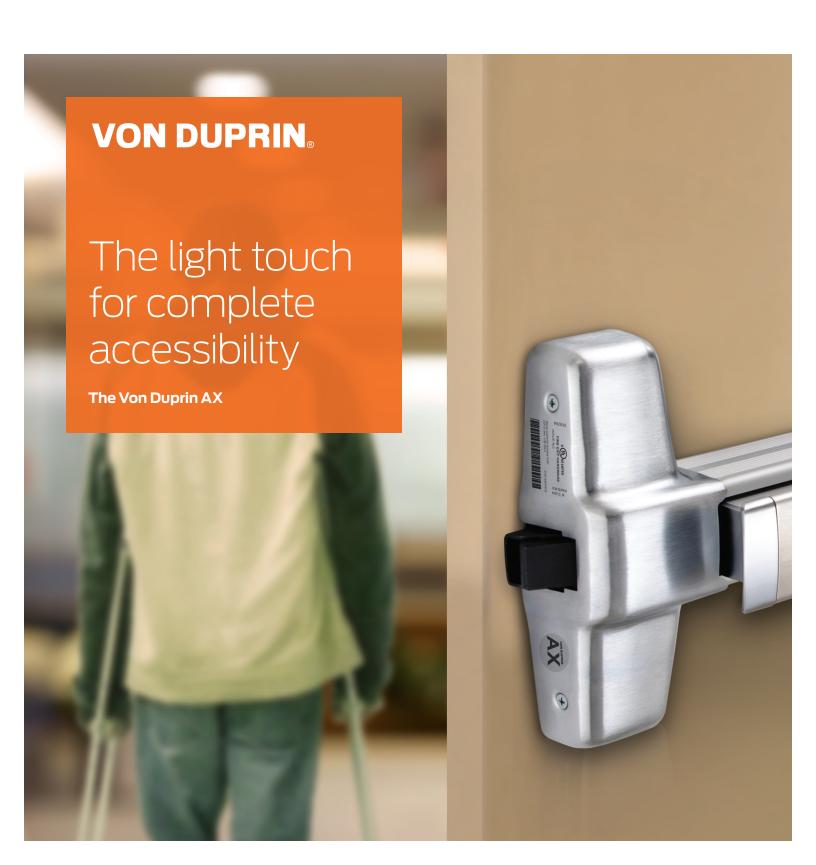
7 Finish See pricebook for finish offering  8 Door Width 3' Standard Default 4'  9 Handing RHR Right Hand Reverse LHR Left Hand Reverse 10 Trim See pricebook for trim/control offering	ons.		
8 Door Width 3' Standard Default 4'  9 Handing RHR Right Hand Reverse LHR Left Hand Reverse 10 Trim	7	Finish	
3' Standard Default 4'  9 Handing RHR Right Hand Reverse LHR Left Hand Reverse 10 Trim	See prid	ebook for finish offering	
9 Handing RHR Right Hand Reverse LHR Left Hand Reverse  10 Trim	8	Door Width	
RHR Right Hand Reverse LHR Left Hand Reverse  Trim	-	Standard Default	
LHR Left Hand Reverse  Trim	9	Handing	
		0	
See pricebook for trim/control offering	10	Trim	
	See prid	ebook for trim/control offering	

1	Lever Style	
See pricebook or lever style offering		
2	Accessories	
ALK GBK	Alarm Kit Glass Bead Kit	
SNB	Sex Bolts	



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### The Von Duprin AX: The exit device which requires only 5 lbs. of force to operate

For decades, architects have turned to Von Duprin for innovative solutions with proven performance. We delivered that once again with the AX, our newest exit device offering. This option provides a complete accessibility solution—without compromising any of the other elements that have made Von Duprin the industry's most trusted exit device manufacturer.

#### New maximum force code

The AX was born out of a need to provide the market with a solution that meets the 2010 ADA Standards for Accessible Design (Chapters 404.2.7 and 309.4) that state the force reqiured to activate operable parts shall be 5 lbs. maximum. The 2013 California Building Code (Chapter 11B-309.4) adopted virtually identical requirements that went into effect January 1st, 2013.

#### What this means to you

- New construction projects in the United States require exits to meet 5 lb. maximum operating force.
- An ideal fit for openings that demand maximum accessibility.

#### UL certification on new California Building Code requirements

The AX is subject to Von Duprin's standard testing to ensure it meets our own rigorous standards for durability, use and functionality. We also received a new UL certification confirming for you—and building inspectors—that an independent third party has verified that the AX is compliant with the 5 lb. maximum operational force requirement. The AX is the first UL-certified exit device to meet the new requirements put in place by ADA Standards and the California Building Code for accessible openings.

#### What this means to you

You can be assured that you're specifying a product that's been thoroughly tested to meet the ADA Standard as well as California Building Code's new code requirements. This will help minimize the risk of project delays, liability and lost time and money in having to re-specify an opening.

#### **Accessibility without compromise**

On the surface, the AX looks and performs the same as our traditional exit devices. But, through smart engineering and redesign, we've enabled the AX to meet 5 lb. operational force requirements. The chassis now requires less push force to actuate the latch, allowing for accessibility without compromise...the Von Duprin promise.





### **Von Duprin AX offering**

Series	Device Type	Functions	
08/00	AX98/99 AXXP98/99	Exit only/Dummy trim Night latch/Lever	
98/99 Fire & panic	AX98/9927 LBR AX98/9949 LBL AX98/9950WDC LBL	Night latch-optional pull Lever-blank escutcheon Lever-rigid-dummy trim Lever-rigid-night latch	
94/95 Fire & panic	AX94/9547	Exit only/Dummy trim Night latch/Lever Lever-blank escutcheon Lever-rigid-dummy trim Lever-rigid-night latch	
	AX33/35A	Exit only/Dummy trim	
33A/35A Fire & panic	AX33/3549A LBL	Night latch/Lever     Night latch-optional pull     Lever-blank escutcheon     Lever-rigid-dummy trim	
22 Fire & panic	AX22 AX2227 LBR	Exit only/Dummy trim/Night latch Night latch-optional pull Lever/lever-blank escutcheon	

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## 6100 Series

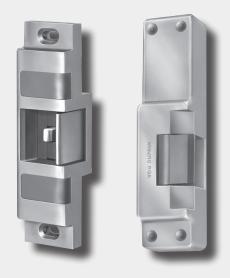
Strikes for rim exit devices



Von Duprin electric strikes are known for their reliability, durability and security. The 6100 Series strikes are designed to withstand abuse. Their heavy-duty stainless steel construction is UL1034 listed and meets ANSI/BHMA Grade 1.

6100 Series electric door strikes are designed for use with a variety of rim exit devices including rim nightlatch. Electrified strikes allow remote release of a locked door by activating a movable lip (keeper) using an entry/exit button or credential reader and can be a cost effective means for managing access. 6100 Series strikes come standard as 24 VDC in fail secure mode. 12 VDC and AC operation can be selected, as can fail safe mode and other options that enable you to configure these strikes to fit your exact needs.

Use 6100 Series electric strikes for retrofit applications or new construction. To assure the proper selection of an electric strike on new applications, lockset compatibility charts are shown on the next page. When using a lockset not listed or if retrofitting a strike to an existing application, please contact Von Duprin technical support for application assistance.



### Features and benefits

- Five configurations available for rim exit and nightlatch devices
- Heavy-duty stainless steel construction
- Strike box allows horizontal adjustment to compensate for misalignment of the door or frame
- 24 VDC standard with 12 VDC and AC operation optional
- Two-piece plug connectors are furnished for ease of installation and removal during strike servicing
- Options include rectifier kit for VAC to VDC conversion, dual monitor switches, entry buzzer and Allegion Connect wire extension
- Six popular finishes available to suite with existing hardware
- Suitable for interior or exterior doors
- UL 10C 3-hour fire-rated electric strike (models 6111, 6112 and 6113 – fail secure only)
- UL 1034 listed for burglary-resistant electric door strikes
- Meets ANSI/BHMA A156.31, Grade 1 for endurance and dynamic strength
- Meets ANSI/BHMA A156.31, Grade 1, 1500 lbs static strength
- Dynamic strength 70 ft lbs
- Endurance 1,000,000 cycles



Model spe	ecifications							
Model number	r	6111	6112	6113	6114	6121		
Retrofits mode	el	VD 3031	FA 310-4	VD 3011 VD 3021	FA 310-5	FA 310-4-100		
Latchbolt thro	w	3/4"	3/4"	3/4"	3/4"	3/4"		
Face plate leng	gth	6"	9"	6"	71/2"	9 1/8"		
Backbox depth	h	1 5/8"	1 11/16"	1 15/16"	N/A	N/A		
Lockset		Rim exit device	Rim exit device	Rim exit device	Rim nightlatch	Rim exit device		
Number	Single	-	-	-	•			
of doors	Double door with mullion	•						
	Double door without mullion					•		
Door/frame	Hollow metal	•	•	•		•		
type	Aluminum	-	-	•	•	•		
	Wood	-	-	•		•		
Options	Blade stop shim	Yes	No	Yes	No	No		
	DS or DS-LC (dual monitor switches)	Yes	Yes	Yes	Yes	Yes		
	EB (entry buzzer - fail-secure only)	Yes	Yes	Yes	Yes	Yes		
Certifications/ Listings	UL 1034	•	•	•	•			
	UL 10C Single Door	3 hour	3 hour	3 hour				
	UL 10C Pair Door*	90 minutes	90 minutes	90 minutes				
	ANSI/BHMA 156.31	Meets Grade 1, 1500	Meets Grade 1, 1500 lbs static strength; 70 ft lbs dynamic strength; 1,000,000 cycles endurance					
Application no	otes	1	2	3	4	5		
					1			

<sup>\*</sup>With manufacturer's mullion.

Note: 16 VDC and 28 VDC solenoid are sold as replacement parts for existing strikes. Please contact customer care for details.

#### **Application notes:**

- ½" projection blade stop shim 010055-XX available for use on cased opening or blade stop frames. Specify when using 55 rim devices. May also be used with vertical rod exit devices noted on previous page x Pullman latch LBR (non-fire rated).
- When used to replace Folger Adam 310-4, minor fame prep modification required.
- 1/2" projection blade stop shim 010055-XX available for use on cased opening or blade stop frames (non-fire rated).
- Surface applied strike designed to replace Folger Adam 310-5 with different mounting hole locations from Folger
- 5. Designed to mount on inactive leaf.

## Rim exit device compatibility 6111, 6112, 6113 & 6121 strikes

Manufacturer	Device
Von Duprin	22, 33A, 35A, 55¹, 88, 98, 99 8827 LBR⁴ x Pullman latch Non-Fire rated 9827 LBR⁴ x Pullman latch Non-Fire rated 9927 LBR⁴ x Pullman latch Non-Fire rated
Falcon Monarch <sup>2</sup>	XX-R, 18-R, 19-R, 24-R, 25-R
Falcon Doromatic	1790
Precision <sup>2</sup>	2100
Sargent	2800, 6500, 6800, 8500, 8800, 9500, 9800³, 9898
Yale	1500,700

- 1. Strike must be factory modified, specify when using with a 55 Rim device.
- 2. Deadlocking feature will not properly function, consult factory.
- 3. Panic only, not fire-rated.
- 4. 6111 is recommended for LBR applications.

Note: When using a lockset not listed or when retrofitting an existing application, please contact Von Duprin technical support for application assistance.

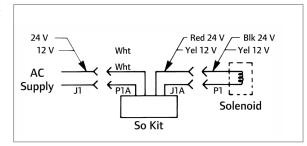
#### 6100 Series power requirements

Models	Voltage	Current	Duty	Amps	Ohms
All	12V	DC	Continuous	0.60	21
All	24V	DC	Continuous	0.33	83

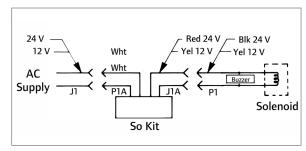
Continuous duty = Energized 1 minute or more

### Wiring

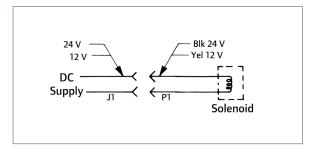
AC



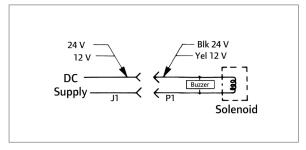
### AC with buzzer



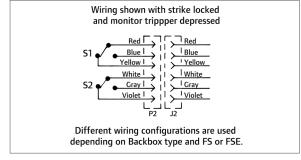
DC



#### DC with Buzzer

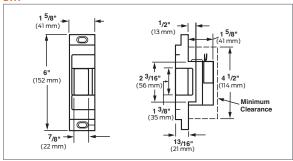


#### Optional DS (FSE Shown)

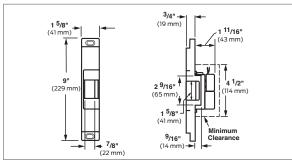


### **Dimensions**

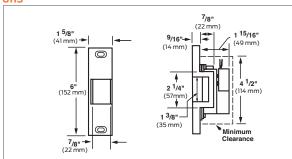
6111



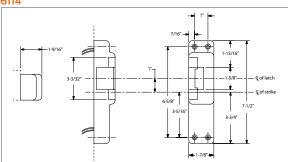
#### 6112



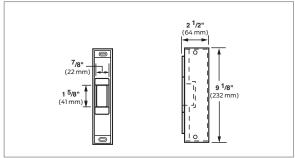
#### 6113



#### 6114



### 6121



### Ordering information

6112-FSE-DS-24-S024-US3-EB-CON

Model	Power failure mode	Dual switch*	Voltage	Rectifier kit*	Finish	Buzzer*	Allegion Connect*
1	2	3	4	5	6	7	8

\* Optional

#### Selections correspond with the numbers above

1	Model
Reference spe	ecification chart to make the proper model selection
2	Power failure mode
FSE	Fail-secure. Requires power to be applied to unlock the strike lip. On loss of power, the strike lip is locked. <b>Fire-rated.</b>
FS	Fail-safe. Requires power to be applied to lock the strike lip. On loss of power, the strike lip is unlocked. <b>Non-fire-rated.</b>
3	Dual switch (optional)
DS	Monitors latch bolt and lock status. DS switches rated for 24 VDC at .050 - 2.0 amps.
DS-LC	Low current option for computer monitoring. Monitors latch bolt & lock status. DS-LS switches rated for 24 VDC at .050 amp or less.
4	Voltage (VDC)
24	Low voltage DC power
12	Low voltage DC power
If AC power is req	juired, specify rectifier kit.
5	Rectifier kit (optional)

S012	Converts 12 VAC voltage to 12 VDC to operate the solenoid				
S024	Converts 24 VAC voltage to 24 VDC to operate the solenoid				
6	Finish				
US3/BHMA 605	Plated polished brass on stainless steel				
US4/BHMA 606	Plated satin brass on stainless steel				
US10/BHMA 612	Plated satin bronze on stainless steel				
US10B/BHMA 613	Plated dark bronze, oil rubbed on stainless steel				
US32/BHMA 629	Stainless steel, polished				
US32D/BHMA 630	Stainless steel, satin				
7	Buzzer (optional)				
EB	Entry Buzzer				
Only available if Fail-Secu	Only available if Fail-Secure (FSE) is specified.				
8	Allegion Connect				
CON	Allegion Connect Connector				
6 in. wire extension harne	ss available				

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Allegion (NYSE: ALLE) is a global pioneer in safety and security, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion produces a range of solutions for homes, businesses, schools and other institutions. Allegion is a \$2 billion company, with products sold in almost 130 countries. For more, visit **www.allegion.com.** 





## FAQ Concealed cable solutions for wood doors

featuring Schlage and Von Duprin

### ■ Technology

What is the difference between the new WDC (-50) and the current WD CVC (-49)? The new product is designed specifically for wood doors; the previous system was designed for hollow metal doors and then adapted for wood doors. With the old system, the latches were larger which in turn required larger parts of the door to be removed. The new system, because it is specifically designed for wood doors, requires less material to be removed from the door - thus providing greater door integrity and negating the need for metal wraps for fire rating (in applications requiring up to 45 minute fire rating).

How is this cable technology different from what we have in the current CVC? The cable itself is identical; the difference is that the new system does not have the outer "sheath" utilized on the current CVC.

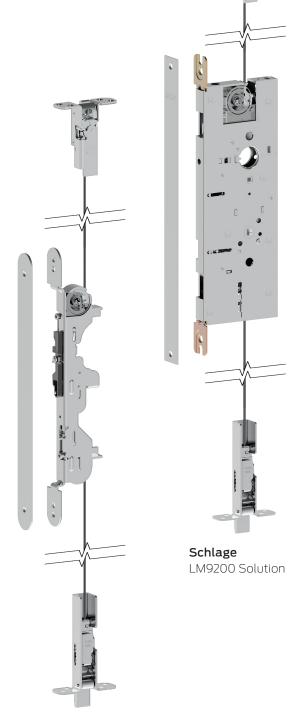
**Is the new cable stronger than the current cable?** The new cable and current cable have identical strength. The difference between them is that the current cable system has a sheath over the cable; as the sheath is not load bearing, the strength between the two is the same

#### Is there a risk of the "ends" coming off the new cable?

No – the process used to secure the ends to the cable actually makes the attachment point stronger than the cable itself.

Do the cables stretch? Can they snap? There is no appreciable stretch over time or use of the cables, and thus they will not require retightening due to use. Additionally, the cable to latch engagement is designed with "over travel". This means that when the latches are retracted, the cable is not at the end of its travel. This over travel means the cables will never receive the direct force of an impact if a push pad or lever is abused or slammed. The cables will not snap in the application.

Which CVC system is better? The current CVC system is better for hollow metal doors because it was designed specifically for that door type; likewise, the new CVC system is better for wood doors because it was specifically designed for that door type.



**Von Duprin** WDC Solution

### FAQ - continued

Is the new system patented? Yes, the new system is currently patent pending.

Von Duprin specific: Will the new WDC cable system replace the previous CVC system? For wood doors, yes, because the new WDC was specifically designed for wood doors applications. However, we will continue to use the current CVC system for hollow metal doors as it was specifically designed for hollow metal applications.

**Von Duprin specific: Are there any changes to the exit device?** There are no changes or modifications to the exit device or the trim options. Electrified options will also remain the same.

**Von Duprin specific: Can the product be retrofitted to existing devices?** Partially. An existing concealed exit device can be reused, but it requires a new cable kit and a new door.

Schlage specific: Will the LM9200 be available for hollow metal doors? Yes – a hollow metal solution will follow the wood door solution and will be available 3-6 months after the wood door solution launches. Note that the hollow metal product will be identified differently than the wood door product. Details to follow in Q2 2015.

Schlage specific: How does the LM9200 compare to the Schlage LM9300? There are three primary differences between the LM9200 and LM9300

- 1) The LM9200 is a two-point latch (top and bottom), the LM9300 is a three-point (top, bottom and side)
- 2) The LM9200 can only be used in wood doors, the LM9300 can only be used in hollow metal.
- 3) The LM9300 is intended for severe weather (tornados, hurricanes) or very high security. The LM9200 wood door is intended for more aesthetic applications.

### Availability

When will the new Schlage LM9200 and Von Duprin WDC be available? Both products will be available to order February 2, 2015, with shipments by February 27. Normal lead times will apply starting March 2015.

**What will be the new pricing?** Please see respective Schlage LM9200 and Von Duprin pricebook pages. NOTE: The Schlage LM9200 pricebook pages will be located in the "multipoint" section of the Schlage pricebook

What door heights will the Schlage LM9200 and Von Duprin WDC work with? Both the Schlage LM9200 and Von Duprin WDC are compatible with door openings ranging from 6'8" – 10'0 (measured from top of finished floor to top strike location in the frame). Simply specify the desired opening height in the order string.

Von Duprin specific: Which exit models will have the concealed vertical cable option? The concealed cable system will launch with the 98/99 as well as the 33/35A devices. The new WDC system will have all the same available options and accessories, including a Less Bottom Latch (LBL) option.

Von Duprin specific: Will the concealed cable system be available in surface mount? There are no immediate plans for a surface vertical cable system.

Von Duprin specific: Are there plans to obsolete the traditional concealed vertical rod system (9947)? No, there are no short-term plans to obsolete the concealed vertical rod 9947 device. There is a very large install base that will need to be serviced for years down the road.

### FAQ - continued

### ■ Installation

If I have enough clearance above the door, can I install the new WDC system while the door is hanging? Yes, if the product is less bottom latch.

Can the cables be cut in the field for various door heights? No. The spool system allows each cable to span several door opening heights so fine tuning of the cable is not required. Additionally, there are attached "ends" to each cable that are necessary for proper installation and cannot be removed.

Why do I need to replace my door when I want to retrofit this into an existing wood door application? Due to the unique design and capabilities of the new system, it cannot be retrofitted into existing door prep.



## FAQ Quiet Electric Latch Retraction-QEL

### ■ Technology

What is the difference between the new QEL and the current QEL? The updated QEL provides many new benefits and features. A couple of key changes to note: 1) Modular design allows you to upgrade your openings without replacing your existing exit device. A variety of kits are available to meet your specific needs - from retrofitting your mechanical devices to upgrading your solenoid driven EL devices.

2) Auto adjust latch retraction - this feature allows for the latch throw and pull to be adjusted automatically every time the device is cycled. 3) Hex dogging option allows for device to be manually dogged or undogged as needed. 4) LED lights indicate voltage drop or surge. 5) Rear facing wiring allows for easier installation.

Did the new QEL replace the previous QEL? Yes.

**Are there any changes to the exit device?** No, this solution can be retrofitted to any existing 98/99, 94/95 or 33A/35A Series exit devices.

**Is the product retrofit able?** Yes, this solution can be added to any existing 98/99, 94/95 or 33A/35A Series exit device. You can upgrade any of these devices to a new QEL, regardless of there current state - ex: a standard rim device without EL or QEL can be upgraded to the new QEL while keeping existing device.

What are the power supply requirements for this device? The QEL has a low in rush current = 1.0 amps, so it can be used with standard Schlage power supplies. When powering multiple components, verify that the amperage requirements of all components combined does not exceed the power supply output rating, see table below for output ratings.

Schlage PS902	Schlage PS904	Schlage PS906
up to 2 amps	up to 4 amps	up to 6 amps

The QEL device is compatible with the following equipment: PS900 Series power supplies - PS902, 904, 906, 914; 900 Series Option Boards - 900-2RS, 900-4R, 900-4RL, 900-2Q; PS873 Power Supply including 871-2, 871-2Q, 873-4TD/AO Option Boards. The power transfer is also sold separately. Please refer to Von Duprin catalog for more information on EPT-2/EPT-10 power transfers and PS900 series power supplies.

Are there wire run restrictions with the QEL? Yes, see table below for factory recommendations.

QEL wire run lengths			
<b>Distance = Wire gauge</b> (one way)			
200' = 18 AWG	320' = 16 AWG	500' = 14 AWG	800' = 12 AWG

### FAQ - continued

What certifications do the QEL device and conversion kits meet? 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 QEL Conversion Kit is UL Classified under "Accessories for Single-Point Locks and Latches and Fire Exit Hardware" (UL 10C).

### Availability

When will the new QEL be available? Product orders will be accepted beginning on December 1, 2014, product will begin shipping on December 8, 2014.

What is the pricing structure for the device and retrofit kits? There is no pricing increase for the standard QEL option. Please reference price books for additional upgrade kits.

Which exit models will the QEL be available for? 98/99, 94/95 and 33A/35A Series exit devices.

**Will service parts be available for existing QEL devices?** Yes, service parts will be in the form of baseplate kits and modules. These items will be available for order in our price books.

### ■ Installation

**Do I need to replace my entire device?** No, the solution can be retrofitted to any existing 98/99, 94/95 and 33A/35A Series exit devices.

Will using a power supply not manufactured by Schlage or Von Duprin void my warranty? No. If a customer uses a power supply from another manufacturer, Von Duprin will still warranty all parts and components from the Von Duprin QEL exit device. The warranty will be voided if the customer uses a power supply that does not meet the specification requirements of the QEL.

QEL electrical load				
Voltage	24 VDC			
Current	1.0 A Inrush (0.5 sec) 0.14 A Holding			

When would the HD-QEL option be used? The HD QEL is only used on panic devices. This option allows for the device to be manually dogged when needed.

### Conversion information for existing products

If I have an existing 33A/35A or 98/99 Series Von Duprin exit device, what do I need to upgrade it? Due to the modularity of the Von Duprin product platform, you have one of two options when upgrading to the new QEL solution - QEL Modular Kit or QEL Baseplate Kit. See chart below to help you choose the proper upgrade option.

I have this type of device currently installed		I want to upgrade to the new QEL, what do I need?		
		33A/35A and 98/99 Series devices		
		QEL Modular Kit*	QEL Baseplate Kit*	
	Panic	X		
Mechanical device	Fire rated (pre October 2014)		X	
	Fire rated (post October 2014	×		
Any existing QEL device		X		
Any existing EL device			X	

<sup>\*</sup>Available with Hex Dogging option for panic devices only

### FAQ - continued

What are the new conversion kit part numbers? See table below for information regarding available conversion kit and associated part numbers.

Conversion kits	QEL	HD-QEL	QEL	HD-QEL
	modular kit	modular kit	baseplate kit	baseplate kit
Series	33A/35A,	33A/35A,	33A/35A,	33A/35A,
	98/99	98/99	98/99	98/99
Part number	114317	958002	958003 - 3' 040065 - 4'	958004 - 3' 040067 - 4'

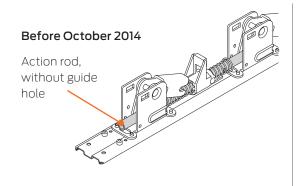
<sup>\* 33/35</sup> and 98/99 conversion kits available with Allegion Connect, to order use suffix CON.

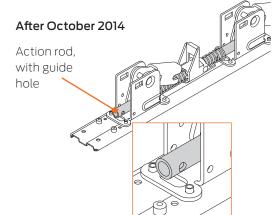
#### If I have an existing 94/95 Series Von Duprin exit device, what do I need to upgrade it?

All that is required to update an existing 94/95 Series device is the Modular Conversion Kit, part number = 958005

#### How do I know if my device was manufactured before October 2014?

Devices manufactured before October 2014, **do not** have a guide hole drilled in the action rod. Devices manufactured after October 2014, **do** have a guide hole drilled for the action rod. See illustrations below for reference.





#### If my device has been modified by a third party, how can I insure that it is UL approved for my application?

Some third party providers for aftermarket solutions are not UL certified, for both panic and fire rated devices. You can avoid this, by purchasing genuine Von Duprin products that are certified for panic and fire rated applications. Guaranteeing you the security and peace of mind that your device meets the most strict code and industry requirements.





# Quiet electric latch retraction



### Overview

The Quiet electric latch (QEL) option provides electronic control of an exit device and is ideally suited for environments where limited operational noise is desired. The feature 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 98/99 rim and vertical systems.

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.

QEL is an option for 98/99 Series (including XP,) 94/95 Series and 33A/35A Series devices. The PS900 Series power supplies, with the 900-2RS option card, is the minimum option card requirement. Other option cards are available for various functions.

### Features and benefits

- Quiet operation
- On-board installation and troubleshooting diagnostics
- Automatic calibration- automatically adjusts latch throw and pull.
- Vandal resistant
- BHMA certified to ANSI/BHMA A156.3
   Grade 1 for exit devices
- UL and cUL listed as "Panic Hardware" (UL 305) and as "Fire Exit Hardware" (UL 10C)
- QEL conversion kit is UL classified under Accessories for Single-Point Locks and Latches and Fire Exit Hardware (UL 10C)

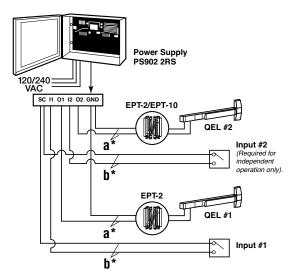
QEL electrical specifications		
Voltage	24VDC	
Current inrush	1.4 Amps	
Current holding	.014 Amp	
Current calibrate	2.0 Amps (3 sec one time)	

Wire length and gauge		
Wire length (feet)	Wire gauge (AWG)	
200'	18	
320'	16	
500'	14	
800'	12	

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-2/10 power transfer and the 900 Series power supplies.

#### To order, specify

- Standard Use prefix QEL, example QEL99L.
- Special center case dogging Use prefix SD-QEL, example SD-QEL99L.



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