

**FALCON®**

# Recessed

Touch bar exit devices



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## The Falcon difference

### Safety, security and uncompromising value

At Falcon, we know that every product you sell not only has to meet local building codes, but also your expectations for performance and quality. We take your expectations seriously, and that's why we build our recessed crossbars to deliver durability, convenience and unmatched value. After all, we've built our reputation on the same standards that you have – providing quality products at a reasonable price delivered on time. It's the way we do business and it's what makes Falcon recessed crossbars a powerful choice no matter what your project.

# Falcon exit devices

	Architectural pushpads	Commercial pushpads		
				
	<b>24/25 Series</b>	<b>19 Series</b>	<b>1490/1590</b>	<b>1690/1790</b>
<b>Selling features</b>	<ul style="list-style-type: none"> <li>• Maximum flexibility in a variety of applications</li> <li>• Wide range of features and options</li> <li>• Patent pending deadlocking technology</li> </ul>	<ul style="list-style-type: none"> <li>• Lowest cost most dependable light-duty exit</li> <li>• Large trim selection</li> <li>• Full compliment of electrical options</li> <li>• Standard deadlocking</li> </ul>	<ul style="list-style-type: none"> <li>• Steel operating mechanisms</li> <li>• Aluminum push bar and end caps</li> <li>• Durable design</li> <li>• Surface vertical and rim options available</li> </ul>	<ul style="list-style-type: none"> <li>• Patented pending latchbolt for hurricane ratings</li> <li>• #1 selling exit device for aluminum doors</li> <li>• Full compliment of electrical options</li> <li>• Durable design</li> </ul>
<b>Applications</b>	<ul style="list-style-type: none"> <li>• Frequent traffic</li> <li>• Offices, churches, hospitality, retail, education, healthcare</li> <li>• Interior, exterior, new construction, retro-fit</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate traffic</li> <li>• Commercial, multi-family, office, retail</li> <li>• Interior, exterior, retro-fit</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate traffic</li> <li>• Commercial, multi-family, office, retail</li> <li>• Interior, exterior, retro-fit</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate traffic</li> <li>• Commercial, multi-family, office, retail</li> <li>• Interior, exterior, retro-fit</li> </ul>
<b>Device options</b>	<ul style="list-style-type: none"> <li>• Rim, SV, CV, M</li> <li>• 6 functions / 9 finishes</li> <li>• 4 lever designs</li> <li>• 10-year warranty</li> </ul>	<ul style="list-style-type: none"> <li>• Rim, SV</li> <li>• 7 functions / 4 lever designs</li> <li>• 3 finishes</li> <li>• 10-year warranty</li> </ul>	<ul style="list-style-type: none"> <li>• CV = 1490 / Rim = 1590</li> <li>• 4 functions / 10 finishes</li> <li>• 3 length options</li> <li>• 10-year warranty</li> </ul>	<ul style="list-style-type: none"> <li>• CV = 1690 / Rim = 1790</li> <li>• 4 functions / 7 finishes</li> <li>• 4 length options</li> <li>• 10-year warranty</li> </ul>

	Crossbars			Recessed/concealed devices
				
	<b>XX</b>	<b>1990</b>	<b>2090</b>	<b>2390</b>
<b>Selling features</b>	<ul style="list-style-type: none"> <li>• Classic traditional design</li> <li>• Dependable and attractive</li> <li>• Economic crossbar option</li> <li>• Panic and fire rated options</li> </ul>	<ul style="list-style-type: none"> <li>• Classic industry look</li> <li>• Balanced appearance, dependable performance and economical pricing</li> <li>• Hardened steel latches</li> <li>• Adjustable strike to ensure safety, security and smooth operation</li> </ul>	<ul style="list-style-type: none"> <li>• Classic looks in a rim device</li> <li>• Designed for high use and abuse</li> <li>• 1/2" inch steel latchbolt</li> <li>• Surface mounted strikes for full frame or blade type stops</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced projection recessed device</li> <li>• Tough, reliable performance</li> <li>• Easy rod adjustment simplifies installation</li> <li>• Smooth, reliable operation</li> </ul>
<b>Applications</b>	<ul style="list-style-type: none"> <li>• Light/moderate traffic</li> <li>• Commercial, multi-family, office, retail</li> <li>• Interior, exterior, retro-fit</li> </ul>	<ul style="list-style-type: none"> <li>• Light traffic</li> <li>• Commercial, Multi-family, office, retail</li> <li>• Interior, exterior, retro-fit</li> </ul>	<ul style="list-style-type: none"> <li>• Light traffic</li> <li>• Commercial, multi-family, office, retail</li> <li>• Interior, exterior, retro-fit</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate/frequent traffic</li> <li>• Healthcare, assisted living, education</li> <li>• Interior, new construction</li> </ul>
<b>Device options</b>	<ul style="list-style-type: none"> <li>• Rim, SV, CV, M</li> <li>• 13 functions / 8 finishes</li> <li>• 5 lever options</li> <li>• 10-year warranty</li> </ul>	<ul style="list-style-type: none"> <li>• CV</li> <li>• 4 functions / 10 finishes</li> <li>• 2 length options</li> <li>• 10-year warranty</li> </ul>	<ul style="list-style-type: none"> <li>• Rim</li> <li>• 4 functions / 4 finishes</li> <li>• 2 length options</li> <li>• 10-year warranty</li> </ul>	<ul style="list-style-type: none"> <li>• CV</li> <li>• 3 functions / 4 finishes</li> <li>• 2 length options</li> <li>• 10-year warranty</li> </ul>

# 2390 Series

## Mid-panel concealed vertical rod device

The best available recessed concealed device for stile and rail doors

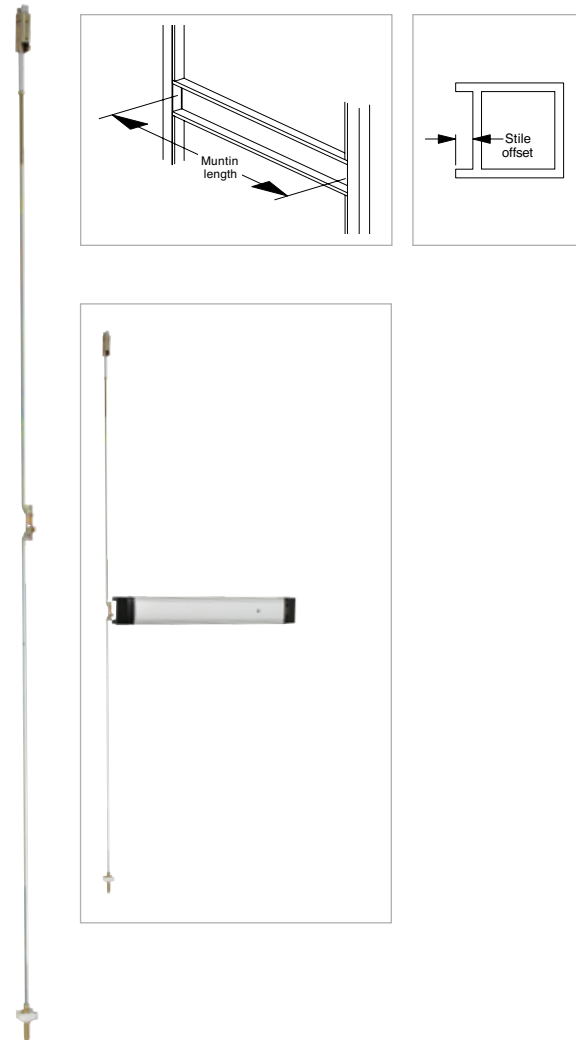
The 2390 is a grade 1 exit device designed for high use and abuse, and delivers a variety of performance features that ensure smooth, easy and reliable operation. Easier rod adjustment simplifies installation.

Stile offset	Long device (24" touchbar) minimum muntin length (width between stiles)	Short device (21" touchbar) minimum muntin length (width between stiles)
.115"	27.505"	24.505"
.125"	27.495"	24.495"
.142"	27.478"	24.478"
.156"	27.464"	24.464"
.187"	27.433"	24.433"



### Specifications

Hand:	Field reversible, non handed.
Functions:	See trim selection chart on this page.
Finishes:	US28, DC13, DC35, champagne.
Strikes:	PB48 top.
Latches:	Standard top - SU latch Standard bottom - hex bottom bolt Optional top - ES - electric strike, device would need to be less bottom rod (LBR). Optional bottom - RL rod bottom latch - PL pullman bottom latch
Dogging feature:	Hex Key Dogging standard, except EL where must use hold back feature.
Cylinder:	Mortise 1" up to 1 3/8", key entry (NL) or hold back (HB) available (field selectable).
Sizes:	21", 24".
Doors:	1 3/4" thick metal doors.
Projections:	1 5/8" with pushbar extended. Pushbar height is 3 1/4".
Stile:	1 3/4" minimum.
Electric functions:	EL - electric latch retraction, (EL requires PS914-2RS minimum power supply). RX - request to exit switch, monitors pushpad SPTD switch.
Fasteners:	All machine screw mounting. Device mounting fasteners are concealed, latch fasteners are exposed to egress side.
End caps:	Sloped metal end caps.
ANSI:	Certified ANSI A156.3 grade 1 standards.
Vertical rods:	7' standard, extension rods available up to 10'. Rod extension kits available. Rod length requirement varies with device mounting height.



Model	Trim package	Type	Function
2390	No outside trim	6	01
2392	Mortise cylinder assembly with cylinder	6	03
2395	Mortise cylinder assembly with less cylinder	6	03/04
2398	Dummy	6	

# Accessories

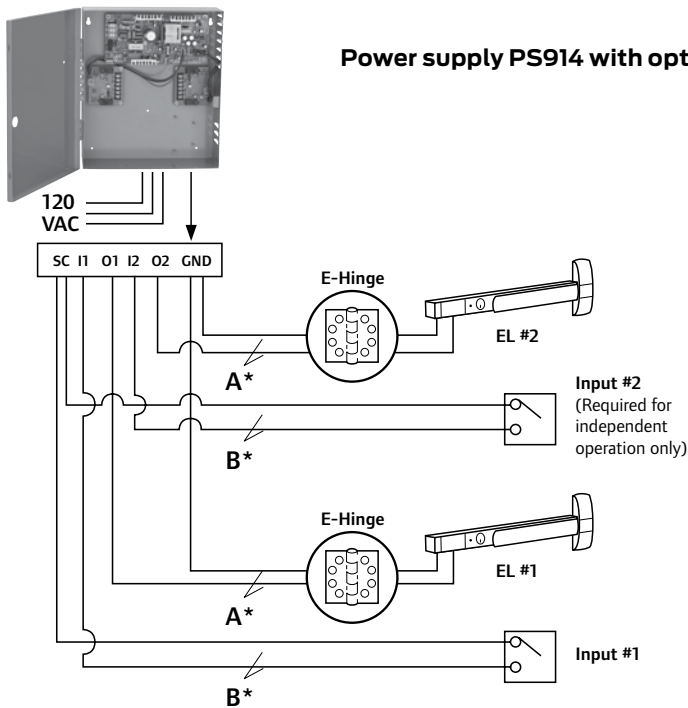
## Strikes

Concealed vertical rod



**PB48**  
 Top strike for 1990/1490/1690/2390 devices. Packed with three 0.050" thick shims.  
 1 1/16" square  
 7/16" projection

## Popular EL application



### EL Device wire selection size

<b>A*</b>	<b>Run length</b>	<b>EL device w/EPT or door loop</b>
	0-100 ft.	14 gauge
	100-200 ft.	12 gauge
<b>A*</b>	<b>Run length</b>	<b>EL device w/electric hinge/pivot</b>
	0-75 ft.	14 gauge
	76-150 ft.	12 gauge
<b>B*</b>	<b>Wire selection</b>	<b>Switch wire size</b>
	1200 ft. max.	18 gauge

# Power supply



The PS900 series is a consolidated line of power supplies and accessories that offer enhanced flexibility and functionality specific to the changing needs of the access control market. The PS900 series can be used in a variety of applications to convert high voltage AC power into the low voltage DC outputs required by most access control devices. The PS900 series protects devices downstream by providing Class 2\* filtered and regulated power. The full line is UL294 certified.

Note: PS906 can provide class 2 rated outputs when used with 900-8P distribution board.

## Features:

- Constant output rating at both 12 VDC and 24 VDC provides superior performance ; includes field selectable jumper  
Polarized connectors for option boards eliminate need for racks and side connectors
- Flat mounting of option boards provides easier access to terminal blocks for connection of electrified devices
- High voltage protective cover
- Battery back-up board auto-selects voltage
- Fire alarm relay can be configured to provide either switched or un-switched outputs from a power supply
- PS914 designed with high in rush current for powering electrified panic devices
- Universal 120-240 VAC input
- Low voltage DC, regulated and filtered
- Electronic power limiting foldback circuit for AC current overload protection
- Fused primary input
- AC status monitor- isolated SPDT contacts
- AC input and DC output LED status indicators
- Cover mounted AC input indication
- Hinged cover with lock down screws

## Certifications:

- UL 294 certified—the standard for access control
  - Class 2 rated\*
- \* Except PS906, output rating exceeds Class 2 power limits

Once power is converted to low voltage DC, the PS900 series offers a variety of distribution options, including basic fuse protection, simple relay, and advanced logic providing complex sequencing and timing functions.

\* PS906 can provide class 2 rated outputs when used with 900-8P distribution board.

	PS902	PS904	PS906	PS914
Number of connectors on power supply for the following:	2 amps	4 amps	6 amps	4 amps
Distribution boards	1	2	3	2
Battery back-up board	1	1	1	1

Note: One fire alarm board can be connected directly to the PS902. If a fire alarm board is desired for the PS904, PS906 or PS914 it can be connected to a distribution board.

## Applications:

The PS900 series of power supplies works with many electrified devices including Falcon exit devices, electromagnetic locks, hardwired locks, electrified mechanical locks, electrified strikes and many other products.

## Accessories:

The PS900 series features seven option boards for use in a variety of applications. All PS900 series power supplies option boards are UL 294 certified.

### Option boards:

**900-4R:** 4 relay controlled output board to power multiple devices.

**900-4RL:** 4 relay distribution board with logic is field configurable for time delay function, auto operator, security interlock.

**900-8F:** Provides 8 individually fuse-protected outputs, giving the flexibility to power multiple devices and provide another layer of protection.

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

**900-BB:** Battery backup.

**900-2RS:** 2 relay EL panic device control board (PS914 only).

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

### Wire selection size / type

Run length	EL device w/ EPT or door loop
0-100 ft	14 gauge standard wire
101-200 ft	12 gauge standard wire
Run length	EL device w/ electric hinge / pivot
0-75 ft	14 gauge standard wire
76-150 ft	12 gauge standard wire
Wire Selection	Switch wire size
1200 ft max.	16 gauge

# Door application

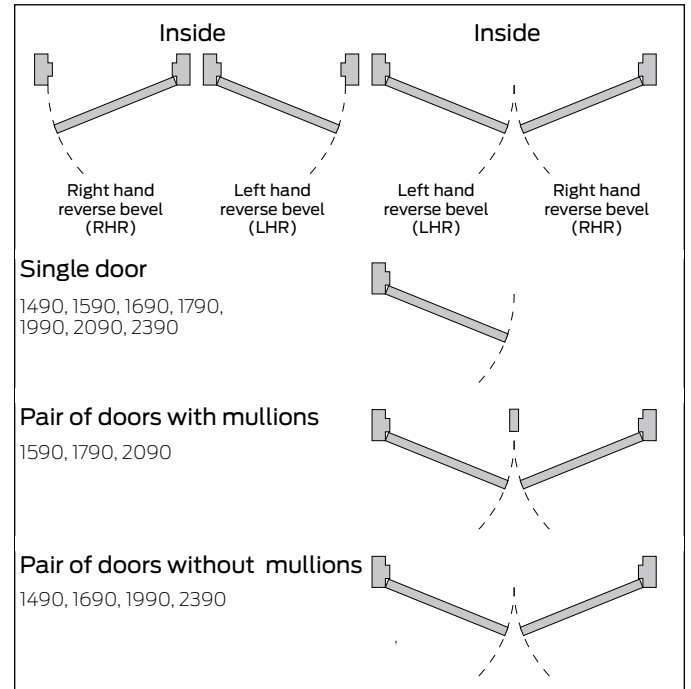
## Door thickness

All devices and components supplied for 1 3/4" doors standard. Specify door thickness if other than 1 3/4".

Number	BHMA/ANSI function
01	Exit only, no trim.
02	Entrance by trim when actuating bar is locked down.
03	Entrance by trim when latchbolt is retracted by key; key removable only when locked.
04	Entrance by trim when latchbolt is retracted by key or set in a retracted position by key.

U.S. standard	BHMA	Description
US28	628	Anodized aluminum – clear
DC13	710	Anodized aluminium – dark bronze
DC35	711	Anodized aluminum – black

## Door application chart



## How to order 2390

		EL	2392	EO	42"	DC13	RL	FILLER PLATE	RHR	37" CL
<b>RX</b>	Request to exit switch									
<b>EL</b>	Electric latch retraction									
<b>2390</b>	Exit only									
<b>2392</b>	Cylinder assembly with mortise cylinder									
<b>2395</b>	Cylinder assembly less mortise cylinder									
<b>2398</b>	Dummy									
<b>EO</b>	Exit only									
<b>DT</b>	Dummy trim									
<b>NL-HBOP</b>	Cylinder assembly - optional pull									
<b>42"</b>	42" (device size is 21")									
<b>48"</b>	48" (device size is 24")									
<b>US28</b>										
<b>DC13</b>										
<b>DC35</b>										
<b>Champagne</b>										
<b>HEX</b>	Standard bottom latch									
<b>RL</b>	Optional rod bottom latch									
<b>PL</b>	Optional pullman bottom latch									
<b>ES</b>	Optional top latch for use with electric strike									
<b>LBR</b>	Less bottom rods									
<b>Channel</b>	Channel									
<b>Filler plate</b>	Filler plate									
<b>CYL</b>	Cylinder									
<b>RHR</b>	RHR									
<b>LHR</b>	LHR									
<b>Centerline</b>	(Must specify)									

## About Allegion

Allegion (NYSE: ALLE) is a global pioneer in safety and security, with leading brands like CISA®, Interflex®, LCN®, Schlage® 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](http://www.allegion.com)

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