

1490 Concealed vertical rod touchbar device

The 1490 offers a clean appearance with pushpad styling and a variety of practical features. The 1490 is built with rugged steel operating mechanisms, and durable aluminum push bars and end caps.



Length	Minimum door size (non-EL)	Minimum door size (EL)
36"	25 ³ / ₄ "	34 ³ / ₄ "
42"	25 ³ / ₄ "	34 ³ / ₄ "
48"	36 ³ / ₄ "	43 ³ / ₄ "

Consult factory for special sizes.



Specifications

Hand:	Specify RHR or LHR-supplied RHR if not specified.
Functions:	See trim selection chart on this page.
Finishes:	US28, DC13, DC 35, US3, US9, US10, US4, US10B, US14, US15.
Strikes:	PB48 top.
Latches:	RL - Rod bottom latch (standard), Hex bottom latch (standard for EL), PL - Pullman bottom latch (optional), ES - electric strike top latch (optional). Device needs to be less bottom rod (LBR).
Dogging feature:	Quarter turn hex dogging standard. No threaded parts to wear out.
Cylinder:	Rim, night latch (NL) or hold back (HB) feature available. Simplified cartridge mounting for most standard rim cylinders. Furnished in DC35 if not specified.
Sizes:	36", 42", 48".
Doors:	1 ³ / ₄ " thick metal doors-specify if other than 1 ³ / ₄ ".
Projections:	2 ³ / ₄ " maximum, 2" when dogged. Pushbar height is 3".
Stile:	1 ³ / ₄ " minimum.
Electric functions:	EL - electric latch retraction, include "S". Requires PS914-2RS minimum power supply. S- latch bolt monitor switch (SPDT). Conversion kits available. Devices are handed.
Fasteners:	All mounting screws are concealed. Uses all machine screws for device and latch.
End caps:	Durable zinc die cast, powder coated.
Vertical rods:	1' standard, extension rods available up to 7' 10".
ANSI:	Certified ANSI A156.3 2001 Grade 1 standards.
Shim kits:	1/2" riser is available.
High security:	1490 High Security devices are used for hurricane rated door openings. Consult door manufacturer's listing.

Model	Trim package	Type	Function
1490	No outside trim	6	01
1491	Pull only (9970)	6	02
1492	NL cylinder	6	03
1493	HB cylinder	6	04
1494	Pull (9970) w/ NL cylinder	6	02/03
1495	Pull (9970) w/ HB cylinder	6	02/04
1498	Dummy	6	

Strikes /accessories

Strikes

1690 Concealed vertical rod device



PB48

Top strike for 1690 device. Packed with three 0.050" thick shims. 1 1/16" x 1 1/16" x 7/16" (H x W x D)

1790 Rim device



STK45

Strike for inactive leaf, pair of doors with 1790 device. 3 1/4" x 1 5/16" x 1/4" (H x W x D)



TD35

Strike for single doors, 1790 device. Includes 1/8" shim. 3" x 2" x 1/2" (H x W x D)

(F) 19-R Rim devices



F570

Standard strike. 2 5/8" x 1 1/4" x 13/16" (H x W x D)



F490

Optional strike. 2 5/8" x 1 1/4" x 7/8" (H x W x D)



565

Adjustable surface mounted for use with blade or applied stops. Mounts flush for 1/2" stop height.



571/571A

Used on inactive leaf for device on active leaf of pair of doors without removable mullion. 571 keeps 2 5/16" backset. 571A is trimmer and projects less into opening.

(F) 19-V Surface vertical rod devices



3788

Top strike for 19-V.



2130

19-V bottom strike for grouting into concrete or masonry floors.



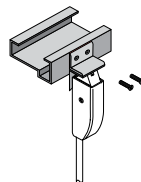
4155

19-V optional bottom strike.



2126A

19-V optional bottom strike.



4215

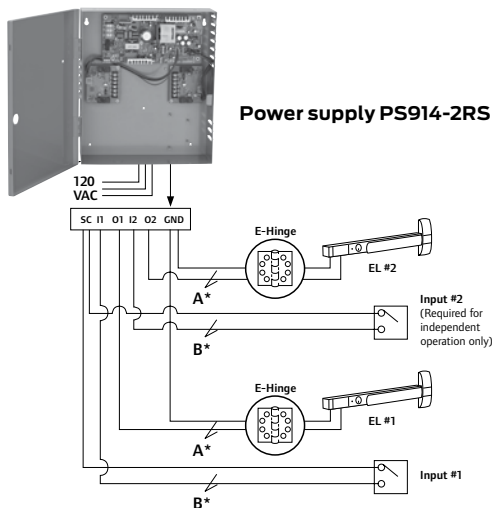
Angle bracket for 19-V devices flush transom applications. Does not require elimination of latch retention feature.



Extension rods

Extension rods are available in 12", 24" and 36" lengths in all finishes. Both ends tapped and all-thread included as connector.

Popular EL application



EL Device wire selection size

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

Accessories



F-4023 Shown

Removable mullion

- Removable mullions are easily removed and reinstalled for full width access
- Increased security and tighter closure
- Minimizes door warp age and sag
- Regulates the traffic flow in-and-out
- Rim devices are used on both leaves, attaining a perfect symmetrical opening
- Mullion assembly consists of a mullion, top and bottom fittings and mounting package
- Mullion can be cut on the job for doors under stock lengths

2923, (F)4023, (F)KR4023 Mullion

These steel mullions can be used with the 19-R and F-19-R devices. Soffit adapters are available for the 2923 and 4023 mullions. The F4023 and F-KR4023 fire-rated mullions also include four stabilizer blocks as required for labeled installations. Strikes are not included with mullion and should be specified with the 19-R or F-19-R device, see page 11 for strike information. KR mullions require 1 1/8" mortise cylinder with standard "A" cam. The mullion fittings are made from ductile iron. The (F)4023 and (F)KR4023 are 2" wide and 3" deep. The 2923 is 1 1/2" wide and 2 1/2" deep. Furnished in prime coat.

Mullions



RM 170



Mullion brackets



525 Mullion stabilizer for RM170

RM 170 Removable mullion

RM 170 for use with 1790 series. Comes complete with adjustable mortised strikes and security clips. Compatible with doors 7' to 10' and for use with stiles as narrow as 1 3/4". Made of aluminum, available in anodized aluminum or bronze finishes. Mullion is 3 1/2" deep, 1" wide on door side, and 1 5/8" at the widest point.

Mullion strikes



STK170

Adjustable mortise strikes (pair).

2 7/8" tall

1 3/4" wide

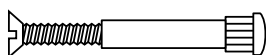
1" thick

Sex bolts

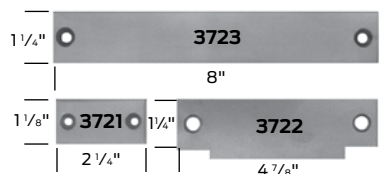
Sex bolts are available for 1 3/4" door thickness. Screws to fit are available in 3/4" and 2" lengths to cover a wide range of door thicknesses.

2729 (#10-24 thread)

4122 (1/4"-20 thread)



Filler plates



3721/3722/3723

Steel filler plates

3721 Cylindrical lock frontfiller

3722 ASA strike filler - set no. SC for 161 cutout

3723 Mortise lock front filler

3722 ASA strike filler - set no. SM for 86 cutout

How to order

1490/1590

		EL	1492	EO	36"	US28	CYL	RL*	RHR*
HH	High security device *								
EL	Electric latch retraction								
S	Signal switch - monitors latch bolt								
1490	See model numbers on page 4								
1590	See model numbers on page 5								
EO	Exit only								
DT	Dummy trim								
NLOP	Night latch cylinder assembly - optional pull								
HBOP	Hold back cylinder assembly - optional pull								
NLP	Night latch cylinder assembly with 9970 pull								
HBP	Hold back cylinder assembly with 9970 pull								
36"	36" (standard)								
42"	42" (optional)								
48"	48" (optional)								
US28	DC35	US9	US4	US14					
DC13	US3	US10	US10B	US15					
RISER	Riser (1/2")								
CYL	Rim cylinder								
7 PIN CYL	Cylinder assembly for 7-pin cylinder. Cylinder not included.								
RL	Standard bottom latch								
HEX	Standard EL bottom latch								
PL	Pullman bottomlatch								
ES	Top latch for use with electric strike								
LBR	Less bottom rod								
RHR	RHR								
LHR	LHR								

*Applies to 1490 only