1690 Concealed vertical rod touchbar device

The design of the 1690 is ideal for demanding, moderate-traffic applications. The vertical rods and latch mechanisms are concealed in the vertical door stile, ensuring trouble-free operation. Cast metal cover plates and end caps hold up to rigorous use. A quick, single-point dogging feature in the housing deactivates the device, permitting unrestricted traffic flow. The 1690 may also be used to retrofit a 1990 Series crossbar device.
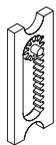
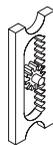| Length	Minimum door size (non-EL)	Minimum door size (EL)
30"	24"	28 $\frac{1}{2}$"
36"	30"	34 $\frac{1}{2}$"
42"	36"	40 $\frac{1}{2}$"
48"	42"	46 $\frac{1}{2}$"

Positioning retractor as shown for NL or HB functions.
Install retractor as shown below for both RHR and LHR doors; this makes all keys function in the same direction.

Hold back (HB)   Night latch (NL)

Specifications

Hand:	Field reversible, non-handed.
Functions:	See trim selection chart on this page.
Finishes:	US28, DC13, DC 35, US3, US10, US26, US26D. Centercase and end cap are powder-coated black only.
Strikes:	PB48 top.
Latches:	Standard top - SU latch. Standard bottom - hex bottom bolt. Optional top - ES - electric strike top latch, device must 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 on outside cylinder.
Cylinder:	Rim, night latch (NL) or hold back (HB) feature available. Field selectable.
Sizes:	30", 36", 42", and 48".
Doors:	1 $\frac{3}{4}$" thick metal doors, specify if other.*
Projections:	3 $\frac{3}{8}$" in neutral position, 2 $\frac{3}{8}$" in dogged position. Pushbar height is 2 $\frac{1}{2}$".
Stile:	1 $\frac{3}{4}$" minimum.
Electric functions:	EL - electric latch retraction, ED - electric dogging (both EL and ED require 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:	Black powder-coated metal end caps.
Vertical rods:	7' standard, extension rods available up to 10'. Rod extension kits available.
ANSI:	Certified ANSI A156.3 grade 1 standards.
Hurricane:	1690 devices are used for hurricane rated door openings. Consult door manufacturer's listing.

Model	Trim package	Type	Function
1690	No outside trim	6	01
1691	Pull only (9970)	6	02
1692	Cylinder only	6	03/04
1694	Pull and cylinder	6	02/03/04

* 9970 is for use on HM and Alum doors only. Not for use on wood doors.

Strikes

1690 Concealed vertical rod device

PB48
Top strike for 1690 device. Packed with three 0.050" thick shims.
$1\frac{1}{16}$" x $1\frac{1}{16}$" x $\frac{7}{16}$"
(H x W x D)

1790 Rim device

STK45
Strike for inactive leaf, pair of doors with 1790 device.
$3\frac{1}{4}$" x $1\frac{5}{16}$" x $\frac{1}{4}$"
(H x W x D)

TD35
Strike for single doors, 1790 device. Includes $\frac{1}{8}$" shim.
3" x 2" x $\frac{1}{2}$"
(H x W x D)

(F) 19-R Rim devices

F570
Standard strike.
$2\frac{5}{8}$" x $1\frac{1}{4}$" x $\frac{13}{16}$"
(H x W x D)

F490
Optional strike.
$2\frac{5}{8}$" x $1\frac{1}{4}$" x $\frac{7}{8}$"
(H x W x D)

565
Adjustable surface mounted for use with blade or applied stops. Mounts flush for $\frac{1}{2}$" stop height.

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

(F) 19-V Surface vertical rod devices
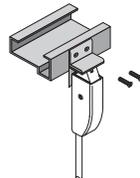
3788
Top strike for 19-V.

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.

How to order

1690/1790

		EL	1690	EO	36"	US28	RL*

HH	Hurricane device*
RX	Request to exit switch
EL	Electric latch retraction
ED	Electric dogging

1690	See model numbes on page 6
1790	See model numbers on page 7

EO	Exit only
DT	Dummy trim
NL-HBOP	Cylinder assembly - optional pull
NL-HBP	Cylinder assembly with 9970

30"	30" (optional)
36"	36" (standard)
42"	42" (optional)
48"	48" (optional)

US28	**DC35**	**US10**	**US26D**
DC13	**US3**	**US26**	

1690 Only

HEX	Standard bottom latch
RL	Rod bottom latch
PL	Pullman lottomlatch
ES	Top latch for use with electric strike
LESS RODS	Less rods (retrofit of 1990 device)
LBR	Less bottom rods

*Applies to 1690 Only

FALCON®

Motorized Electric Latch Retraction-MEL

Featuring the 24 and 25 & 1690 and 1790 Series exit devices

Overview

Motorized electric latch retraction (MEL) provides energy efficient electronic control of an exit device for an affordable around the door solution. The MEL option on the Falcon 24 and 25 Series is Falcon's® solution of choice for multifamily and commercial real estate facilities, and on the Falcon 1690 and 1790 devices for aluminum store front applications where cost competitive electromechanical latch retraction is desired.

These devices always provide mechanical egress. Motorized electric latch retraction can be used with credential readers to unlatch doors momentarily for authorized users, or it can be incorporated with systems to retract latches for extended periods of time to allow free entry. This is a convenient alternative to mechanical dogging. Doors with automatic operators also often incorporate exit devices with electric latch retraction.

The MEL option is available on panic and fire rated devices. Because fire exit hardware must be self latching, an automatic fire alarm system must be incorporated to drop power to fire rated MEL devices in case of fire.

Features and benefits

- MEL option available on all 24 and 25, and 1690 and 1790 Series exit devices

- Energy efficient motorized latch retraction enables longer wire runs and the use of a standard Schlage® power supply with option board

- Modular design allows for a simplified installation of the available MEL conversion kit to existing Falcon 24 or 25 and 1690 or 1790 exit devices

- On-board installation and troubleshooting diagnostics built into the motor assembly

- Self-calibrating motor assembly

- Pushbar is pulled in electronically when dogged

- Vandal resistant – detects and responds to events of attack and tampering

Specifications compliance

- MEL is designed for use on exit devices that are BHMA Certified to ANSI/BHMA A156.3
- Exit devices with MEL are UL and cUL Listed as "Panic Hardware" (UL 305) and as "Fire Exit Hardware" (UL 10C)
- The MEL Conversion Kit is UL Classified under "Accessories for Single-Point Locks and Latches and Fire Exit Hardware" (UL 10C)

Popular application

Power supply PS902-2RS
Electric power transfer
EPT-2 or EPT-10

Electronic specifications

MEL electrical load

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

MEL wire run lengths

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

Accessories

The MEL has a low inrush current = 1.0 amps, so it can be used with standard Schlage power supplies. When powering multiple components, verify that the amperage requirement 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 MEL device is compatible with the following equipment: PS900 Series power supplies - PS902, 904, 906, 914; 900 Series Option Boards - 900-2RS, 900-4R and 900-4RL. The power transfer (EPT, electrified hinge, or door loop) is also sold separately. Please refer to Falcon catalog for more information on EPT-2/EPT-10 power transfers, electrified hinges, and PS900 series power supplies.

How to order

- To order the MEL feature add "MEL" prefix to device designation (example: MEL-25-R-EO). **Note:** Mechanical dogging is not an option with MEL.
- To order the MEL conversion kit for the 24 or 25 Series, please specify finish with part number (605, 606, 630, 689, 695). Falcon MEL conversion kits are only compatible with the appropriate Falcon listed exit device models.
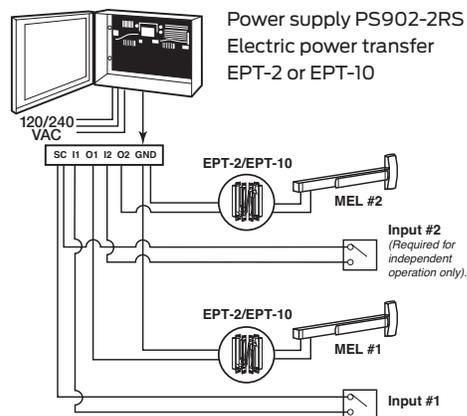
24 and 25 Series devices

Model No.	Description	Part #
25-MELK-3	25 Motorized Electric Latch Retraction Kit 3'	47266630
25-MELK-4	25 Motorized Electric Latch Retraction Kit 4'	47266631
24-MELK-3	24 Motorized Electric Latch Retraction Kit 3'	47266632
24-MELK-4	24 Motorized Electric Latch Retraction Kit 4'	47266633

1690 and 1790 Series devices

Model No.	Description	Part #
1690/1790	16/1790 MEL Kit	47867200
1690/1790	16/1790 MEL Connector Kit	47935967

About Allegion

Allegion (NYSE: ALLE) is a global pioneer in seamless access, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion secures people and assets with a range of solutions for homes, businesses, schools and institutions.

For more, visit **www.allegion.com**

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