F-25-R Series with Exit Alarm, FSE trim, RX Switch
Rim device

🔥**Fire exit hardware**

The Falcon F-25-R Series rim device combines sleek styling and durability with the protection of a fire-rated device. The F-25-R also features a single-point, rim type latch and can be electrified.

299F Strike

499F Strike

EA-25-R-EO
Exit alarm device with warning label.
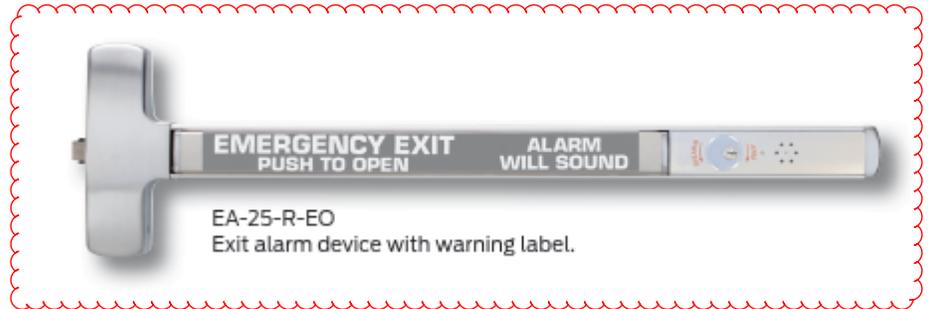
Single door application

Device	Door size	Door strike	Min stile (in)	Min door opening width
F-25-R	3'	299-F	4"	2' 7 $^1/_2$"
F-25-R	4'	299-F	4"	3' 1 $^1/_2$"

Double door application

Device	Door size	Door strike	Min stile (in)	Min door opening width
F-25-R	3'	499-F x F-4023	4 $^1/_2$"	2' 7 $^5/_8$"
F-25-R	4'	499-F x F-4023	4 $^1/_2$"	3' 1 $^5/_8$"

Specifications

Hand:	Non-handed
UL:	"A" label (3 hr.); 4'0" x 8'0"; 8'0" x 8'0" with F-4023 mullion. "B" label (1 $^1/_2$ hr.); 8'0" x 8'0"; with KRF4023.
Finishes:	US3 (605); US4 (606); US10 (612); US11 (643e); US15 (619); US19 (622); US26 (625); US26D (626); US32 (629); US32D (630); US28 (628), 313AN (710) (see page 17 for finishes)
Strikes:	299F strike standard. 499F standard for pairs with mullion.
Latchbolt:	Stainless steel, $^3/_4$" throw
Deadlocking latchbolt:	Standard
Stock sizes:	See chart to left. Cut to size in the field.
Doors:	1 $^3/_4$" thick, wood or metal. Specify thickness if other than 1 $^3/_4$".
Projections:	2 $^3/_4$" maximum.
Mounting height:	40 $^1/_4$" from CL to finished floor.
Electric functions:	Can be interfaced with building security systems. Motorized electric latch retraction (fail secure only), FSA/FSE trim, security monitoring, delayed egress and exit alarm available.
Fasteners:	All mounting screws are concealed, sheet metal screws and machine screws standard.
Sex bolts:	Required for use in EO applications when used with wood, composite or non-reinforced hollow metal doors. For EO device, specify 8 - 425 (#10-24) SNB. For devices with trim, specify 2 - 425 (#10-24) SNB.
ANSI:	Certified ANSI A156.3-2001 grade 1 standards.
Center case and working parts:	Center case is heavy wrought and sintered metal parts.
Shim kits:	For glass lite applications; $^1/_4$" thick, specify SK25-RM.

25 Series
Strikes and accessories

Strikes

For rim devices

264
2 7/8" x 1 1/4" x 9/16"
(H x W x D)
Panic device only.

299
7 7/8" x 1 1/4" x 13/16"
(H x W x D)
Panic device only.

299F
2 7/8" x 1 1/4" x 13/16"
(H x W x D)

499F
3 5/8" x 1 1/2" x 16/16"
(H x W x D)

1439 Blade stop
1 3/4" x 1 7/8" x 1/2"
(H x W x D)
Panic device only.

1606
2 7/8" x 1 3/8" x 3/8"
(H x W x D)
Panic device only.

1609
3 1/4" x 1 1/16" x 3/8"
(H x W x D)
Requires coordinator.
Panic device only.

For surface and concealed vertical rod devices

2130
(F)25-V and (F)25-C standard bottom strike for grouting into concrete or masonry floors.

3788
Furnished top of (F)25-V.

4155
Optional strike.
Panic device only.

4188
Top strike for (F)25-C.

For mortise lock devices

1279
Closed strike used on single doors and on fire exit hardware doors with coordinator.

F1280
Open back strike used on pairs of 1 3/4" doors without astragal or coordinator. Can be used on stock hollow metal doors. F1280 "B" label (1 1/2 hr.) stainless steel strike available.

1281
Open back strike for 1 3/4" doors. 8" x 1 1/4" face allow use in mortise lock cutout of stock hollow metal door.

Accessories
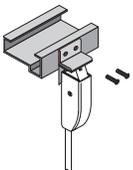
4215

Angle bracket for flush transom applications. Does not require elimination of latch retention feature. Accepts 3788 strike for 25-V device.

Surface vertical extension rods

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

Concealed extension rods

Extension rods are available in 12", 24" and 36". Both ends have pressed-in, threaded inserts.

Filler Plates

1 1/4"   **3723**
8"

1 1/8" **3721** 1 1/4" **3722**
2 1/4"   4 7/8"
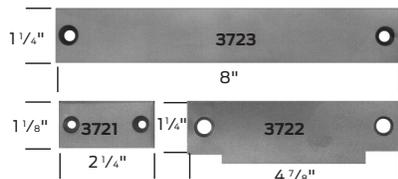
3721/ 3722/ 3723

Steel filler plates

3721   Cylindrical lock front filler
3722   Strike filler - set no. SC for 161 cutout
3723   Mortise lock front filler
3722   Strike filler - set no. SM for 86 cutout

25 Series
Trim designs

Functionality built into the trim, facilitating easy door preps, easy field retrofit and easy ordering.

Lever trims (510L)

510L
510L-NL

510L-DT
510L-BE

2 ³/₄"   ⅞"

9 ³/₄"
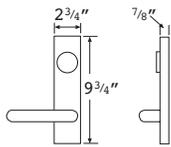
Lever designs

Avalon (AVA)
Projection 3 ¹/₄"

Quantum (QUA)
Projection 3 ¹/₄"

Dane (DAN)
Projection 3"

Broadway (BRW)
Projection 3 ¹/₅"

Boardwalk (BRK)
Projection 3 ¹/₅"

Danish (DSH)
Projection 2 ⁹/₁₀"

Latitude (LAT)
Projection 3 ¹/₁₀"

Longitude (LON)
Projection 3 ¹/₁₀"

Sutro (SUT)
Projection 3 ¹/₄"

All levers return to within ¹/₂" of door.
Escutcheon: 9 ³/₄" (H) x 2 ³/₄" (W) (specify handing) brass finish.
Protected by easily replaceable shear pin.
Lever is reversible, supplied RHR if not specified. For keyed functions, see page 14 for cylinder requirements.

Vandal - resistant lever trims (511L)

Provides resistance to rotation, making damage of trim due to attack from the outside less likely. Designed to operate normally after vandalism attempts without the need for maintenance personnel intervention.

- Heavy duty, vandal-resistant, ANSI AI56.3 grade 1 security trim
- Lever deflects up to 22 ft-lb for a minimum of 10,000 vandal-resistant cycles
- Vandal resistance is present in both lever rotation directions
- After lever is fully deflected, lever stops rotating and a shear pin breaks at 70 ft-lb to prevent damage to unit

- Available on 25 rim, vertical, mortise, and concealed devices
- Retrofits all existing 25 trim without additional door prep
- Works with all electric lock and unlock functions
- Available in all finishes and lever designs including Avalon, Boardwalk, Broadway, Dane, Danish, Latitude, Longitude, Sutro, and Quantum

Pull trims (512)

512TP   512NL   512DT   512TP-BE

Escutcheon: 16" x 2 ³/₄"
Grip: 6 ¹/₄" C- C
Projection: 2 ¹¹/₁₆"
Brass
For keyed functions, see page 14 for cylinder requirements.

Delta (717)

717DT

Knob trims (513K)

513K-DT   513K
513K-BE   513K-NL

Round ball knob
Escutcheon: 9 ³/₄" x 2 ³/₄"
Projection: 4"
Brass
For keyed functions, see page 14 for cylinder requirements.

Cylinder only (NL-OP)

Key retracts latch bolt. Cylinder sold separately (see page 14).

25 Series
Trim chart & finish chart

Function

	Lock/ unlock	NL	DT	BE	FSA/ FSE
Lever (510)	510L	510L-NL	510-DT	510L-BE	510L-FSA 510L-FSE
Vandal-resistant lever (511)	511L	—	—	—	511L-FSA 511L-FSE
Pull trims (512)	512TP	512-NL	512DT	512TP-BE	512L-FSA 512L-FSE
Knob (513)	513K	513K-NL	513K-DT	513K-BE	513L-FSA 513L-FSE
Delta (717)	—	—	717DT	—	—

25 Series finishes

	Color	US number	BHMA number
	Brass, bright	US3	605
	Brass, satin	US4	606
	Bronze, satin	US10	612
	Bronze, aged	US11	643e*
	Nickel, satin	US15	619*
	Black, matte	US19	622*
	Chromium, bright	US26	625
	Chromium, satin	US26D	626
	Anodized aluminum	US28	628
	Stainless Steel, bright	US32	629
	Stainless Steel, satin	US32D	630
	Anodized duranodic	313AN	710

*Available on select devices and trims

25 Series
Types and functions

This page shows all 25 Series device and trim functions.

Functions (ANSI)	Rim device ANSI type 1 (F)–25-R	Vertical rod device ANSI type 2 (F)–25-V	Mortise lock device ANSI type 3 (F)–25-M	Concealed vertical rod device ANSI type 8 (F)–25-C
EO (01) Exit only, no trim.	25-R-EO	25-V-EO	25-M-EO	25-C-EO
DT (02) Entrance by trim when actuating bar is locked down.	25-R-DT	25-V-DT	25-M-DT	25-C-DT
NL (03) Entrance by trim when latchbolt is retracted by key. Key removable only when locked.	25-R-NL	25-V-NL	25-M-NL	25-C-NL
TP (05) Entrance by thumbpiece. Key locks or unlocks thumbpiece.	25-R-TP	25-V-TP	25-M-TP	25-C-TP
L or K (08) Entrance by knob or lever. Key locks or unlocks knob.	25-R-L/K	25-V-L/K	25-M-L/K	25-C-L/K
L(NL) or K(NL) (03) Entrance by knob or lever when latchbolt is retracted by key. Lever/knob is rigid. Key removable only when locked.	25-R-L/K(NL)	25-V-L/K(NL)	25-M-L/K(NL)	25-C-L/K(NL)

Electric lock or unlock trim
Electric lock or unlock trim (FSA/FSE) for 25 Series

The electric lock or unlock (FSA/FSE) feature allows the controlling of trim while still maintaining free egress at all times. The lock or unlock command can be controlled by a security system, fire alarm system, key switch, card reader, push button or touchpad.

FSA (Fail safe—unlocks when power is interrupted) can be used in areas requiring doors to be unlocked due to fire, power failure or emergency situations. (Examples: stairwells, hospitals, fire exits, etc.)

FSE (Fail secure—locks when power is interrupted) can be used in areas requiring doors to be locked for security reasons and only unlocked when energized by authorized personnel. (examples: banks, inner-office, etc.) With either feature, authorized personnel can gain access utilizing key by overriding or bypassing electric locking function.
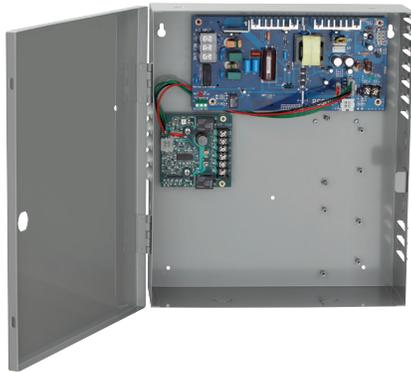
Specifications

- Solenoid rated for continuous duty at 24V DC 0.4 amps.
- UL listed devices.
- Device channel is used as conduit on 25 Series devices.
- Power transfer (EPT-2) hinge 2-wire minimum rated $1/2$ Amp.
- See page 35 for more information

How to order
To order FSA/FSE feature, add FSA or FSE prefix to device designation. (Example: FSA 25-R-L)

Note:
1. FSA/FSE can be used on all devices.
2. The FSA/FSE feature can be used in conjunction with MEL (Motorized electric latch retraction), EA (exit alarm) and security monitoring (DM, LM, RX).

Minimum power supply- PS902

- The series 902 power supply is the recommended power supply for use with an FSA or FSE trim. The series 902 power supply is also designed for electric locking or monitoring of single or double door applications.
- See page 32 for more information

Wire chart

Length of wire run (ft.)	24VDC 0.4 AMPS
0-500	18AWG
501-700	16AWG

Exit alarm
Exit alarm (EA) - for all 24 and 25 Series devices

The Exit alarm (EA) feature provides a battery powered exit alarm to allow for a simple and effective means of monitoring the use of exits while still maintaining means of egress (for code requirements). When the touchbar is depressed the alarm will sound continuously, indicating that the exit has been engaged. The exit alarm can only be reset by way of a standard $1\,^1/_4$" mortise cylinder with standard "A" cam ($^5/_{16}$" wide x $^3/_4$" long). The design of the unit will allow the single 9V battery to last for at least six months (on standby mode).

EA-25-R-EO
Exit alarm device with warning label.

Minimum door width required for standard devices

Device	Door size	Door strike	Min door opening width
EA-24-R	3'	299	2' 9 $^1/_4$"
		264	2' 9 $^1/_8$"
		1439	2' 8 $^3/_8$"
		1606	2' 8 $^7/_8$"
EA-24-R	4'	299	3' 3 $^1/_4$"
		264	3' 3 $^1/_8$"
		1439	3' 3 $^7/_8$"
		1606	3' 3 $^7/_8$"
EA-24-C	3'	All	2' 9 $^1/_8$"
EA-24-C	4'	All	3' 3 $^1/_8$"
EA-24-V	3'	All	2' 8 $^7/_8$"
EA-24-V	4'	All	3' 2 $^7/_8$"
EA-25-R	3'	299	2' 9 $^1/_4$"
		264	2' 9 $^1/_8$"
		1439	2' 8 $^3/_8$"
		1606	2' 8 $^7/_8$"
EA-25-R	4'	299	3' 3 $^1/_4$"
		264	3' 3 $^1/_8$"
		1439	3' 3 $^7/_8$"
		1606	3' 3 $^7/_8$"
EA-25-C	3'	All	2' 8 $^7/_8$"
EA-25-C	4'	All	3' 2 $^7/_8$"
EA-25-M	3'	All	2' 9 $^1/_4$"
EA-25-M	4'	All	3' 3 $^1/_4$"
EA-25-V	3'	All	2' 8 $^7/_8$"
EA-25-V	4'	All	3' 2 $^7/_8$"

Specifications

- Works with rim, mortise, concealed, surface vertical rod
- UL listed
- The EA feature can be used in conjunction with FSA/FSE (Fail safe/Fail secure trim) and security monitoring (DM, LM, RX) features.

Features and benefits

- 110 dB alarm
- 24 Volt hardwire option
- 9V Battery input
- External inhibit for card reader
- LED indication
  - Armed
  - Disarmed
  - Low battery
  - EAK retrofit kit aviable for your existing devices

How to order
To order EA feature add "EA" prefix to device designation. (example: EA-25-R-EO)

To order EAK (exit alarm kit) feature order "EAK" plus device length (3' or 4'), type of device (24 or 25 Series) and the finish of your existing device.
(example: EAK-4', 24 Series, US10)
(For retrofit application)

Minimum power supply - PS902
The series PS902 power supply is the recommended power supply for use with the exit alarm (EA) option. The series PS902 power supply is designed for electric locking or monitoring on single or double door applications (see page 32 for more information).