98/99 Rim exit device

The 299 Strike ships standard, optional strikes available

98 and 99 Rim exit devices for all types of single and double doors with mullion, UL listed for panic exit hardware. Devices are ANSI A156.3 – 2001 Grade 1. The 98 device has a smooth mechanism case and the 99 device has a grooved case. The rim device is non-handed except when the following device options are used: SD (special dogging), -2 (double cylinder) or SS (signal switch). See Opposite page for available outside trim and device functions. Covers stock hollow metal doors with 86 or 161 cutouts on single doors (may cover cutouts on pairs – consult template).

Hex key dogging comes standard on 98/99 Rim exit devices

Finishes – US3, US3A, US4, US4A, US10, US26, US26D, US26D-AM Antimicrobial, US28, 313, 315 & 643E. US15 and US32D available with 98 Series only.

Specifications

Device functions	Device ships EO/DT/NL. Field selectable. For TP, K or L remove NL drive screw from device.
Device lengths	3' 2'4' to 3' (711mm to 914 mm) Door size 4' 2'10" to 4' (864 mm to 1219 mm) Door size
Device centerline from finished floor	39$^{13}/_{16}$" (1011 mm) 39$^{11}/_{16}$" (1008 mm) with mullion
Center case dimensions	8" x 2$^3/_4$" x2$^3/_8$" (203mm x 70mm x 60mm)
Mechanism case dimensions	2$^1/_4$" x 2$^1/_4$" (57mm x 57mm)
Projection	Pushbar neutral – 3$^{13}/_{16}$" (97 mm) Pushbar depressed – 3$^1/_{16}$" (78 mm)
Latch bolt	Deadlocking, $^3/_4$" (19mm) throw
Fasteners & sex bolts (SNB)	Includes screw pack for 1$^3/_4$" (44mm) and 2$^1/_4$" (57mm) thick metal or wood doors. Optional 425 SNB available, see page 9 for quantities.
Electric options	**LX** Latchbolt monitor switch **RX** Pushpad monitor switch **RX2** Double pushpad monitor switch **E** Electric locking & unlocking trim **EL** Electric latch retraction **QEL** Quiet electric latch retraction **SS** Signal switch **CX** Chexit delayed exit **ALK** Alarm exit kit **WP-RX** Waterproof request to exit **CON** Allegion Connect
Mechanical options	**-2** Double cylinder **AX** Accessible device **GBK** Glass bead kit **PN** Pneumatic latch retraction **XP** Extra protection **SNB** Sex bolts **SEC** Security screws
Dogging feature Dogging options	Hex key dogging standard **CD** Cylinder dogging **SD** Special center case dogging **LD** Less dogging **DI** Dogging indicator **CI** Cylinder dogging indicator
Strikes	**299** – Dull black

XP
Extra protection
· 90° latch-to-strike contact
· Force resistance of 2,000+ lbs.

CD
Cylinder dogging
· Replaces hex key dogging
· Requires standard 1$^1/_4$" mortise cylinder

QEL
Quiet electric latch retraction
· Bolt retraction via switch
· Converts exit door to push-pull operation

RX
Pushpad monitor switch
· Signals use of an opening
· SPDT switch to monitor pushpad

CX
Chexit delayed exit
· Meets NFPA 101 requirements
· Self-contained controls, locking, alarm

AX
Accessible device
· UL certified to meet new 5 lb. maximum operating force requirement
· Exceeds ANSI/BHMA requirements

EL
Electric latch retraction
· Enables remote unlatching
· Alternative to manual dogging

ALK
Alarm exit kit
· Unauthorized opening triggers 85-decibel horn
· Set in armed or disarmed mode by key

PN
Pneumatic latch retraction
· For areas where electrical devices banned
· Special linkage for mechanical or pneumatic dogging

CON
Allegion Connectors
· Common connectors to connect various door hardware all the way to the power supply

Standard trim

	EO	DT	NL	NL-OP
	No outside trim Exit only	**Dummy trim** Pull when dogged	**Night latch** Key retracts latchbolt	**Night latch** Key retracts latchbolt optional pull required
Product description	98EO 99EO	98DT 99DT	98NL 99NL	98NL-OP 99NL-OP
Trim description	—	990DT	990NL-R/V	110NL-MD 110NL-WD
Escutcheon plate size	—	3" x 14$^{13}/_{16}$" x $^3/_{32}$" (76x360x2mm)	3" x 14$^{13}/_{16}$" x $^3/_{32}$" (76x360x2mm)	—
Pull center to center	—	5$^1/_2$" (140mm)	5$^1/_2$" (140mm)	—
Projection	—	2" (51mm)	2" (51mm)	—
ANSI function	01	02	03	03
Cylinder type	—	—	Rim	Rim
Handing	—	—	—	—
Optional trim	x990EO x996EO	x996K-DT x996L-DT x696DT x697DT	x996K-NL x996L-NL x696NL x697NL	
Optional #425 SNB quantity for device	6	2	2	6

	L	L-NL	L-BE	L-DT
	Lever Key locks & unlocks	**Lever – night latch** Key retracts latchbolt	**Lever – blank escutcheon** Always operable (no cylinder)	**Lever dummy trim** pull when dogged
Product description	98L 99L	98L-NL 99L-NL	98L-BE 99L-BE	98L-DT 99L-DT
Trim description	996L-R/V*	996L-NL-R/V	996L-BE-R/V*	996L-DT
Escutcheon plate size	2$^3/_4$" x 10$^3/_4$" x $^{27}/_{32}$" (70x273x21mm)	2$^3/_4$" x 10$^3/_4$" x $^{27}/_{32}$" (70x273x21mm)	2$^3/_4$" x 10$^3/_4$" x $^{27}/_{32}$" (70x273x21mm)	2$^3/_4$" x 10$^3/_4$" x $^{27}/_{32}$" (70x273x21mm)
Pull center to center	—	—	—	—
Projection	2$^7/_8$" (73mm)	2$^7/_8$" (73mm)	2$^7/_8$" (73mm)	2$^7/_8$" (73mm)
ANSI function	08	03	14	02
Cylinder type	Rim	Rim	—	—
Handing	Handed/Reversible	Handed/Reversible	Handed/Reversible	Handed/Reversible
Optional #425 SNB quantity for device	2	2	2	2

* Electrified lever operation available

Notes

🔥 98-F/99-F Rim exit device

The 299F Strike ships standard, optional strikes available

499F Strike with 9854/9954 mullion

98-F and 99-F Rim fire exit devices for all types of single doors up to 4' x 10' (1219mm x 3048mm) or 8' x 10' (2438mm x 3048mm) double doors with 9954 or 9854 mullion, UL listed for fire exit hardware. See page 72 for detailed information on UL listed fire exit hardware label and door opening size information. Devices are ANSI A156.3 – 2001 Grade 1. The 98-F device has a smooth mechanism case and the 99-F device has a grooved case. The rim device is non-handed except when the following device options are used: -2 (double cylinder) or SS (signal switch). See opposite page for available outside trim and device functions.

Finishes – US3, US3A, US4, US4A, US10, US26, US26D, US26D-AM Antimicrobial, US28, 313, 315 & 643E. US15 and US32D available with 98 Series only.

Specifications

Device functions	Device ships EO/DT/NL. Field selectable. For TP, K or L remove NL drive screw from device.
Device lengths	3' 2'4" to 3' (711mm to 914 mm) Door size 4' 2'10" to 4' (864 mm to 1219 mm) Door size
Device centerline from finished floor	39 13/16" (1011 mm) 39 11/16" (1008 mm) with mullion
Center case dimensions	8" x 2 3/4" x 2 3/8" (203mm x 70mm x 60mm)
Mechanism case dimensions	2 1/4" x 2 1/4" (57mm x 57mm)
Projection	Pushbar neutral – 3 13/16" (97 mm) Pushbar depressed – 3 1/16" (78 mm)
Latch bolt	Deadlocking, 3/4" (19mm) throw
Fasteners & sex bolts (SNB)	Includes screw pack for 1 3/4" (44mm) and 2 1/4" (57mm) thick metal or wood doors. Optional 425 SNB available for metal doors. 425 & 825 SNB required on wood doors without SLM blocking. See page 11 for quantities.
Electric options	**LX** Latchbolt monitor switch **RX** Pushpad monitor switch **RX2** Double pushpad monitor switch **E** Electric locking & unlocking trim **EL** Electric latch retraction **QEL** Quiet electric latch retraction **SS** Signal switch **CX** Chexit delayed exit **ALK** Alarm exit kit **WP-RX** Waterproof request to exit **CON** Allegion Connect
Mechanical options	**-2** Double cylinder **AX** Accessible device **GBK** Glass bead kit **PN** Pneumatic latch retraction **XP** Extra protection **SNB** Sex bolts **SEC** Security screws **SLM** Special Laminate Material Blocking
Dogging option	No mechanical dogging. EL and QEL option available
Strikes	**299F** – Dull black, 499F with mullions

XP
Extra protection
· 90˚ latch-to-strike contact
· Force resistance of 2,000+ lbs.

RX
Pushpad monitor switch
· Signals use of an opening
· SPDT switch to monitor pushpad

EL
Electric latch retraction
· Enables remote unlatching
· Alternative to manual dogging

ALK
Alarm exit kit
· Unauthorized opening triggers 85-decibel horn
· Set in armed or disarmed mode by key

QEL
Quiet electric latch retraction
· Bolt retraction via switch
· Converts exit door to push-pull operation

CX
Chexit delayed exit
· Meets NFPA 101 requirements
· Self-contained controls, locking, alarm

AX
Accessible device
· UL certified to meet new 5 lb. maximum operating force requirement
· Exceeds ANSI/BHMA requirements

SG
Safety glow
· Shows exit door location in darkness or smoke
· Developed to meet MEA standards

PN
Pneumatic latch retraction
· For areas where electrical devices banned
· Special linkage for mechanical or pneumatic dogging

CON
Allegion Connectors
· Common connectors to connect various door hardware all the way to the power supply

Standard trim

	EO	DT	NL	NL-OP
	No outside trim Exit only	**Dummy trim** Pull when dogged (not recommended for fire device)	**Night latch** Key retracts latchbolt	**Night latch** Key retracts latchbolt optional pull required
Product description	98EO-F 99EO-F	98DT-F 99DT-F	98NL-F 99NL-F	98NL-OP-F 99NL-OP-F
Trim description	—	990DT	990NL-R/V	110NL-MD 110NL-WD
Escutcheon plate size	—	3" x 14$^{13}/_{16}$" x $^3/_{32}$" (76x360x2mm)	3" x 14$^{13}/_{16}$" x $^3/_{32}$" (76x360x2mm)	—
Pull center to center	—	5$^1/_2$" (140mm)	5$^1/_2$" (140mm)	—
Projection	—	2" (51mm)	2" (51mm)	—
ANSI function	01	02	03	03
Cylinder type	—	—	Rim	Rim
Handing	—	—	—	—
Optional trim	x990EO x996EO	x996K-DT x996L-DT x696DT x697DT	x996K-NL x996L-NL x696NL x697NL	
#425 SNB optional - HMD req. WD w/o SLM pkg.	2	2	2	2
#825 SNB req. WD w/o SLM pkg.	2 (if using trim)	2	2	2
#425 SNB req. w/ 499F	2	2	2	2

	L	L-NL	L-BE	L-DT
	Lever Key locks & unlocks	**Lever – night latch** Key retracts latchbolt	**Lever – blank escutcheon** Always operable (no cylinder)	**Lever dummy trim** pull when dogged (not recommended for fire device)
Product description	98L-F 99L-F	98L-NL-F 99L-NL-F	98L-BE-F 99L-BE-F	98L-DT-F 99L-DT-F
Trim description	996L-R/V*	996L-NL-R/V	996L-BE-R/V*	996L-DT
Escutcheon plate size	2$^3/_4$" x 10$^3/_4$" x $^{27}/_{32}$" (70x273x21mm)	2$^3/_4$" x 10$^3/_4$" x $^{27}/_{32}$" (70x273x21mm)	2$^3/_4$" x 10$^3/_4$" x $^{27}/_{32}$" (70x273x21mm)	2$^3/_4$" x 10$^3/_4$" x $^{27}/_{32}$" (70x273x21mm)
Pull center to center	—	—	—	—
Projection	2$^7/_8$" (73mm)	2$^7/_8$" (73mm)	2$^7/_8$" (73mm)	2$^7/_8$" (73mm)
ANSI function	08	03	14	02
Cylinder type	Rim	Rim	—	—
Handing	Handed/Reversible	Handed/Reversible	Handed/Reversible	Handed/Reversible
#425 SNB optional - HMD req. WD w/o SLM pkg.	2	2	2	2
#825 SNB req. WD w/o SLM pkg.	2 (if using trim)	2	2	2
#425 SNB req. w/ 499F	2	2	2	2

* Electrified lever operation available

98/99 Electrical options

EL Electric latch retraction

The EL feature allows for the remote unlatching of 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 duty solenoid retracts the latch bolt, either for momentary unlatching, or for extended periods of time. The EL feature is an alternative to manual dogging.

If manual hex-key dogging is required, specify HD-EL. If cylinder dogging is required, the standard cylinder dogging is not available, but special center case dogging is available, specify SD-EL. SD-EL is not available on the 9875 or 9975 devices.

EL 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**.

UL approved for Class II circuit applications.

The EL option does not include the power transfer from door to frame, the power supply, or the control operator. Refer to EPT-2 power transfer and the PS914 power supply.

The PS914 with the 9002RS option card is the minimum option card required. Other option cards available for other functions, see PS914 power supply for additional information.
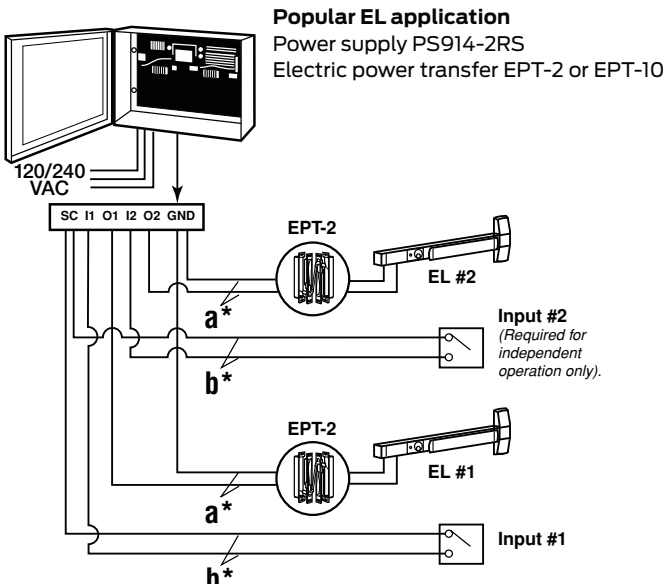
Solenoid specifications:
Continuous duty – 24 VDC
Current inrush – 16 Amps
Current holding – 0.3 Amps

Solenoid resistance:
-grn-yel 1.2 – 2.2 OHMS
-grn-org 100 – 150 OHMS

To order, specify:
Standard – use prefix EL, example EL99L.
Hex Key dogging – Use prefix HD-EL, example HD-EL99L
special center case dogging – Use prefix SD-EL, example SD-EL99L

Popular EL application
Power supply PS914-2RS
Electric power transfer EPT-2 or EPT-10

Von Duprin exit device	EL Wire length (feet)[1]	Wire gauge (AWG)
EL 98/99 Rim	0-500	12
	0-300	14
	0-200	16
All other 98/99EL device types	0-250	12
	0-150	14
	0-100	16
Control Switch	0-1200	18

1. Wire lengths include an EPT, Door loop, electric hinge or pivot and are measured one way between the PS914/option board and the device.
2. Table is applicable to devices that have shipped after August 2012.

QEL Quiet electric latch retraction

The QEL feature allows for the remote unlatching of 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. Different than the popular EL, the QEL quiet operation is achieved using an electric drive motor which retracts the latch bolt either momentary unlatching or for extended periods of time. This feature is an alternative to manual dogging.

If cylinder dogging is required, the standard cylinder dogging is not available, but special center case dogging is available, specify

SD-QEL. SD-QEL is not available on the 9875 or 9975 devices.

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.
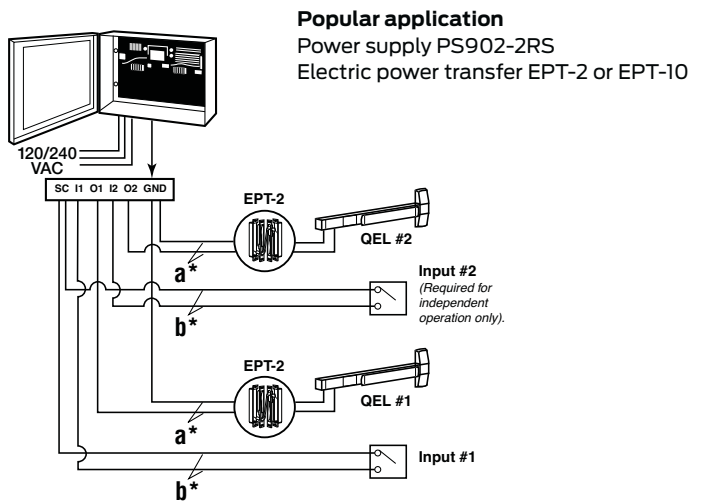
UL approved for Class II circuit applications.

The QEL option does not include the power transfer from door to frame, the power supply, or the control operator. Refer to EPT-2 power transfer and the PS902 or 914 power supply.

The PS902/914 with the 2RS, 4RL or 4R board is the minimum required. Other option boards available for other functions, see PS902/914 power supply for additional information.

QEL Electrical load	
Voltage	24VDC
Current	1.4 A Inrush (0.5 sec.) 0.14 A Holding 2.0 A Calibrate (3 sec. one time)

To order, specify:
Standard — use prefix QEL, example QEL99L.
Special center case dogging — use prefix SD-QEL, example SD-QEL99L

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

a*

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

b*

Wire selection	Switch wire size
1200 ft. Max.	18 gauge standard