

VON DUPRIN®

98/99™
Series

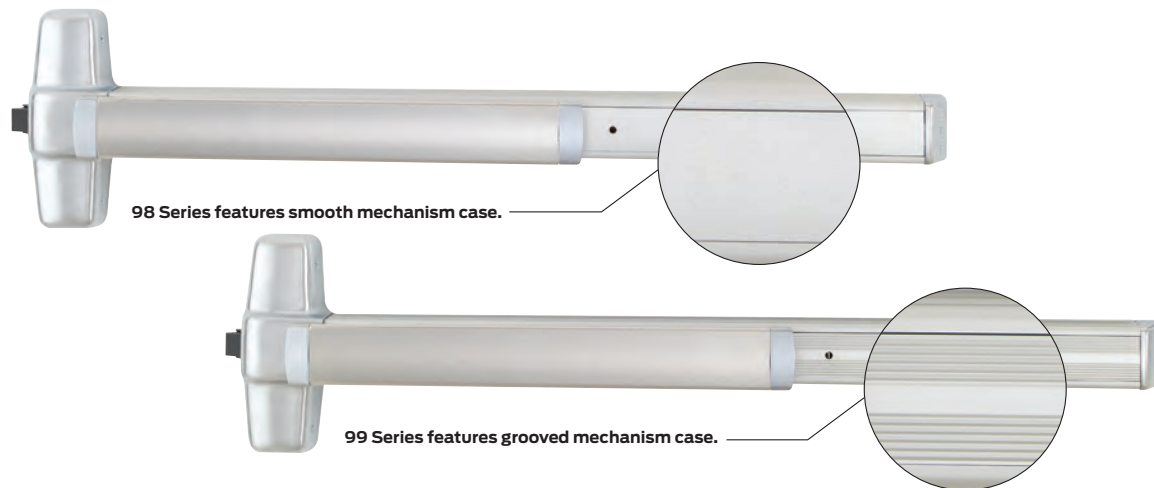
Exit devices



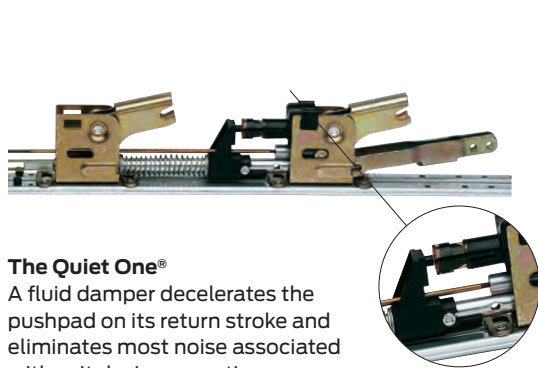
Introduction

Exit devices are a critical part of the fire and life safety egress system and will provide safe and reliable service when properly applied and maintained. Von Duprin designs and manufactures exit devices in accordance to ISO 9001 Quality Management System and meets or exceeds accepted U.S. domestic and International standards. All 98 and 99 Series exit devices are UL listed for panic hardware or fire hardware, and are certified to ANSI A156.3, 2008, Grade 1. Many models are also certified for Hurricane Resistant Applications. Consult your local Security & Safety consultant (SSC) or the Von Duprin factory for current listings.

It is intended that the information included in this publication, when properly used, will provide clear and reliable guidelines to the proper general selection and application. However, the scope of the information is necessarily limited.

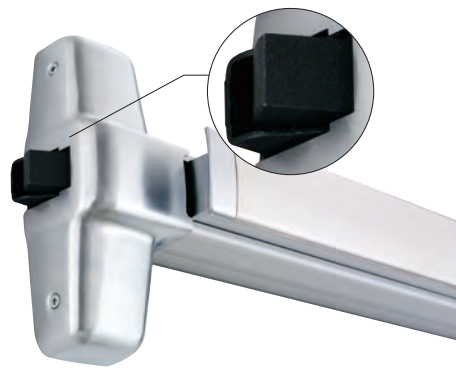


Von Duprin exit devices are available in two external surface styles, designated 98 and 99 Series.



The Quiet One®

A fluid damper decelerates the pushpad on its return stroke and eliminates most noise associated with exit device operations. Furnished on all 98/99™ Series exit devices.



Latch bolt

Deadlocking latchbolt provides security and improved performance at standard device cost.

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Fire exit hardware

Rim devices

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XP rim devices

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9875/9975	18
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Wood door concealed vertical rod devices

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9849WDC-F/9949WDC-F	46
Trim	47

Wood door concealed vertical cable devices

9850WDC-F/9950WDC-F	50
Trim	51

THIS PRODUCT IS OBSOLETE it is replaced by the 98/9950 WDC.
See pages 48-51 for more information.

Options and accessories

Applications & trim operation	Single & double door applications Door handing Outside trim operation Lever styles
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Trim options	Knob Thumbpiece Lever Electrified outside lever trim (E996L) Breakaway lever Thumbturn control Hospital pull Offset pull Vandal resistant pull AD-Series adaptable electronic trim
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Strike options	Strike/Stile information Strikes
Dogging options	Cylinder dogging Hex key dogging Less dogging Dogging keys Special center case dogging Double cylinder

Symbols

 Indicates fire rated application  Indicates ADA products

Electrical options	RX Request to exit LX Latchbolt monitoring SS Signal switch CX Chexit® ALK Alarm kit E Electric mortise lock device EL Electric latch retraction QEL Quiet electric latch retraction CON Allegion Connect
Electrical accessories	Power supplies Electric power transfer

Mechanical options	XP98/99 rim exit device WS Surface vertical rod exit device Less bottom rod AX Accessible device Pullman latch Dummy push pad Braille, embossed, knurled and safety glow (Luminescent) touchpads
Pneumatic options	Pneumatic controlled exit devices Pneumatic power transfer

Device accessories	Glass bead kit Vertical rod and latch guard Cover plate kits Cylinders Mullions Sex bolts
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Additional information	ANSI Function, grade & type UL fire labeling and opening size
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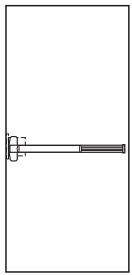
Finishes	Standard & special finishes
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Nomenclature – how to order

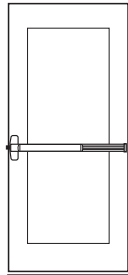
		EL	99	27	-L	-16	-F	LBR	3'	US3	RHR
None	Standard										
SD	Special dogging R/VR - panic only										
CD	Cylinder dogging - panic only										
CX	Chexit										
E	Electric locking mortise/lever										
QEL	Quiet electric latch retraction										
EL	Electric latch retraction										
LX	Latch bolt monitoring										
RX	Request to exit										
RX2	Double request to exit										
SS	Signal switch										
AX	Accessible device										
PL	Pullman latch										
PN	Pneumatic latch retraction										
WS	Surface vertical rod exit device										
XP	Heavy protection - rim										
WS	Tornado & hurricane tested										
98	Series 98-smooth										
99	Series 99-grooved										
None	Rim device										
27	Surface mounted vertical rod device										
47	Concealed vertical rod device										
47WDC	Concealed vertical rod wood door device										
48	Concealed vertical rod device										
49	Concealed vertical cable device										
49WDC	Concealed vertical cable wood door device										
57	Three-point latch device										
75	Mortise lock device										
AD	AD Trim (to come from client)										
DT	Dummy trim										
EO	Exit only										
HL	Hospital pull trim										
K	Knob										
K-BE	Knob - blank escutcheon										
K-DT	Knob, rigid - dummy trim										
K-NL	Knob, rigid - night latch										
L	Lever (classroom)										
L-BE	Lever - blank escutcheon										
L-DT	Lever, rigid - dummy trim										
L-NL	Lever, rigid - night latch										
NL	Night latch										
NL-OP	Night latch cylinder assembly, optional pull										
TL	Turn lever										
TL-BE	Turn lever - blank escutcheon										
TP	Thumbpiece										
TP-BE	Thumbpiece - blank escutcheon										
XX	Lever style 06 standard Optional 01, 02, 03, 05, 07, 12 (Handed), 16 (Omega), 17, 18, Accent, Asti, Merano, St. Annes										
F	Fire exit device										
-2	Double cylinder (rim & mortise only)										
LBR	Less bottom rod										
LBL	Less bottom latch										
SG	Safety glow (luminescent) touchpad										
ALK	Alarm kit										
ALK-AR1	Auto-reset 1½ minute alarm kit										
ALK-AR3	Auto-reset 3 minute alarm kit										
ALK-AR6	Auto-reset 4½ minute alarm kit										
CON	Alligion Connect										
2'	2' Device (2' door size) 27, 47 or 49 only										
3'	3' Device (2' 4"- 3' door size)										
4'	4' Device (2' 10"- 4' door size)										
Finishes	US3, US4, US10, US26, US26D, US28, 313, 315 US32D – 98 ONLY -AM Antimicrobial (available US26D and US32D)										
-LHR	Left hand reverse										
-RHR	Right hand reverse										

Popular double door applications

Single door applications

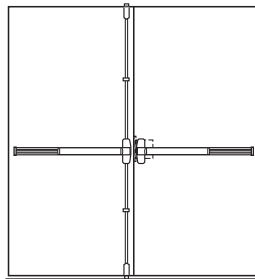


Single mortise lock device

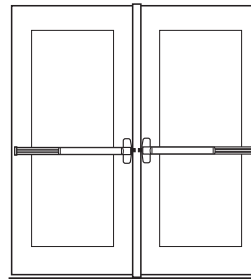


Single rim device

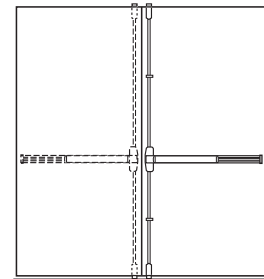
Double door applications



Mortise lock and surface mounted or concealed vertical cable/rod device combination—same direction

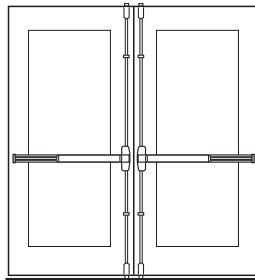
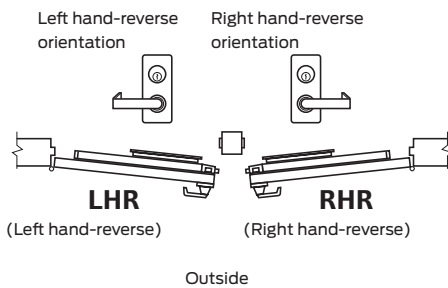


Two rim devices with mullion—same direction

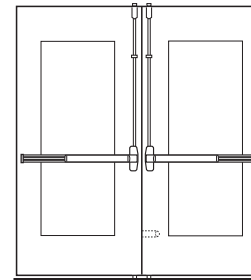


Two vertical rods—double egress

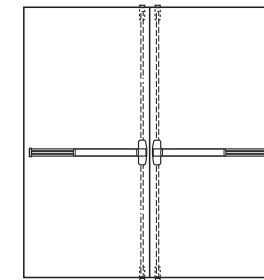
Door handing



Two surface mounted vertical rod devices—same direction (do not use with overlapping astragal)



Two fire exit hardware vertical cables/rods with auxiliary fire latch—LBR option

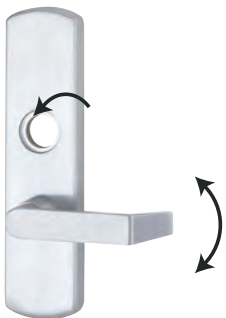


Two concealed vertical cables/rods

Outside trim operation

Trim operation lever or knob

Standard



Key locks and unlocks lever or knob, e.g., 996L (Classroom)

Night latch



Key retracts latch bolt. Lever or knob is rigid. Use NL suffix, e.g., 996LNL. (Storeroom)

Blank escutcheon



Lever or knob always active. Use BE suffix, e.g., 996L-BE. (Passage)

Dummy



Lever or knob rigid for pull operation. Use DT suffix, e.g., 996L-DT.

996L Breakaway™ lever



The 996L Breakaway trim has become the standard lever trim offering on the 98L/99L Series devices. The Breakaway design is especially effective in areas where vandalism to door hardware is a problem. The design intent is to discourage costly repairs from becoming necessary. The Breakaway feature is not available on the NL (night-latch) or DT (dummy trim) versions.

374T/376T Series thumbturn control



Standard operation, key locks and unlocks thumbturn. Optional operation, key unlocks thumbturn, re-locks when key is removed. This operation is created by changing the cylinder plate included with control. Use 1 1/4" mortise cylinder with a straight cam. Schlage cam reference L583-475. Use with a pull trim (990DT pictured).

Lever styles

Decorative levers



M51
Knurling available



M52
Knurling available



M53



M54



M55



M56



M57 **



M61
(Handed)



M62 **
(Handed)



M63
(Handed)



M81
Knurling available



M82



M83



M84



M85
(Handed)

** Available in Stainless Steel substrate ONLY.

Standard Levers



01



02
Knurling available



03*
Knurling available



05



06*
Default lever
Knurling available



07



12
(Handed)



16
(Omega)



17*
Knurling available



18



ACC
(Accent)
(Handed)



AST
(Asti)
(Handed)



MER
(Merano)
(Handed)



LAT*
Latitude



LON*
Longitude

*Available in Stainless Steel - specify SS when ordering

9847/9947 Concealed vertical rod device



9847/9947 Concealed vertical rod device for use on single or double metal doors, UL listed for panic exit hardware. Devices are ANSI A156.3 – 2008 Grade 1. The 9847 device has a smooth mechanism case and the 9947 device has a grooved case. The concealed vertical rod device is non-handed except when the following device options are used: SD (special dogging), 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	2'	2' (610 mm) Door size
	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 ⁵ / ₈ " (1006 mm) Standard Adjustable from 35 ⁵ / ₈ " (905mm) to 49 ⁵ / ₈ " (1260mm)	
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 top & bottom bolt, ⁵ / ₈ " (16mm) throw	
Door undercut	1/4" (7mm) recommended	
Top & bottom Latch case	4 ¹ / ₂ " x 2 ¹ / ₈ " x 1 ¹ / ₂ " (114mm x 54mm x 38mm)	
Vertical rods	Round 2-piece adjustable rods – Top rod adjustable from 6'8" (2027mm) to 8'4" (2533mm). Bottom rod adjustable 35 ⁵ / ₈ " (905 mm) to 49 ⁵ / ₈ " (1260 mm). Extension rod kits available for doors over 8'4" (2533mm).	
Fasteners & sex bolts (SNB)	Includes screw pack for 1 ³ / ₄ " (44mm) to 2 ¹ / ₄ " (57mm) thick metal doors. Optional 425 SNB available.	
Electric options	LX	Latchbolt monitor switch
	RX	Pushpad monitor switch
	RX2	Double pushpad monitor switch
	E	Electric unlocking and locking 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	GBK	Glass bead kit
	PN	Pneumatic latch retraction
	LBR	Less bottom rod
	PL	Pullman latch
	SNB	Sex bolts
	SEC	Security screws
Dogging feature	Hex key dogging standard	
Dogging option	CD	Cylinder dogging
	SD	Special center case dogging
	LD	Less dogging
	DI	Dogging indicator
	CI	Cylinder dogging indicator
Strikes	Top – 338 - Unfinished, Bottom – 385A - Unfinished	



Hex key dogging comes standard on 9847/9947 Concealed vertical rod devices

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

CON
Allegion Connectors

- Common connectors to connect various door hardware all the way to the power supply

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

E (E996L)
Electrified breakaway lever

- Electrified remote locking/unlocking
- Standard in fail safe condition

LX
Latchbolt monitor switch

- Signals use of an opening
- SPDT switch to monitor latch bolt






PN
Pneumatic latch retraction





- For areas where electrical devices banned
- Special linkage for mechanical or pneumatic dogging

DI
Dogging indicator

- Monitor dogging status without a control panel
- Red indicator light shows visibility to dogging from over 75 feet

Standard trim

	EO	DT 	NL 	NL-OP 	TL 	TL-BE 
	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	Thumbturn Key locks & unlocks (use with DT trim)	Thumbturn Blank escutcheon always operable (no cylinder) (use with DT trim)
Product description	9847EO 9947EO	9847DT 9947DT	9847NL 9947NL	9847NL-OP 9947NL-OP	9847TL 9947TL	9847TL-BE 9947TL-BE
Trim description	—	990DT	990NL-R/V	110NL-MD	376T X 990DT	374T-BE X 990DT
Escutcheon plate size	—	3" x 14 ^{13/16"} x 3 ^{3/32"} (76x360x2mm)	3" x 14 ^{13/16"} x 3 ^{3/32"} (76x360x2mm)	—	2 ^{3/4"} x 10 ^{3/4"} x 27 ^{3/32"} (70x273x21mm)	2 ^{3/4"} x 10 ^{3/4"} x 27 ^{3/32"} (70x273x21mm)
Pull center to center	—	5 ^{1/2"} (140mm)	5 ^{1/2"} (140mm)	—	—	—
Projection	—	2" (51mm)	2" (51mm)	—	2" (51mm)	2" (51mm)
ANSI function	01	02	03	03	11 or 12	16
Cylinder type	—	—	Rim	Rim	1 ^{1/4"} Mortise	—
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	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
Product description	9847L 9947LF	9847L-NL 9947L-NL	9847L-BE 9947L-BE	9847L-DT 9947L-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 ^{3/32"} (70x273x21mm)	2 ^{3/4"} x 10 ^{3/4"} x 27 ^{3/32"} (70x273x21mm)	2 ^{3/4"} x 10 ^{3/4"} x 27 ^{3/32"} (70x273x21mm)	2 ^{3/4"} x 10 ^{3/4"} x 27 ^{3/32"} (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



98/99 Finishes

Finishes*

	Color	US number	BHMA number
	Chromium, polished	US26	625
	Anodized, aluminum	US28	628
	Chromium, dull	US26D	626
	Brass, polished	US3	605
	Brass, dull	US4	606

	Color	US number	BHMA number
	Bronze, dull	US10	612
	Satin nickel Available for 98 ONLY	US15	619
	Satin stainless steel	US32D	630
	Duranodic dark bronze	313	710
	Black, painted (not flat powder)	SPBLK	693
	Flat Black	US19/ 315	622/711
	Aged bronze	–	643e

Special finishes

	Color	US number	BHMA number
	Satin chrome, Antimicrobial	US26D-AM	626-AM
	Satin stainless steel, antimicrobial	US32D-AM	630-AM

Pushpad options — Knurled
 Embossed “Push”
 Braille (Caution-Stairwell), satin stainless steel only
 RSS – (Emergency Exit – Push to open and sound alarm) – Red Silkscreen lettering on US32D

* Note: Durable powder coated finishes available at specific special request. PLEASE CONTACT FACTORY.