

concealed vertical rod

7160(F)

The 7160(F) is a concealed vertical rod exit device to be used on wood and metal doors up to 10' where one- or two-point latching is desired. A Less Bottom Rod (LBR) option is available.

certification/compliance

UL/cUL Listed: FVSR/FVSR7 - Panic hardware
 GXHX/GXHX7 - Fire exit hardware (F)
 (8' x 10' pairs, 1-1/2 hr.)
 (8' x 8' pairs, 3 hr.)

ANSI/BHMA Certified: A156.3 Type 7 and 8, Grade 1



features

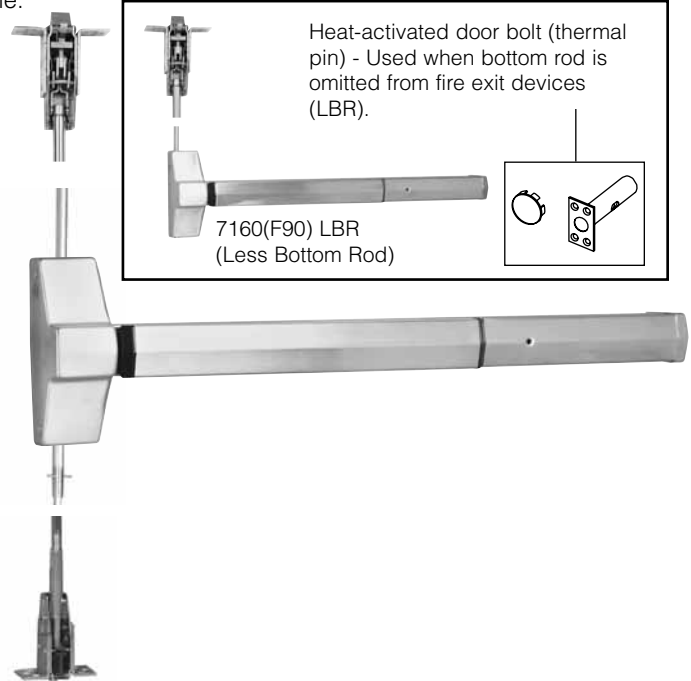
- Designed for wide stile and flush doors
- Handed. Specify hand (field reversible)
- Mortised top strike
- Available less bottom rod (LBR option)

applications

- Pairs of doors
- Double egress
- Metal, wood, or composite door materials

specifications

Door Opening Width:	-24 for 24" (60cm) doors -36 for 30" - 36" (76cm - 91cm) doors -48 for 36" - 48" (91cm - 122cm) doors Optional sizes can be special ordered. Consult Technical Product Support.
Door Opening Height:	Standard door height adjustable to 8' (244cm), with the device centerline at 39-15/16" (101cm) from floor. Optional heights specify suffix -9, -10.
Door Thickness:	1-3/4" (44mm) standard. 2" and 2-1/4" (51mm and 57mm) optional; specify when ordering.
Minimum Stile Width:	4-1/2" (114mm)
Projection:	3-1/4" (83mm) active, 2-3/4" (70mm) dogged
Latchbolt:	Top: 3/4" (19mm) throw, pullman-type with automatic deadlatching Bottom: 5/8" (16mm) throw deadbolt, held retracted during door swing
Vertical Rods:	1/2" (13mm) O.D. telescoping tubular rods
Strike:	Top: Mortised 761. Bottom: Flush mounted 790. 794 floor strike optional (threshold openings).
Fasteners:	Machine screws and wood door fasteners standard for panic hardware. Sex nuts and bolts supplied standard for fire exit hardware.
Trims:	620F series escutcheon trim, 630F series pull/thumbpiece trim, 680F series offset pull trim, 540F series rose trim. See pages 27-29.
Dogging:	Hex key dogging supplied standard on panic devices
Options:	Cylinder dogging, shim kit #723, sex nuts and bolts, less bottom rod (LBR), -9, -10 opening height, rod extensions, bottom pullman latch (panic only), MicroShield®, Lumi-Lite®.
Warranty:	5-year limited



SecureX® electrified options

The Yale® 7000 Series exit devices offer a complete range of electrical options. A continuity in appearance, security and functions with the 7000 Series mechanical exit device is maintained. These electrified exit devices may be integrated into the monitoring security and alarm systems of most buildings.

electrified options

Model #	Exit Device Description	A	B	D	G	H	O	P	S	SAFE	SECURE	690F	691F
7100(F)	Rim Device (Wide)	x	x	x	x	x	x	x	x			x	x
7110(F)	Surface Vertical Rod (Wide)	x	x	x	x			x	x			x	x
7120(F)	Concealed Vertical Rod (Wide)	x	x	x	x			x	x			x	x
7130(F)	Mortise Device (Wide)	x	x	x	x			x	x	x	x		
7150(F)	Rim SquareBolt® Device (Wide)	x	x	x	x	x		x	x	x		x	x
7150(F)WS	Rim SquareBolt Windstorm (Wide)	x	x					x	x	x		x	x
7160(F)	Concealed Vertical Rod (Wide)	x	x	x	x			x	x	x		x	x
7170(F)	Surface Vertical Rod (Wide)	x	x	x	x			x	x	x		x	x
7170(F)WS	Surface Vertical Rod Windstorm (Wide)	x	x					x	x	x		x	x
7200(M)(F)	Rim Device (Narrow)	x	x	x	x				x	x			
7210(M)(F)	Surface Vertical Rod (Narrow)	x	x	x	x				x	x			
7220(M)(F)	Concealed Vertical Rod (Narrow)	x	x	x	x				x	x			
7250(M)(F)	Rim SquareBolt Device (Narrow)	x	x	x	x				x	x			

electrified hardware option descriptions

A	Alarm Option
B	Touchbar Monitor
D	Delayed Egress
G	Electric Dogging
H*	Security Package (DPS)
O	Trim Monitor Switch

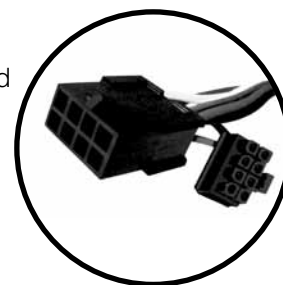
P	Electric Latch Retraction
S	Latchbolt Position Monitor
SAFE	Fail Safe Operation (Mortise)
SECURE	Fail Secure Operation (Mortise)
690F	Fail Safe Electrified Trim
691F	Fail Secure Electrified Trim

Note: Any combination of the following options cannot be ordered together:
 1) P, G, or D 2) B or A 3) D, B or A
 *Only available for rim and SquareBolt® Devices when used with Delayed Egress option.



What normally took an hour or more to connect now takes minutes. Yale electrified exit devices and trims are equipped with ElectroLynx® connectors. As a standard feature, these “plug & play” connectors link power from the incoming source to electrified locking products, including hinges, locks, exit devices, magnetic holders and strikes.

Note: Electrified door hardware with ElectroLynx® connectors require a compatible number of lead wires attached to the door hinge.



SecureX[®] electrified options

electric latch retraction “P”

Operation

Allows the latchbolt to be retracted electrically for momentary or maintained periods of time from a remote location. The exit device bolt remains retracted for as long as the device is energized. Removal of power returns the device to the life safety, self-latching mechanical mode. Easy interface with central or local fire alarm systems, automatic door operators, and access control systems. Allows free egress at all times. Manual hex key dogging standard on non-rated devices.

Electrical Specifications

Solenoid Assembly

- Continuous duty
- 9 amp inrush
- Requires a 4-wire minimum pivot or hinge to transfer power from frame to door.
- Requires the 782 controller for operation (USING ANY OTHER POWER SUPPLY VOIDS THE WARRANTY OF THE DEVICE.)

Listings

UL/cUL listed for panic and fire exit hardware. Fire-rated devices must be wired into an automatic fire alarm system.

Applications

Rim: 7100(F), 7200, 7200M(F)
 SquareBolt[®]: 7150(F), 7250, 7250M(F)
 SVR: 7110(F), 7170(F), 7210, 7210M(F)
 CVR: 7120(F), 7160(F), 7220, 7220M(F)
 Mortise: 7130(F)

Ordering

Suffix “P” to the Model Number. Ex: 7100P.

Note: Not available on “D” delayed egress exit devices.

electric dogging “G”

Operation

Provides continuous latch retraction and pushpad dogging simultaneously. When power is applied to the device, depressing the pushpad will retract the latchbolt and continuously hold down the pushpad in the unlock position for push/pull operation. Removal or interruption of power will release the pushpad and the latchbolt will extend and secure the opening. For use in areas that require quiet door operation.

Exit device allows free egress at all times.

Electrical Specifications

2 Holding Magnets

- .35 amps @ 24VDC

Requires a 2-wire pivot or hinge and a standard 24VDC regulated and filtered power source (Recommended BPS power supplies)

Listings

UL/cUL listed for panic and fire exit hardware. Fire-rated devices must be wired into an automatic fire alarm system.

Applications

Rim: 7100(F), 7200, 7200M(F)
 SquareBolt: 7150(F), 7250, 7250M(F)
 SVR: 7110(F), 7170(F), 7210, 7210M(F)
 CVR: 7120(F), 7160(F), 7220, 7220M(F)
 Mortise: 7130(F)

Ordering

Suffix “G” to the Model Number. Ex: 7150G.

Note: Not available on “D” delayed egress exit devices.

mortise device trim control “safe/secure”

Operation

Allows the outside trim to lock or unlock electrically from a remote location. Exit device allows free egress at all times.

Fail Safe devices are commonly used in stair towers or locations that require the trim to unlock when power is removed or during fire alarm activation.

Fail Secure devices are used to secure openings and are usually integrated into the building security system to allow access control. Fail Secure trims remain locked when power is removed.

Electrical Specifications

Solenoid

- .35 amps @ 24VDC only (12 volt not available)
- Continuous duty
- Requires a 2-wire pivot or hinge and a standard 24VDC regulated and filtered power source (Recommended BPS power supplies)

Listings

UL/cUL listed for panic and fire exit hardware.

Applications

Mortise: 7130(F) - lever functions only

Ordering

“Safe” – Maintains the outside trim in a locked state when energized. Removal of power unlocks outside trim.

“Secure” – Unlocks the outside trim when energized.

Remains locked when power is removed.

Suffix “SAFE” or “SECURE” to the Model Number.

Ex: 7130 x L5 x Safe.