



ABLOY® EL490, EL590 AND PE590 SCANDINAVIAN RANGE MOTOR LOCKS

Flexible multifunctional locking

APPLICATION

The electromechanical ABLOY locks offer complete high security solution whenever you need pedestrian traffic control in addition to mechanical locking safety, for example in fire doors and exit doors. By using the latest technology, the ABLOY motor locks are developed to further increase both security and safety of the door environment.

More possibilities - less product versions

ABLOY motor locks EL490 for narrow profile doors and EL590/PE590 for wooden and metal doors are developed to aid product selection for demanding and functionally challenging door environment. The motor locks are especially suitable for one- and two-way access controlled fire doors and emergency exit doors.

One-way access controlled doors

Typical applications are the exterior and fire doors of

- business premises
- hospitals

Doors with both access control and fixed time control

Typical applications are the exterior of

- educational premises
- public buildings
- sport halls
- apartment buildings

Two-way access controlled doors

- exterior and fire doors of business premises
- access controlled doors, which are used also as emergency exits
- hospital and residential building doors, when special control is needed (e.g. dementia wards)

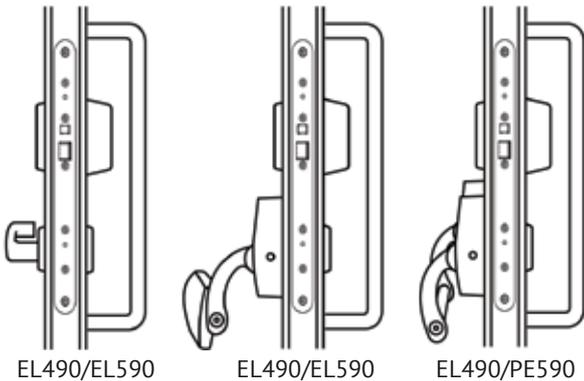
Entrance doors for customers with both access control and fixed time control

- exterior doors of business premises, where extra security is required to prevent vandalism (e.g. bank entrance doors)



FUNCTION

One-way access controlled doors



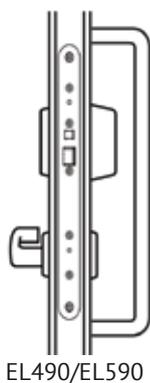
The lock is electrically controlled by access control system.

Mechanical opening by cylinder and by inside handle / push pad (EN179/EL490, EL590) or panic bar is always possible.

Please note the following lock case settings:

- Bolt throw 14 mm in fire rated doors (EL590)

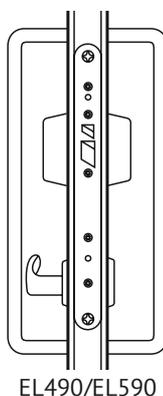
Doors with both access control and fixed time control



The lock is electrically controlled by fixed time control or access control system. When time controlled, the door can be opened by pulls and when access controlled, the door can be opened by a reader outside and with inside handle.

Mechanical opening by cylinder and inside handle is always possible.

Two-way access controlled doors



The lock is electrically controlled by access control system, i.e. the lock can be opened by readers from both sides of the doors. In case of emergency the door can be opened with the inside handle, which is activated by e.g. central fire alarm. In case of power failure, mechanical opening with the inside handle is always possible.

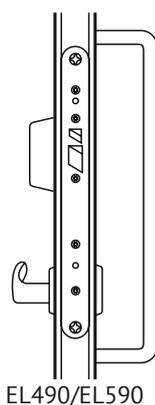
Please note the following lock case settings:

- The bolt throw 14 mm in fire rated doors (EL590)
- In emergency exit doors the handle operation must be changed to electrically controlled

Accessory

- Exit button

Entrance doors for customers with both access control and fixed time control



The lock is electrically controlled by access control system. Mechanical opening by inside cylinder is always possible. In case of emergency the inside handle is controlled by e.g. central fire alarm system or with exit button. In case of power failure, mechanical opening with the inside handle is always possible.

Please note the following lock case settings:

- In emergency exit doors the handle function must be changed to electrically controlled

Accessory

- Exit button

TECHNICAL INFORMATION

FEATURES

ABLOY EL490, EL590 and PE590 motor locks offer several functional options in just one lock case. Because all the options are covered by a small number of versions, the same lock can be used in several differently functioning door environments. The following mechanical and electromechanical functions can be set at the installation phase.

- handing of the bolt
- handing of the trigger bolt (EL590, PE590)
- bolt throw: 14 or 20 mm (EL590)
- handle function: mechanical or electrically controlled (EL490, EL590)
- opening delay 1-20 sec.

MONITORING

The lock includes the following monitoring outputs:

- bolt deadlocked
- handle down
- cylinder monitoring (available as an accessory)

The monitoring output for door automatics:

- bolt in

The monitoring outputs are not available during power failure.

TECHNICAL DETAILS

Operating voltage: 12 (10%) - 24 (+15%) VDC STAB

Current:

- Max 1700 mA (12 VDC)
700 mA (24 VDC)
- Normal (seal force 50N) 600 mA (12 VDC)
250 mA (24 VDC)
- Idle 50 mA (12 VDC)
25 mA (24 VDC)

Relays:

Max. 30V, 100 mA

Operating temperature:

-25...+70°C

Bolt throw:

14 mm/20 mm (EL590)

14 mm (EL490, PE590)

Backset:

50 mm (EL590, PE590)

29 mm/35 mm (EL490)

Forend:

22 mm (EL590, PE590)

25 mm (EL490)

Spindle:

8 mm

Door clearance:

2 - 5,5 mm (the distance between forend and striker plate)

Finish:

Chrome plated forend

Cylinder monitoring:

Switch 950885 (EL590, PE590)

Switch 950886 (EL490)

Versions of lock cases with cylinder monitoring:

EL490 29mm 110011 /

EL490 35mm 110021 /

EL590 110011

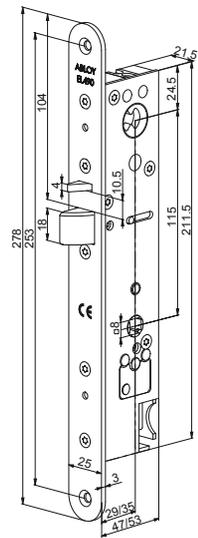
DELIVERY

Standard delivery includes:

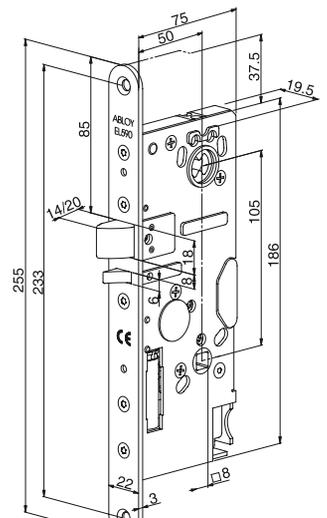
- Lock case, handing 2,4
- Fixing screws etc.
- Lock case manual

DIMENSIONS

ABLOY® EL490



ABLOY® EL590, PE590



CYLINDERS AND ACCESSORIES (Please order separately)

		CYLINDERS	EXIT DEVICES	STRIKE PLATES	CABLES	LEAD COVERS
		ABLOY® PROTEC2 (T) ABLOY® PROTEC (N) ABLOY® NOVEL (U)				
EL590	Single	CY021 (inside) CY037 (outside)	Handle (EN 179): e.g. ABLOY® PRESTO 3-20/030*) Push pad (EN 179): ABLOY® PPE002	LP12 LP22 LP32	EA217 (6 m) EA227 (10 m) EA228 (0,5 m) 18x0,14 mm ²	EA280 EA281
	Double	CY002				
	Single Thumbturn	CY001				
PE590	Single	CY037 (outside) CY021 (inside)	Panic Bar (EN1125): ABLOY® PBE002			
EL490	Single	CY064 (inside) CY063 (outside)	Handle (EN 179): e.g. ABLOY® PRESTO 3-20/0630*) Push pad (EN 179): ABLOY® PPE003	EA307 EA308 4613 4614		
	Double	CY065				
	Single Thumbturn	CY066				
	Single	CY063	Panic Bar (EN1125): ABLOY® PBE003			

*) For further information, please contact Abloy Architectural hardware

MORE FUNCTIONS LESS ACCESSORIES

ABLOY EL490, EL590 and PE590 motor locks offer most comprehensive features which reduce the need of accessories in both access controlled emergency exits and fire doors. For example there is no longer need for emergency power supply, exit buttons, thumbturns or emergency exit domes. In addition to that more status information is available.

One-way access controlled doors

- no need for emergency power supply in fire doors
- no need for separate push buttons or emergency exit domes
- the door can always be opened with the inside handle, push pad or panic bar

Doors with both access control and fixed time control

- no need for separate push buttons or emergency exit domes
- the door can always be opened with the inside handle

Two-way access controlled doors

- no need for emergency exit domes
- no need for magnetic locks in especially demanding applications
- in emergency situations the door can be opened with the inside handle which is activated by e.g. central fire alarm and always in case of power failure.

Entrance doors for customers with both access control and fixed time control

- no need for emergency exit domes
- in emergency situations the door can be opened with the inside handle

ABLOY Motor locks have been tested according to the following standards:

EN 1634-1 (for fire resistance)

EN 14846 (for electromechanically operated locks)

EN 179 (for emergency exit doors)

EN 1125 (for panic exit doors)

The durability of ABLOY EL490, EL590 and PE590 motor locks has been tested with 200.000 opening cycles.

ABLOY® EL490, EL590 AND PE590 SCANDINAVIAN RANGE MOTOR LOCKS



ABLOY secures people, property, and business operations on land, at sea, and in the air – in all circumstances.

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience.

MANUFACTURER:

Abloy Oy

Wahlforssinkatu 20

P.O. Box 108

FI-80101 Joensuu | Finland

Tel. +358 20 599 2501

WWW.ABLOY.COM



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