

PD97ES
Electrified Mortise Locks with Auto-locking \& Monitoring for Sliding Doors

- Motor Driven 12/24V electrified lock for sliding doors
- Built-in DPS \& DBM sensors, enabling auto-latching and auto-locking functions
- Supports touchless opening solutions when paired with an auto-operator
- Fail Secure lock remains mechanically locked during power failure, ensuring security
- Designed for easy integration with access control and monitoring systems


## SPECIFICATIONS

| Door <br> Thickness | 1-3/4" (45mm) Standard |
| :---: | :---: |
|  | $1-3 / 8^{\prime \prime}(35 \mathrm{~mm})$ Thin Door Kit available for XGT only |
|  | 2" to 2-1/4" ( 50 mm to 57 mm ) Thick Door Kit available |
| Backset | 2-3/4" (70mm) |
|  | 2-1/2" ( 63.5 mm ) |
| Lever Spindle | $8 \times 8 \mathrm{~mm}$ square |
| Thumbturn Spindle | $5 \times 5 \mathrm{~mm}$ square |
| Center to Center Distance | Lever to Cylinder: 3-7/8" (98mm) |
|  | Lever to Thumbturn: 2-11/16" (68mm) |
| Handing | Specify handing when ordering |
| Cylinder | Schlage C keyway 6 pin, 1-1/4" mortise cylinder with 2 keys (standard). Optional SFIC and LFIC housing and cores available |
| CAM | CAM01-SCL Clover Cam |
| Material | Trim: Stainless Steel |
|  | Lockcase: Heavy gauge Steel |
|  | Bolt: Brass and Stainless Steel |
|  | Faceplate/Strike: Stainless Steel |
|  | Cylinder: Solid Brass |

ELECTRICAL SPECIFICATIONS

| Lock Body | $\leq 560 \mathrm{~mA}$ |
| :--- | :--- |
| Strike | $\leq 40 \mathrm{~mA}$ |
| Keypad | $\leq 90 \mathrm{~mA}$ |
| Handwave | $\leq 30 \mathrm{~mA}$ |
| Relay | $\leq 30 \mathrm{~mA}$ |
| Monitor | $\leq 30 \mathrm{~mA}$ |

## CODE COMPLIANCE

## SISTED

- UL1034 Burglary-Resistant Electric Locking Mechanisms
- UL294 Standard for Access Control System Units
- ANSI/BHMA A156.25 Electrified Mortise Locks
- ANSI/BHMA A156.18 Finishes
- ANSI A117.1 ADA Accessibility


## FINISH

- 32D Satin Stainless Steel
- 32 Bright Stainless Steel
- 19G Graphite Black
- PVD4 Satin Brass available in 205, 221, 243, 244, 276, 318, 319, 320, 321, 345, 346 and 509 designs
- CeraMax Ceramic Coating: C19G Graphite Black, C19 Flat Black, CGY Stormy Grey, CDB Dark Bronze
- Please see Finish Solutions on INOX website for special order finishes

FUNCTION

PD97ES Functions are Fail Secure. Deadbolt auto-locks once door is closed; during power failure, deadbolt remains mechanically locked from outside. PD97ES includes the following monitoring sensors:

- REX = Request-to-Exit Monitoring Switch
- DBM = Deadbolt Monitoring Switch
- $\operatorname{DPS}=$ Door Position Switch



## Patio/Exit 60

- Deadbolt projected/retracted by built-in stepper motor when energized by $12 / 24 \mathrm{~V}$ DC power transferred through contacts on lock and strike
- Thumbturn inside throws/retracts deadbolt to lock/unlock door
- Outside lever is rigid at all times
- Inside lever always unlocks deadbolt for emergency egress



## Entrance 53

- Latchbolt projected/retracted by built-in stepper motor when energized by 12/24V DC power transferred through contacts on lock and strike
- Key from outside to throw/retract latchbolt to lock/unlock door
- Thumbturn inside throws/retracts latchbolt to lock/unlock door
- Outside lever is rigid at all times
- Inside lever always unlocks latchbolt for emergency egress


## Storeroom 80



- Latchbolt projected/retracted by built-in stepper motor when energized by 12/24V DC power transferred through contacts on lock and strike
- Key from outside to throw/retract latchbolt to lock/unlock door
- Door cannot be locked from inside
- Outside lever is rigid at all times
- Inside lever always unlocks latchbolt for emergency egress

FUNCTION TABLE

|  | Entrance | Storeroom | Patio/Exit |
| :--- | :---: | :---: | :---: |
| Outside Lever | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Inside Lever | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Lockcase | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Cylinder | $\checkmark$ | $\checkmark$ | x |
| Inside Thumbturn | $\checkmark$ | $\mathbf{x}$ | $\checkmark$ |
|  | Optional Accessories |  |  |
| Switch | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Power Supply | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Keypad w/Built-in Relay | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Push Button | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Handwave | $\checkmark$ | $\checkmark$ | $\checkmark$ |



Optional INOX Access Control Accessories


## Description

1 PD97ES lockcase and faceplate; 2-3/4" backset PD97ES-234 or 2-1/2" backset PD97ES-212

2 Faceplate contacts; Auto-locking, DPS (Door Positioning Switches), Power Transfer

3 Strike with reinforcement plate for door frame
4 ADA Compliant thumbturn
5 Heavy-duty Stainless Steel cast rose with choice of X Series lever design

6
Schlage C keyway, 6 pin 1-1/4" mortise cylinder
$7 \quad$ 1" $(25.4 \mathrm{~mm})$ heavy-duty brass bolt throw with self-retracting non-marring hooks

8 Dust box with DBM (Deadbolt Monitoring Sensor)
9 Power Transfer Strike with spring-loaded prongs PD97ES-ADJ-STRK 6-9/16"x1"x3/16"

Optional Accessories, use the part numbers below as new line items.

INX-ELPS5-4 Power Supply with built-in surge 10 protection, Voltage: 2A@12/24V DC, Dimension: 11 "x11"x4"

AC-KP1200 Stainless Steel keypad faceplate
11 for indoor electrically locked door application, Voltage: 12/24V DC, Dimension: 4-1/2 x2-3/4"x1-1/4"

12 AC-MP100 Stainless Steel Monitoring Panel
Dimension: 4-1/2"x2-3/4"x3/4"

AC-IR1100 Handwave sensor with illuminated display, Voltage: 2A@12/24V DC, Dimension: 4-1/2"x2-3/4"x1"

AC-PB200 Wide Push Button with illuminated display, Dimension: 3-3/8"x3-3/8"x3/4"

AC-PB100 Narrow Push Button with no illuminated display, Dimension: 3-1/2"x1-1/8"x1"

NOTE: PD97ES locks only require 3~6 seconds of continuous power to engage or retract deadbolt; time varies subject to soft close or weatherstripping conditions on sliding door. Continuous power longer than required will damage the motor, so make certain that your connected relay has a timed function.


## BUILT-IN MONITORING SWITCHES


*Power Transfer to the lock occurs on contact with the pogo pins on the strike.

## Auto-locking Function [orange/blue]

- When the door is closed, the DPS will send power to the motor for auto-locking.
- When the DBM detects the deadbolt is not fully engaged, the DPS indicates the door is still closed; the auto-locking switch will trigger the power to be sent to the lock for auto-relocking again. If this verification process is repeated 3 times, an alarm sound will be activated unless user re-opens the door.


## DPS (Door Position Switch) [yellow/purple]

- Monitoring signal showing the position of the door either as closed or open.
- When door is closed, the DPS signal will trigger an auto-locking switch function.
DBM (Deadbolt Monitoring Switch) [green/purple]
- Monitoring signal showing the position of the deadbolt as locked or unlocked.
- If the deadbolt is not fully engaged in the strike after a locking cycle, the DBM signal will trigger a relocking cycle.
- After 3 failed attempts to lock, an integrated speaker will chime 60 seconds to notify user that the door failed to lock.
REX / Inside Lever Monitoring Switch [grey/purple]
- Monitoring signal alerts that someone is using the lever, intending to exit from within secure area. someone intending to exit from within the secure area.
- send a signal to the relay requesting power transfer to re-lock deadbolt


This product for UL compliance shall be used with UL Listed access control and burglar alarm control panels / peripheral devices. Accessories are shown for reference only and not evaluated for UL294 or UL1034.

PD97ES Electrified Locks are designed to operate at 12/24V. Complete INOX system maximum current draw is 780 mA . INOX breakdown of individual items:

| Lock Body | $\leq 560 \mathrm{~mA}$ |
| :--- | :--- |
| Strike | $\leq 40 \mathrm{~mA}$ |
| Keypad | $\leq 90 \mathrm{~mA}$ |
| Handwave | $\leq 30 \mathrm{~mA}$ |
| Relay | $\leq 30 \mathrm{~mA}$ |
| Monitor | $\leq 30 \mathrm{~mA}$ |

For UL compliance the product is to be powered via a UL294 or UL603 or UL2610 power supply with a class 2 power limited output suitable for the power requirement of the product.
Door Position Switch (DPS), Deadbolt Monitoring Switch (DBM): 250K cycles of operation resistive load.

## HANDING

- Handing refers to the direction the door slides open. Example: If the door slides to the left to open, it is a lefthanded door.
- Handing is determined from the exterior or key side of the door when facing into the room.


Left Hand (LH) Sliding Door Opens to the Left

Outside or Key Side


Right Hand (RH) Sliding Door Opens to the Right

ROSE \& LEVER DESIGN


XGS Rose
*Return-to-Door Lever Designs comply with California and other state building codes for door openings

201 Cologne


244 Twilight*


202 Munich*



318 Café



221 Aurora


319 Hampton


243 Sunrise


## THUMBTURN OPTIONS


1

3

4

5

6

## Part Number

| 1 | TT02 Thumbturn in Round Rosette | GR02 |
| :--- | :--- | :--- |
| 2 | TT02 Thumbturn in Square Rosette | SR02 |
| 3 | TT04 Thumbturn in Round Rosette | GR04 |
| 4 | TT04 Thumbturn in Square Rosette | SR04 |
| 5 | ADA TT07 Thumbturn in Round Rosette | GR07 |
| 6 | ADA TT07 Thumbturn in Square Rosette | SR07 |

ELECTRIFIED LOCKS COMPARISON

| Trim | PD97 | PD97PT | PD97ATL | PD97ES |
| :---: | :---: | :---: | :---: | :---: |
| X Series Trim | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Outside Surface Pull with Inside Lever for Egress | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Performance Capabilities |  |  |  |  |
| Touchless Unlocking | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Built-in Power Transfer within Lockset | x | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Self-latching/Auto-locking* | x | x | $\checkmark$ | $\checkmark$ |
| Auto-locking with Monitoring Panel | x | x | x | $\checkmark$ |
| Compliance Certification |  |  |  |  |
| UL294 Safety and Security for Access Control System | x | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| UL1784 Air Leakage Test for Draft, Smoke Door Assembly | x | x | $\checkmark$ | $\checkmark$ |
| UL1034 Burglary Resistant Electric Lock Mechanism | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| ANSI/BHMA A156.25 Electrified Locking Device | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |



## HOW TO ORDER LOCKSETS

To order locksets, please describe the additional requirements in the same sequence as below. Please see price book for parts or additional service upcharge.

| Rose | Lever | Lock | Function | Backset | Cylinder | Thumbturn | Finish | Handing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| XGT <br> 1 | $243$ <br> 2 | $\begin{aligned} & \text {-PD97ATL } \\ & 3 \end{aligned}$ | 53 <br> (4) | $\begin{array}{r} \text { A } \\ 5 \end{array}$ | 6 | -GR04 $7$ | -32D <br> 8 | -LH <br> 9 |
| ROSE | LEVER |  |  |  | LOCK F |  | FUNCTION |  |
|  |  |  | $205$ | 221 | -PD97ATL 53 <br> -PD97ES 60 |  | 53 Entrance <br> 60 Patio 80 Storeroom |  |
|  | 244 | 276 | 318 |  | (5) BACKSET |  |  |  |
|  | 321 | 345 | 346 |  | Backset Blank = 2-3/4" <br> Backset A = 2-1/2" |  |  |  |

6 CYLINDER AND HOUSING (includes collar)
LC = Less Cylinder

Blank = Standard Mortise 1-1/4" Cylinder

-S6 = Small Format Interchangeable Cylinder (SFIC) Housing 1-1/4", 6-Pin, Less Core, L Clover Cam -S7 = Small Format Interchangeable Cylinder (SFIC) Housing 1-3/8", 7-Pin, Less Core, L Clover Cam -L6 = Large Format Interchangeable Cylinder (LFIC) Housing 1-1/2", 6-Pin, Less Core, L Clover Cam

Order IC Cores and Thick Door Kits (TDKs) separately

7 THUMBTURN

8 FINISH
Standard:


PVD4 is available for $205,221,243,244,276,318,319,320,321,345,346$ and 509 lever designs.
(9) HANDING

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- \text { RH }=\text { Right Hand } \quad-\text { LH }=\text { Left Hand }
$$

