TECNOSICUREZZA
Locks & Security Systems

Pulse Pro

Installation instructions

Company

Founded in 1983 with the aim of providing a complete range of professional products, Tecnosicurezza is now a consolidated reality in the field of locks and security systems for safes.

The experience gained in over 35 years of activity in the security sector has allowed the designing and manufacturing of high technology and reliability systems, which continue to receive the approval of an increasingly demanding clientele.

TECNOSICUREZZA is present directly on the Italian, Spanish and US markets and, through a extensive distribution network, in many European and extra-European countries.

TECNOSICUREZZA is aimed at national and international customers of primary importance, such as banks, safe manufacturers, cash in transit companies, mass market retailers and post offices.

Today TECNOSICUREZZA is a leading company focused on the customers' needs and constantly in step with technology.

Pulse PRO

Table of contents

Models and characteristics

Models	Variants
T6630/GRP Keypad in metal. Satin chrome colour with rubber membrane foil keypad in grey colour.	**/DL** – with Dallas key reader.

Accessories

Code	Description
T3330	Rotating back plate kit.
NL1000	Mounting adapter.
N077/A	Battery box with alarm interface.
L4001	Large battery box for 6 size C 1.5V batteries.
T6005/W	Power supply interface (12Vdc).
T6005	Power supply interface (12Vdc) with alarm interface.
L2666	Knob with 6 mm square spindle.
N1982 o N1971	User Dallas key.

Audit and programming accessories

Code	Description
N42180/T	USB interface.
N42170/D	Dallas key reader with molex connector.
N42170/M	Magnetic Dallas key connection cable.
N1996RM	Magnetic Dallas key for audit.

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Certifications

Zertifikat Certificate

Anerkennung

von Bauteilen und Systemen

Approval

of Components and Systems

VdS

Inhaber der Anerkennung
Holder of the Approval
TECNOSICUREZZA s.r.l.
Via Cesare Battisti 276
IT-37057 Verona

Anerkennungs-Nr. Approval No.	Anzahl der Seiten No. of pages	gültig vom (TT.MM.JJJJ) valid from (dd.mm.yyyy)	gültig bis (TT.MM.JJJJ) valid until (dd.mm.yyyy)
M 117305	4	01.06.2017	30.05.2021

Gegenstand der Anerkennung
Subject of the Approval
Elektronisches Hochsicherheitsschloss - Klasse 2
Baureihe Pulse PRO

High security electronic lock - class 2
Series Pulse PRO

Verwendung
Use
in Wertbehältnissen

in secure storage units

Anerkennungsgrundlagen
Basis of the Approval
VdS 2344:2014-07
VdS 2396:2014-07
EN 1300:2013-11

Köln, den 01.06.2017

Reinermann
Geschäftsführer
Managing Director

Urban
Leiter der Zertifizierungsstelle
Head of Certification Body

DAkkS Deutsche Akkreditierungsstelle D-ZE-11149-01-01

Die Anerkennung
umfasst nur das angegebene Bauteil/System in der zur Prüfung eingereichten Ausführung
- mit den Bestandteilen nach Anlage 1,
- dokumentiert in den technischen Unterlagen nach Anlage 2,
- zur Verwendung in den angegebenen Einrichtungen der Brandschutz- und Sicherungstechnik.

Bei der Anwendung des Gegenstandes der Anerkennung sind die Hinweise nach Anlage 3 zu beachten.

Das Zertifikat darf nur unverändert und mit sämtlichen Anlagen vervielfältigt werden. Alle Änderungen der Voraussetzungen für die Anerkennung sind der VdS-Zertifizierungsstelle – mitsamt den erforderlichen Unterlagen - unverzüglich zu übermitteln.

This Approval
is valid only for the specified component/system as submitted for testing
- together with the parts listed in enclosure 1
- documented in the technical documents according to enclosure 2
- for the use in the specified fire protection and security installations.

When using the subject of the approval the notes of enclosure 3 shall be observed.
This certificate may only be reproduced in its present form without any modifications including all enclosures. All changes of the underlying conditions of this approval shall be reported at once to the VdS certification body including the required documentation.

VdS Schadenverhütung GmbH
Zertifizierungsstelle
Amsterdamer Str. 174
D-50735 Köln

Ein Unternehmen des Gesamtverbandes der Deutschen Versicherungswirtschaft e.V. (GDV), durch die DAkkS akkreditiert als Zertifizierungsstelle für Produkte in den Bereichen Brandschutz und Sicherungstechnik

A company of the German Insurance Association (GDV) accredited by DAkkS as certification body for fire protection and security products

CERTIFICATE OF COMPLIANCE

Certificate Number	20170803-BP10647
Report Reference	BP10647-20170718
Issue Date	2017-AUGUST-03
Issued to:	TECNOSICUREZZA SRL Via Cesare Battisti 276,37057 Sangiovanni Lupatoto Vr ITALY
This is to certify that representative samples of	HIGH-SECURITY ELECTRONIC LOCKS, TYPE 1 High Security Electronic Lock, Type 1 –
	High Security Electronic Lock System; Pulse Pro: Comprised of Rotobolt Lock with),T6630(Pulse Pro Metal **satin** chrome). Units maybe suffixed with /B Black unit,/G Grey unit,/GR unit with rubber grey keypad,/BR unit with rubber keypad in black,/DL unit with Dallas Reader**. Unit maybe provided with optional art.** T3300 rotation kit. High Security Electronic Lock System; Pulse Pro: Comprised of T4800/D Straightbolt Lock with Keypad T6630(Pulse Pro Metal **satin** chrome). Units maybe suffixed with /B Black unit,/G Grey unit,/GR unit with rubber grey keypad,/BR unit with rubber keypad in black,/DL unit with Dallas Reader. **Unit maybe provided with optional art.** T3300 unit with rotation kit.
	Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	Subject 2058 – High-Security Electronic Locks.
Additional Information:	See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

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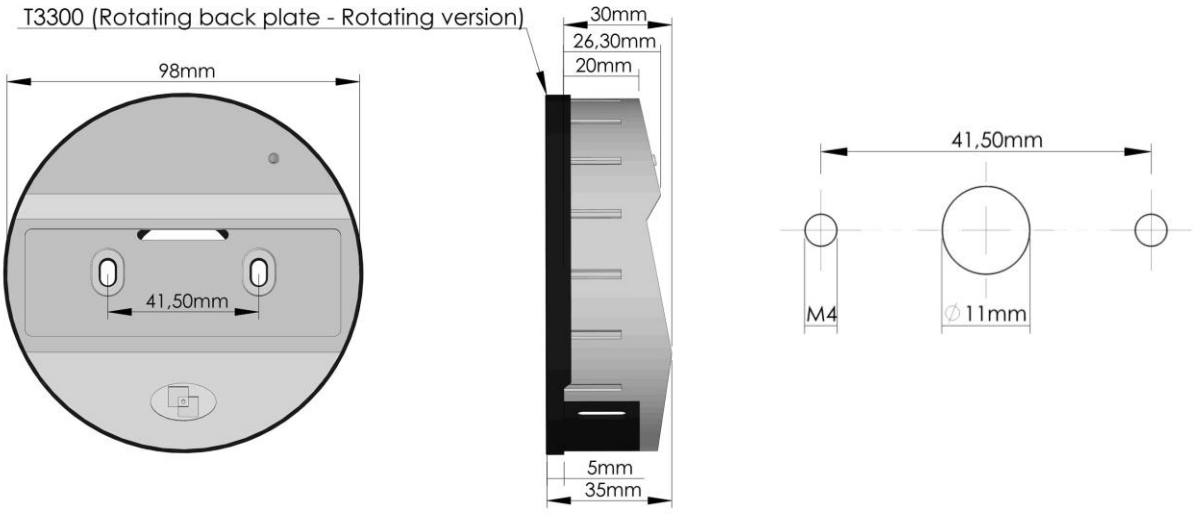
Important notes!

- Before installing this product, please read carefully the installation and operating instructions.
- Locks can be installed in all traditional safes.
- Lock has to be mounted on secure storage metal (preferred steel) units only.
- Locks must be protected against external attacks, for this reason it is recommended to install them on the door away from any through holes.
- Any electronic part must be properly protected and not easily accessible even when the door is open.
- Locks have been developed to work correctly in a temperature range from -5 ° C to + 50 ° C and in an environment with non-condensing humidity between 25% and 90%.
- The mounting dimensions are standard (magic module).
- For the installation of the keypad and lock, use only the screws provided by Tecnosicurezza. Any other screw must be approved in advance.
- Locks are supplied with metric (M6) mounting screws. Upon request, Imperial 1/4-20 UNC format mounting screws are available.
- The type of material and the length of the screws must, in any case, be selected so as to guarantee long life and reliability.
- Tighten the screws so that the lock is firmly fixed to the mounting surface (recommended torque between 2.5 and 5.5 Nm).
- The mounting surface must be perfectly flat.
- In order to prevent loosening of the screws it is recommended the use of LOCTITE® threadlocker and/or specific washers positioned under the head of the fixing screw.
- The diameter of the passage hole for the connection cable or the spindle must not exceed 11 mm.
- The hole must be completely cleaned of drill dust and no edge should be sharp.

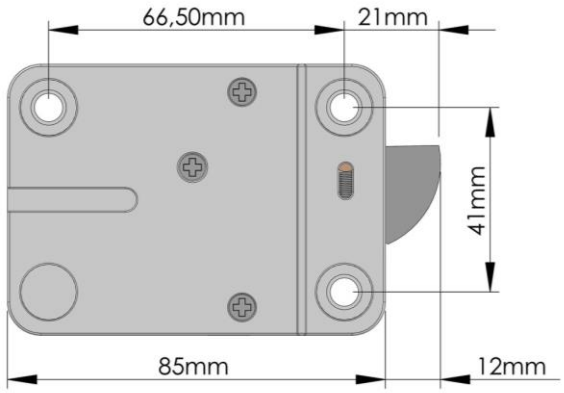
- Lock must not be lubricated.
- In the locked position, the distance between the bolt and the boltwork part that is moving the lock bolt must comply with the following specifications for each type of lock.
- Any component to be fixed to the lock bolt must be previously approved by Tecnosicurezza before installation. In any case, the maximum load must not exceed 2.5 N.
- Secure the cables away from moving parts by using cable ties and cable ties bases.
- If placed in normal domestic or office environments, the locks do not require particular maintenance; in any case, after 10,000 opening/locking cycles, it is recommended to run a test that verifies the correct and complete operation of the product.
- Use only DURACELL™ 9 Volt Alkaline batteries, or battery holders with DURACELL™ 1.5 Volt Alkaline batteries. Alternatively, it is also possible to use a stabilized 12V - 1A power supply (p.n. N1212) with relative power supply interface (p.n. T6005/W or p.n. T6005).
- A series of acoustic signals during opening indicate a low battery level. In this case, the battery must be replaced.

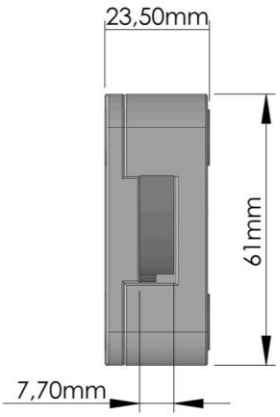
Keypad dimensions



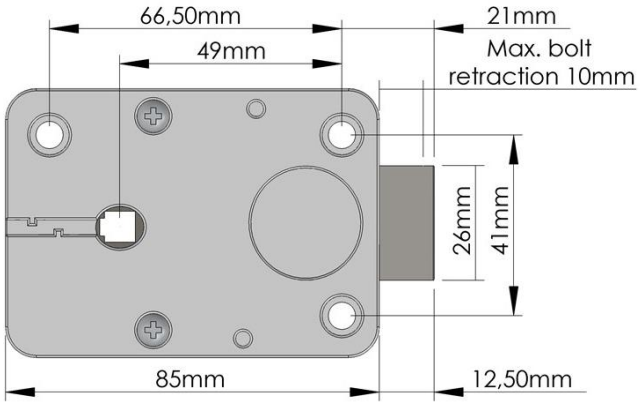
Pulse PRO

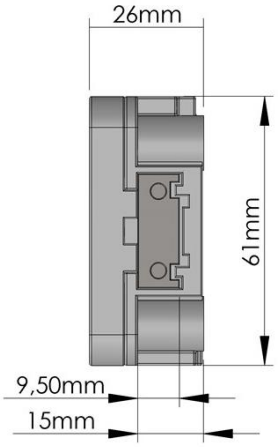
RotoBolt lock dimensions



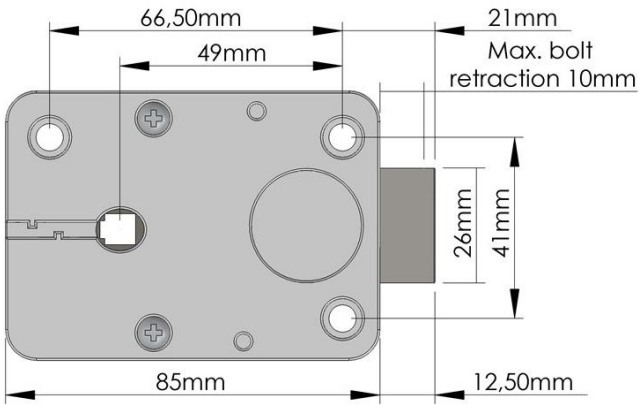


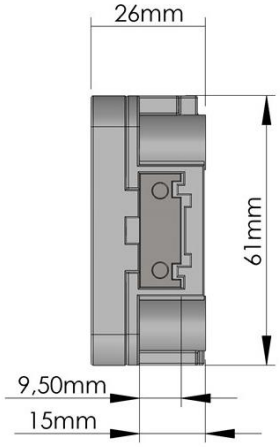
StraightBolt lock dimensions



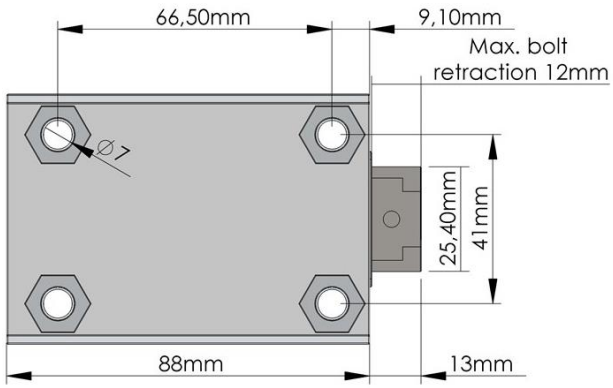


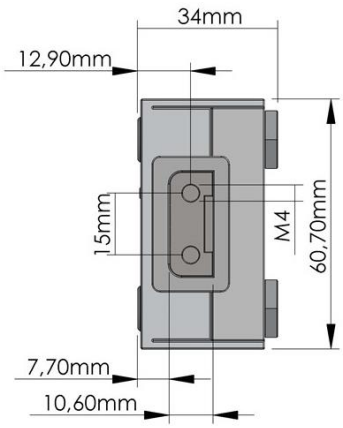
SpringBolt lock dimensions



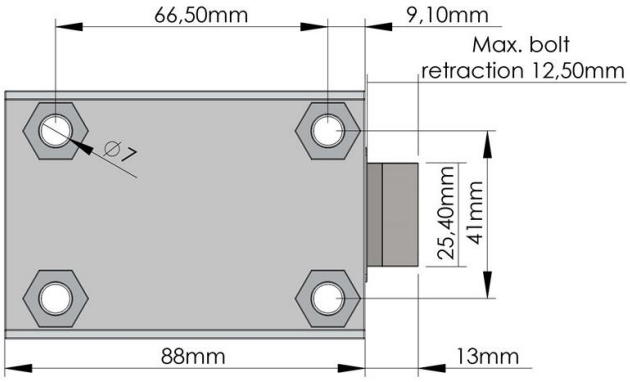


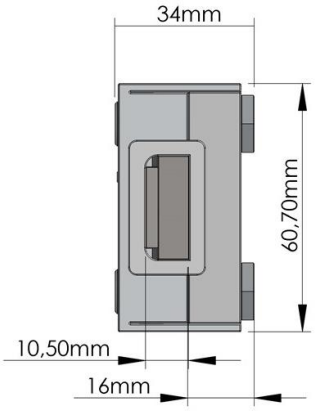
MotorLock lock dimensions





MotorSpringBolt lock dimensions





Keypad rotating kit installation instructions (accessory, p.n. T3300)

The rotation kit consists of 2 bushings, 2 M4 countersunk screws, 1 plastic pin, 1 spring and 1 rotating backplate.
(Imperial screws 8-32 UNC are available on request.)

Cut the grooved shaft to the appropriate length: measure door thickness (from mounting surface of the entry unit to the mounting surface of the lock) and add 26 mm (1”). Prepare the mounting and cable holes.

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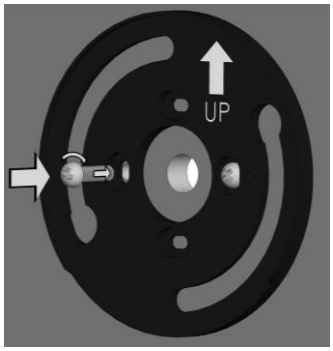
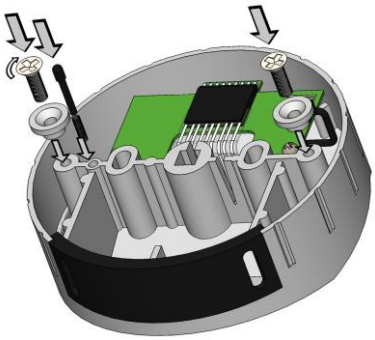
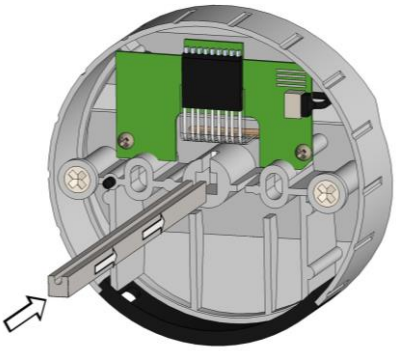
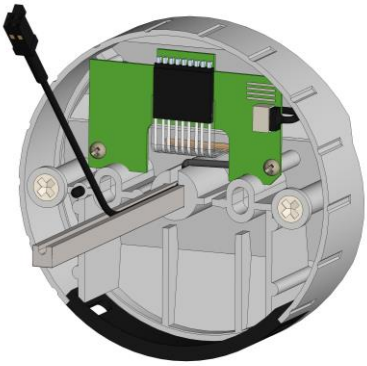
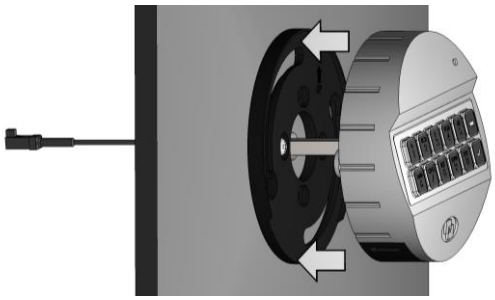


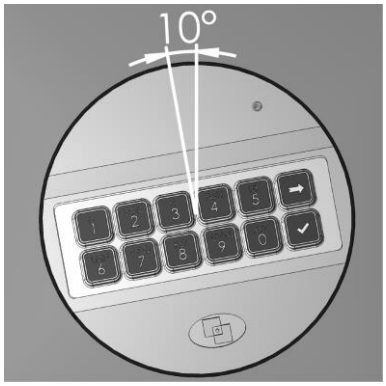




Fix the screws (M4) and the rotating backplate, positioning the latter on the side marked "UP".
Fix the bushings to the keypad housing using the supplied screws.
Insert the pin completely in the spring and then place it into the specific hole in the case.
Insert the grooved shaft, with the cutting edge first, all the way into the keypad housing.





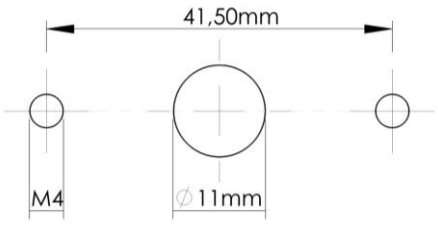


Place the connection cable inside the groove in the spindle.
Insert the cable and the spindle inside the spindle hole made in the door, keeping the keypad in angled position (10:00 o' clock) hook the keypad to the rotating backplate.
Then turn unit clockwise into straight position at 12:00 o' clock until you hear a click, reaching the final position.

Remove the release liner placed under the membrane and apply the latter on the keypad case.
Connect a battery to the battery connector inside the keypad battery compartment or, if provided, connect the battery pack to the lock connector "BAT" (connector 2 in the case of a MotorLock or Motor SpringBolt lock).

Fixed keypad installation instructions

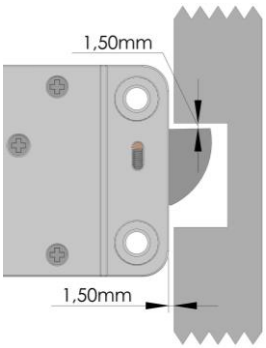
Insert the keypad cable inside the hole on the safe door and connect it to the lock connector "ENT" (connector 1 in the case of a MotorLock or Motor SpringBolt lock).
Lift the keypad membrane and, making sure that the connection cable and the battery cable are not damaged by the keypad case, fix the screws to the relative threaded holes on the safe door.



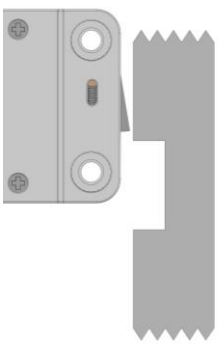
Remove the release liner placed under the membrane and apply the latter on the keypad case.
Connect a battery to the battery connector inside the keypad battery compartment or, if provided, connect the battery pack to the lock connector "BAT" (connector 2 in the case of a MotorLock or Motor SpringBolt lock).

RotoBolt lock installation instructions

The RotoBolt lock is a swingbolt lock whose block is carried out by a motor; it can be installed in all 4 directions, even upside down.
By entering a valid code, the lock electronic removes the blocking for 3 seconds and the boltwork can be moved into open position by pushing the bolt inside the lock case.
The bolt automatically secures when the safe handle, or the safe door mechanism, is brought to the locked position.
If the RotoBolt lock is used in conjunction with other locks, the safe door mechanism must ensure the closure of the RotoBolt before the other locks.
The lock can be mounted in all four mounting directions (RH, LH, VU, VD).
Furthermore, by flipping over the lock, both locking directions can be realized (RH/LH).



In the locked position the distance between the RotoBolt bolt and the RotobBolt part that is moving the lock bolt should be approximately 1 mm.



The bolt must be able to move freely without force being applied to it.

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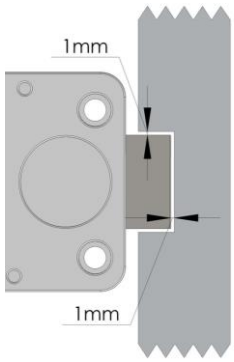
The maximum load applicable to the bolt must not exceed 1KN. Contact Tecnosicurezza in case of heavier loads.
Connect the keypad cable to the lock connector "ENT", making sure it is fully inserted and locked.
Any alarm interface or battery holder will be connected to the lock connector “BAT”.
To remove the cable, bring the connector upwards and carefully pull it out.

StraightBolt and SpringBolt installation instructions

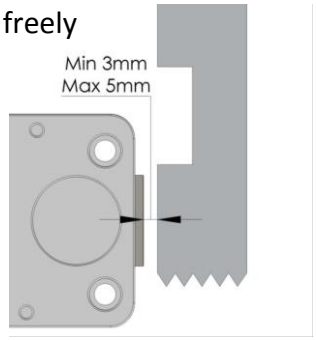
StraightBolt and SpringBolt locks are locks with, respectively, a dead bolt and a spring bolt, whose block is carried out by a motor.
By entering a valid code, the lock electronic removes the blocking for 3 seconds and the boltwork can be moved into open position by turning the spindle inserted in the lock.
The spindle can be connected to a knob, a handle or directly to the keypad if equipped with a rotation kit. In the latter case it must be used the specific rotation kit T3300. When the spindle is brought to the locked position, the bolt comes out ensuring the lock is locked.

The StraightBolt and SpringBolt locks can be mounted in all four mounting directions.



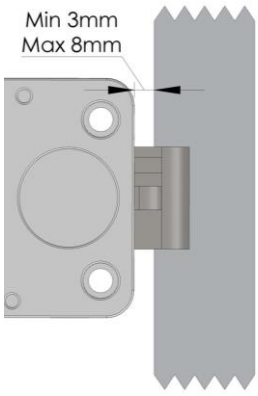
In the locked position, there should be approximately 1 mm clearance between the lock bolt and the cavity in the blocking bar of the boltwork. The bolt must be able to move freely without force being applied to it.

In open position, there should be minimum 3mm and maximum 5 mm clearance between the lock bolt and the blocking bar of the boltwork.



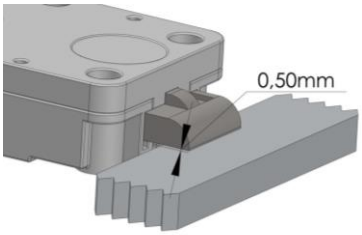
The maximum load applicable to the bolt must not exceed 1KN. Contact Tecnosicurezza in case of heavier loads.

The spring-latch version (SpringBolt) is specially designed to ensure self locking when the door closes.



The distance between the SpringBolt lock and the locking edge must be between a minimum of 3 mm and a maximum of 8 mm.

When locked, there must be a 0.5mm gap between lock bolt and locking surface.

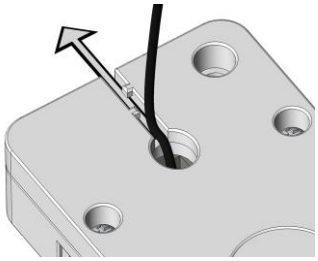


The spindle must be inserted between a minimum of 7 mm to a maximum of 12 mm inside the lock.

WARNING: do not insert the spindle up to the lid of the lock, but leave some margin to allow the movement of the cable and to prevent any damage.

Make sure the cable is fully inserted and locked in the groove of the spindle.
Remove any residues deriving from the cutting of the spindle that could damage the cable.
Insert the cable connector into the square hole present in the bottom of the lock and make it come out from the opposite side.

Secure the cable, avoiding to stretch it too much, inside the specific groove on the lock cover and fix the lock using the appropriate mounting screws.



Connect the keypad cable to the lock connector "ENT", making sure it is fully inserted and locked.
Any alarm interface or battery holder will be connected to the lock connector “BAT”.
To remove the cable, bring the connector upwards and carefully pull it out.

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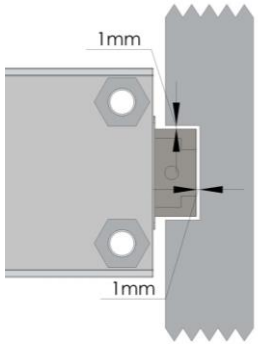
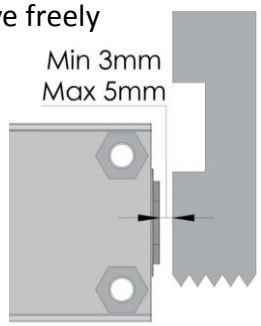
MotorLock and Motor SpringBolt locks installation instructions

MotorLock and Motor SpringBolt locks are locks with, respectively, a motor driven dead bolt and a motor driven spring bolt, whose block is carried out by a motor.
By entering a valid code, the motor retracts the bolt which remains in the open position for about 8 seconds and then automatically returns to the locked position.
If the manual relocking option is selected, the bolt closes by pressing the button **P**.

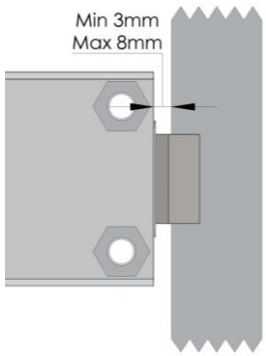


In the locked position, there should be approximately 1 mm clearance between the lock bolt and the cavity in the blocking bar of the boltwork. The bolt must be able to move freely without force being applied to it.



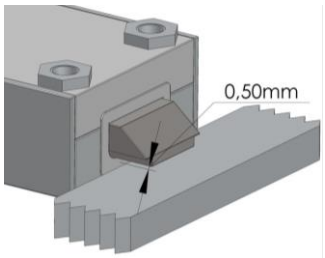
In open position, there should be minimum 3mm and maximum 5 mm clearance between the lock bolt and the blocking bar of the boltwork.

The spring-latch version (Motor SpringBolt) is specially designed to ensure self locking when the door closes.

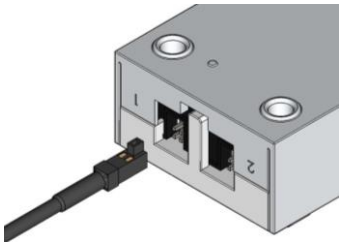


The distance between the SpringBolt lock and the locking edge must be between a minimum of 3 mm and a maximum of 8 mm.

When locked, there must be a 0.5mm gap between lock bolt and locking surface.



Connect the keypad cable to the lock connector "1", making sure it is fully inserted and locked.
Any alarm interface or battery holder will be connected to the lock connector “2”.
To remove the cable, bring the connector upwards and carefully pull it out.



Functional tests

To be carried out with the door open.

MEMBRANE TEST:
Press and hold button 5 until the double beep (the LED will remain on).
Slowly enter all the buttons according to the sequence below:
[1]-[2]-[3]-[4]-[5]-[6]-[7]-[8]-[9]-[0]
A double beep after pressing each single button indicates that the keypad correctly communicates with the lock.
A long beep indicates an electronic problem (in this case please contact the technical assistance).

ELECTRONIC / MECHANICAL TEST:

OPENING:
Enter the opening code (ID60 standard manager code 123456 or simply 1 if the lock is in pre-setup mode). The lock emits a double beep. You will hear a long beep in case of incorrect code.
With RotoBolt and MotorLock locks, turn the safe door handle to the open position.
With StraightBolt and SpringBolt locks, rotate the knob or the keypad according to the type of installation and move the lock bolt to the open position.
For all types of locks the bolt must be able to move freely.

LOCKING:
With RotoBolt and MotorLock locks, turn the safe door handle to the locked position. Lock bolt must fully extend and ensure locking.
With MotorLock locks with manual relocking, turn the door handle towards the locked position and press the button P.
With StraightBolt locks, turn the knob/keypad to the locked position.
For all types of locks, at the end of the operation the bolt must fully extend and ensure locking.

Repeat the functional test several times before locking the safe door.

Failure to follow these installation instructions or opening the lock by personnel not authorized by Tecnosicurezza will void the warranty.

Pulse PRO

CE declarations

DICHIARAZIONE CE DI CONFORMITA'
CE DECLARATION OF CONFORMITY

Pulse PRO: T66-xx

Il sottoscritto Franco Miller, in veste di Presidente CdA e Legale Rappresentante della società **Tecnosicurezza s.r.l.**, con sede in San Giovanni Lupatoto (Verona) Via Cesare Battisti 276, dichiara sotto la propria responsabilità, che il suddetto prodotto soddisfa per progettazione e costruzione i requisiti delle direttive di: compatibilità elettromagnetica **2014/30/EU** e RoHS 2 **UE/2015/863**. La conformità è stata verificata con l'ausilio delle seguenti norme armonizzate:

EN 61000-6-3, EN50130-4,EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11, EN 61000-6-1, EN55022

The undersigned Mr Franco Miller as Chairman and Legal Representative of the company **Tecnosicurezza s.r.l.**, located in San Giovanni Lupatoto (Verona) Via Cesare Battisti 276, declare herewith on our own responsibility that the above-mentioned product meets the requirements of the **UE/2015/863** RoHS 2, **2014/30/EU** Electromagnetic Compatibility for what concerns engineering and construction. Conformity has been controlled with the aid of the following harmonized standards:

EN 61000-6-3, EN50130-4,EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11, EN 61000-6-1, EN55022

Verona - Italy, 25/07/2018

Franco Miller
Board Chairman

Tecnosicurezza s.r.l.

(firma, signature)

DICHIARAZIONE CE DI CONFORMITA'
CE DECLARATION OF CONFORMITY

Pulse PRO: T48-xx

Il sottoscritto Franco Miller, in veste di Presidente CdA e Legale Rappresentante della società **Tecnosicurezza s.r.l.**, con sede in San Giovanni Lupatoto (Verona) Via Cesare Battisti 276, dichiara sotto la propria responsabilità, che il suddetto prodotto soddisfa per progettazione e costruzione i requisiti delle direttive di: compatibilità elettromagnetica **2014/30/EU** e RoHS 2 **UE/2015/863**. La conformità è stata verificata con l'ausilio delle seguenti norme armonizzate:

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The undersigned Mr Franco Miller as Chairman and Legal Representative of the company **Tecnosicurezza s.r.l.**, located in San Giovanni Lupatoto (Verona) Via Cesare Battisti 276, declare herewith on our own responsibility that the above-mentioned product meets the requirements of the **UE/2015/863** RoHS 2, **2014/30/EU** Electromagnetic Compatibility for what concerns engineering and construction. Conformity has been controlled with the aid of the following harmonized standards:

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Verona - Italy, 25/07/2018

Franco Miller
Board Chairman

Tecnosicurezza s.r.l.

Pulse PRO

NOTES

Correct disposal of this product:
(Waste Electrical & Electronic Equipment)

Applicable in the European Union and other European countries with separate collection systems.

This marking displayed on the product or its literature indicates that it should not be disposed with other wastes at the end of its working life.
To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Contacts

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