

Motorized blocking system

Installation Instructions



Motorized blocking system

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.

Motorized blocking system

Table of contents

COMPANY	2
TABLE OF CONTENTS	3
IMPORTANT NOTES!	4
MOTORLOCK LOCK DIMENSIONS	5
MOTORSPRINGBOLT DIMENSIONS	5
MOTORLOCK AND MOTOR SPRINGBOLT LOCKS INSTALLATION INSTRUCTIONS	6
CHARACTERISTICS AND CABLING	7
FUNCTIONAL TEST	7
CONTACTS	8

Motorized blocking system

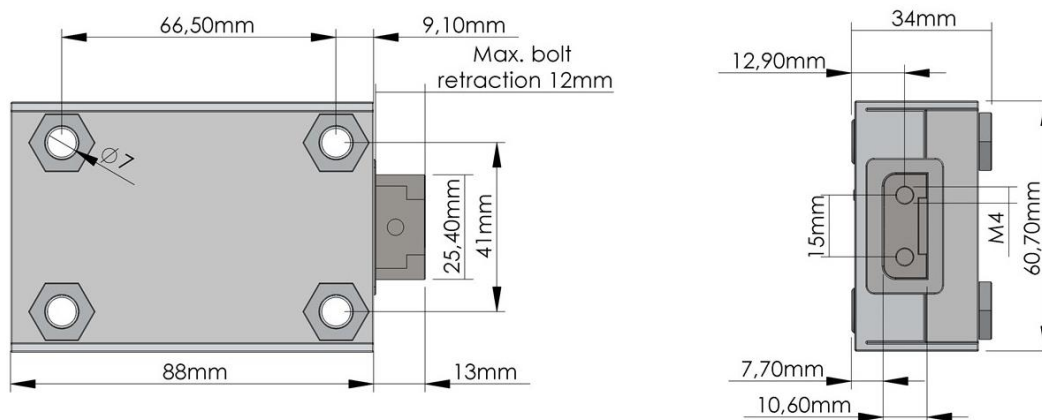
Important notes!

- 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).
- 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, maximum load must not exceed 2.5 N.
- Secure the cables away from moving parts by using cable ties and cable ties bases.

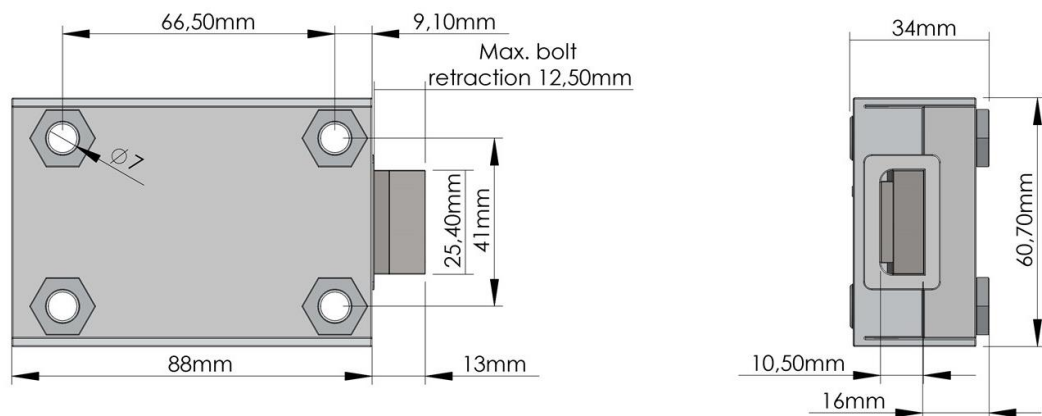
Motorized blocking system

- 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.

MotorLock lock dimensions



MotorSpringBolt dimensions

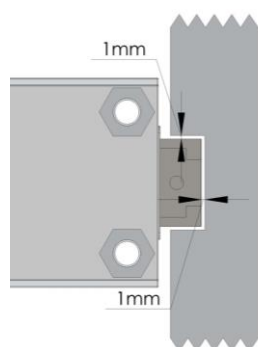


Motorized blocking system

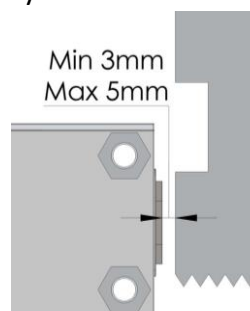
MotorLock and Motor SpringBolt locks installation instructions

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 powering the lock, the motor retracts the bolt with the opening command which remains in the open position until the closing command is performed and the bolt returns to the locked position.

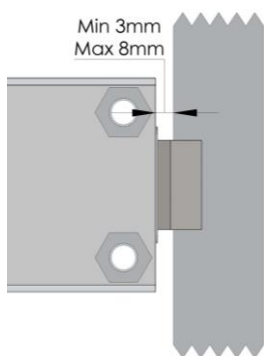


In the locked position, there should be approximately 1 mm clearance between the lock bolt and the cavity in the blocking bar of the boltwork. The bolt must be able to move freely without force being applied to it.



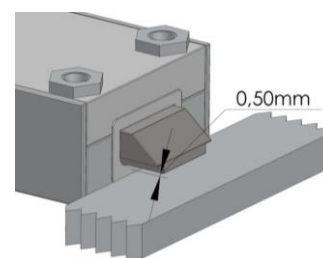
In open position, there should be minimum 3mm and maximum 5 mm clearance between the lock bolt and the blocking bar of the boltwork.

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.



Motorized blocking system

Characteristics and Cabling

Caratteristiche

The lock T4500/M/C is a motorized lock that does not require a keypad or other control units, in fact, the opening and closing of the bolt is driven by means of electrical contacts.

In order to open the bolt is necessary to close the contact between the black and green wires for a period of one second.

In order to close the bolt it is necessary to close the contact between the black and red wires for a period of one second.

The power supply can be 9, 12 or 13.8 Volts (on connector ENT).

The locks series T4500 can be mounted in all four directions (RH, LH, VU, VD). Further, by flipping the lock, both blocking directions can be realized (DX/SX).

The mounting dimensions are standard (magic module).

The lock is delivered with M6 metric mounting screws. Withworth screws 1/4 – 20 are available on demand.

Cabling

Power supply:

On connector ENT

Red positive – Black negative.

V = 9V – 12V – 13.8V

I run = 115mA @ 9V

I sleep = 5μA

Bolt control contacts

Black wire – common

Green wire – opening

Red wire – closing

Bolt microswitch:

Blue wire – common

Red wire – normally open

Green wire – normally closed

I_{max} = 0,5A – V_{max} = 50Vdc

Functional test

To be carried out with the door open.

Provide power to the lock.

Turn boltwork handle towards OPEN position. Bolt must move freely.

Cut power to the lock.

Turn boltwork handle towards LOCKED position.

The lock bolt must fully extend and secure.

Make sure there is an air space on all sides of the lock bolt when the safe's boltwork is fully thrown into LOCKED position.

Repeat 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.

**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

GLOBAL HEADQUARTERS

Tecnosicurezza SpA

Via Cesare Battisti. 276
37057 San Giovanni Lupatoto
Verona

Tel.+39 045 826 64 70

Fax. +39 045 826 64 69

info@tecnosicurezza.it

USA HEADQUARTERS

Tecnosicurezza Inc.

50, Thomas Lane
Versailles, KY 40383

Tel.+1 859 490 89 30

info@usatecno.com

SPAIN HEADQUARTERS

Tecnosicurezza Sa

C/Menor, 4 - Nave 10
Pol. Ind La Mina 28770
Colmenar Viejo

Tel.+34 91 804 33 91

Fax.+34 91 804 32 63

info@tecnosicurezza.es