


Description	Bolt Lock
<p>MK-Safe is the easy-to-configure trapped key interlocking system. It is suitable for various industrial safety applications. The casing of the MK-Safe product range is 316 stainless steel which is designed and built to withstand harsh industrial environments. The coding system has 15,000+ different key codes available. The master coding system can be provided as an option.</p> <p>BL1 single barrel bolt lock is the mechanical interlocking device which extends a bolt to lock a device or object. For example, BL bolt lock can be used to lock an isolator switch, valves or circuit breakers. The bolt size is 15.88mm in diameter with 16mm of travel. The operating sequence is the bolt is extended to the longest length 22mm when the key is removed from the BL1 unit.</p>	

### Technical Specification: Bolt Lock

Housing Material	316 Stainless Steel
Internal Component Material	Full Stainless Steel
Max Bolt Strength	5000N for side load direction, 5000N for the front load direction (Please refer to load direction in this document)
Operating Temperature	0°C - 80°C
Mechanical Lifetime	400,000 Operations

Safety Standards	
Standards	EN ISO 14119:2013 EN ISO 13849-1:2015 EN ISO 13849-2:2012 EN IEC 62061:2021
Certifications	CE marked for all applicable directives

Safety Related Data	
B10d	2,000,000
SIL up to	SIL 3 acc. to EN 62061
Performance Level (PL) up to	PL-e acc. to EN ISO 13849-1
Safety Category up to	CAT4 acc. to EN ISO 13849-1
Coding	Type 2 acc. to EN ISO 14119

**Note:** The trapped key interlocking product is part of the machine safety control system. To achieve the desired safety performance, the correct system structure shall be implemented. The proper safety controller shall be used to provide the correct monitoring function and diagnostic coverage.

The information is designed to help suitably qualified personnel install and operate Mechan Controls safety equipment. Before using this product, read this guide thoroughly along with any relevant European and/or National Standards E.g. Machinery Directive 2006/42/EC and its Amendments, Provision and Use of Work Equipment Regulations. Further information can be obtained from Mechan Controls Ltd.

Mechan Controls Ltd accepts no responsibility for managing key codes for the customers. It is the customer's responsibility to implement a proper key code management system and means to prevent unintentional duplication of key codes. If an organization decides to keep spare or master keys then they shall be under management control and this shall be taken into account in the risk assessment. For further information, please refer to ISO/TS 19837.

## Mounting

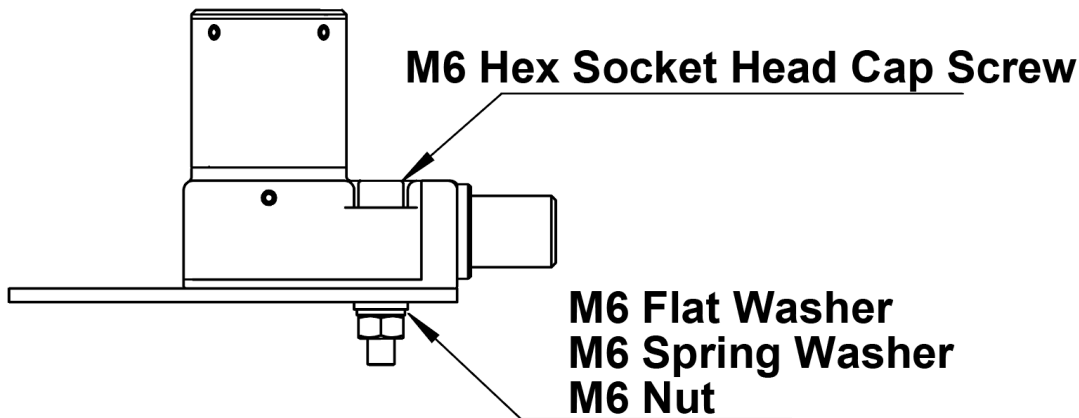
### Mounting of the Bolt Lock

1. The unit should be mounted in its correct assembly condition.
2. The user must comply with the relevant safety standards.
3. After mounting the unit, it must be commissioned and tested by qualified personnel to ensure the correct operation and safety function of the unit.

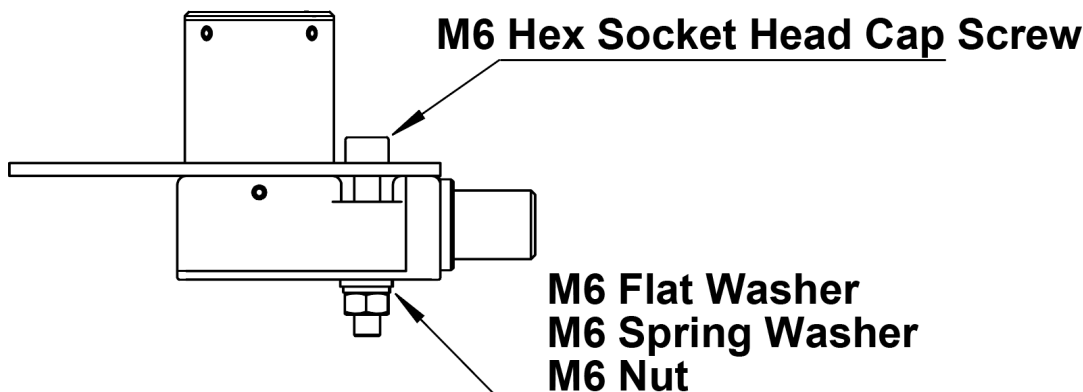
The unit should be mounted in a position with no vibration. Otherwise, anti-vibration mounting measurements should be used to ensure the correct operation of the unit.

Recommended Fixing Required:

Front of board mounting: 2 x M6 Hex socket head cap screws /  
minimum screw length = 32mm + panel thickness  
2 x M6 Spring washer, 2 x M6 Flat Washer, 2 x M6 Nut.



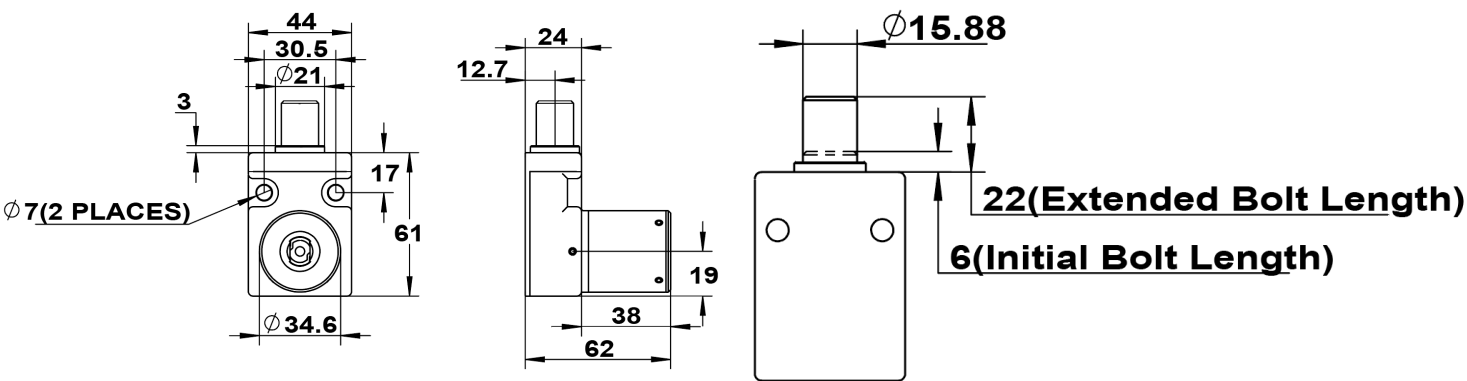
Back of board mounting: 2 x M6 Hex socket head cap screws /  
minimum screw length = 37mm + panel thickness  
2 x M6 Spring washer, 2 x M6 Flat Washer, 2 x M6 Nut.



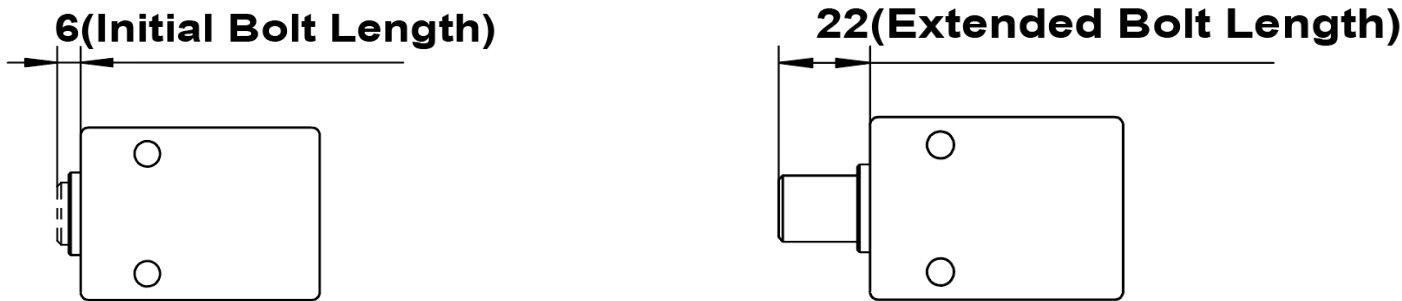
The recommended torque to tighten the fixings is 8 to 10Nm.  
Ensure that all the fixing screws cannot be removed due to the vibration.  
The temper-proof security screws are recommended so that the personnel on site cannot remove the unit using standard tools.

All fixing positions must be used.  
Mount the unit to a flat steel plate. The minimum thickness should be 3.0mm

Dimensions

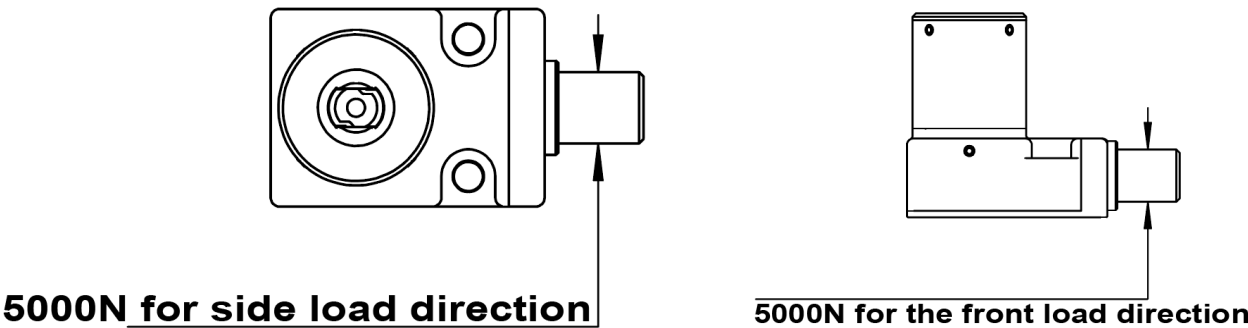


When the key is in the trapped position, the bolt length is 6 mm.



When the key is released from the BL1 Lock, the bolt length is 22 mm.

The strength of the bolt ---5000N for the side load direction, and 5000N for the front load direction.



*\*All dimensions are in MM*

Product Selection

**MK-BL-1-STC-N**

Product Type		Dust Cover	
MK-Safe	Mechan Key Exchange	N	No Dust Cover
		DC	With Dust Cover
Range		Code	
BL	Bolt Lock Range	STC	Standard Code System
		MAC	Master Code System
Lock Number			
1	Number of locks		

# Safety Specification

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## Safety Assessment

A risk assessment should take place to establish that the specifications of the MK-Safe product are suitable for the application required. See Technical Specifications below or contact Mechan Controls for further information.

The products may only be installed, commissioned, operated, and maintained by competent persons.

A competent person is a qualified and knowledgeable person who, because of their training, experience and current professional activity, has the specialist knowledge required. An understanding of European and International laws, directives and standards is recommended.

## Maintenance

It is recommended to check the unit every week regarding the following aspects:

1. the correct safety function of the unit
2. the correct operation of the unit
3. Look for signs of damage or excessive wear

Damaged units should be replaced or returned to the manufacturer for repair where practical. For lubrication or cleaning, use WD40. The unit should be lubricated at a reasonable frequency depending on the operating environment.

## Disclaimer

In the interest of product development specifications are subject to change without notice. It is the responsibility of the user to ensure compliance with any acts or by-laws in place. All information regarding Mechan equipment is believed to be accurate at the time of printing. Responsibility cannot be accepted for errors or omissions.

## Warranty

Warranty will be void if the following points are true:

- The product was not used for its intended purpose
- Damaged was caused by usage not stated in the manual
- Modifications have been made to the products (e.g exchanging components)
- Operating personnel are not suitably qualified

## Warning!



The MK-Safe trapped key system should not be manipulated or overridden. Removing the actuator from the guard may lead to loss of safety resulting in serious injury or death.