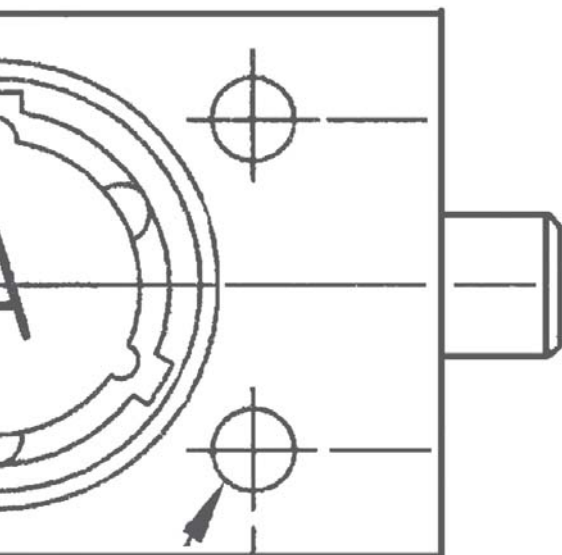




Safety Products

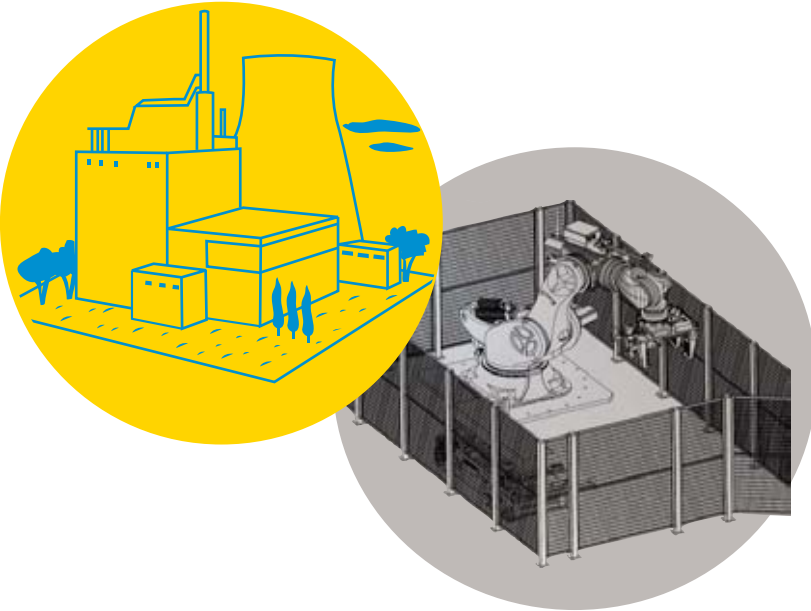


**Product Presentation
2013**



Our Scope

KLS Group



KLS Group is a specialist on interlocking

Present in many countries directly and in the majority of industrialized areas with a network of agents and resellers, KLS is your local partner for safety interlocks.

Currently the safety of machines, plants and systems employed in industry depend more on the correct functioning of the main control systems. Inadequate maintenance labour can lead to serious risks, jeopardizing both capital investments and the lives of the employees. To minimize the risks, the relevant safety systems must meet or exceed requirements for functional safety.

Interlocking systems are actually one of the most complete safety systems available to eliminate risks and prevent injuries.

KLS is a global leader in key interlock applications. The key interlocking systems utilize locks and keys for sequential control of equipment and machinery to ensure safe operation.

In view of this mission, few priorities reflect the fundamental values shared by all Group:

Be creative and innovate constantly.

Aim for product excellence.

Promote cultural respect and humankind valorization.

Let our employees express their passions, their dreams and dedication.

Promote the exchange of people and their sustainability.

Strive to be the best in all we do.

Willingness to excel, refusal of mediocrity.

These illustrations show two separate accidents that could have been prevented using Lock Out Tag Out equipment or Key Interlocking System.

In the first incident, a maintenance worker has failed to lock-off the supply valve to the tank that he is cleaning. Now the tank has flooded with water and he has drowned.



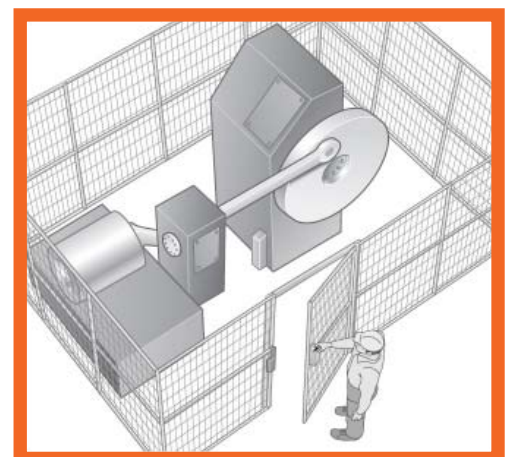
In the second incident, the worker has been electrocuted because he has failed to lock-off the power switch to the circuit he is working on. Health and Safety legislation places a duty on all workers to check that the equipment they are working on is correctly isolated.



REGULATIONS

Our Guards and Interlocks are designed according to the following standards.

UNI EN 953	Safety Of Machinery - Guards - General Requirements For The Design And Construction Of Fixed And Movable Guards
UNI EN ISO 12100•1/2	Safety Of Machinery - Basic Concepts, General Principles For Design
UNI EN ISO 1384941	Safety Of Machinery - Safety-Related Parts Of Control Systems - Part 1: General Principles For Design
CEI EN 60204•1	Safety Of Machinery - Electrical Equipment Of Machinery - Part 1: General Principles
UNI EN ISO 13857	Safety Of Machinery - Safety Distances To Prevent Hazard Zones Being Reached By Upper And Lower Limbs
UNI EN 349	Safety Of Machinery - Minimum Gaps To Avoid Crushing Of Parts Of The Human Body
UNI EN 1088	Safety Of Machinery - Interlocking Devices Associa Ted With Guards. Principles For Design And Selection.
DIRECTIVE 2006/42/CE	New Machinery Directive



**ZERO
IS POSSIBLE**



KLS is fully committed to preserve the health and safety of its employees as well as the workers at our client's plants and the subcontractors that participate at any stage of production.

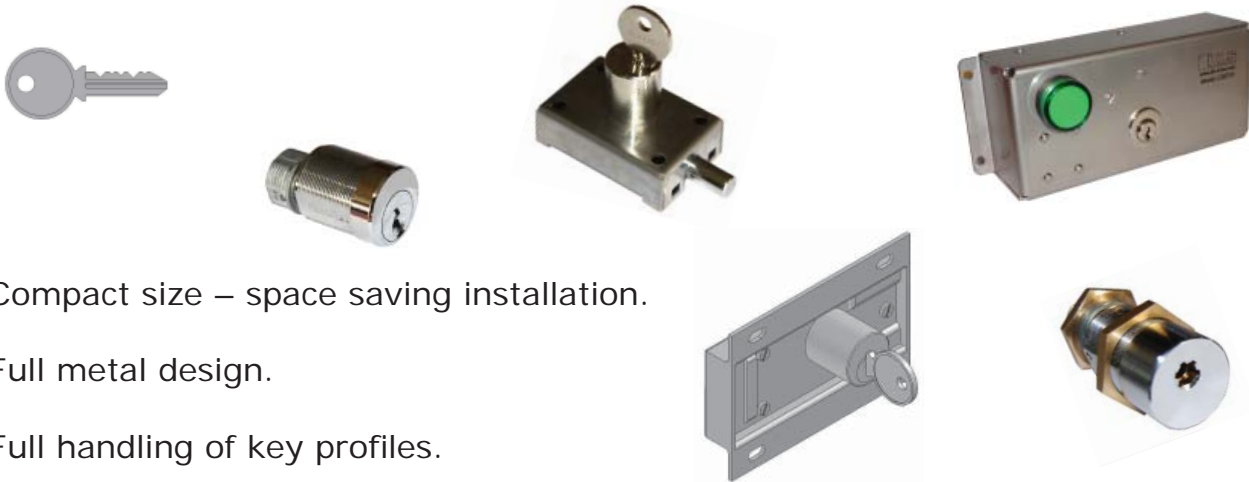
This will be possible at operation stage, as well as in the outdoor or indoor.

We are committed to safety because our ethics dictate that the people involved in our projects should leave work unharmed, because injuries in the workplace are unacceptable. We are committed to safety because it is the right way to work.

Select Your Range

ENERGY And Light Industry Range

EL, ME Key Range



Compact size – space saving installation.

Full metal design.

Full handling of key profiles.

PRODUCTS AVAILABLE

- Bolt locks, Door locks, Electro-locks, Solenoid Controlled Locks, Key Exchange Boxes, Special Locks.

Our Industrial Heavy Duty Range

CP KEY Range



Fits many international standards.

Dust cap on key and lock for rough industrial applications.

Excellent balance PRICE to QUALITY.

PRODUCTS AVAILABLE

- Cylinders, Bolt locks, Door locks, Electro-locks, Solenoid Controlled Locks, Key Exchange Boxes, Special Locks, Gate Control.

HOW

TO SELECT YOUR INTERLOCKS



product type	mechanism type	electro	number of cylinders	contacts
B - Bolt Lock	S = std 5 pins key; L = Large cylinder; H= Heavy duty; 6= 6 pins key; D = Dot key	M = Mechanical E = with solenoid 110Vdc (enclosure); F= solenoid 24Vdc (enclosure)	1, 2	Z = no switch; N = signal 5A; P = power 202F Q = Power 3C10
C - Camlock				
D - Door locks				
G - Gate locks				
X - Exchange box			2 to 40 cylinders logic is specified in the description	
VK = valve kits	H = heavy duty		1, 2	

Select Your Key Profile

S KEY - FLAT BRASS KEY

Technical Features

Material: Nickel-plated brass.

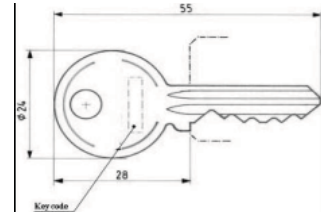
Thickness: 2,2mm.

Weight: 12g.

Breaking torque: 5Nm.

Options:

Available in different profiles.



P KEY - PLASTIC HEAD KEY

Description And Technical Features

Material: Black nylon key head. Key insert out of brass.

1 700 000 different keys available.

Weight: 10g.

Breaking torque: 8Nm.

Front face of the lock sticks out by 29,5mm.

Options:

Engravings: 8 letters/figures maximum (2.5mm high).

Q KEY - METAL HEAD

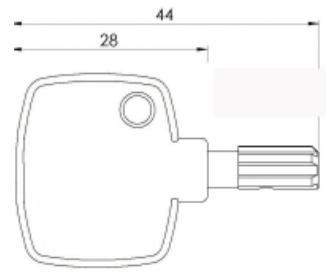
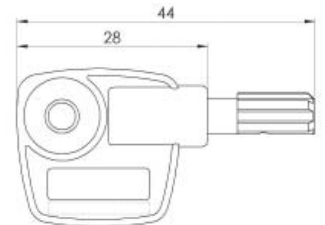
Description And Technical Features

Material: Brass.

Weight: 90g.

Options:

Engravings: 10 letters maximum (height: 2,5mm.), engraving on both sides.



K KEY - KLS KEY

Description And Technical Features

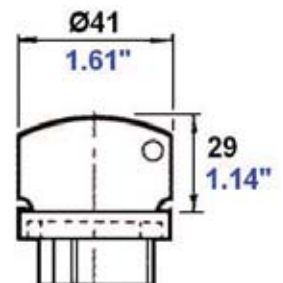
2 millions combinations available

Material: Brass key.

Weight: 180g.

Options:

Engravings: 10 letters maximum (height: 2,5mm.), engraving on both sides.



CP KEY - CUP KEY

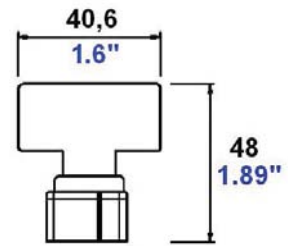
Description And Technical Features

Material: Brass or stainless steel key.

Weight: 70g.

Options:

Engravings: 10 letters maximum (height: 2,5mm.), engraving on both sides.



CR KEY - SEALED CUP KEY

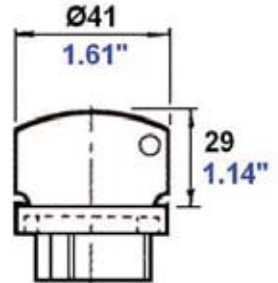
Description And Technical Features

Material: Stainless steel key.

Weight: 180g.

Options:

Engravings: 10 letters maximum (height: 2,5mm.), engraving on both sides.



T KEY - STRONG KEY

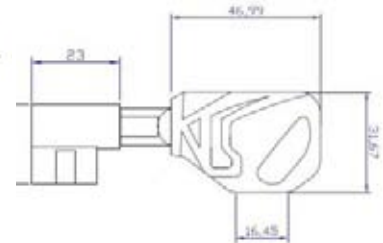
Description And Technical Features

Material: Stainless steel key.

Weight: 120g.

Options:

Engravings: 10 letters maximum (height: 2,5mm.).



CAMLOCK SELECTOR									
Type of lock	Type of cylinder	Electro	Number of Cylinders	Contacts	-	Rotor type	Dimensions (above panel / below panel)	Adaptor M16 on the rear	Rotation
C = Camlock	S = Small D23 mm	M = Mechanical	1	Z = no switch	Separator for specification	E* = eccentric	23S = 3 mm / Thread M23 22M* = 7 mm / Thread M22 22L = 13,6 mm / Thread M22	A* = adaptor supplied mounted 0 = no adaptor	CW* = Clockwise AW = Anticlockwise
	22M or 22L								
	C = centered E* = eccentric					22L = 13,6 x 23 mm Thread M22			
						E = eccentric	U = 3mm (DIA 34) + 12 mm (DIA 29) / M29 x 21 mm	0 = no adaptor	360 DG
	C = centered					35 = 35 mm - no thread	R = Round cylindric rear Ø14,5mm - 23mm long S* = rear Square 9,5mm - 23mm long	CW* = Clockwise AW = Anticlockwise	
PA/* = panel mount with fixing north-east PA\ = panel mount with fixing north-west									
					KLS deliver options with star (*) If not selected differently				



For coloured keys, locks or cylinders please contact us.



CSM1Z-E22M

Miniature Cylinder

Description And Technical Features

This cylinder is the smallest for the flat key interlock with 22mm diameter.

Key rotation - rotation of cam 1/4 turn to right.

Attachment to panel by nut, designed for panel thickness of 0.8 to 10mm.

Various cam arrangements are possible.



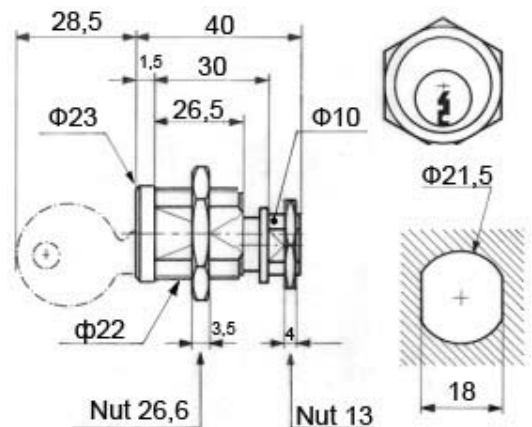
Possibilities:

- Direction of key rotation 1/4 to the left.

Options:

- Rear adaptor M11 (see picture);
- Cams;
- Spacer rings 4 or 6mm. thickness.

Weight: 100g.



CSM1Z-E22L

Cylinder

Description And Technical Features

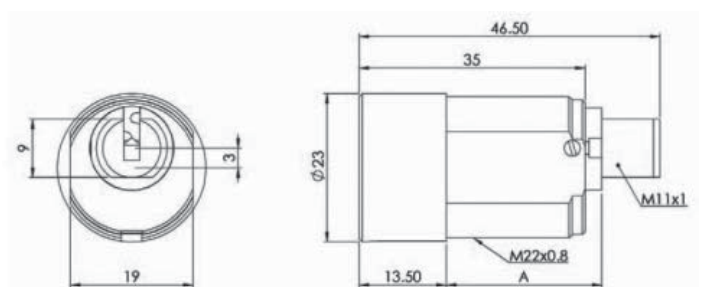
This cylinder is the indicated for European standard panels and is coupled with the standard flat key.

- Full metal cylinder, no plastic parts;
- Camlocks with length of 24mm. (A);
- 90° clockwise or anti-clockwise rotation.

Options:

- Rear adaptor M11x1 driver with 9mm flat;
- Fixing nut.

Weight: 100g.



CSM1Z-E23S

Cylinder

Description And Technical Features

This cylinder is the smallest for the flat key interlock, diameter 23mm.

Key rotation - rotation of cam : 1/4 turn to right.

Attachment to panel by nut, designed for panel thickness of 0.8 to 10mm.

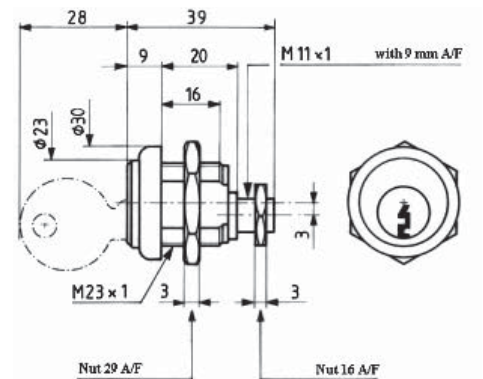
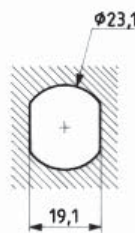
Various cam arrangements are possible.



Options:

- Direction of key rotation on the left;
- Cams;
- Spacer rings 4 or 6mm thickness.

Weight: 100g.



CLM1Z-E29S

Large US Cylinder

Description And Technical Features

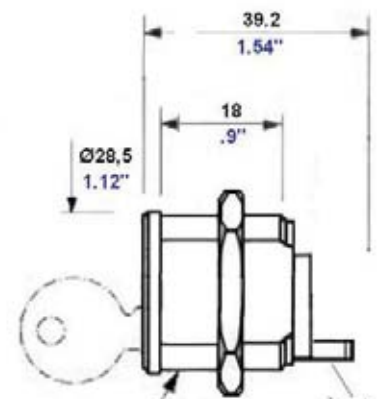
This cylinder is the indicated for American standard panels and is coupled with the standard flat key.

Diameter 29mm.

Key rotation - rotation of cam : 360° any direction

Attachment to panel by nut, designed for panel thickness of 0.8 to 10mm.

Various cam arrangements are possible.



M29x0 Thread: M29 x 21 mm



Profalux Type Cylinder

Profalux Type Cylinder

Technical drawing of the M11x1-2000 ball valve. The drawing includes two views: a front view (left) and a side view (right).

Front View Dimensions:

- Overall diameter: 19
- Outer diameter of the top flange: 9
- Thickness of the top flange: 3

Side View Dimensions:

- Overall length: 46.50
- Length of the main body: 35
- Length of the handle assembly: 13.50
- Thread specification for the handle: M11x1
- Thread specification for the ball valve body: M22x0.8
- Overall diameter of the main body: $\varnothing 23$
- Dimension A: Indicated by a dimension line at the bottom, representing the distance from the end of the handle to the center of the ball valve body.



CKM1Z-PA

Camlock

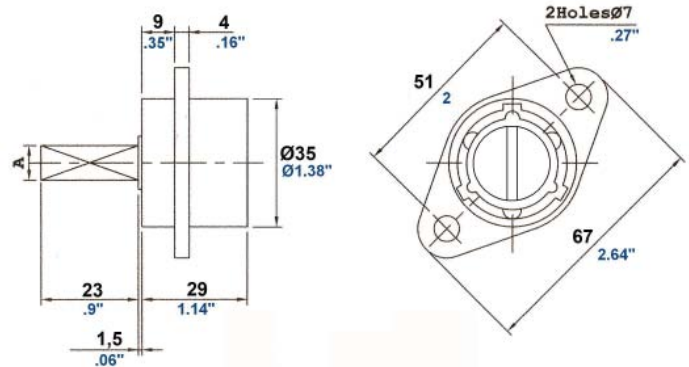
Description And Technical Features

The movement of the key rotates the lock. Lock can be used in panels.

The lock can be equipped with a flip cap.
Cam to be ordered separately. Please refer to accessories page at the end of catalogue

Features:

- Mounting: by screws;
- Material: nickel-plated brass;
- Direction of cam: 90° clockwise (trapping key);
- Rotation of key: CW.



CHM1Z-PA

Camlock

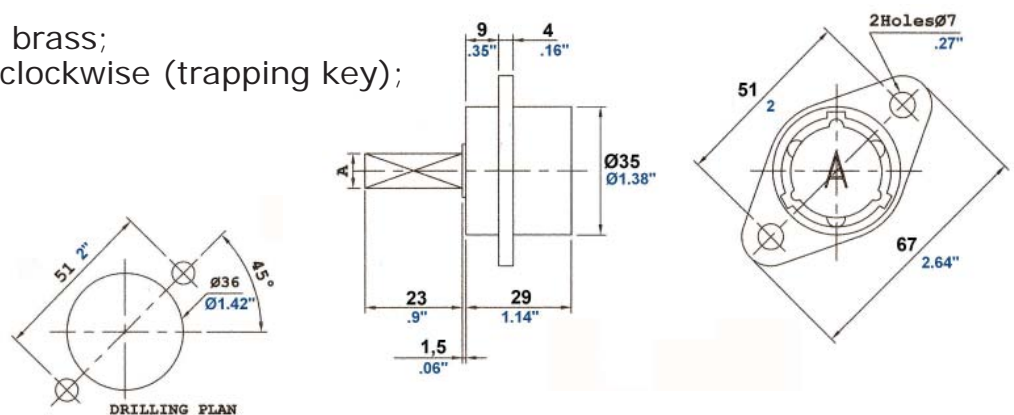
Description And Technical Features

The movement of the key rotates the lock. Lock can be used in panels.

The lock can be equipped with a flip cap.
Cam to be ordered separately. Please refer to accessories page at the end of catalogue

Features:

- Mounting: by screws;
- Material: nickel-plated brass;
- Direction of cam: 90° clockwise (trapping key);
- Rotation of key: CW.



CSM1N - Camlock With Electrical Feedback

Description And Technical Features

Attachment to panel by screw.

Electrical contact: 1 normally open and 1 normally closed.

Direction of key rotation : 1/4 turn to the right.

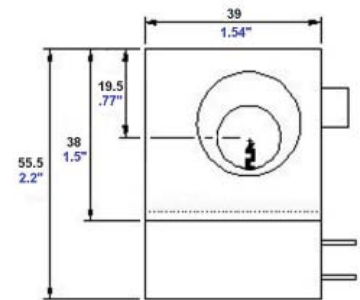
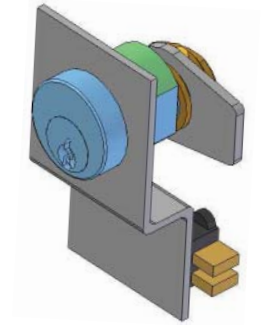
Weight: 250g.

Material:

- Body: Stainless steel 304.

Options:

- Other switches on demand.



CHM1P - Rotary Lock With Power Switch

Description And Technical Features

The CHM1P is a key driven electrical switch suitable for the isolation of switching of low current (10A).

Standard block are 2 poles, 101C, 415V, 10A.

Contact us for any other version.

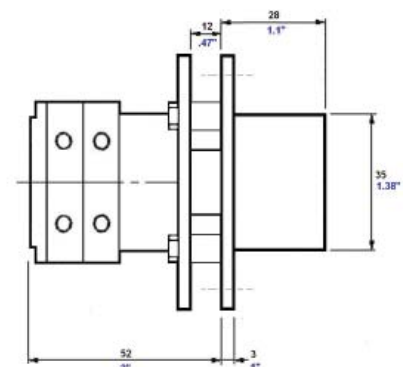
All contacts are UL and CE approved.

Features:

- Panel mounting: 0.8 – 10mm thickness;
- Mounting: by screws;
- Barrel: nickel-plated brass;
- Electrical contacts: 400Vac, 6A max
2O (contact open)
or 2C (contact closed).

Options:

- 3O, 1C contacts.



BSM1Z-M - MINI US Style Bolt Interlock

Description And Technical Features

Bolt lock with 1 lockbolt and 1 key cylinder S type.

Material:

- Body: Stainless steel 304.

Operation:







- Key free - rounded lockbolt extracted;
- Key trapped - bolt retracted and the key becomes trapped.

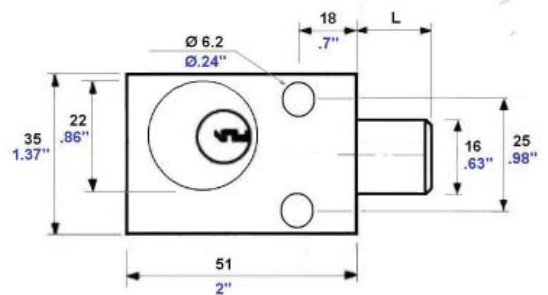


Option (D):

The key is captive when the rounded lockbolt is extracted.

When the key is rotated 180°, the rounded lockbolt is retracted and the key is released.

Diagram	Function	C	D
 Key free	Initial position		
 Key trapped	Final position		



BSM1Z & BMM1Z Bolt Interlock

Description And Technical Features

Bolt lock with 1 lockbolt and 1 key.

Material:

- Body: see next page for Body material;
- Cylinder: Brass, nickel finish.

Weight: 250g.

Operation:





- Key free - rounded lockbolt extracted;
- Key trapped - bolt retracted and the key becomes trapped.



Option (D):

The key is captive when the rounded lockbolt is extracted.

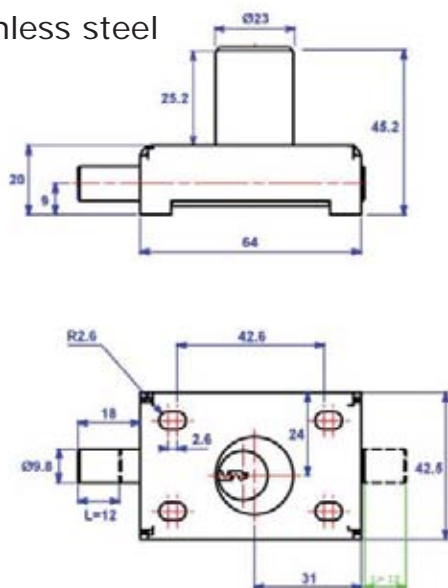
When the key is rotated 180°, the rounded lockbolt is retracted and the key is released.

Diagram	Function	C	D
○ Key free	Initial position		
● Key trapped	Final position		

- Bolt retracted - 6mm.
- Bolt extracted - 21mm.
- (15mm. movement)
- L - 15mm.
- l - 6mm.

MATERIAL

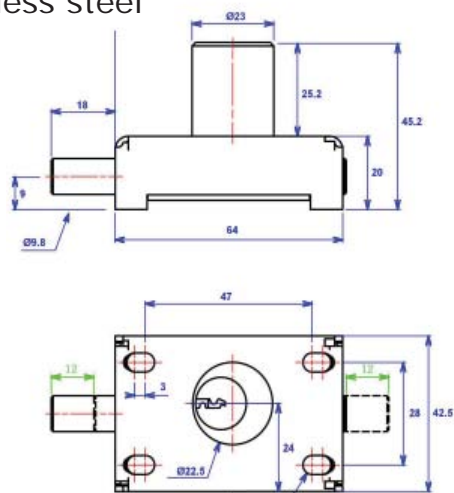
Body : Stainless steel



Dimensions on BSM1Z-N

MATERIAL

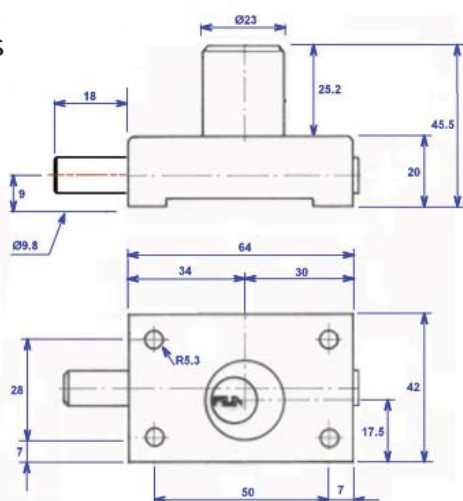
Body : Stainless steel



Dimensions on BSM1Z-R

MATERIAL

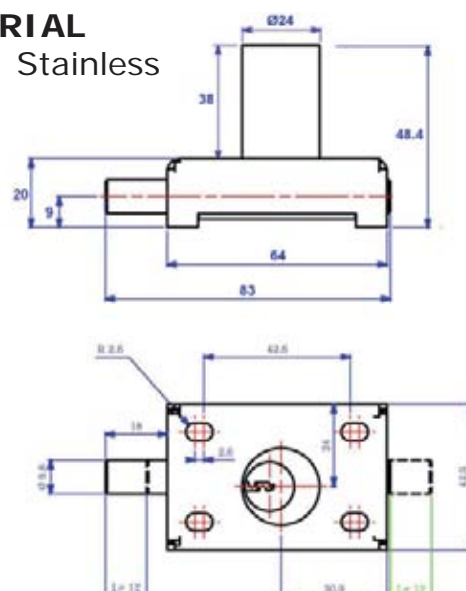
Body : Brass



Dimensions on BMM1Z-K

MATERIAL

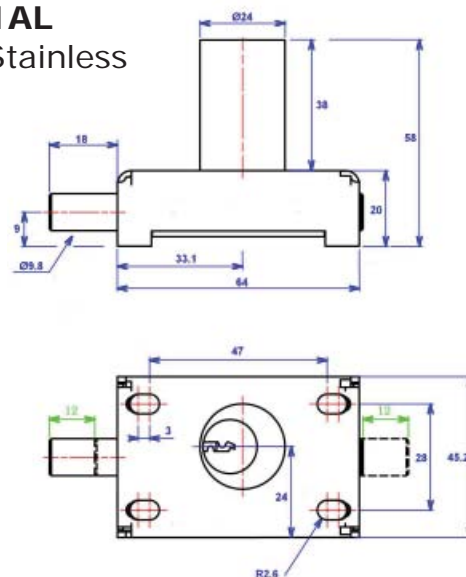
Body : Stainless steel



Dimensions on BMM1Z-N

MATERIAL

Body : Stainless steel



BL1EB - Bolt Interlock

Description And Technical Features

The Bolt Interlock range is used in switchgear control to inhibit movement of cams, toggles or levers.

One cylinder boltlock with a bolt \varnothing 16mm.

- Bolt in - 11mm. (standard L);
- Bolt out - 31mm. (L+20);
- Bolt travel - 20mm. (B).

Key is trapped when the bolt is in.

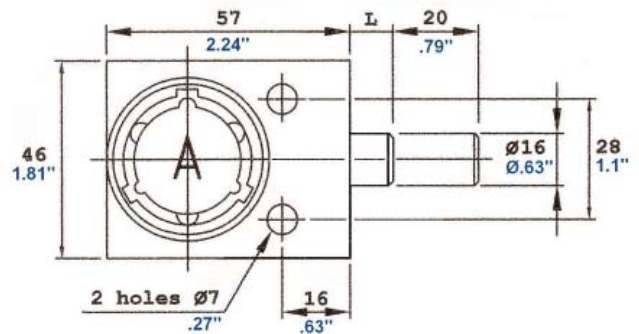
Options:

- Different bolt extension;
- Bolt \varnothing 9.5 to 16mm on request (.37" to .63")

Material:

- Red polyester paint on brass body.

Weight: 700g.



BHM1Z - Bolt Interlock US Heavy Duty Std

Description And Technical Features

The Bolt Interlock range is used in switchgear control to inhibit movement of cams, toggles or levers.

One cylinder boltlock with a bolt \varnothing 16mm.

- Bolt in - 11mm. (standard L);
- Bolt out - 31mm. (L+20);
- Bolt travel - 20mm. (B).

Key is trapped when the bolt is in (in the picture, a different version - key is trapped when bolt is out).

Options:

- Different bolt extension;
- Bolt \varnothing 9.5 to 16mm. on request (0.37" to 0.63").

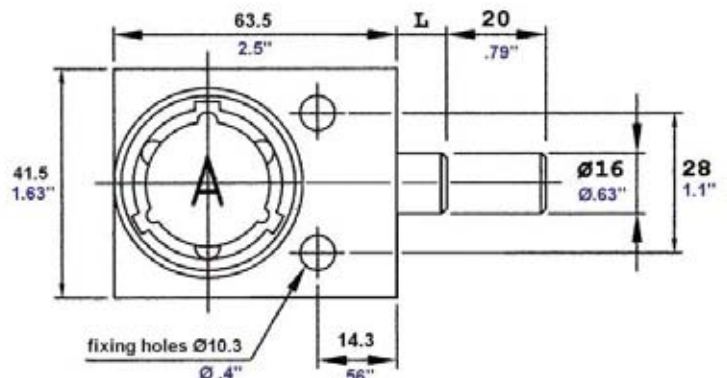
Material:

- Stainless steel.

Weight: 700g.



www.kls-locks.com



BLM1Z - Bolt Interlock

Large US Cylinder

Description And Technical Features

Bolt lock with 1 lockbolt and 1 key.

Material:

- Body: Stainless steel 304.

Operation:

- Key free - rounded lockbolt extracted;
- Key trapped - bolt extracted and the key becomes trapped.

Option (D) :

The key is captive when the rounded lockbolt is extracted. When the key is rotated 180°, the rounded lockbolt is retracted and the key is released.

Weight: 300g.

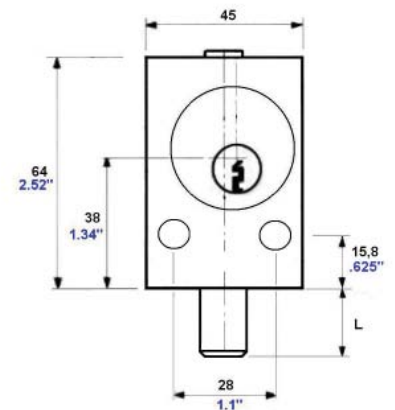


Diagram	Function	C	D
○ Key free	Initial position		
● Key trapped	Final position		

BOLT LOCK SELECTOR								
Typr of lock	Type of cylinder	Electro	Number of Cylinders	Contacts	-	Body styles	Logik	Bolt Information
B = Bolt Lock	S = Small H25 mm M = Medium H37 mm P = Star key D = flat key, low cost version, without nickeling on body)	M = Mechanical	1	Z = no switch	Separator for specification	N = 64 x 42,5 x 20 mounting holes distance 47 x 28 mm - stainless steel K* = 64 x 42,5 x 20 mounting holes distance 42,6 x 26,3 - stainless steel R = 65 x 42,5 x 20 mounting holes distance 50 x 28 mm - brass M = 52 x 35 x 35 mounting holes distance 25 x 18 mm - stainless steel	KO = Key in, bolt out KI* = Key in, bolt in	Bolt lenght when bolt IN 000 = fl at to body (0", 0mm) 025* = 1/4", 6.4mm 037 = 3/8", 9.5mm 050 = 1/2", 12.7mm 062 = 5/8", 15.8mm 075 = 3/4", 19.1mm 100 = 1", 25mm 125 = 1-1/4", 31.7mm 137 = 1-3/8", 34.9mm 150 = 1-1/2», 38.1mm 200 = 2", 50.8mm 300 = 3", 76.2mm
	L = Large D34 H = Heavy duty					U = 64 x 50 x 34,5 mounting holes distance 15,8 x 28 mm - stainless steel		
					Use the options with a star (*) If this part is not set			

BL1EB - CLAW Interlock (Mexico And India Style)

Description And Technical Features

The Claw Interlock range is used in switchgear control to inhibit movement of cams, toggles or levers.

One cylinder boltlock with a bolt Ø 10mm. and a claw 38mm wide.

Bolt travel = 20mm. (B)

Key is trapped when the bolt is in.

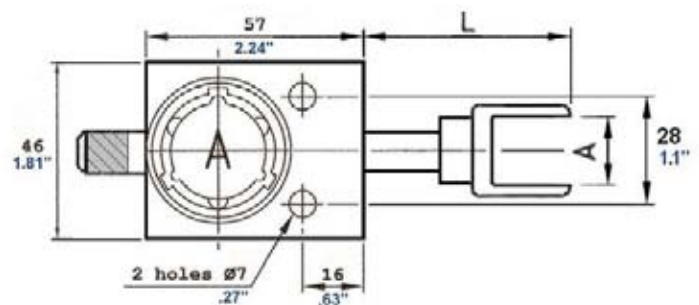
Material:

- Brass.

Options:

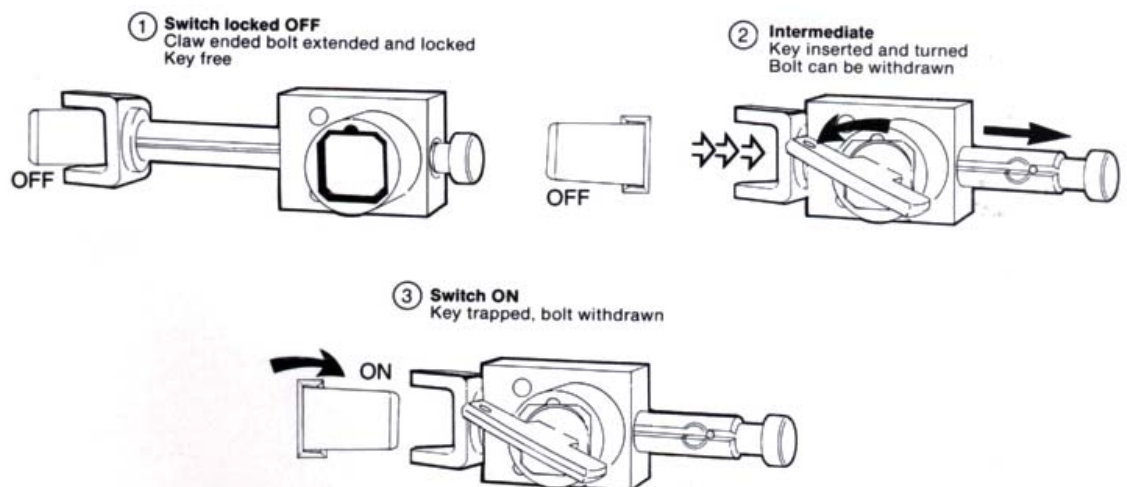
- Stainless steel body.
- Claw dimension: 25, 50 or 63mm.

Weight: 900g.



HOW IT WORKS ?

LOCKING A SWITCH IN THE "OFF" POSITION



B0E1N - Solenoid Controlled Boltlock

Description And Technical Features

Designed to control access to the dangerous or protected areas, this device is installed in any kind of door, gate, housing, and permits remote unlocking from a distance.

Equipped with a forced opening contact, it permits the detection when the access is closed again.

Unlocking: through voltage application;

Stroke: 14mm.

Supply Voltage: 24/48/110/230V AC, DC;

Running Coefficient: 100%;

Contact: 6A, 250V;

Consumption: 20W;

Radial shear force: 500daN.

Options:

- Ground latch, by-pass key, unlocking through voltage application (SP).



B0E1N-BP - Solenoid Controlled Boltlock With Push Button

Description And Technical Features

Designed to control access to the dangerous or protected areas, this device is installed in any kind of door, dock door, housing, and permits the voluntary unlocking of the access by pressing the push button.

Equipped with a forced opening contact, it detects the re-entry of the latch into the slot. Indication signal for authorization for unlocking.

Mechanical system that impedes any manual manipulation of the latch.

Unlocking: through voltage application;

Stroke: 14mm.;

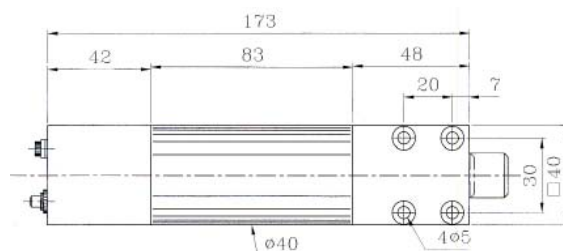
Voltage: 24/48/110/230V AC, DC;

Duty factor: 100%;

Contact: 6A, 250V;

Consumption: 20W;

Radial shear force: 500daN.



BSM1N, BMM1N, BLM1N - Boltlock With Electrical Feedback

Description And Technical Features

The key operated bolt interlock is fitted with an electrical contact suitable for the control of electrical switchgear, valves or other.

The electrical contacts are used to provide a feed back information of the bolt position or to switch control circuitry of a machine. This lock is available on following cylinders : S, M, L, P, H, T.

Material:

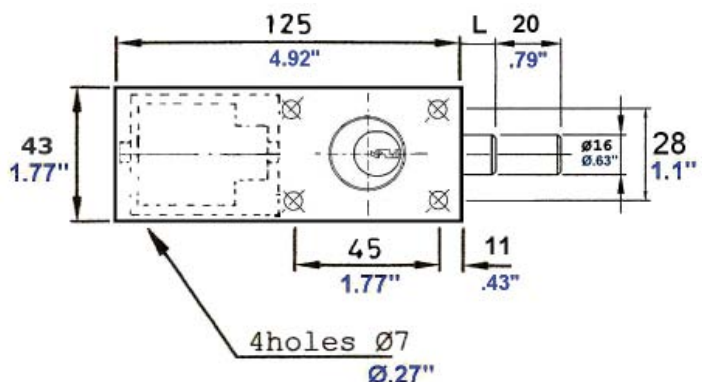
- Cylinder: Brass with nickel finish;
- Body: Stainless steel.

Weight: 800g.











Operation:

By inserting and turning the key a 12mm. rounded bolt is put into action that, when re-introduced into the body of the lock, sets a switch and allows the operator to manoeuvre the lever.

The key is therefore locked until the command is returned to the original point. This allows the bolt to extend thus locking the command controls.



Available Configurations:

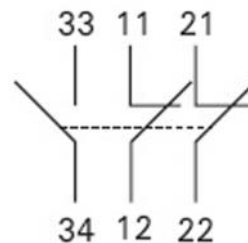
Diagram	Function	C - Initial	C - Final	D - Initial	D - Final
	Position				
					

Electrical Characteristics:

We use positive opening features on our switches.

- contacts 2NC+1NO
(contact NC with forced opening);
- rating 3A 250VAC.

ATTENTION : Switch is accessible from below the lock, once installed, it will be protected from modification. Wires are not supplied in the lock.



BHM1N - Boltlock With Electrical Feedback

Description And Technical Features

The key operated bolt interlock is fitted with an electrical contact suitable for the control of electrical switchgear, valves or other.

The electrical contacts are used to provide a feed back information of the bolt position or to switch control circuitry of a machine.

Material:

- Cylinder: Brass;
- Body: Stainless steel with red paint;

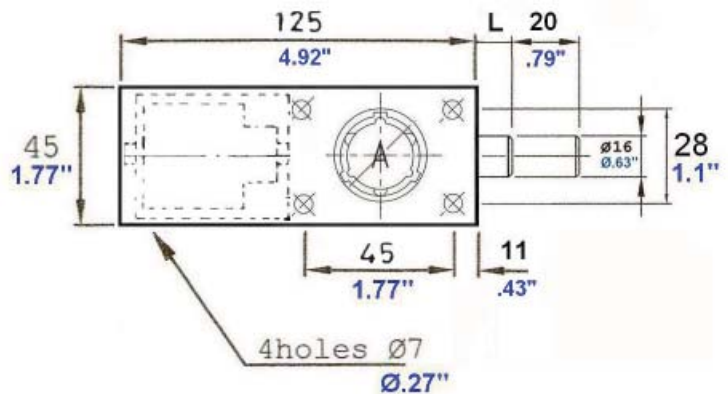
Weight: 900g.

Operation:











By inserting and turning the key a 12mm. rounded bolt is put into action that, when re-introduced into the body of the lock, sets a switch and allows the operator to manoeuvre the lever.

The key is therefore locked until the command is returned to the original point.

This allows the bolt to extend thus locking the command controls.



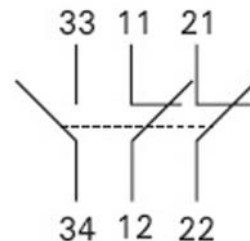
Available Configurations:

Diagram	Function	C - Initial	C - Final	D - Initial	D - Final
	Position				
					

Electrical Characteristics:

We use positive opening features on our switches.

- contacts 2NC+1NO
(contact NC with forced opening);
- rating 3A 250VAC.



ATTENTION : Switch is accessible from below the lock, once installed, it will be protected from modification. Wires are not supplied in the lock.

BSM2Z - Boltlocks

Description And Technical Features

Bolt lock with 1 lockbolt and 2 keys.

BSM2Z-01:

Lockbolt out : L=18mm. Key 1 released. Key 2 captive.

Lockbolt in : l=6mm. Key 1 captive. Key 2 released.

BSM2Z-00:

Lockbolt out : L=18mm. Keys 1 and 2 released.

Insert key 2, turn 180°.

Insert key 1, turn 180°.

Lockbolt in : l=6mm. Keys 1 and 2 captive.

Possibilities:

- Lockbolt on the left;
- Other options as per below schematics.

Options:

- Lockbolt with 15mm. diameter;
- Lockbolt out : L=35mm.

Weight: 450g.

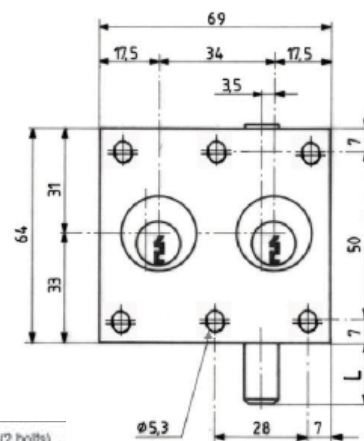


Diagram	Function	F	H	J	K	L	M	N	J (2 bolts)	H (2 bolts)
○ Key free	Initial position									
● Key trapped	Final position									

MBSM2Z-VT00 - MINI Double Cylinder Boltlock

Description and technical features

Bolt interlock with 2 key entries.

Bolt travel 20mm.

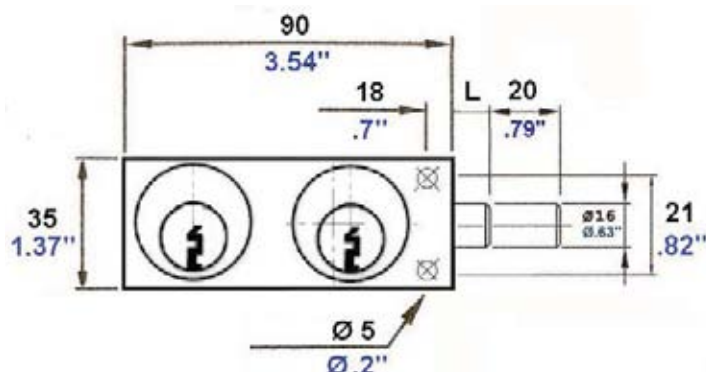
Available functions:

- 2 keys arrive at same time to operate the bolt (-00);
- exchange function (-01).

Material:

- Stainless steel.

Weight: 580g.



Description And Technical Features

Bolt interlock with 2 key entries.

Bolt travel 20mm.

Available functions:

- 2 keys arrive at same time to operate the bolt (-00);
- exchange function (-01).

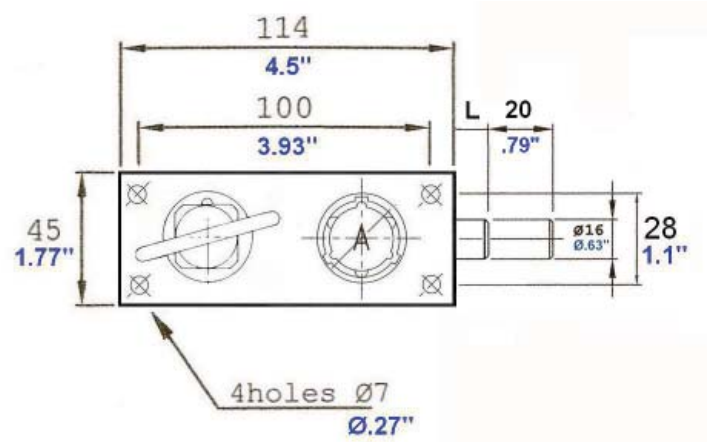
Material:

- Stainless steel.

Finish:

- Nickel.

Weight: 1300g.



DSM1Z - DDM1Z Access Lock

Description

For access locking of doors, cowling, robotic guards and etc.



Operation:

The key can only be extracted when the striker plate is engaged in the lock.

- Key released - door closed;
- Key trapped - door open.

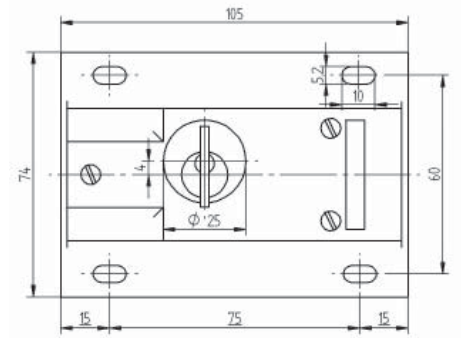
Cylinder height : 26mm., diameter 23mm.

Options:

Front entrance for the striker plate.

For other striker plates, please see accessories section at end of catalogue.

Full brass body with rear switch actuator, please refer to DDM1Z version.



Weight: 440g.

DOOR INTERLOCKS vs. DOOR LOCKS or BOLT LOCKS

There is a very important difference between the 2 products:
In a normal door lock, the key is needed to open the door, but the door can remain open and the key can be taken out.

All door interlocks will trap the key while the door is open.
The key will be released only if the door is closed and shut properly.

KSM1Z - KPM1Z - compact door lock

Description

For access locking of doors, cowlings, robotic guards and etc.



Operation:

The key can only be extracted when the striker plate is engaged in the lock.

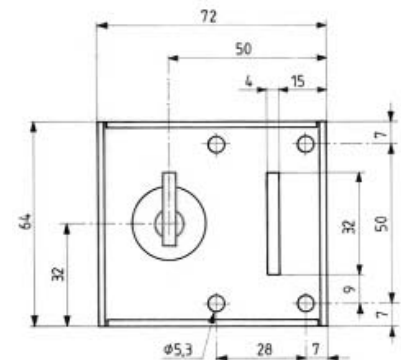
- Key released - door closed;
- Key trapped - door open.

Cylinders available for this lock : P, S

Options:

Front entrance for the striker plate.

For other striker plates, please see accessories section at end of catalogue.



Weight: 490g.

KHM1Z - KKM1Z latch Access lock

Description

Providing a self-aligned “slam action” for lighter guards and covers, these interlocks will only release the control key when the latching mechanism is engaged. They are available in: front and rear latch styles, to accommodate all applications.

Through hole mounting versions are available for the whole range.

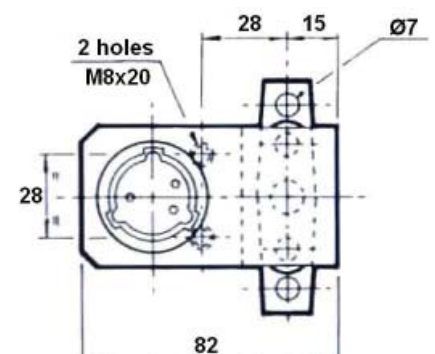


Operation:

The key can only be extracted when the striker plate is engaged in the lock.

- Key released : door closed;
- Key trapped : door open.

Weight: 540g.



AL1EB - Access Lock

Description And Technical Features

Gate locks are a single key access interlock suitable for use on hinged and sliding doors.

This access lock has a mechanism to ensure that the key inserted to gain access cannot be removed until the door or guard has been securely closed and the bolt fully engaged.



A floating bolt mounting bracket provides flexibility to accommodate misalignment.

Material:

- Brass.

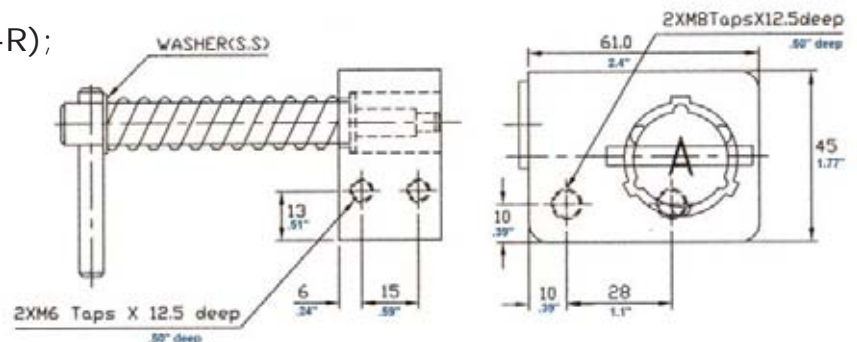
Finish:

- Red polyester paint on body, (-R);
- Nickel finish on key entry (-N).

Options:

- Flip cap.

Weight: 600g.



AL1ES - Access Lock

Description And Technical Features

GH locks are a single key access interlock, suitable for use on hinged and sliding doors.

This access lock has a mechanism to ensure that the key inserted to gain access cannot be removed until the door or guard has been securely closed and the bolt is fully engaged.



A floating bolt mounting bracket provides flexibility to accommodate misalignment.

Material:

- Stainless steel.

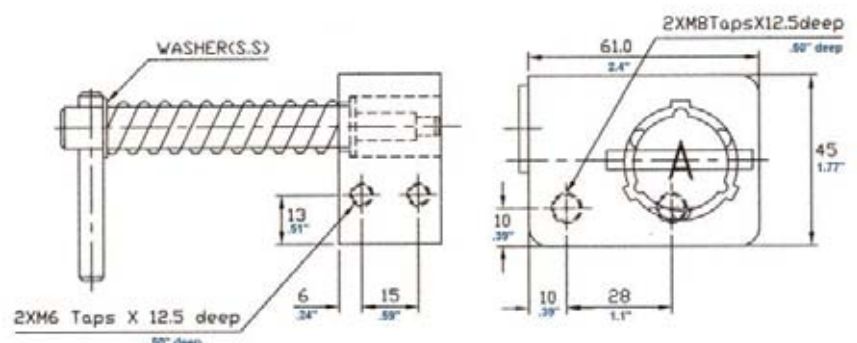
Finish:

- Red (-R);
- Nickel (-N).

Options:

- Flip cap.

Weight: 600g.



DHM1Z - Door Lock

Description And Technical Features

Door locks are a single key access interlock suitable for use on hinged and sliding doors.

Typical applications are access to ESP ash doors, quarrying, aggregates and pharmaceutical.

Material:

- Brass.

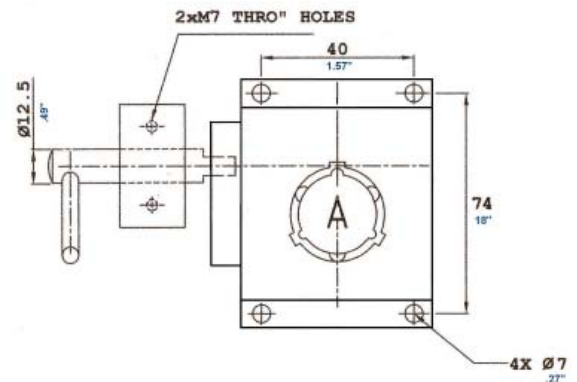
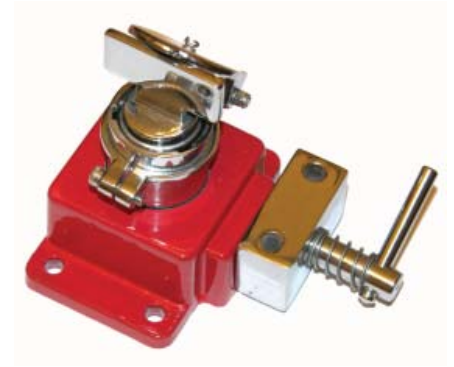
Finish:

- Red polyester paint on the body;
- Nickel on the key entry.

Options:

- Flip cap.

Weight: 700g.



DHM1Z-CK - Door Lock

Description And Technical Features

Door locks are a single key access interlock suitable for use on hinged and sliding doors.

Typical applications are access to ESP ash doors, quarrying, aggregates and pharmaceutical. This lock is provided with a chain-key of 30cm.

Material:

- Body: Brass;
- Chain: Aluminium.

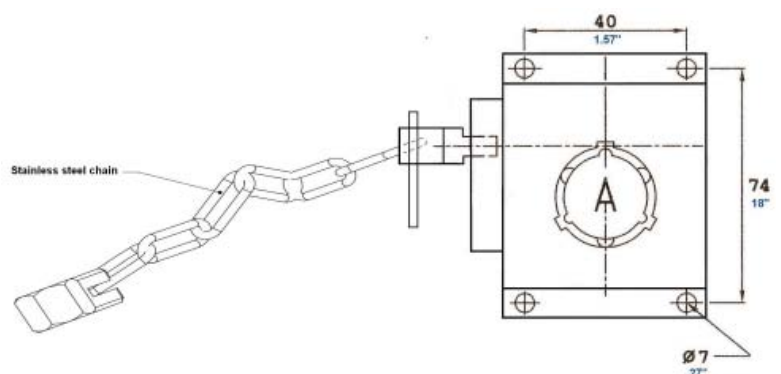
Finish:

- Red polyester paint on the body;
- Nickel on the key entry.

Options:

- Flip cap.

Weight: 700g.



AL2EB-00 - Access Lock

Description And Technical Features

GH locks are a double key access interlock suitable for use on hinged and sliding doors.

The version -01 access lock with 2 cylinders in exchange function. When the door is closed primary key is free, when door is open, secondary key is free.

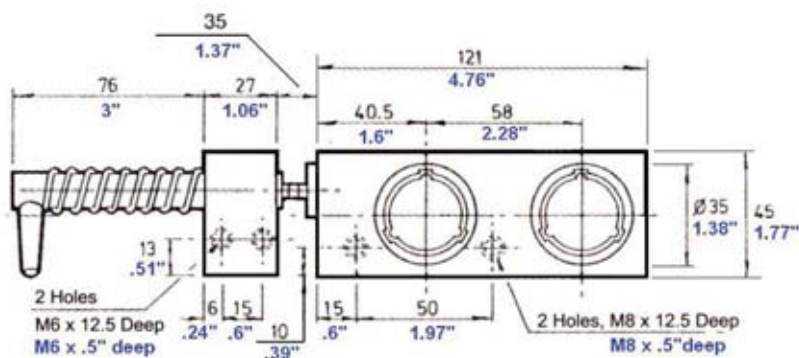
Material:

- Brass.

Options:

- Chain-key;
- Body in brass.

Weight: 700g.



DSM2Z-00 - Access Lock

Description And Technical Features

For access locking of doors, cowling, robotic guards and etc.

The 2 keys can only be extracted when the striker plate is engaged in the lock.

- Keys released - door closed;
- Keys captive - door opened.

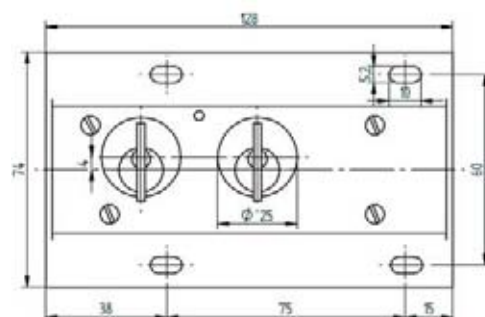
Options:

- Electrical contact on rear of the body (101C);
- Front entrance for striker plate;
- For special striker plates, please refer to accessories page at the end of catalogue.

Weight: 600g.



Diagram	Function	F	H	J
○ Key free	Initial position	○ ○ ○	○ ○ ○	○ ○ ○
● Key trapped	Final position	● ○ ○	● ○ ○	● ○ ○



XSM - Key Exchange Box Europe Style

Description And Technical Features

The key exchange unit is defined by the total number of keys (free or captive) and the sequence of operation.

The key exchange unit traps certain keys before the release of others.

- **Length:** $L = 16 + (N \times 34)$;
- N=number of lock positions.

Description of XSM3Z:

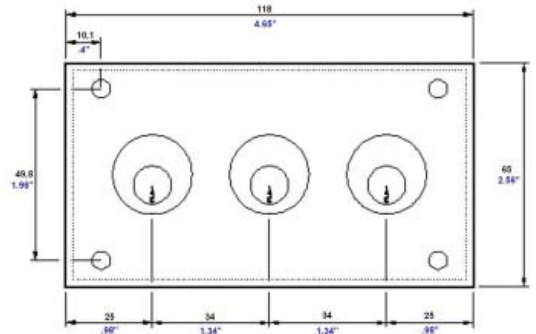
Insert and turn Key 1. It becomes captive. Key 2 can then be turned and released. Key 3 can then also be turned and released.

Options:

- Stainless steel body;

Consult us for any specific request.

Weight: 215g. x N.



XHM-PA - Key Exchange Box Asia Style

Description And Technical Features

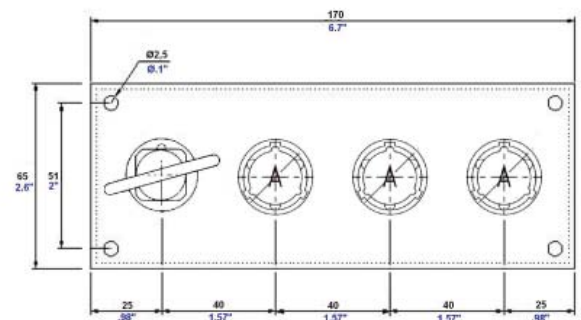
XHM is a linear key exchange box.

Maximum number of keys is 1 master and 24 slaves.

For more cylinders, please consult us.

Options:

- Engraving on cylinder and/or on the lock case



Description And Technical Features

YHM is a matrix key exchange box.

With two kind of keys (master and slaves), you can operate only one of them at the time (either all masters, or all slaves).

The keys of each side are freed without sequence.

Options:

- Engraving on cylinder and/or on the lock case.



How To Order A Key Exchange Box

X - Linear key exchange box, sequential key operation;

Y - Matrix key exchange box, no sequence in key operation.

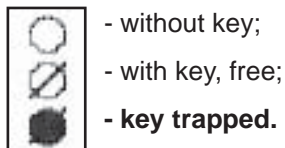
Type of key accepted in the key exchange box : **S, H, P, L, D.**

Number of cylinders (and logic of key operation).

-PA - easy panel fixing (lateral plate)

Finishing:

- Metal;
- Red colour;
- Gray colour.



XSM3Z-12

Initial status - Final status



XSM4Z-13



XSM4Z-22



XSM5Z-14



CSE1N

Solenoid Controlled Lock

Description And Technical Features

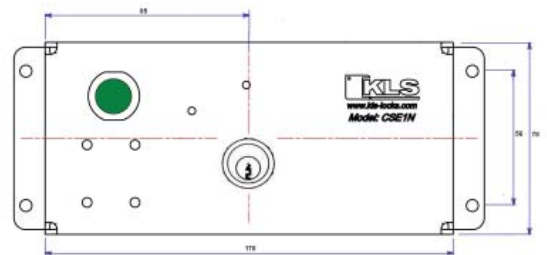
The special functions are developed in order to control the extraction of the keys, used to direct the sequence of the operations, with the aid of contacts, electromagnets, push-buttons and timers.

The in-built logic is therefore more flexible and meets customer needs more easily. It is ideal for guaranteeing the emergency systems for electrical workers in situations such as environments with condensers, inertial motions or atmospheres saturated with gas.

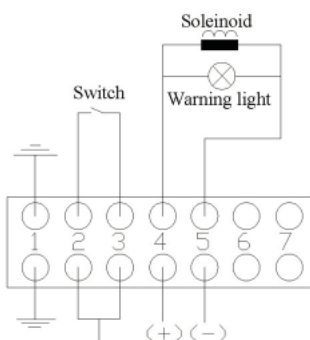


Options:

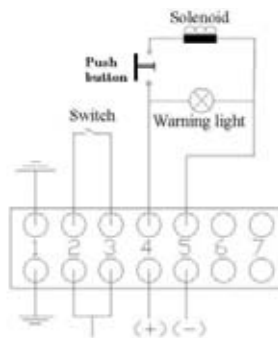
- Time delay function;
- Signalization light;
- Different switching points;
- Different connexions;
- Bolt controlled by solenoid (see image below).



ATTENTION : Wires not represented on the schemes. Connector positioned in the bottom side of lock.



Connection diagram for basic version.



Connexion diagram for added push button.



BHE1N option with bolt movement controlled by key and solenoid. Consult us for this option.

CHE1P - Solenoid Controlled Lock

Description And Technical Features

Key locked by a solenoid – key is free when the solenoid is energized. Switch is activated when the key is made free.

Switch features:

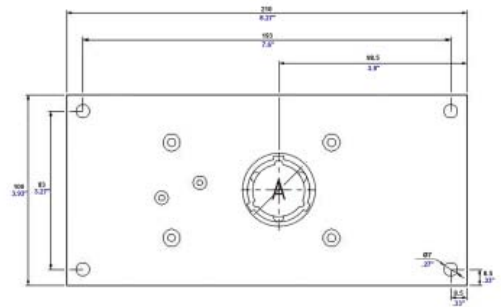
- Voltages available for the solenoid 24 DC;
- Duty factor 100%;
- Other voltages on demand.

Protection index IP40.

Options:

- Second cylinder;
- Engraving on cylinder and/or on lock case.

Weight: 1500g.



CHE2P - Solenoid Controlled Lock

Description And Technical Features

Key locked by a solenoid – key is free when the solenoid is energised. Switch is activated when the key is made free.

Switch features:

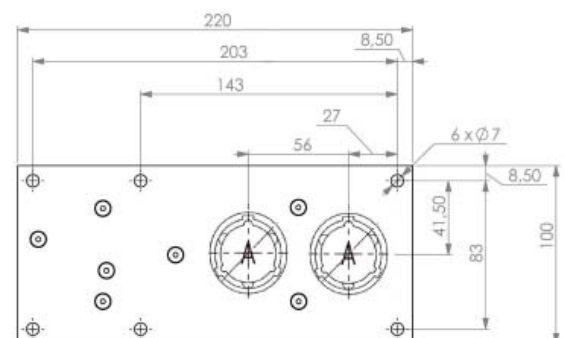
- Voltages available for the solenoid 24 DC;
- Other voltages on demand.

Protection index IP40.

Options:

- Second cylinder;
- Engraving on cylinder and/or on lock case.

Weight: 1500g.



VKHM1Z

Valve Kit

Description And Technical Features

1/4 turn valve, 2 ways equipped with an integrated locking system which allows locking in the open and/or closed position.

The operation of the valve is directly related to that of the key.

Diameter of valve: 1/4"(DN 7) and 3/8"(DN 10);

Body Material: Nickelled brass and stainless steel;

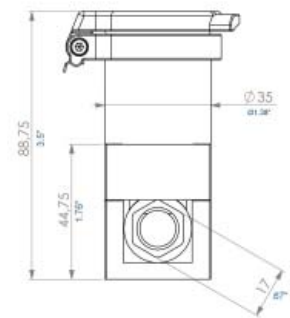
Thread: Cylindrical BSP;

Coupling: Female.



Contact us for information on the specific fluids and/or higher pressures.

Weight: 617g.



VKHM2Z

Safety Kit For Valves

Description And Technical Features

For any other version of valve locking, we provide you with special adaptation. This applies to almost any kind of market for valves excluding oil market.

Features:

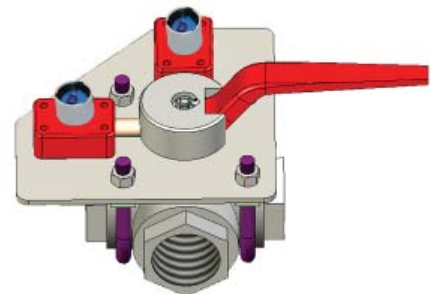
- Locks : BL1E;
- Single or double interlock for redundancy on the system.

Fixing plate are supplied together with locks for easy mounting installation.

Option:

- Electrical contact for feedback.

VALVE NOT SUPPLIED as a standard.



VLR

Valve locking systems

Description and technical features

This device is used for the protection against accidental valve opening.

Non-conductive polypropylene body

Dielectric protection

High resistance to Impact, heat, corrosion and chemical

Locking by padlock

Finish: red colour



Option:

For rotation valve, 5 sizes available

For ball valve

For butterfly valve

VALVE NOT SUPPLIED as a standard.

DIMENSIONS

VLR25-63R = CONSIGNATION for valve dimension Ø 25 / 63 mm

VLR63-127R = CONSIGNATION for valve dimension Ø 63 / 127 mm

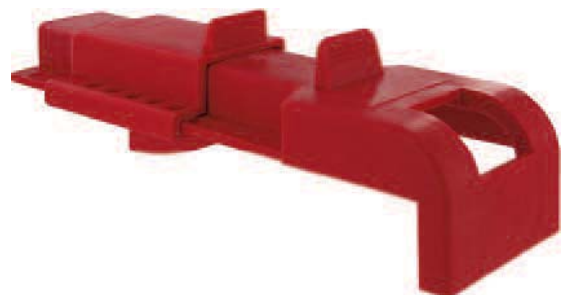
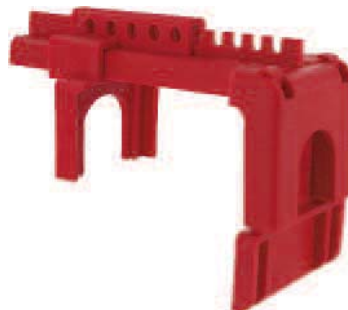
VLR127-165R = CONSIGNATION for valve dimension Ø 127 / 165 mm

VLR165-254R = CONSIGNATION for valve dimension Ø 165 / 254 mm

VLR254-330R = CONSIGNATION for valve dimension Ø 254 / 330 mm VLR-

VLRBLR = CONSIGNATION for ball valve

VLRPAR = CONSIGNATION for butterfly valve





Cams For Cylinders, Gaskets For Door Locks

Please contact us for your special requirement on these items.



Anti-dust Protections

We supply different anti-dust protectors, directly mountable on the cylinders.



Chain Fixing

To avoid misalignment problems for your door locks, we can supply a chain fix.



Adaptors Plates And Rings

Please contact us if you need any specific adaptor plate or special modification for your locks fitting.

Fixing Bolts And Nuts

Even if KLS products are very easy to mount with standard market bolts, we can assist you in providing a full kit of bolts and screws to simplify your installation.

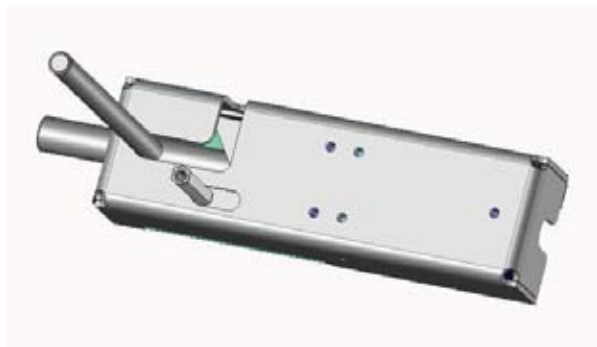
Safety on fenced areas

The use of the increasingly widespread robots and automatic machine operations increases the risk injuries on the workplace.

When an accident occurs, consequences can be terrible for the operators and their families, and for the factory too, as they cause stops in operations of production which are much expensive.

KLS designed a new series of safety devices to minimize these risks. Our wide range allows choosing among different options and levels of security, going from a SET 100% complying in all terms to Machinery Directive (98/37/EC) and to EN 1088 and EN 954-1, to several alternatives for other countries and reduced needs in terms of legislation. KLS offer a wide choice of products to meet the perfect balance between regulations and costs, always without compromise in quality.

KLS offer interlock systems comprising different flexible products covering all the needs related to the closure of doors and machine safety. Please discover in our next pages our standard product offer.



Thanks to our expertise and our local presence, KLS is capable to support you since the early phases of the building of new plants or for a refurbishing or upgrading on existing plant.

Just contact us to get our technical engineers helping you out !



A FENCE FOR ALL OF YOUR APPLICATIONS

Our fence ranges will allow you to protect any kind of machine or area according to the risks and the budgets.

Please contact with us for any detailed study on your case. Our interlocks and LOTO products match perfectly with these items. Anti-imprisonment options are also available to ensure that operators cannot be closed inside the area by somebody else. In case of emergency in the plant the lock guarantees prompt exit from the danger zone. Optionally the system can be expanded by using padlocks for each operator, which do not allow to be accidentally trapped inside the danger zone

OUTDOOR FENCING



INDOOR FENCING

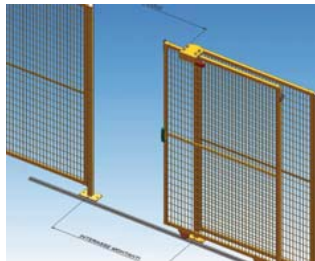
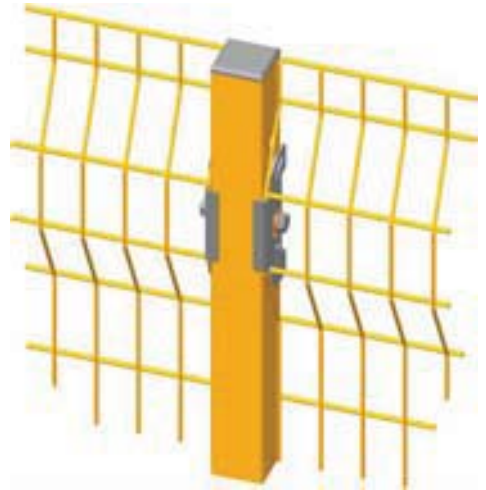


TECHNO Fences

The KLS range of fences named Techno offers a flexible steel solution for the protection of dangerous areas.

Advantages of Techno are:

- **Operational/Flexibility:** Techno can be modified by using a few tools because of no border frames;
- **Interchangeability:** Existing and new systems can be exchanged between each-other realizing hybrid structures;
- **Visibility:** Our innovative net and the absence of border frames allows an optimal visibility of the machinery;
- **Cost:** Economical design - without border frames delivery and material costs is much reduced, a perfect choice to save cost, while not compromising on quality;
- **Robustness:** The net is made of folds reinforcements which ensure an excellent impact resistance; the posts have a welded plate



SLIDING DOORS - Available Models

- Light 770 Wheel base 860 (Panel B=100cm);
 - Light 970 Wheel base 1060 (Panel B=120cm);
 - Light 1270 Wheel base 1360 (Panel B=150cm);
- Single sliding door to the ground.

HINGED DOORS - Available Models

- Light 735 Wheel base 775 (Panel B=70cm);
- Light 1035 Wheel base 1075 (Panel B=100cm);
- Light 1235 Wheel base 1275 (Panel B=120cm);
- Light 1535 Wheel base 1575 (Panel B=150cm);

Please contact us for any other version of door.
A solution is ready for you.



PANEL DIMENSIONS

Cod.	Base	H
PNNT001	250*	1840
PNNT002	420	1840
PNNT003	700	1840
PNNT004	1020	1840
PNNT005	1220	1840
PNNT006	1500	1840
PNNT007	1500	2340

Total height of the protection from the ground 2000, 2500 mm
Floor light at 160 mm for pennelling
Floor light for the doors

POST DIMENSIONS

Cod.	H	Type
MT113 (intermediate)	2000	Post 40x40 Plate 100x180 Holes for leveling M8
MATEC110 (angular)	2000	
MT2500 (intermediate)	2500	
MATEC2500 (angular)	2500	
KA100ZN KF100	Level plate Grains	

Available colours

- Yellow posts RAL1003
- Yellow panels RAL1003
- Door panel black no-scratch RAL9005

Colour on request

Posts and panels can also be varnished with ral colours.

Available plugging

Net 32x67 wire ø3

MGRD1 - MAGNETIC SWITCHES

MAGNETIC SENSORS

Magnetically actuated safety switches.

The Ferrogard range of magnetically actuated safety switches offers non-contact reliability together with tolerance to misalignment and fail-safe operation. With versions sealed to IP67 these products are ideal for environments where hygiene is of paramount importance.

In addition, some versions have independent auxiliary signal contacts to indicate the machine and guard condition.

Note: All products have internal non-resettable overload protection. They should be protected by an external fuse rated as shown in the specifications table.

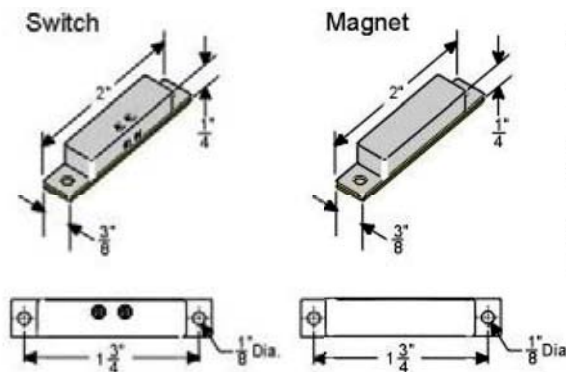
Model MGRD1

These safety switches are supplied sealed to IP67 and pre-wired. This range incorporates a unique slim design of switch and actuator cases. The switch can be operated by either of two faces and the actuator has fixing holes which gives a choice of mounting configurations.



Model MGRD2

These versions offer the facility of terminal connections. The robust ABS housing is sealed to IP65 and can be drilled for cable entries wherever required. The PCB switch assembly is encapsulated in the lid to ensure switching characteristics similar to previous range. The lid is secured with anti-tamper screws, top-quality terminals with clamp plates are provided within the enclosure, clearly marked to facilitate simple and safe installation.



Specifications:

1" Wide Gap Contact Switch

Normally Closed / Form A Output

Contact Rating: 28VDC - 500mA - 10W

Terminal Screw Wiring Connect 18 -22AWG

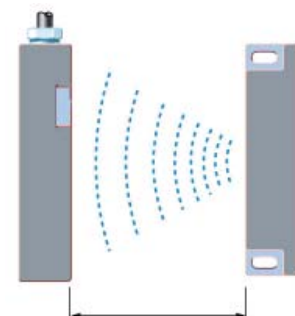
Surface mount / adhesive tape & mounting screws included

Dimensions: 2" L - 1/4" H - 3/8" D

OPERATING PRINCIPLE

Encapsulated in the range is a unique high-power industrial reed (capable of switching up to 15A), which is de-rated, dependent on switch type, by a non-resettable overload protection circuit.

On presenting the actuator to the switch, the high-intensity magnetic field from the actuator causes the contacts to close. On removing the actuator (opening the door) the safety contacts open, isolating the machine.



Safety contact operating distance: make 12mm., break 23 mm.



IMPORTANT NOTE: Under the requirements of the Machinery Directive, all machinery must undergo risk assessment to determine the necessary level (or category) of the safety-related control system or hazard-avoidance measures. Whilst the range complies with the requirements of EN 1088 it may not be suitable for all types of machinery or environments. Where magnetic materials are present or if it is foreseeable that through machine function or use, MGRD operation by magnets other than the supplied actuator is possible, then use of an alternative KLS product is recommended.

Alternatively additional measures may be taken to prevent the MGRD being easily bypassed. Consideration should be given to the recommended installation example given in the instructions and those in EN 1088.

LIMIT SWITCHES

Order Code	Contact Type	Actuating Block Construction	Actuating Block End Unit Type	Actuating Block End Unit Material
L5K23LUM321	Slow Action 1 NC+1 NO 2 Poles	Plastic	Key	Metal



POSITIVE OPENING FUNCTION

Emergency Limit Switches
With Metal Curved Key



Order Code	Contact Type	Actuating Block Construction	Actuating Block End Unit Type	Actuating Block End Unit Material
L51K23LUM321	Slow Action 1 NC+1 NO 2 Poles	Metal	Key	Metal

POSITIVE OPENING FUNCTION 

Emergency Limit Switches
With Metal Curved Key



Order Code	Contact Type	Actuating Block Construction	Actuating Block End Unit Type	Actuating Block End Unit Material
L52K23HUM112	Slow Action 1 NC+1 NO 2 Poles	Metal	Metal Ring	Metal

Pull Wire With Ring With Reset



Order Code	Contact Type	Actuating Block Construction	Actuating Block End Unit Type	Actuating Block End Unit Material
L52K13MEP122	Snap Action 1 NC+1 NO 2 Poles	Metal	Roller	Plastic



POSITIVE OPENING FUNCTION

Rotary ø 18 mm Plastic
Roller Short Lever Length
Adjustable With Angular Action



Order Code	Contact Type	Actuating Block Construction	Actuating Block End Unit Type	Actuating Block End Unit Material
L52K13MEM121	Snap Action 1 NC+1 NO 2 Poles	Metal	Roller	Metal



POSITIVE OPENING FUNCTION

Rotary ø 18 mm Metal Roller
Lever With Angular Action

Gatelocks, rugged version with switch feedback

This range of gate locks are typically used to improve performances of standard limit switches. Made of stainless steel, their applications is perfect in heavy duty robotic applications

Material : Body : stainless steel
Finish : poliester paint on the body, red or Yellow on request

Options

Electrical contact : 1 normally open
and 2 normally closed, positive security
: Rating 5A nominal

RIA3000 lock



RCH3000 lock



CH Chain Latch



ROBOTICS						
Type of lock	Type of handle	Switches	Solenoid	LED	Padlock	Key Logic
R = ROBOTICS	TA = T actuator LA = Latch EH = EU handle BH = BIN handle	0,1,2,3....	0 = No solenoid 22 = 220 V AC 11 = 110V 12 = 125V DC 24 = 24V 48 = 48V	0 = No LED PG - Green PR - Red PW - White GR - Green + Red	0 = No padlocks LD = Lockout Device PD = Padlock adpator	0 = no key 1 = Interlocking key 2 = Consignation Key

REH311001 - Gatelock Solenoid Controlled, With Feedback 201C Switch And Full Handle System

This range of locks are a single key access interlock suitable for use on hinged and sliding doors.

The door can be opened only when authorized, by the system (end of cycle, PLC maintenance signal). When the door is opened, an electrical feedback is informing the system/PLC, that the gate is open.

Typical applications are: automated process lines with robots or moving elements and full body access.

Material:

- Body: Stainless steel;
- Cylinder: Brass.

Finish:

- Red polyester paint on the body;
- Yellow polyester paint on the handle;
- Nickel on the key entry;

Solenoid:

- When lock is energized, key is free to operate the lock;
- Door open - Key trapped;
- Solenoid 24V, 48V, 110V, 125V DC, 220 V AC;

Electrical contact:

- 1 normally open and 2 normally closed, positive security
- : Rating 5A nominal

Options:

- Anti-dust;
- Different solenoids;



T Actuator



AIN Latch



EU Handle



BIN Handle



Switches

Electrical contact : 2 NO and 1 NC
1 NO and 1 NC

Solenoid

Solenoid rating 24V, 48V, 110V, 125V DC, 220 V AC
All solenoids are 100% Duty

LED



Lockout Device



Padlock Adaptor

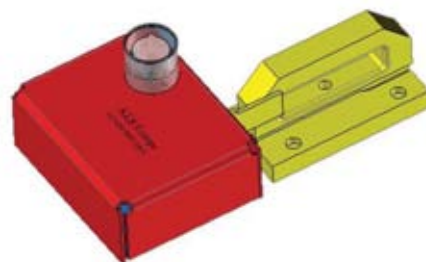


Consignation Key



Interlocking Key





Our interlock products and the Techno fences are a perfect complete kit for a plant safety.

The lock has an integrated system with Micro-switch plus Lock System in order to give top safety.

The handle anti-imprisonment ensure that operators cannot be closed inside the area by somebody else. In case of emergency in the plant the lock guarantees prompt exit from the danger zone. Optionally the system can be expanded by using padlocks for each operator, which do not allow to be accidentally trapped inside the danger zone

Micro Kit for hinged doors or sliding doors are available, please consult with us.



Euro-cylinders with interlock function,
Anti-panic Key locks for hinged doors are also available



EURO CYLINDER

Interlocked or standard

Description

European brass profile
5 pin mechanism
Driver cam made of powdered metal
3 nickel plated steel keys
Finish ; Brass or nickel plated
Option
1/2 cylinder with key way
Cylinder with key way and inside knob

Use

Rim lock or mortice lock for entrance door



Available with screws 30, 40, 45 and 50 mm

3 POINT SAFETY DOOR

Description

Pressed steel case and striker
Bichromated zinc plated plated
steel bolts
Chrome plated ABS knob
5 pin brass double cylinder
45 mm lenght
Aluminium rods
Strengthening plate
Mechanism to be used for horizontal lock
3 nickel plated steel keys

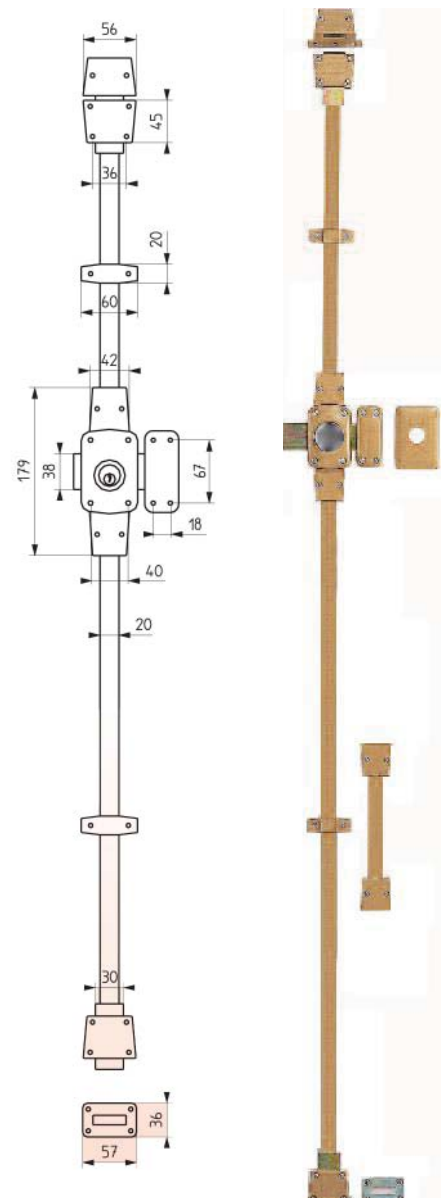
Finish : Bronze or white epoxy

Option

Master pass
Double cylinder
Right hand or Left hand

Use

Entrance door



LOTO

LOG OUT TAG OUT solutions are a cheaper way to provide safety in an industrial factory.

While KLS is strongly supporting the choice of INTERLOCKS as the BEST PRACTISE, in some cases, people can choose to implement LOTO solutions. For all these customers, please refer to the next selection of products we can offer.



Numbering to "Differ".

When required, KLS guarantee that individual padlocks "differ". Using a simple system of numbering padlock body and keys and recording these numbers against each customer record we can avoid using the same numbers on subsequent orders. If, for security reasons you don't wish the locking mechanism number to appear we can still apply the same system for you.

Using the same procedure and in addition to supplying padlocks to 'differ' we supply:

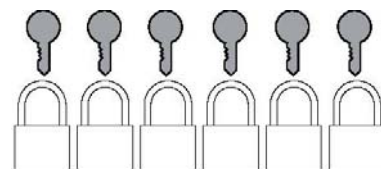
- Padlocks all 'keyed alike' (to pass).
- Master keyed (mastered and differed).

This registration of numbers enables us to quickly identify locking mechanisms previously supplied if duplications are required at a later date.

KLS Keying Options: We offers three basic keying options. Use the following guide to select the key system which best suits your Permit to Work requirements.

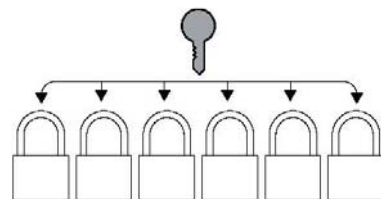
Padlocks to DIFFER.

Each padlock has a unique locking mechanism and its own key. One person cannot open another persons padlock. 50,000 DIFFERS available.



Padlocks KEYED ALIKE.

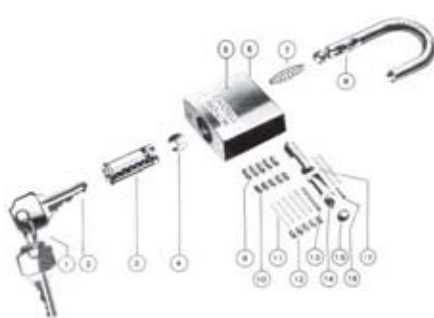
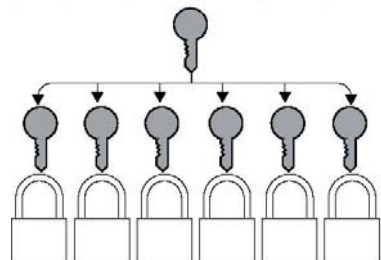
Each padlock is supplied with the same locking mechanism. One key will open any lock in the set.



Padlocks MASTER & DIFFER.

Each padlock has a unique locking mechanism and its own key. The additional master key will override any padlock in the set. 100 Suites of 1000 locks are available.

All KLS padlocks are supplied with 2 keys as standard. Additional keys available.



- | | |
|--------------------------|---------------------------|
| 1 Key Ring | 11 Tumbler Springs |
| 2 Key | 12 Pin Hole Plugs |
| 3 Plug | 13 Plug Retainer |
| 4 Brass Protection Plate | 14 Bolts |
| 5 Shackle Retainer | 15 Bolt Hole Plug |
| 6 Case | 16 Guide for bolt springs |
| 7 Shackle Spring | 17 Bolt Springs |
| 8 Shackle | |
| 9 Pins | |
| 10 Mushroom Tumblers | |

Padlocks

STANDARD PADLOCKS

Select Body style (**30, 40, 50 or 60mm.**) for the STANDARD BODY and key style (**KA, KD, MA**).

NOTE: Key Mastering is only available with padlock 50 or 60mm.

Example: Padlock 30MKA.



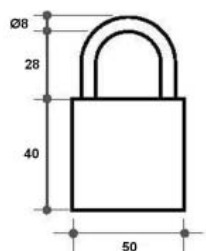
Padlocks body 30mm.

- Key alike (KA);
- Key differ (KD).



Padlocks body 40mm.

- Key alike (KA);
- Key differ (KD).



Padlocks body 50mm.

- Key alike (KA);
- Key differ (KD);
- Master (MA).

REINFORCED INTERLOCKED PADLOCKS

Select Body style (**R40I, R50I or R60I mm.**) for the REINFORCED BODY and key style (**KA, KD, MA**).

NOTE: Key Mastering is only available with padlock 50 or 60mm.

Example: Padlock R50IKA.



Options:

- Master key;
- Key trapped when padlock is open;
- Dust protector on the key entry;
- Engraving.



Padlocks body 40mm.

- key alike (KA);
- key differ (KD).



Padlocks body 50mm.

- Key alike (KA);
- Key differ (KD);
- Master (MA).

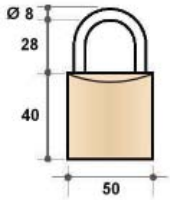
INTERLOCK PADLOCKS

These padlocks retain the key while the padlock is open. To free the key, the padlock must be closed.

Select Body style (**40 or 50mm.**) for the INTERLOCKED BODY and key style (**IKA, IKD, IMA**).

NOTE: Key Mastering is only available with padlock 50mm.

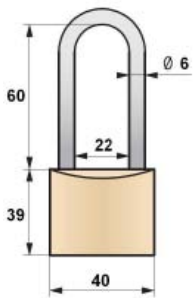
Example : Padlock 40IKA.



Model 40IK

Padlocks body 40mm.

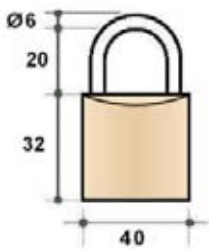
- Key alike (IKA);
- Key differ (IKD).



Model 40IK-60SH

Padlocks body 40mm, shackle 60mm high.

- Key alike (IKA);
- Key differ (IKD).



Model 50IK

Padlocks body 50mm.

- Key alike (IKA);
- Key differ (IKD);
- Master (IMA).

KEY CABINETS

KLS can provide you with a selection of key cabinets to fix your LOTO keys, please consult with us with your specific requirement.

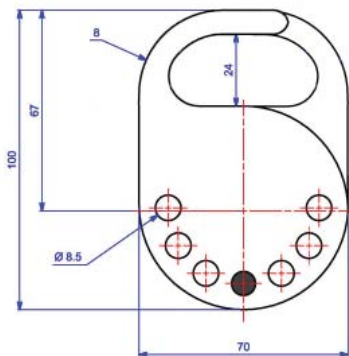


Select Your Multiclasp



Multiclasp is the low cost version of a Key Exchange Box, linking different keys and operators to a single system.

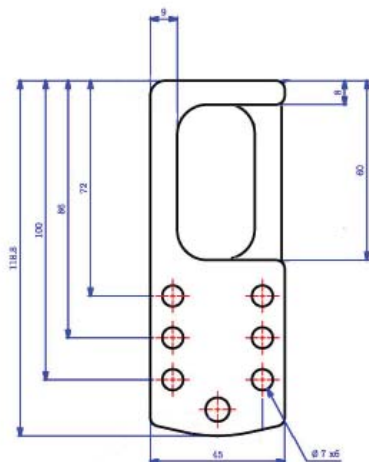
The Multiclasp is attached to the relevant anchor point so that each operative can insert his own personalised padlock which is then locked. To restore access to the prime mover, all padlocks must be removed.



Multiclasp 24mm.

MCSP24H85
- Holes 8,5mm.

MCSP24H95
- Holes 9,5mm.



Multiclasp 42mm.

MCSP42H85
-Holes 8,5mm.

MCSP42H95
-Holes 9,5mm.



LOTO Stations

KLS has some ready kits for your easy LOTO needs.

Please contact us for any modification on the below kits, to meet your very own needs.

Lockout Station Version 1

Padlock 30SKD	2pcs.
Padlock 40SKD	2pcs.
TAG : "Do not operate"	3pcs.
Station	1pc.



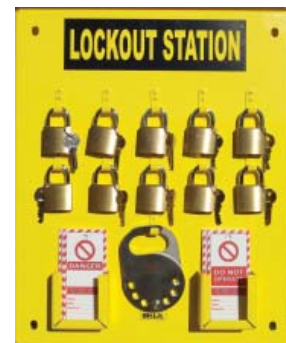
Lockout Station Version 2

Padlock 30SKD	4pcs.
Multiclasp 24x9,5	1pc.
TAG : "Do not operate"	3pcs.
Station	1pc.



Lockout Station Version 3

Padlock 30SKD	10pcs.
Multiclasp 24x9,5	1pc.
TAG : "Do not operate"	3pcs.
TAG : "Danger"	3pcs.
Station	1pc.



Lockout Station Version 4

Padlock 30SKD	20pcs.
Multiclasp 24x9,5	2pcs.
TAG : "Do not operate"	6pcs.
TAG : "Danger"	6pcs.
Station	1pc.



TAGS



55x75 MK4E-S



55x75 MK3E-S



55x75 MK7ES



55x75 PK6E-S



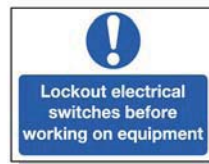
55x75 MK11ES



55x75 MK8ES



55x75 MK9ES



55x75 MK6ES



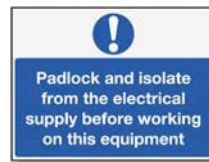
55x75 MK10ES



55x75 WK7E-S



450x600 Rigid S/A MK1Y-R MK1Y-S



450x600 Rigid S/A MK5Y-R MK5Y-S



450x600 Rigid S/A MK3Y-R MK3Y-S



450x600 Rigid S/A EK9Y-R EK9Y-S



450x600 Rigid S/A MK8Y-R MK8Y-S



450x600 Rigid S/A PK6Y-S



450x600 Rigid S/A WK7Y-R WK7Y-S



450x600 Rigid S/A MK2Y-S



600x450 Rigid S/A EK4Y-R EK4Y-S



110x50 WT26A 200x100 WT26B



110x50 WT28A 200x100 WT28B



110x50 WT30A 200x100 WT30B



110x50 WT32A 200x100 WT32B



110x50 WT33A 200x100 WT33B



110x50 WT53A 200x100 WT53B



110x50 WT42A



110x50 WT40A 200x100 WT40B



110x50 WT41A



110x50 WT45A



110x50 WT37A 200x100 WT37B



110x50 WT35A 200x100 WT35B



110x50 WT36A



110x50 WT42A



110x50 WT39A 200x100 WT39B



110x50 WT55A



110x50 WT01A 200x100 WT01B



110x50 WT32BB 200x100 PT32BR



110x50 WT38B 200x100 PT33BR

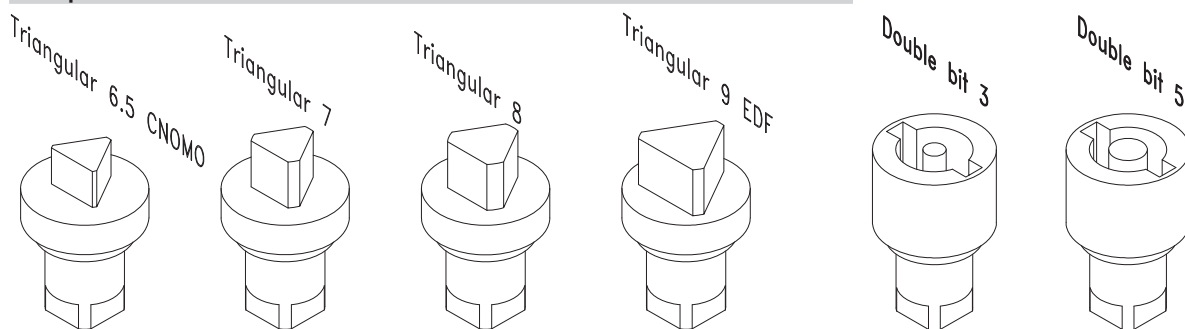
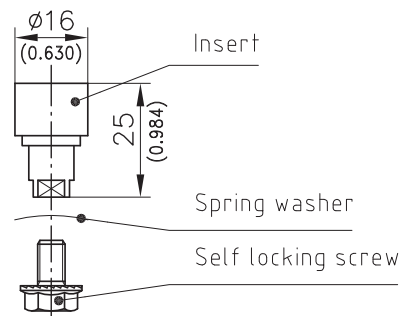
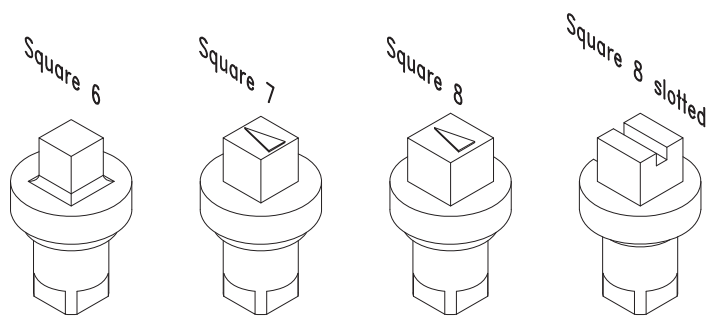


110x50 WT48B 200x100 PT34BR

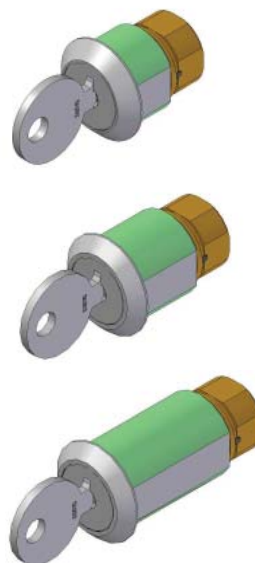
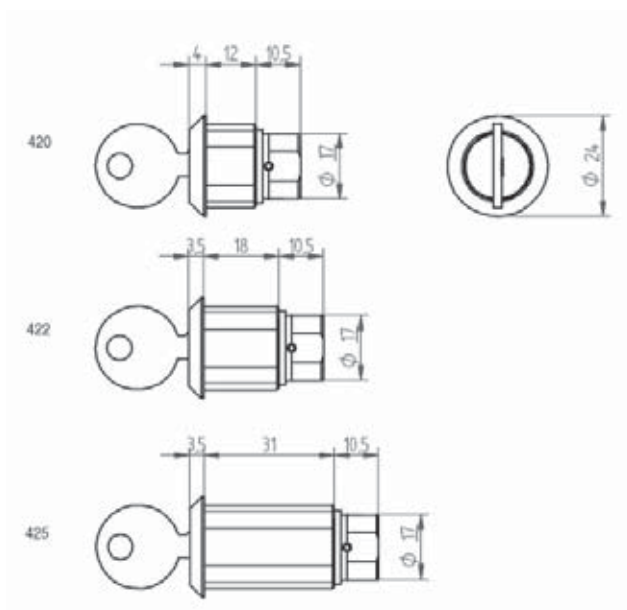
Locking Systems

INSERTS

This range of closing systems are a single key cylinders with different shapes : square, triangle, hexagonal, etc.



QUARTER TURN



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E-mail: info@kls-locks.com

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E-mail: info@kls-americas.com

IMPORTANT:

The interlocks should be mounted using anti-tamper fasteners to prevent unauthorised removal. Interlock must be installed by a competent and qualified person who has read and understood these instructions. Please retain this document in your technical file.

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Technical parts for the industry