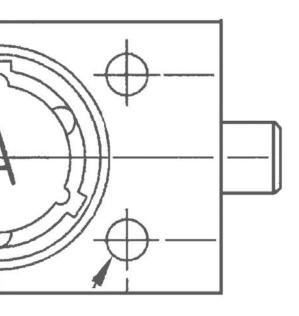






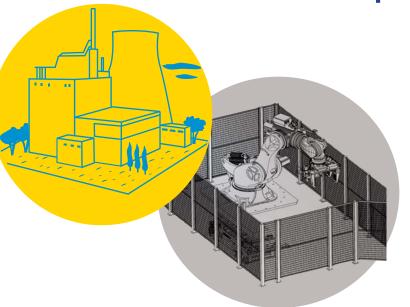
Safety Products



Product Presentation2014



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.



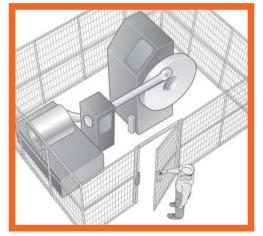
REGULATIONS

DIRECTIVE 2006/42/CE

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

New Machinery Directive

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.



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.



ENERGY and Light Industry Range

EL, ME, C 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.

TO SELECT YOUR INTERLOCKS

product type	mechanism type	electro	number of cylinders	contacts
B - Bolt Lock				
C - Camlock			4.0	
D - Door locks	S = std 5 pins key; L = Large cylinder; H= Heavy duty; 6= 6 pins key;	M = Mechanical E = with solenoid	1, 2	Z = no switch;
G - Gate locks	D = Dot key	110Vdc (enclosure); F= solenoid 24Vdc (enclosure)		N = signal 5A; P = power 202F Q = Power 3C10
X - Exchange box			2 to 40 cylinders logic is specified in the description	
VK = valve kits	H = heavy duty		1, 2	



S KEY - FLAT BRASS KEY

Technical Features

Material: Nickel-plated brass.

Thickness: 2,2mm.

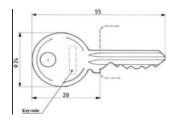
Weight: 12g.

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.



Engravings: 8 letters/figures maximum

(2.5mm high).

Q KEY - METAL HEAD

Description And Technical Features

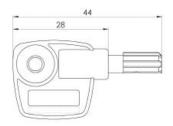
Material: Brass. Weight: 90g.



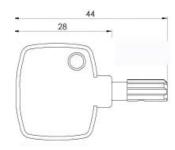
Engravings: 10 letters maximum (height:

2,5mm.), engraving on both sides.









K KEY - KLS KEY

Description And Technical Features 2 millions combinations available

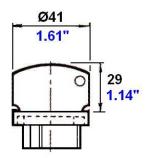
Material: Brass key. Weight: 180g.

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.

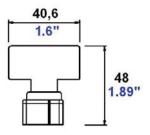
Weight: 70g.

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.

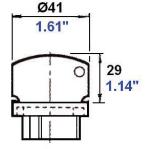
Weight: 180g.

Options:

Engravings: 10 letters maximum(height:

2,5mm.), engraving on both sides.





T KEY - STRONG KEY

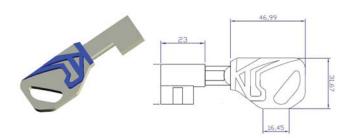
Description And Technical Features

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					
	S = Small D23 mm	M = Mechanical 1	nall D23 mm	1 Z = no switch				E* = eccentric	23S = 3 mm / Thread M23 22M* = 7 mm / Thread M22 22L = 13,6 mm / Thread M22	A* = adaptor supplied mounted	CW* = Clockwise			
	D = Small D23 mm without nickel finish											22M or 22L	0 = no adaptor	AW = Anticlockwise
	P = Star key					Z = no switch	Separator	C = centered E* = eccentric	22L = 13,6 x 23 mm Thread M22					
C = Camlock	L = Large D34		M = Mechanical		anical 1		Z = no switch	for specification	E = eccentric	U = 3mm (DIA 34) + 12 mm (DIA 29) / M29 x 21 mm	0 = no adaptor	360 DG		
							35 = 35 mm - no thread	R = Round cylindric rear	CW* =					
	H = heavy duty										C = centered	PA/* = panel mount with fixing north-east	Ø14,5mm - 23mm long S* = rear Square	Clockwise
							PA\ = panel mount with fixing north-west	9,5mm - 23mm long						

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.

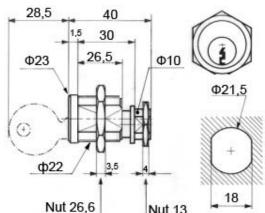
Possibilities:

- 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 C style cylinder

Description And Technical Features

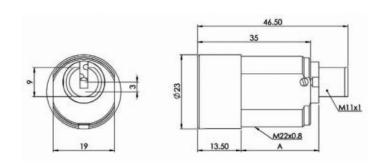
This cylinder is the indicated for European standard panels and is coupled with the standard flat key.

- 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.

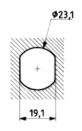
Attachment to panel by nut, designed for panel thickness of 0.8 to 10mm.

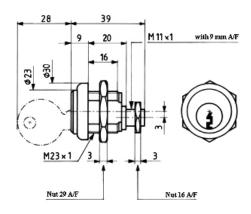
Various cam arrangements are possible.

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.

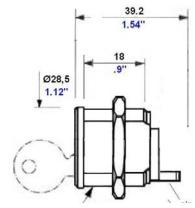
Various cam arrangements are possible.

Options:

- Cams.

Weight: 200g.





M29x0 Thread: M29 x 21 mm





CPM1Z -C22L

Profalux Type Cylinder

Description And Technical Features

The movement of the key rotate the lock. Lock is typically used in panels.

Key rotation - rotation of cam: 1/4 or 1/2 turn to right or left.

Attachment to panel by nut, designed for panel thickness of 0.8 to 10mm. (0.03" to 0.39").

Various cam arrangements are possible. Cam to be ordered separately. Please refer to accessories page at the end of catalogue



Possibilities:

Direction of key rotation:

- CW; - right
- left - CC (AW).

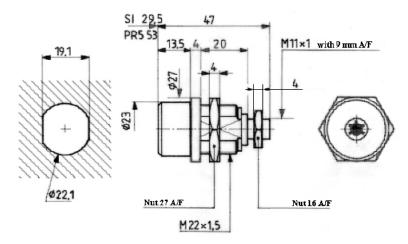
Value of key rotation:

- 1/4 turn 4;
- 1/2 turn 2.

Options:

- -Cams;
- -Spacer rings 4 or 6mm. thickness.

Weight: 100g.



CPM1Z -E22LO

Profalux Type Cylinder

Description And Technical Features

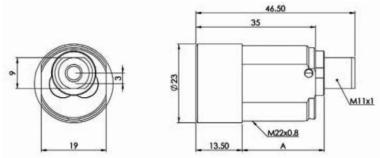
This cylinder is the indicated for European standard panels and is coupled with the Profalux key.

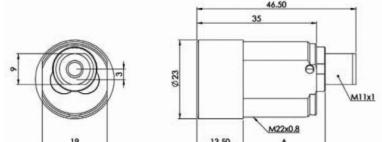
- Full metal cylinder, no plastic parts;
- Camlocks with length of 24mm (A);
- 90° clockwise or anti-clockwise rotation.

Options:

- Rear adaptor M16x1 driver with 9mm flat;
- Fixing nut.

Weight: 100g.







Camlock

Description And Technical Features

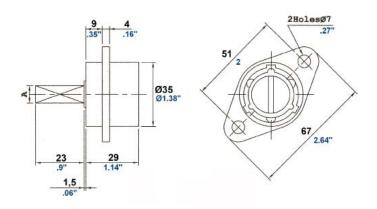
The movement of the key rotates the lock. Lock can be used in panels.

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



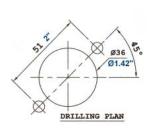
Features:

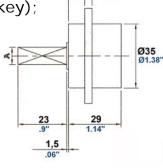
- Mounting: by screws;

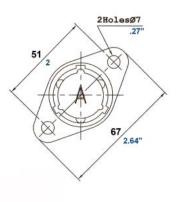
Material: nickel-plated brass;

- 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.

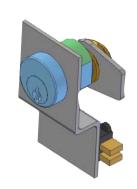
Weight: 250g.

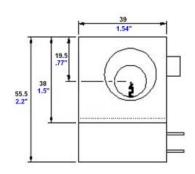
Material:

- 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

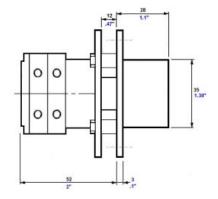
20 (contact open) or 2C (contact closed).

Options:

-30, 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:

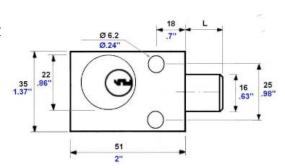
- Key free rounded lockbolt extracted;
- Key trapped bolt retracted and the key becomes trapped.



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	С	D
○ Key free● Key trapped	Initial position		
	Final position	ě	P



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	С	D
○ Key free● Key trapped	Initial position		
	Final position	ě	P

- Bolt retracted 6mm.
- Bolt extracted 21mm.

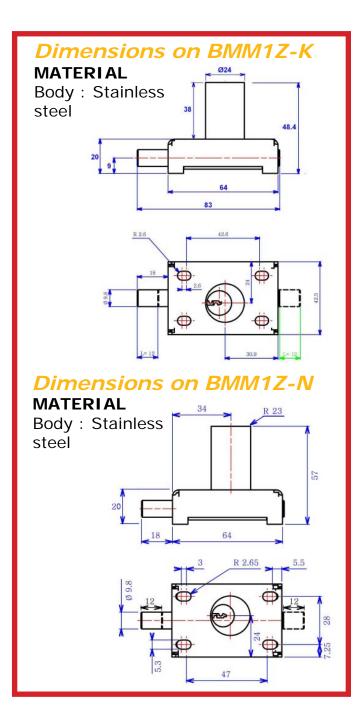
(15mm. movement)

- L 15mm.
- -1 6mm.





Dimensions on BSM1Z-K MATERIAL Body : Stainless steel Dimensions on BSM1Z-N **MATERIAL** Body: Stainless steel Dimensions on BSM1Z-R MATERIAL Body: Brass 0





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

One cylinder boltlock with a bolt Ø 16mm.

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

Key is trapped when the bolt is in.

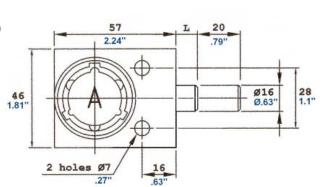
Options:

- Different bolt extension:
- Bolt Ø9.5 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 Ø 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 Ø 9.5 to 16mm. on request (0.37" to 0.63").

Material:

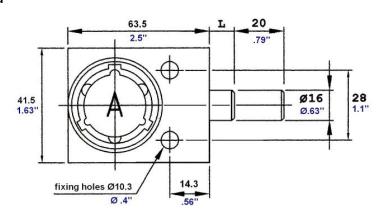
- Stainless steel.

Weight: 700g.

KLS

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.

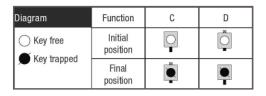
Operation:

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

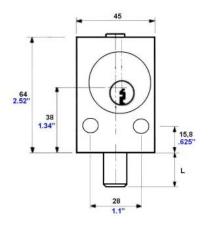
Option (D):

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.







	BOLT LOCK SELECTOR								
Typr of lock	Type of cylinder	Electro	Number of Cylinders	Contacts	-	Body styles	Logik	Bolt Information	
3 = Bolt Lock	S = Small H25 mm M = Medium H37 mm P = Star key D = flat key, low cost version, without nickeling on body) L = Large D34 H = Heavy duty	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 U = 64 x 50 x 34,5 mounting holes distance 15,8 x 28 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	



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 \emptyset 10mm. and a claw 38mm wide.

Bolt travel = 20mm. (B)

Key is trapped when the bolt is in.

Material:

- Brass.

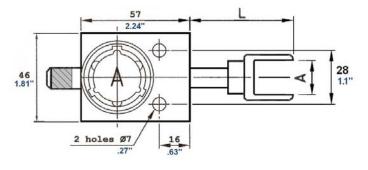
Options:

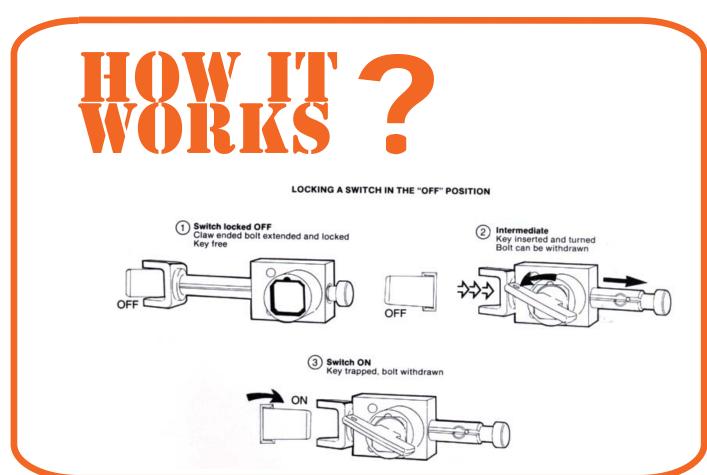
- Stainless steel body.

- Claw dimension: 25, 50 or 63mm.

Weight: 900g.









BOE1N - 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.



- 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.

DATE STATES

Material:

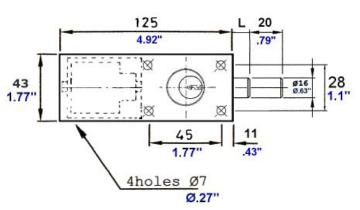
- Cylinder: Brass with nickel finish;
- Body: Stainless steel.

Weight: 800g.

Operation:

By inserting and turning the key a 12mm. rounded bolt is put into action that, when 43 re-introduced into the body of the lock, 1.77 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
○ Key free★ Key trapped	Position		6 16	900	

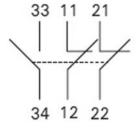
Electrical Characteristics:

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.







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;

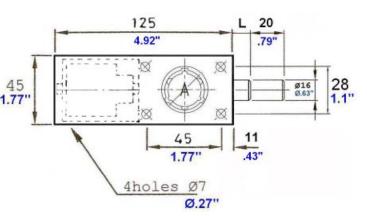
Weight: 900g.

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, 45 sets a switch and allows the operator to 1.77" 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
○ Key free● Key trapped	Position	•;• •	\$ 1 8	90	• • •

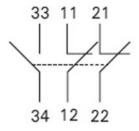
Electrical Characteristics:

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.







Bolt lock with 1 lockbolt and 2 keys.

BSM2Z-01:

Lockbolt out: L=18mm. Key 1 released. Key 2 captive. Lockbolt in: I=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: I=6mm. Keys 1 and 2 captive.

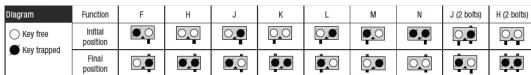
Possibilities:

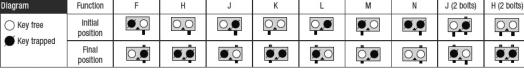
- Lockbolt on the left:
- Other options as per below schematics.

Options:

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

Weight: 450g.





MBSM2Z-VT00 - MINI Double Cylinder Boltlock

Description and technical features

Bolt interlock with 2 key entries. Bolt travel 20mm.

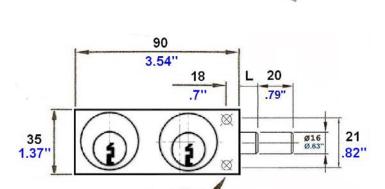
Available functions:

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

Material:

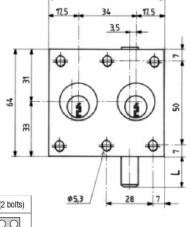
- Stainless steel.

Weight: 580g.









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:

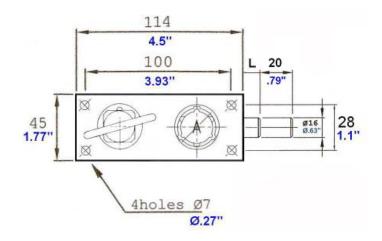
- Stainless steel.

Finish:

- Nickel.

Weight: 1300g.







DSM1Z - DSM1C 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:

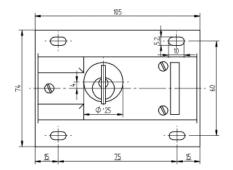
Front entrance for the striker plate.

For other striker plates, please see accessories section at end of catalogue. Full brass body with rear switch actuator, please refer to DSM1C version.

Weight: 440g.

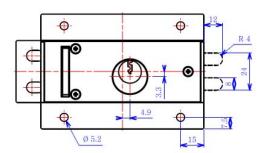
DSM1Z





DSM₁C





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.



KCM1Z - KPM1Z Compact door 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.

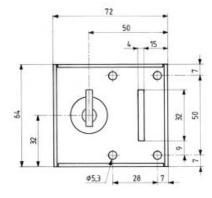
Cylinders available for this lock: P, S



Front entrance for the striker plate. For other striker plates, please see accessories section at end of catalogue.

Weight: 490g.





KHM1Z - KKM1Z Compact door 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.

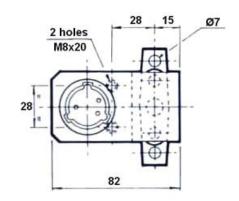
Operation:

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.

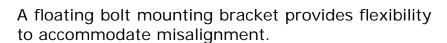






Gate locks are a single key access interlock suitable for use on hinged and sliding doors.

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.





45

Material:

- Brass.

Finish:

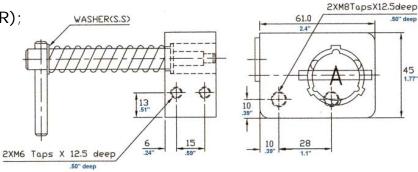
Red polyester paint on body, (-R);

- 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:

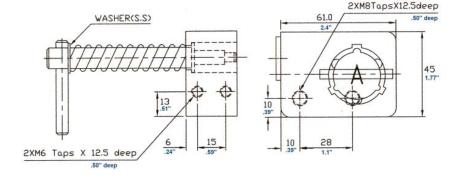
- Red (-R);
- Nickel (-N).

Options:

- Flip cap.

Weight: 600g.





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:

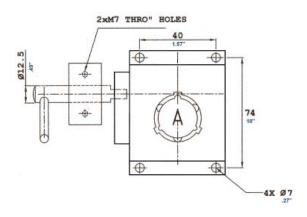
- Red polyester paint on the body;
- Nickel on the key entry.

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:

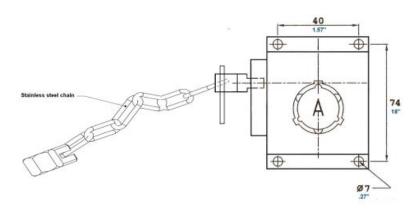
- Red polyester paint on the body;

- Nickel on the key entry.

Options:

- Flip cap.

Weight: 700g.





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.

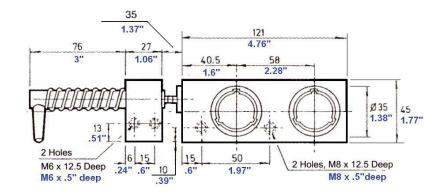
Material:

- 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:

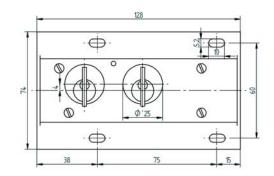
- Electrical contact on rear of the body (101C);
- Front entrance for striker plate;
- For special striker plates, please refer to accessories page at the end of catalogue.

Weight: 600g.

Diagram	Function	F	Н	J
Key free	Initial position	Ø01	001	001
Key trapped	Final position	0.00	Ø Ø []	Ø 0[







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.

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

Description of XSM3Z:

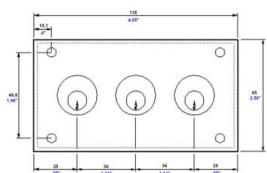
Insert and turn Key 1. It becomes captive. Key 2 car then be turned and released. Key 3 can then also be turned and released.

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 or double row sequential key exchange box.

Maximum number of keys is 1 master and 24 slaves.

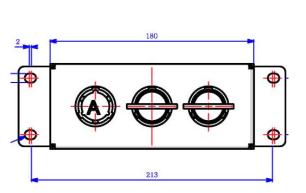
For more cylinders, please consult us.

Options:

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







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.



- without key;
- with key, free;
- key trapped.

XSM4Z-12

XSM4Z-13

XSM4Z-22

XSM5Z-14



Solenoid Controlled Lock

Description And Technical Features

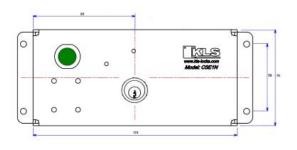
The special functions are developed in order to control the extraction of the keys, used to direct the sequence of the operations, with the aid of contacts, electromagnets, push-buttons and timers.

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).

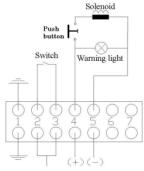


ATTENTION: Wires not represented on the schemes. Connector posi-

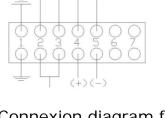
tioned in the bottom side of lock.

Soleinoid Switch Warning light

Connection diagram for basic version.



Connexion diagram for added push button.





BHE1N-PA is the version as above with easy panel mounting.





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.

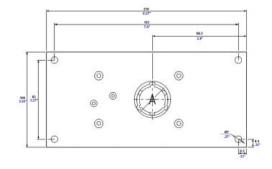
Protection index IP40.

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:

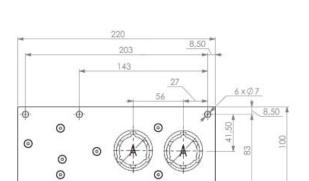
- Voltages available for the solenoid 24 DC;
- Other voltages on demand.

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;

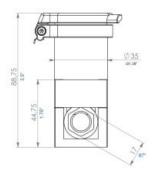
Thread: Cylindrical BSP;

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 ststems

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







ACCESSORIES



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.



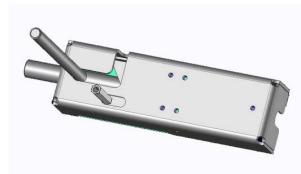
Safety on fenced areas

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.

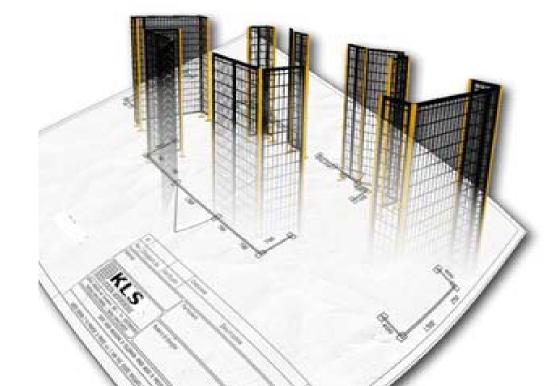
KLS designed a new series of safety devices to minimize these risks. Our wide range allows choosing among different options and levels of security, going from a SET 100% complying in all terms to Machinery Directive (98/37/EC) and to EN 1088 and EN 954-1, to several alternatives for other countries and 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 suty 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





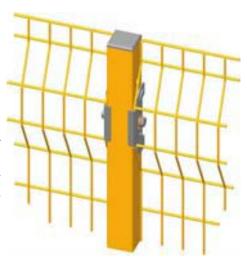


TECHNO Fences

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	н
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

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

POST DIMENSIONS

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



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	Кеу	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







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

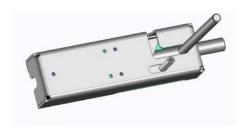
Options

Electrical contact : 1 normally open

and 2 normally closed, positive security

: Rating 5A nominal

RLA3000 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	22 = 220 V AC 11 = 110V 12 = 125V DC 24 = 24V	PR - Red	LD = Lockout Device	0 = no key1 = Interlocking key2 = 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



EU Handle



AIN Latch

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



green



red



Lockout Device Padlock Adaptor





Consignation Key Interlocking Key







TD - TIME DELAY UNIT

This range of locks is specifically designed for all application where inertia is an additional problem for the access.

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

Material : stainless steel

Finish : metal or Red poliester paint

Weight : 900 gr

Options

Electrical contact : 3 normally open

and 1 normally closed : Rating 35KW nominal

Antidust cap

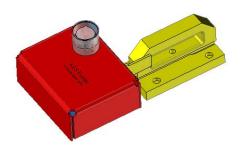


TIME DELAY UNIT SELECTOR								
Type of lock	I Mounting I Sarety system -							
F ⁺ =	F* = front mounting	70	O = nothing K* = coupled with AL1E8 lock	Separator	100100° =			
TO = Time delay unit	R= rear	Z ⁺ = no switch	L = with limit switch L5K29	for specification	project number			
	mounting		M = couple with magnetic switch					

Use the options with a star (*) if this part is not set









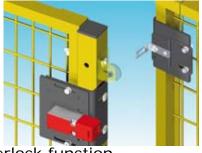
Our interlock products and the Techno fences are a perfect complete kit for a plant safety.

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 andinside knob

Use Rim lock or mortice lock for entrance door



Available with screws 30, 40, 45 and 50 mm

3 POINT SAFETY DOOR

Description

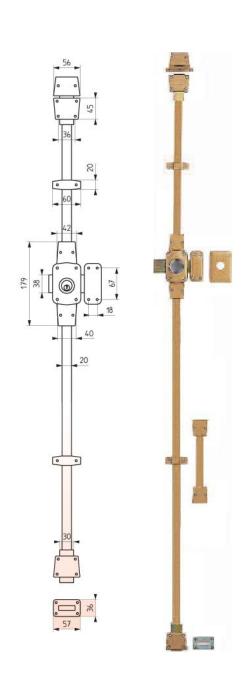
Pressed steel case and striker
Bichromated zinc plated plated
steel bolts
Chrome plated ABS knob
5 pin brass double cylinder
45 mm lenght
Aluminium rods
Strengthening plate
Mechanism to be used for horizontal lock
3 nickel plated steel keys

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.

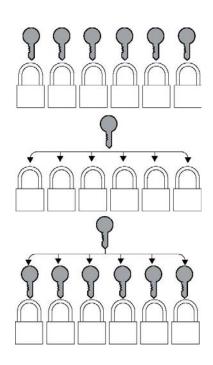
Padlocks KEYED ALIKE.

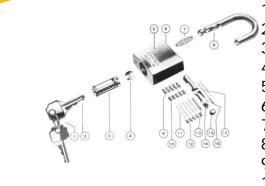
Each padlock is supplied with the same locking mechanism. One key will open any lock in the set.

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
- 2 Key
- 3 Pluq
- 4 Brass Protection Plate 14 Bolts
- 5 Shackle Retainer
- 6 Case
- 7 Shackle Spring
- 8 Shackle
- 9 Pins
- 10 Mushroom Tumblers

- 11 Tumbler Springs
- 12 Pin Hole Plugs
- 13 Plug Retainer
- 15 Bolt Hole Plug
- 16 Guide for bolt springs
- 17 Bolt Springs



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.

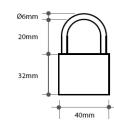
Example: Padlock 30MKA.





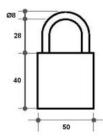
Padlocks body 30mm.

- 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 **R60Imm**.) for the REINFORCED BODY and key style (**KA**, **KD**, **MA**).

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

Example: Padlock R50IKA.



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





Padlocks body 40mm.

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



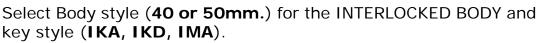
Padlocks body 50mm.

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



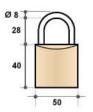
INTERLOCK PADLOCKS

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



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

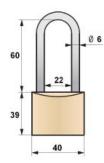
Example: Padlock 401KA.



Model 401K

Padlocks body 40mm.

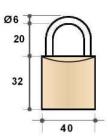
- Key alike (IKA);
- Key differ (IKD).



Model 40IK-60SH

Padlocks body 40mm, shackle 60mm high.

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



Model 501K

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. Here below just a few examples of the realizations we can do.

KEY-CAB01

This basic key cabinet is designed to hold up to 48 keys.

Product made in metal with powder ink coated. All basic coloring are available

Cabinet is closed with a common key 1333.



KEY-CAB02

This key cabinet is designed to hold up a very large number of keys and is designed to keep the dimension of the box as small as possible.

The cabinet is multilayer.

Product made in metal with powder ink coated. All basic coloring are available





KEY-CAB97AA01

This key cabinet is designed to hold up a very large number of keys and is designed to keep the dimension of the box as small as possible.

The cabinet is multilayer.

MATERIAL:

Cabinet: metal with powder ink coated.
 Color: RAL632 (Dark Admiralty grey)

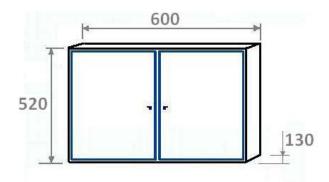
- Front doors : glass



INTERNAL:

- Multilayer





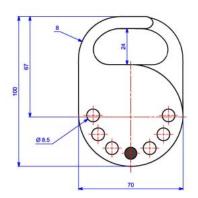


Select' Your Multiclasp



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.

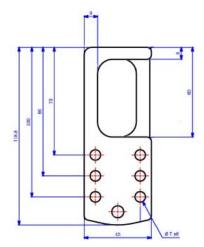
MCSP24H85

- 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



55×75



55x75 PK6E-S



55×75 MK11ES



55x75 MK8ES



55×75 MK9ES



55×75 MK6ES



55×75 MK10ES



55x75 WK7E-S



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





Padlock and isolate supply before working on this equipment

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

Do not start this

equipment when

locked out



0

Caution Lock out devices to be removed by authorised personnel only



450x600 Rigid S/A EK9Y-R



MK2Y-S

450x600 Rigid







PK6Y-S





110x50 WT53A 200x100 WT53B

⚠



110x50 WT42A



110x50 WT40A 200x100 WT40B



110x50 WT41A



110x50 WT45A



110x50 WT26A

200×100 WT26B

0

200×100 WT37B



200x100 WT35B



0

Do not

use

110x50 WT30A

200×100 WT308



200×100 WT32B



0

Do not

start

110x50 WT33A

200×100 WT33B

200×100 WT398



110x50 WT55A



110x50 WT01A 200x100 WT01B





200×100 PT3288



200v100 PT33BR



110x50 WT488 200x100 PT34BR



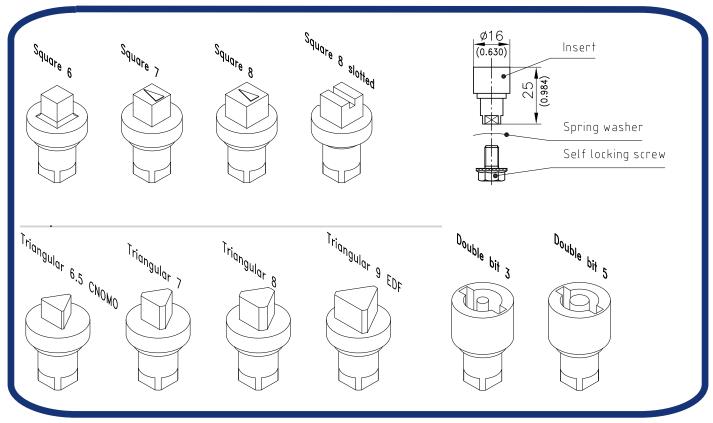
Locking Systems

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

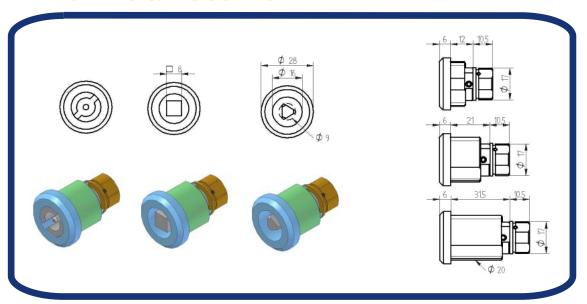
It is possible to buy only the insert or the complete locking system : insert and body



INSERTS



INSERTS & HOUSING





QUARTER TURN with KEY QTEC-13,5

Cylinder Quarter-Turn with 900 rotation and fixing clip.

- PA-version is electrically insulated .
- RH or LH application .
- A pre-assembled Quarter-Turn can be installed in the cutout.

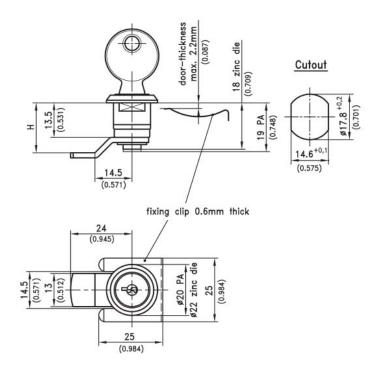
Material:

Housing and cylinder:

PA, black or zinc die, chrome plated

• Fastening clip and cam:

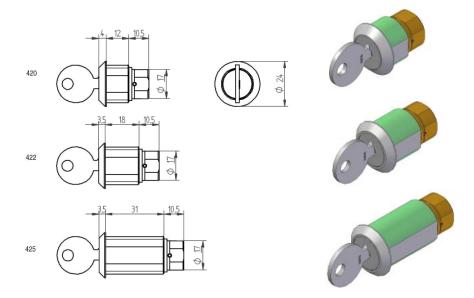
steel, zinc plated



Locking type	H in mm / inch
keyed alike	7.5 / 0.295
	13.5 / 0.531
	19.5 / 0.768
keyed different/	7.5 / 0.295
mixed	13.5 / 0.531
	19.5 / 0.768

All locks supplied with 2 keys.

OTHER QUARTER TURN



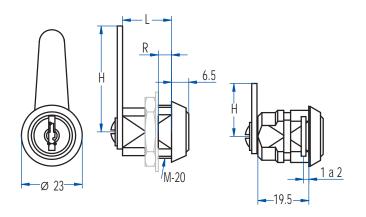


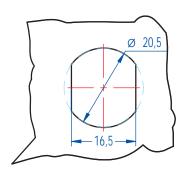
QUARTER TURN with KEY QTEC-20,5

Closing systems for metal and wood forniture elements. Designed to match thinkness of 5mm, 13mm or 27mm. Very easily adaptable to different environments they can turn left, right, turning 90° or 180° and with key free in different positions.

This profile is available with same key codes or group codes, but not with mastering.

Dimensions:





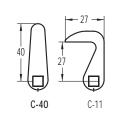
How to order

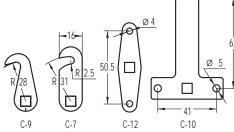
		QTEC20.5	/20.5M
Key style	Serie 500 - 900	•	•
MATERIAL	Zamak	•	•
	Chrome	•	•
Finishing	Nickel	•	•
	Black	•	•
	L = 18,5mm	•	
	L = 32mm		•
	R = 5mm	•	
Dimensions	R = 13,5mm	•	
	R = 27mm		•
	N° of differs	208	208
	Weight (gr.)	62	88

С	FLAT CAMS											
Н	15	20	25	30	35	45	50	55	60	65	70	75
EExa	mple:	C-20										

С	0	THE	R C	AM	S			
Н	35	G	3	5	10	15	20	25
Н	55	G	5	10	15	20	25	30
Example: C-35-5								

<u>2</u>	
Z 7	16 H







CATCH LOCK MINI CLM01

You can use this simple catch for a variety of purposes - to buckle lids, gates, boxes, cases and more.

Material:

- Steel body

Finish:

- Nickel

Weight: 15g.



SWING HANDLE SWH01

This handle is typically used in electrical cabinets of any kind.

Description and technical features

- -park position with "click"
- -sleek, modern design
- -IP40 rated
- -available in many key combinations
- -90° left & right stopper

Material:

- Polyamide Different finishing available





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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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