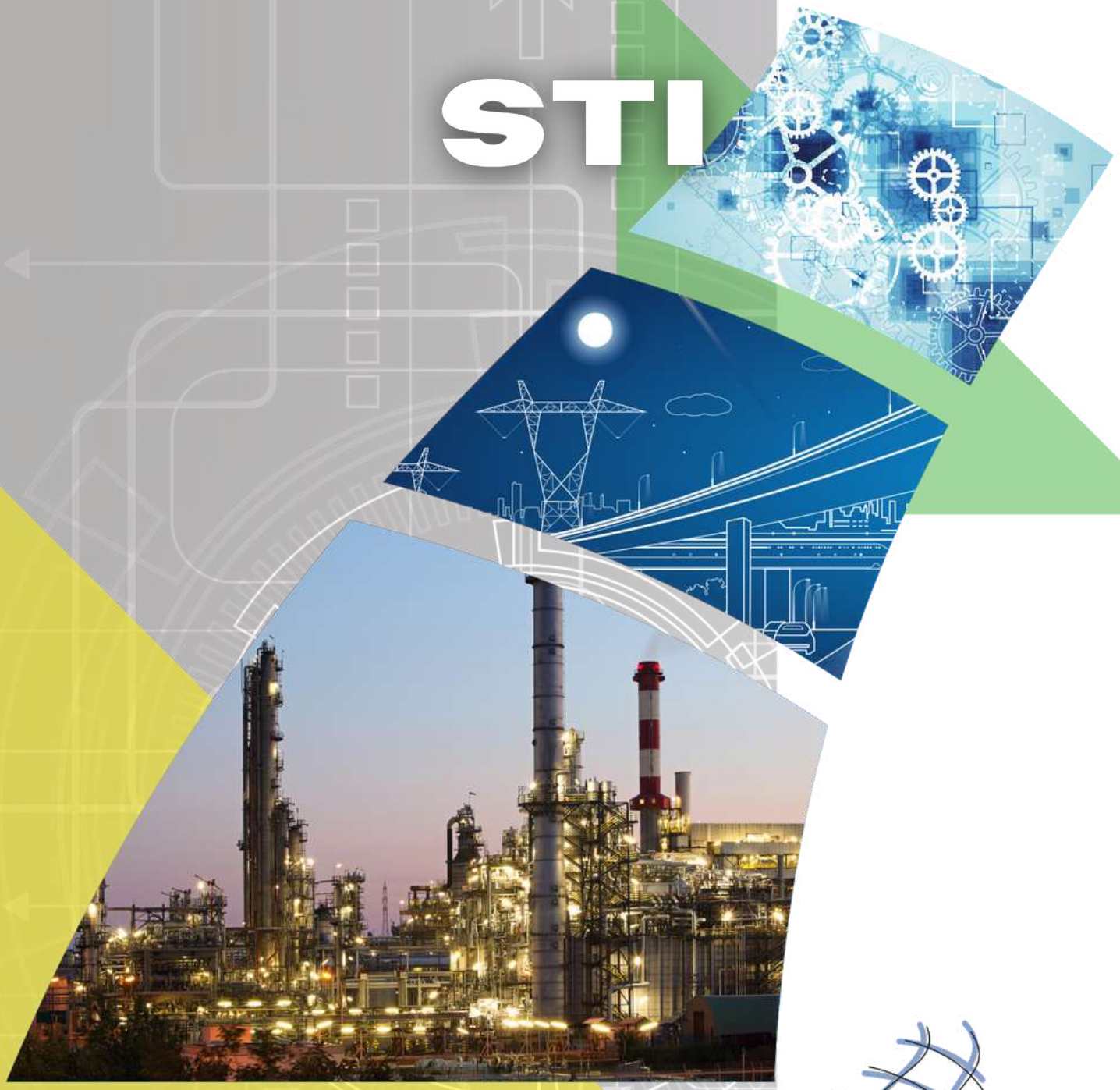
STI



AUTOMAÇÃO

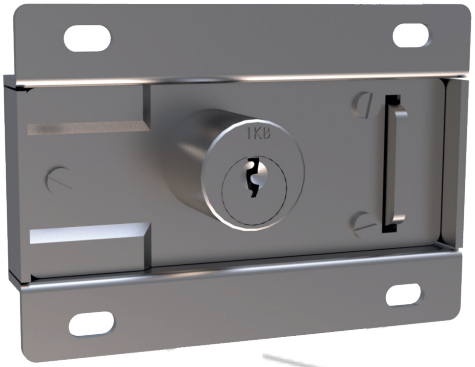
ELECTRICIDADE

ELECTRÓNICA INDUSTRIAL

NOVAZETA3
AUTOMATIZAÇÃO E CONTROL, LDA

www.novazeta3.pt

Access ELP



The Access lock (or Door lock) is a key access interlock is suitable for use on access point (trap door, doors, gates …) but also on transformer's plug in connectors. The interlock has manufactured in in aluminium or composite, making it ideal for use in energy line of business.

Different types of striker plates are available depending on the equipment. Striker plates can be inserted into the lock cylinder-side or on the side opposite the cylinder

The Access lock is available in two options: exchange key and multi key.

Trapped Key Interlocks

ENERGY

USAGE

The Access ELP should be used to allow safe access to potential hazardous and dangerous areas.

The Access ELP should be used with one key on part body access doors where the use of personal safety keys is not essential or with 2 keys (consignment key) on full body access doors where the use of personal safety keys is essential (to prevent accidental lock in).

The Access ELP is not designed for security purposes, such as a safe or external access to a building.

INSTALLATION

A safety lock must be mounted with appropriate fasteners.

Important:

To avoid unauthorized removal, the lock must be mounted with rivet or M5 (screws, nuts and washers) stainless steel safety screws and secured with a threadlock.

Tightening torque: 5Nm

The interlock must be installed by a competent and qualified person who has read and understood these instructions.

MAINTENANCE

Contact STI for maintenance instructions.

Access ELP

TECHNICAL DATA

Temperature rating	Contact STI for details
Type of mounting	Surface or over back mount using with suitable fasteners
Weight	440 gr
Material	Nickel brass - Stainless steel 303 & 304
Product finish	None
Homologation	Contact STI for details
Salt spray resistance	Contact STI for details
IP Rating	Contact STI for details
Mechanical life	Contact STI for details
B10d	Contact STI for details
Diagnostic coverage (%)	Contact STI for details
Retention force	Contact STI for details
Shock & vibration (IK)	Transport and functional random vibration
ROHS	Certificate available on request
REACH	Certificate available on request
Conflict mineral	Certificate available on request

OPTIONS

- Flat or Star key
- Up to 1 key entrie
- Stricker plate (Bent, 90° bent, straight)

APPLICATION

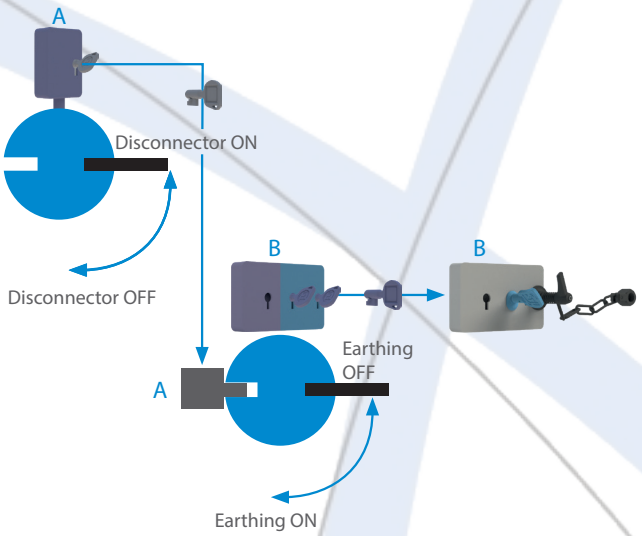
Whilst the disconnector is on the A key cannot be removed. Switching the disconnector to the off position will allow the A key to be removed from the K Lock.

This A key can then be inserted into the K Lock which will retract the bolt and allow the earthing to be switched on.

This will in turn allow the key B to be removed extending the bolt and locking the earthing in to the on position.

The B key can now we used to gain access through AIE. A personnel key will be released to ensure that the operation cannot be reversed whilst personnel are in the transformer housing.

The symbols used here are A for the disconnector and earthing and B for the earthing and the access lock.



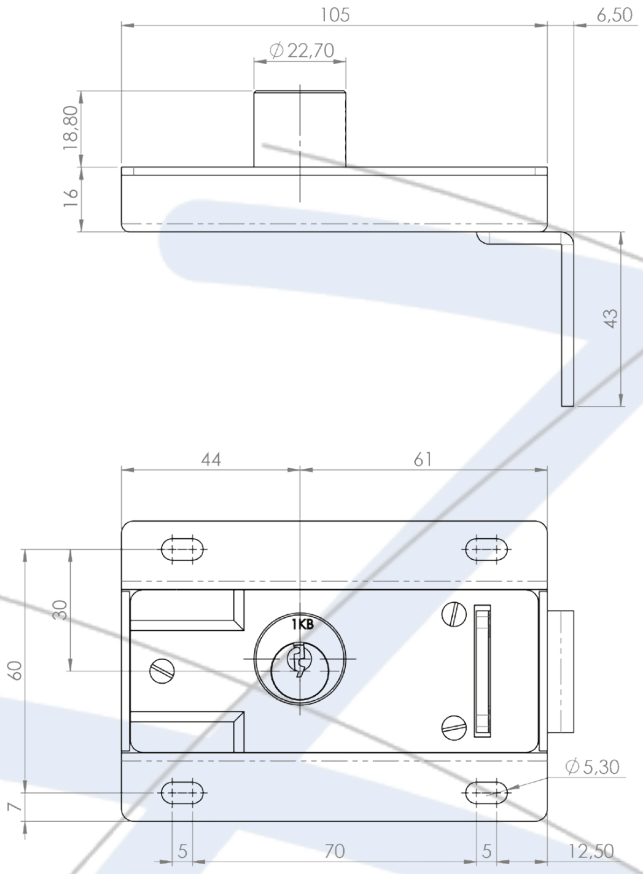
Access ELP

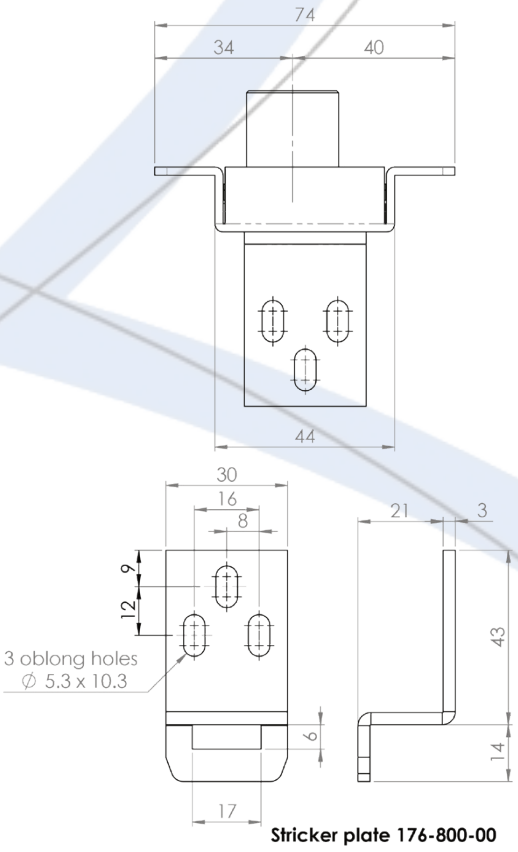
DRAWING

Dimensions: in mm

Note: For safe mounting, use security screws

Access ELP





Stricker plate 176-800-00

Function	C
Initial Position	
Final Position	

ELP1 + STRICKER PLATE 176-800-00

Access ELP

ORDER INFORMATION

	1	2
Part number		
Example	ELP	1

1	Product family	ELP
2	No. of cylinders	1 2

ACCESSORIES

- Flip cap

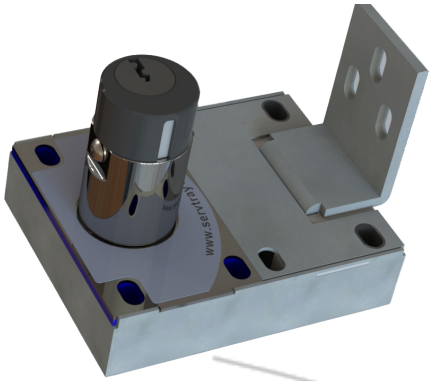
CONTACT INFORMATION

Serv Trayvou
1 ter rue du Marais
93100 MONTREUIL
France

t : +33 (0)1 48 18 15 15
f : +33 (0)1 48 59 68 50
e : sales@servtrayvou.com

ASP/HSP Access lock

Part of the Sentric Group



The access lock is a trapped key interlock solution designed to be used on access points (hatches, doors, gates, etc.), but also on power transformers. This lock is made of stainless steel and aluminium, which makes it ideal for use in the energy sector.

Various types of strike plates are available depending on the installation. The strike plates are reversible and can be inserted into the front or back of the lock case. This makes it the most flexible lock on the market in terms of installation. The access lock is available in two options: a key exchange function or a multiple key release function.

Trapped Key Interlocks

ENERGY

USAGE

The access lock should be used to allow safe access to potentially hazardous areas..

The access lock must be used with:

- 1 key on access doors when the operator does not access an area, but simply opens a transformer cover or sash, (the use of personal keys is not essential)
- 2 keys on access doors when the operator is going into a hazardous area, the use of a personal key (pocket key) is essential to prevent accidental locking.

This lock is not designed to secure access to a safe or external access to a building.

INSTALLATION

A safety lock must be fitted with appropriate fixings (not supplied with the lock).

Important:

To prevent unauthorised removal, the lock must be fitted with a rivet or M5 security screws (self-tapping screws, nuts and washers) of stainless steel and secured with a threadlocker.

Tightening torque: 5Nm

Drilling of the mounting plate (when the lock is mounted from the rear): 4 holes ø5,3 + 1 hole ø25 per cylinder.

The lock must be installed by a competent and qualified person.

MAINTENANCE

No maintenance of the product is recommended. However, to improve its operation and possibly increase its life span, adding "Xenium micronised graphite powder" to the lock is accepted.
Any other product is prohibited.

ASP/HSP Access lock

Part of the Sentric Group

TECHNICAL DATA

Weight	Starting at 300 gr for 1 cylinder
Material	- Cylinder - Rotor 5000 : 6064-T9 aluminium / Rotor 6000 : Grivory GVX-65h composite Stator : 6064-T9 aluminium - Lock - AISI 304L inox
Product finishing	Anodised black (cylinder)
Type of Mounting	Front or back mounting with suitable fixings (flush)
Temperature rating	-35˚C / +120˚C for the lock -35˚C / +105˚C for the switch
Salt spray tolerance	240h
Watertightness	IP4X-lock IP67-switch
IK rating	IK08
Vibrations	0.7mm @10-55HZ 1 oct/min in 3 axes
Retentive strength	250N-key 600N-strike plate
Lifespan	500000 cycles*
B10d	100000 cycles*
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch)
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

*Version rotor aluminium

OPTIONS

- Flat key (RONIS type) or star key (PROFALUX type)
- Electrical switch (changeover)
- Rotor type (aluminium, composite or aluminium small series)
- Available stike plate: bend, straight or 90˚ bend
- Up to 3 key entries, for more key entries contact us
- It is possible to mix the types of profiles on the same lock (star / flat), contact us

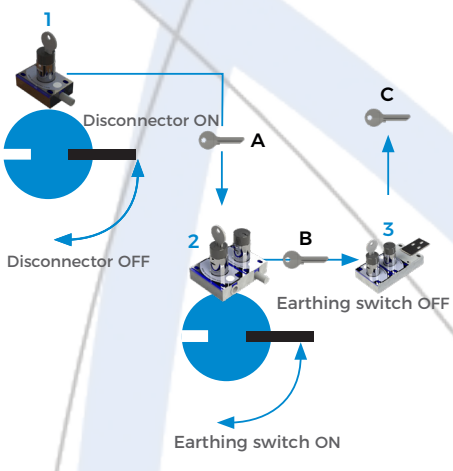
APPLICATION

The system includes a Hercules bolt on the machine's power supply control, another Hercules bolt on the electrical circuit grounding control, and a Hercules access lock for access to the hazardous area. Under normal machine operation (motor powered), the power key A is trapped in the Hercules bolt on the machine disconnector and the access door to the hazardous area is closed and locked.

To access the hazardous area:

1. The operator cuts the power to the machine allowing the release of the power key A
2. The power key A is then trapped in the Hercules lock of the earthing switch allowing the earthing of the electrical circuit. The operator can then release the access key B, thus locking the earthing switch in the closed position and ensuring that earthing cannot be interrupted.
3. The access key B is then trapped in the Hercules access lock releasing the personal key C and the strike plate allowing access to the area.

   The personal key C is kept by the operator during operation to protect against accidental locking and starting.
4. To put the machine back into service, the operator follows the same steps in reverse order



ASP/HSP Access lock

Part of the Sentric Group

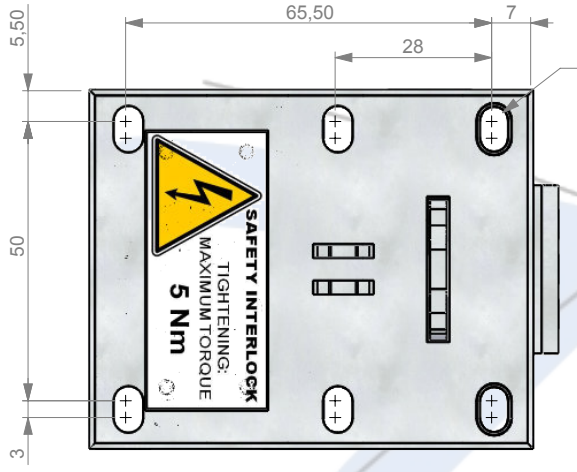
DRAWING

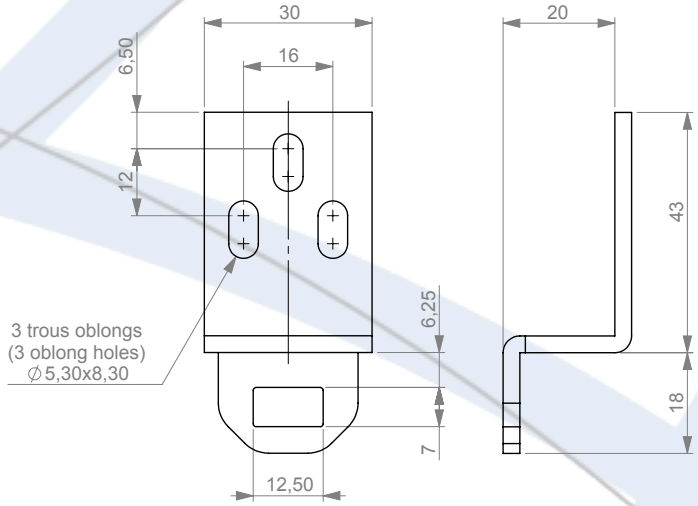
Dimensions: in mm

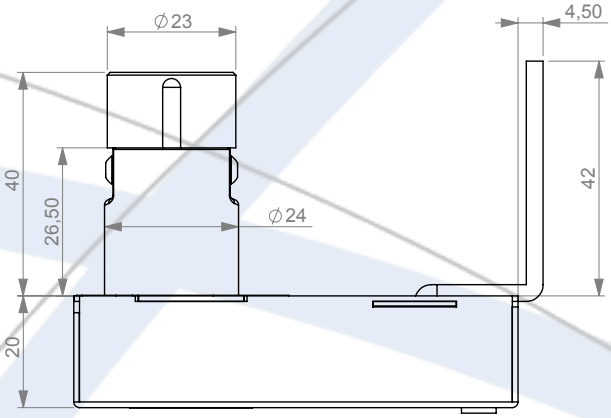
Available as a flat key (RONIS) or star key (PROFALUX)

Note: For safe mounting, use security screws.

Standard access lock

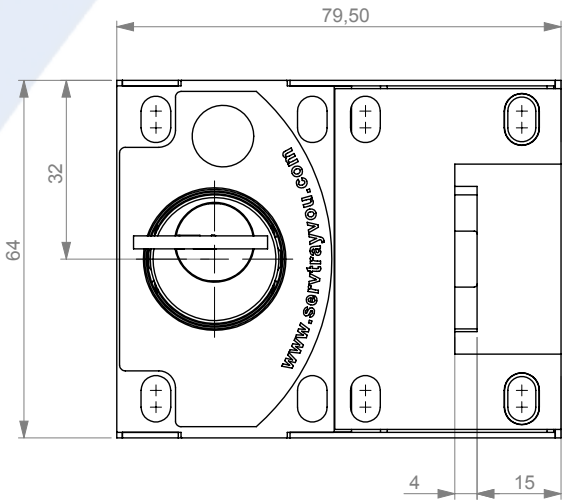






gâche standard et réversible: introduction dans les deux sens

(Standard and reversible Striker:introduction in both directions)



Référence Produit avec clé type:
(product reference following key type:)

- Plate = ASP1CXX5000
  (flat)

A = Clé plate
H = Clé étoile

5 = Rotor Aluminium
6 = Rotor Composite

xx = Profile EL,EK,EP,EM,ET,EV
GL,GK,GP,GM,GT,GV

ASP/HSP Access lock

Part of the Sentric Group

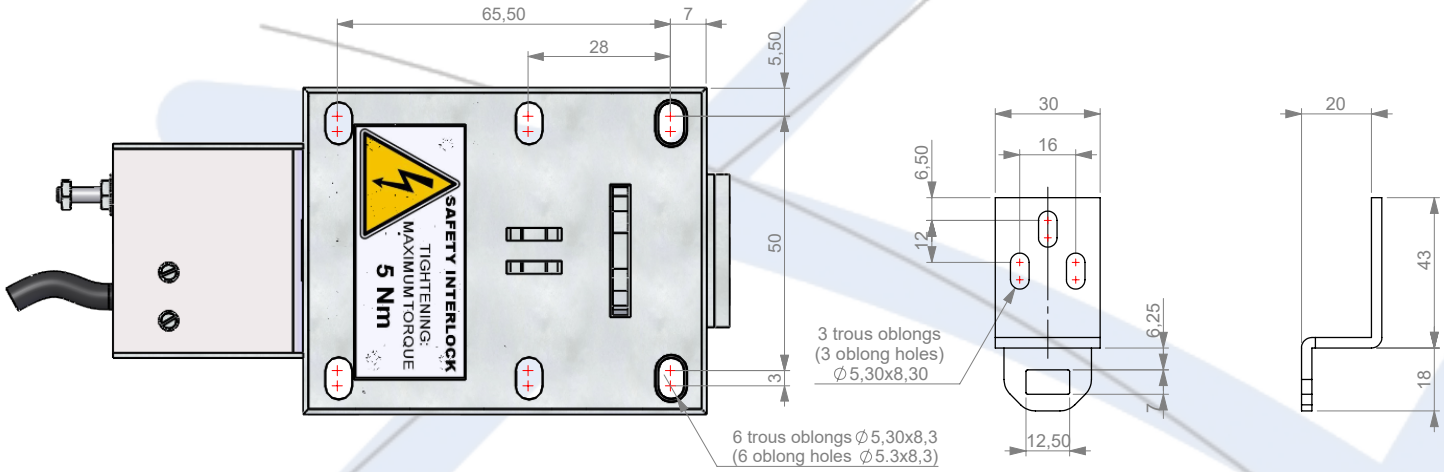
DRAWING

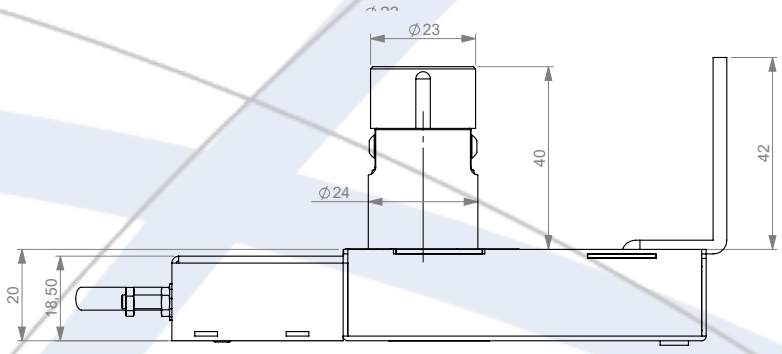
Dimensions: in mm

Available as a flat key (RONIS) or star key (PROFALUX)

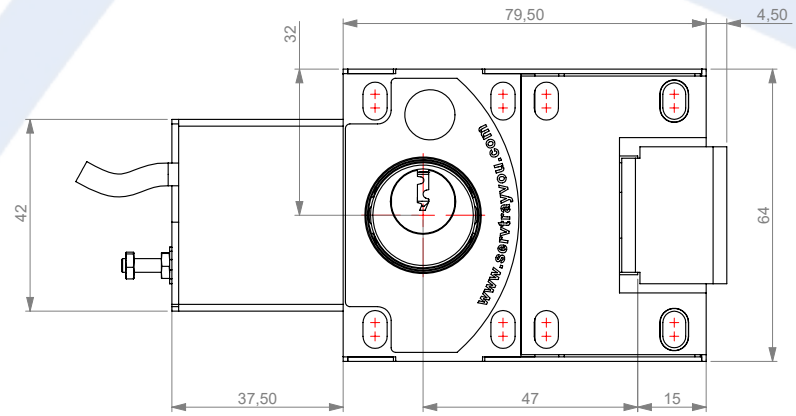
Note: For safe mounting, use security screws.

Access lock with a switch





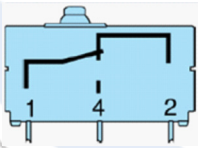
gâche standard et réversible : introduction dans les deux sens
(Standard and reversible Striker: introduction in both directions)



Caractéristiques du contact inverseur :
(Characteristics of the micro-switches)

reference: CROUZET 83186

- cable lg 1.2m, section 0.5mm²:
  * 1 Noir (black) = Commun (common)
  * 2 Gris (grey) = NF (NC)
  * 4 bleu = NO
- calibre sous 250VCA:
  (ratings at 250VCA)
  * Nominal: 6A
  * Thermique: 7.5
  (Thermal)
- IP67
- Température d'utilisation : -40°C / +105°C
  (operating temperature)



ASP/HSP Access lock

Part of the Sentric Group

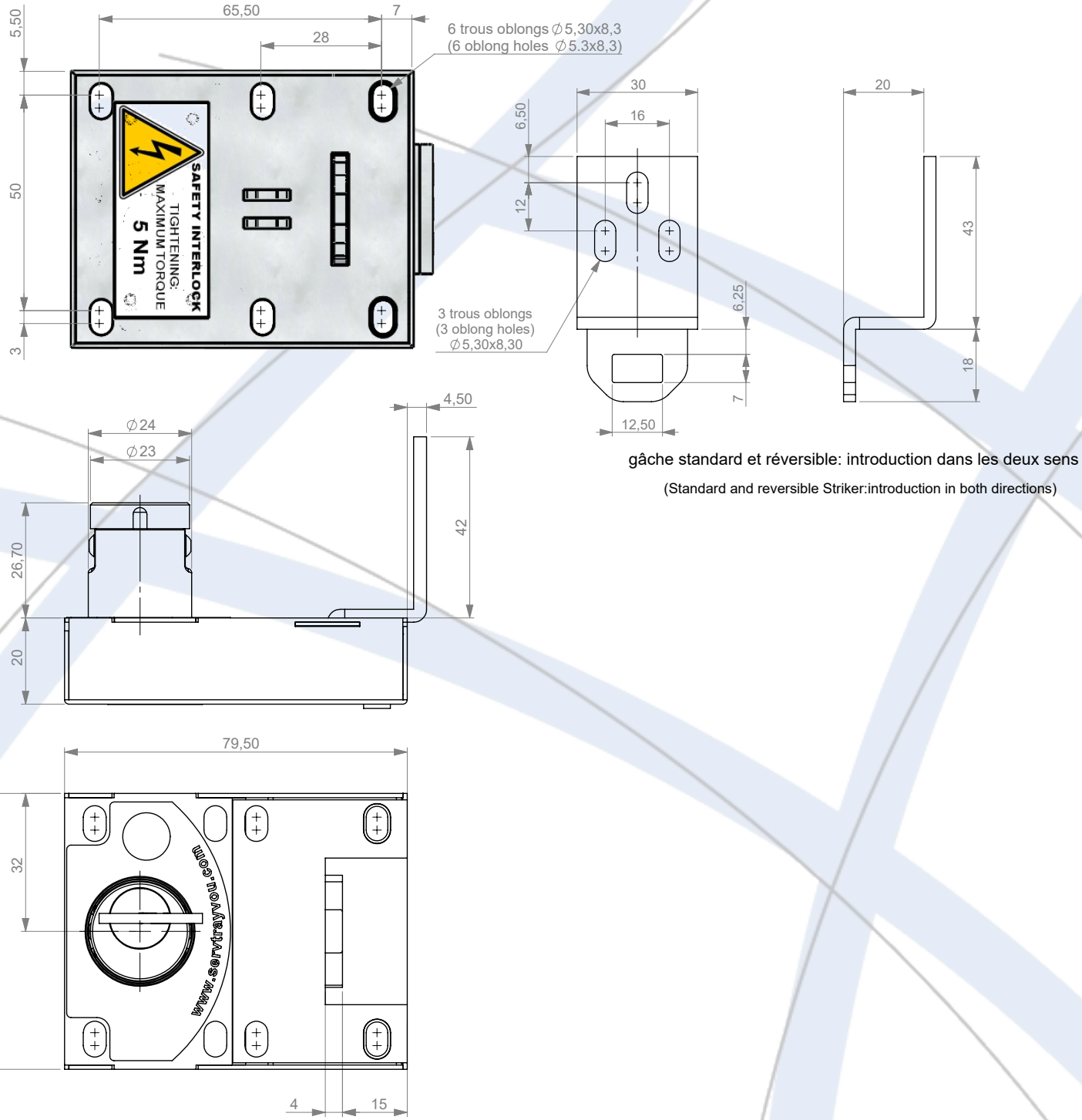
DRAWING

Dimensions: in mm

Available as a flat key (RONIS) or star key (PROFALUX)

Note: For safe mounting, use security screws.

Small series Access lock



gâche standard et réversible: introduction dans les deux sens

(Standard and reversible Striker:introduction in both directions)

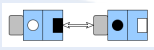
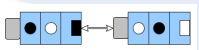
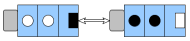
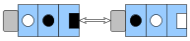
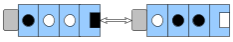
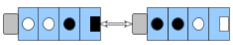
ASP/HSP Access lock

Part of the Sentric Group

ORDER INFORMATION

	Cylinder profile	Product type	N° of cylinder	Function	Key profile	Rotor type	Particularity
Reference							
Example	A	SP	1	C	EL	5	000

Cylinder profile	A = Flat key H = Star key
Product type	SP = standard access lock PC = access lock with a switch
N° of cylinder	From 1 to 3 cylinders
Function	The function determines the key position (in or out). See FUNCTION table
Key profile	Star key = PS 5-piston flat key = EK, EL, EM, EP, ET, EV 6-piston flat key = GK, GL, GM, GP, GT, GV
Rotor type	5 = Aluminium 6 = Composite 7 = Small series
Particularity	000 = Standard (bend strike plate) 045 = 90° bend strike plate 066 = straight strike plate 225 = 2 switches version 484 = straight strike plate + 200mm chain

N° entries	Function	Principle
1	C	
2	F	
2	H	
2	J	
3	F	
3	H	
3	J	

Legend	○	free key
	●	trapped key
	■	trapped strike plate
	□	free strike plate
	▭	switch position for switch version

ASP/HSP Access lock

Part of the Sentric Group

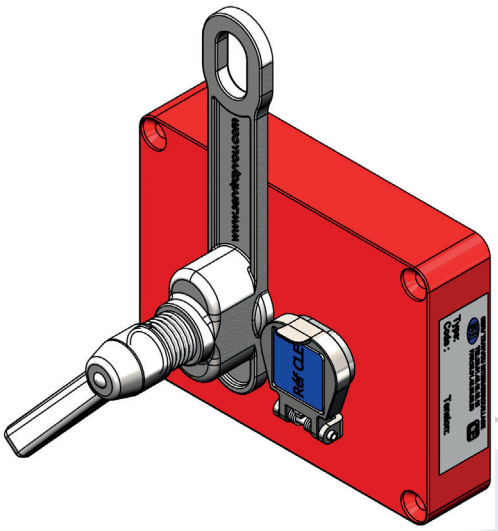
ACCESSORIES

- 90° bend strike plate
- Straight strike plate
- Straight strike plate + 200mm chain
- Flip cap (ref. D23556, drawing available on request)

CONTACTS

Serv Trayvou
1 ter rue du Marais, 93100 MONTREUIL, France
t: +33 (0)1 48 18 15 15 | f: +33 (0)1 48 59 68 50 | e: sales@servtrayvou.com

S0L Access Lock



The S0L latch lock is a key access interlock is suitable for use on hinged and sliding doors. The interlock is manufactured in copper brushed aluminium, making it ideal for use in harsh or corrosive environments and heavy use. Typical industries using the S0L latch lock are chemical, aggregate & concrete, iron & steel, paper & wood transformation, rail and power generation.

Trapped Key Interlocks

INDUSTRY

ENERGY

Railway

USAGE

The S0L Access Interlock can be used to allow safe access to potential hazardous and dangerous areas.

The S0L Access Interlock can be used on part body and full body access doors where the use of personal safety keys is not essential (to prevent accidental lock in).

The S0L Access Interlock is not designed for security purposes, such as a safe or external access to a building.

INSTALLATION

A safety lock must be fitted with suitable fasteners.

Important:

To prevent unauthorized removal, the lock must be mounted using rivets or M5 stainless steel safety fixing screws (washers, nuts and screws).

The installation must be carried out by a competent and qualified person who has read and understood these instructions.

In case of vibrations, contact STI.

MAINTENANCE

Periodic visual checks should be carried out to check for deformation or corrosion/erosion/acid aggregating by the site manager/safety officer. Clearing the marking/closing of the lock attachment.

Do not lubricate lock barrel with oil or grease, use Powder Graphite if necessary.

In case of defects being detected please contact your nearest Serv Trayvou Support Department for further actions. Please see Contact section for contact details.

S0L Access Lock

TECHNICAL DATA

Temperature rating	Contact STI for details
Weight	1, 2 kg
Material	- Body & mechanism: Copper brushed aluminium - Latch: Stainless steel 304
Product finish	Red (RAL 3000) polyester paint
Homologation	Contact STI for details
Salt spray resistance	Contact STI for details
IP Rating	Contact STI for details
Mechanical life	Contact STI for details
B10d	Contact STI for details
Diagnostic coverage (%)	Contact STI for details
Retention force	Contact STI for details
Shock & vibration (IK)	Contact STI for details
ROHS	Certificate available on request
REACH	Certificate available on request
Conflict mineral	Certificate available on request

OPTIONS

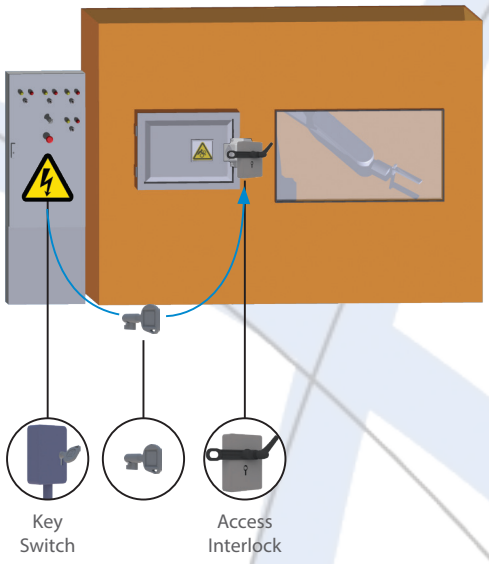
- Without flip cap

APPLICATION

A typical application of the S0L single key access interlock is machine guarding with man-hole access.

The S0L latch lock is used as part of a safety system, ensuring a machine is shut down, before access to the hazardous area.

The system is composed of a RTK*E key switch that breaks the machine safety circuit, when the key is removed. The key can then be transferred to the S0L to unlock the panel access. The machine cannot be restarted until the panel is closed and locked. To lock, the latch must inserted & turned. Thus, the isolation key can be released and transferred back into the RTK*E key switch.

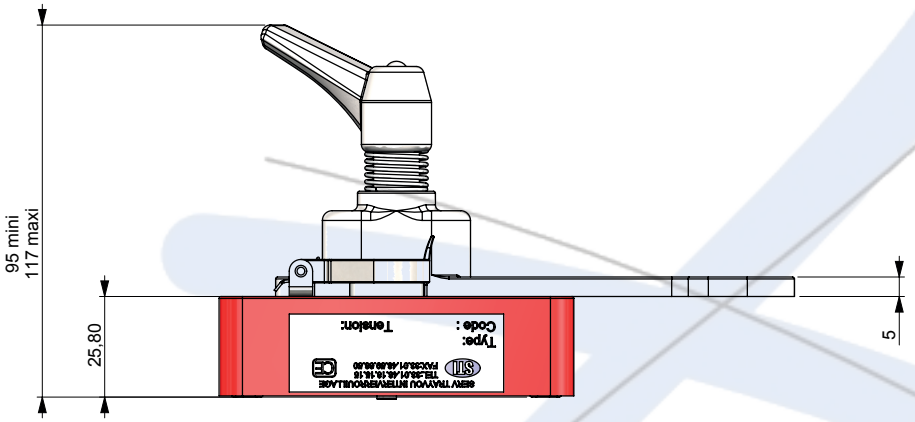


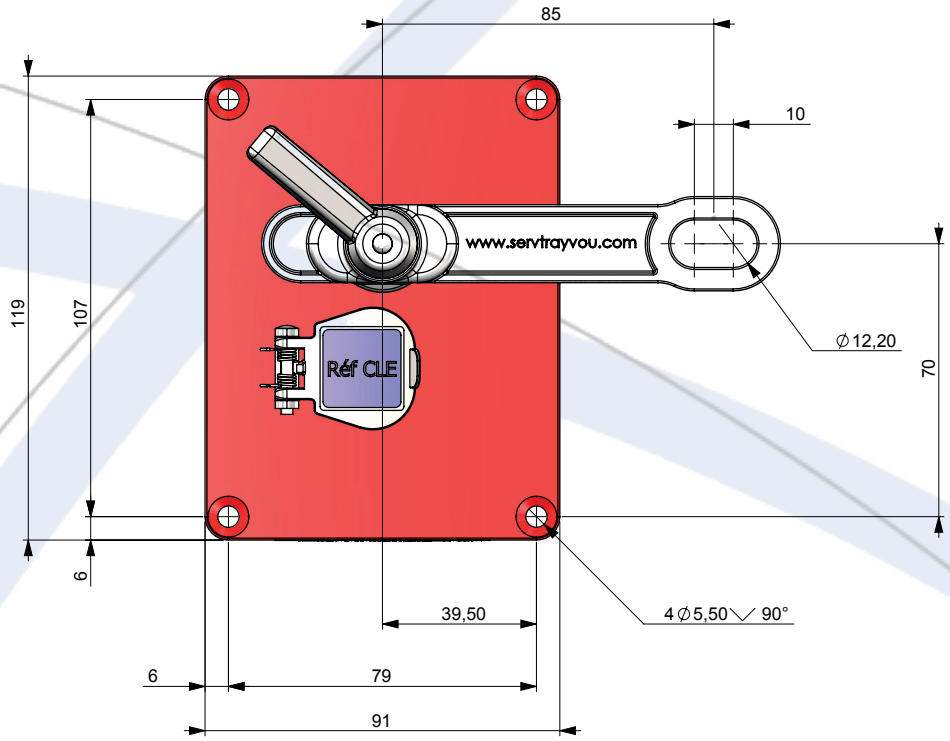
DRAWING

Dimensions: in mm

Note: For safe mounting, use security screws

S0L

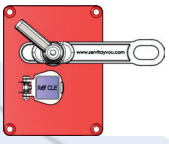
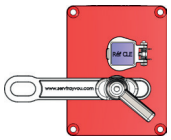




S0L Access Lock

ORDER INFORMATION

	Component type	Entry	1	NS	2	3
Part number	S0L					
Example	S0L	1	L85	NS	0	000

1	Locking element	L85 = Standard latch lock 2 switch option NS = no switch FS = Front Switch C20 = Chain key lock 20cm C60 = Chain key lock 60cm LTS = T standard latch lock		
2	Direction of lock	Pos 1: Left-hinged Access points Pos 2: Right-hinged Access points	Pos 1 	Pos 2 
3	No. of order	For dedicated applications. This number is assigned by STI for a suitable product		

ACCESSORIES

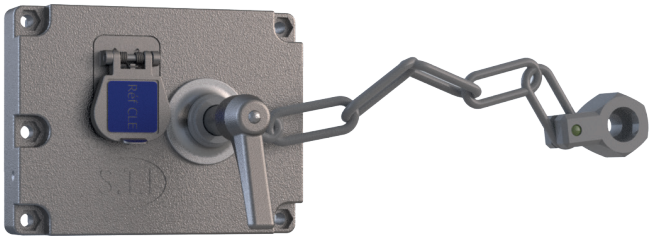
- Standard latch L85
- Chain Key C20, C60 or CSP (special length)
- Triangular latch without consignment LTS

CONTACT INFORMATION

Serv Trayvou
1 ter rue du Marais
93100 MONTREUIL
France

t : +33 (0)1 48 18 15 15
f : +33 (0)1 48 59 68 50
e : sales@servtrayvou.com

XS0L Access Lock



The XS0L latch lock is a key access interlock is suitable for use on hinged and sliding doors. The interlock is manufactured in stainless steel, making it ideal for use in harsh or corrosive environments and heavy use. Typical industries using the XS0L lock are concrete & aggregate, mining, iron & steel and power generation.

Trapped Key Interlocks

INDUSTRY

ENERGY

Railway

USAGE

The XS0L Access Interlock can be used to allow safe access to potential hazardous and dangerous areas.

The XS0L Access Interlock should be used on part body access doors where the use of personal safety keys is not essential (to prevent accidental locked-in).

The XS0L Access Interlock is not designed for security purposes, such as a safe or external access to a building.

INSTALLATION

A safety lock must be fitted with suitable fasteners.

Important:

To prevent unauthorized removal, the lock must be mounted using rivets or M5 stainless steel safety fixing screws (washers, nuts and screws).

The installation must be carried out by a competent and qualified person who has read and understood these instructions.

In case of vibrations, contact STI.

MAINTENANCE

Periodic visual checks should be carried out to check for deformation or corrosion/erosion/acid aggregating by the site manager/safety officer. Clearing the marking/closing of the lock attachment.

Do not lubricate lock barrel with oil or grease, use Powder Graphite if necessary.

In case of defects being detected please contact your nearest Serv Trayvou Support Department for further actions. Please see Contact section for contact details.

XS0L Access Lock

TECHNICAL DATA

Temperature rating	Contact STI for details
Weight	1, 3 kg
Material	Stainless steel 304
Product finish	None
Homologation	Contact STI for details
Salt spray resistance	Contact STI for details
IP Rating	Contact STI for details
Mechanical life	Contact STI for details
B10d	Contact STI for details
Diagnostic coverage (%)	Contact STI for details
Retention force	Contact STI for details
Shock & vibration (IK)	Contact STI for details
ROHS	Certificate available on request
REACH	Certificate available on request
Conflict mineral	Certificate available on request

OPTIONS

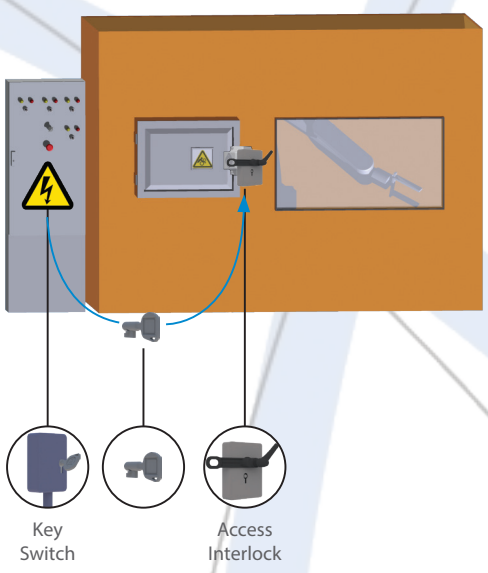
- Without flip cap
- Painted red polyester (RAL 3000)
- High Temperature (not painted, without switch and flip cap)
- Emergency release system
- Switch 2O-1C (standard) - Switch function in key free position

APPLICATION

A typical application of the XS0L single-keyed access interlock is part-body access to hazardous area.

The XS0L latch lock is used as part of a safety system, ensures a machine is shut down, before access to the hazardous area.

The system is composed of a RTK*E key switch that breaks the machine safety circuit, when the key is removed. The key can then be transferred to the XS0L to unlock the panel access. The machine cannot be restarted until the panel is closed and locked. To lock, the latch must inserted & turned. Thus, the isolation ket can be released and transferred back into the RTK*E key switch.



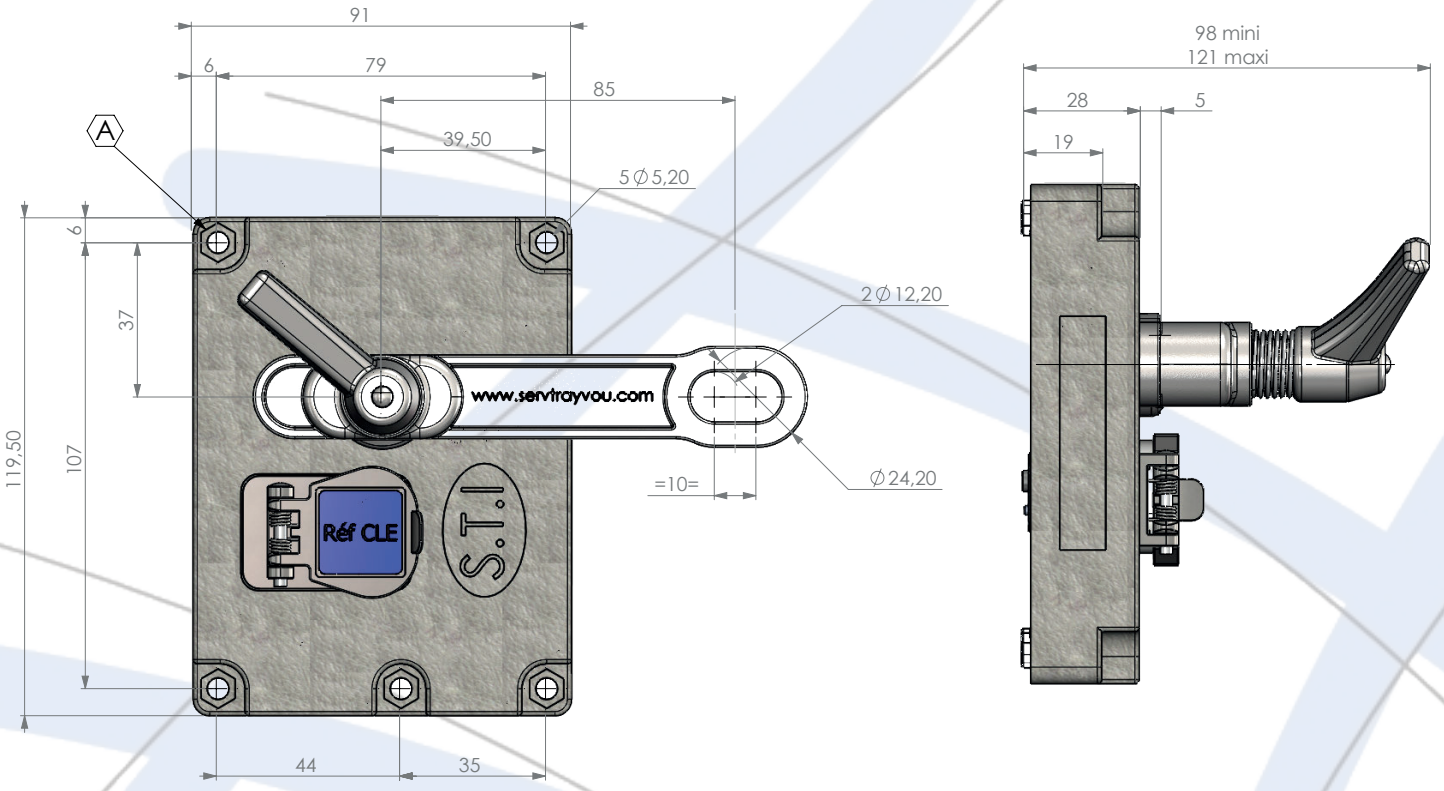
DRAWING

Dimensions: in mm

Note: For safe mounting, use security screws

XS0L

Ⓐ : 5 hexagones pour vis / Hexagon for screws H-M5



XS0L Access Lock

ORDER INFORMATION

	Component type	Entry	1	2	3	4
Part number	XS0L					
Example	XS0L	1	L85	NS	0	0000

1	Locking element	L85 = Standard latch lock C20 = Chain key lock 20cm C60 = Chain key lock 60cm LTS = T standard latch lock		
2	Switch Option	NS = No switch FS = Front switch		
3	Lock position	Pos 1: Left-hinged Access points Pos 2: Right-hinged Access points	Pos 1 	Pos 2 
4	No. of order	For dedicated applications. This number is assigned by STI for a suitable product. 0000 applies for standard items.		

ACCESSORIES

- Standard latch L85
- Chain Key C20, C60 or CSP (special length)
- Triangular latch without consignment LT

CONTACT INFORMATION

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France

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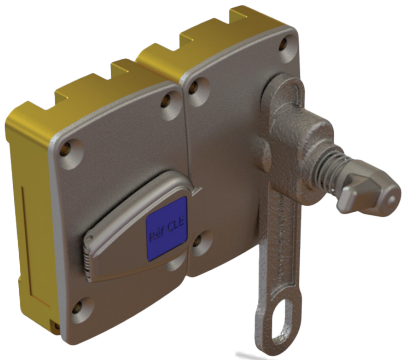
f : +33 (0)1 48 59 68 50
e : sales@servtrayvou.com

MS - Access lock

Part of the Sentric Group



The MS access lock is a designed locking system for swinging and sliding door accesses.

This lock is made of aluminium bronze, which makes it ideal for use in harsh or corrosive environments and intensive use. It is modular and available with up to 4 key entries and a latch.

Typical industries that use the MS access lock are the chemical, pharmaceutical, mining, steel, metallurgical, railway and power generation industries.

Trapped Key Interlocks

INDUSTRY

ENERGY

RAILWAY

USAGE

The MS Access lock should be used to provide safe access to hazardous areas.

The MS Access lock can be used with a single key for access hatches or with a minimum of two keys for access doors where the use of a lockout key is essential (to prevent accidental lockout).

The MS Access lock is not designed to secure access to a safe, external access to a building, for doors or access gates.

INSTALLATION

A safety lock must be fitted with appropriate fixings.

Important:

To prevent unauthorised removal, the lock must be fitted using rivets or M5 stainless steel security screws (washers, nuts and screws).

Installation must be carried out by a competent and qualified person.

MAINTENANCE

Periodic visual inspections should be carried out by the Facility Manager or Safety Manager to ensure that there is no distortion or corrosion/erosion/acid build-up and that the lock marking plate is clearly legible.

Do not lubricate the lock cylinder with oil or grease.

MS - Access lock

Part of the Sentric Group

TECHNICAL DATA

Weight	Starting at 1,54 kg (for 1 key entry and 1 latch entry)
Material	- Mechanical: Aluminium bronze - Cover: 304 stainless steel - Flip cap gasket: Cellular Silicon - Marking plate: Aluminium - Riveted plate (Brass rivets) or glued (Acrylic - Loctite AA330)
Temperature rating	Currently being evaluated
Salt spray tolerance	Currently being evaluated
Watertightness	Currently being evaluated
IK rating	Currently being evaluated
Vibrations	Currently being evaluated
Retentive strength	Currently being evaluated
Lifespan	Currently being evaluated
B10d	Currently being evaluated
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch)
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

OPTIONS

- 1 to 4 key entries
- Switch 2NC-2NO (standard)

APPLICATION

The system includes a RTK key swith to control machine control circuit and a MS access lock for entering the hazardous area. Under normal machine operation (motor powered), the power key A is trapped in the RTK and the access doors to the hazardous area are closed and locked.

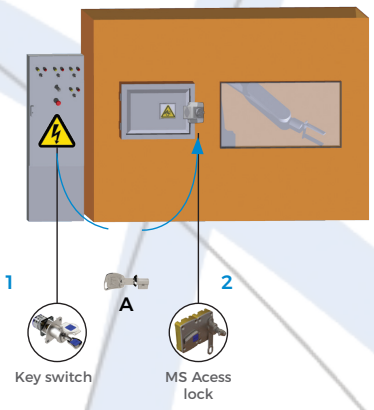
To access the hazardous area:

1. The operator releases the isolation key A from the RTK, thus cutting off the power to the machine.

2. The isolation key A is then trapped in the MS access lock releasing the latch allowing access to the area.

As long as the access to the area is open, the isolation key A is trapped in the access lock. The machine cannot be restarted with the door open.

3. To put the machine back into services, the operator follows the same steps in reverse order.



MS - Access lock

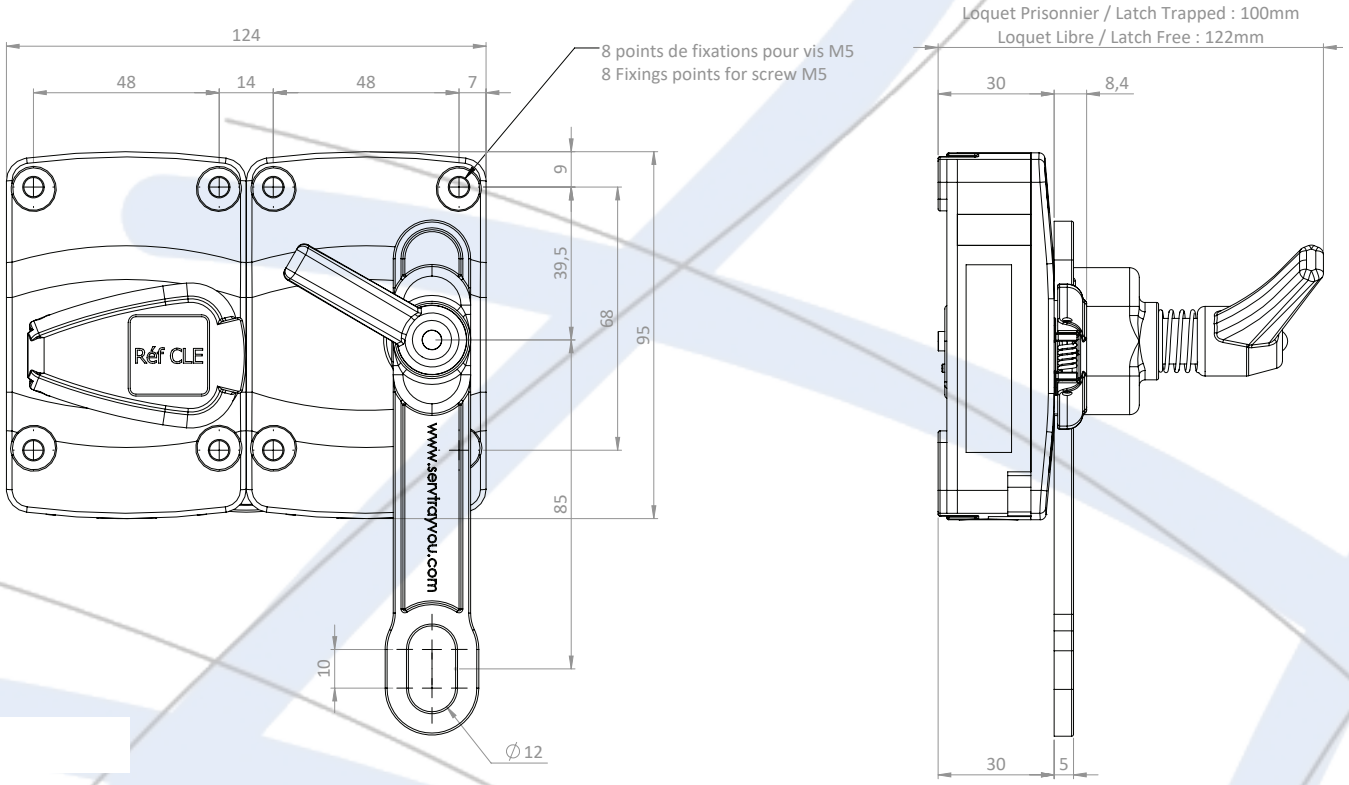
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

MS access lock with one key entry



MS - Access lock

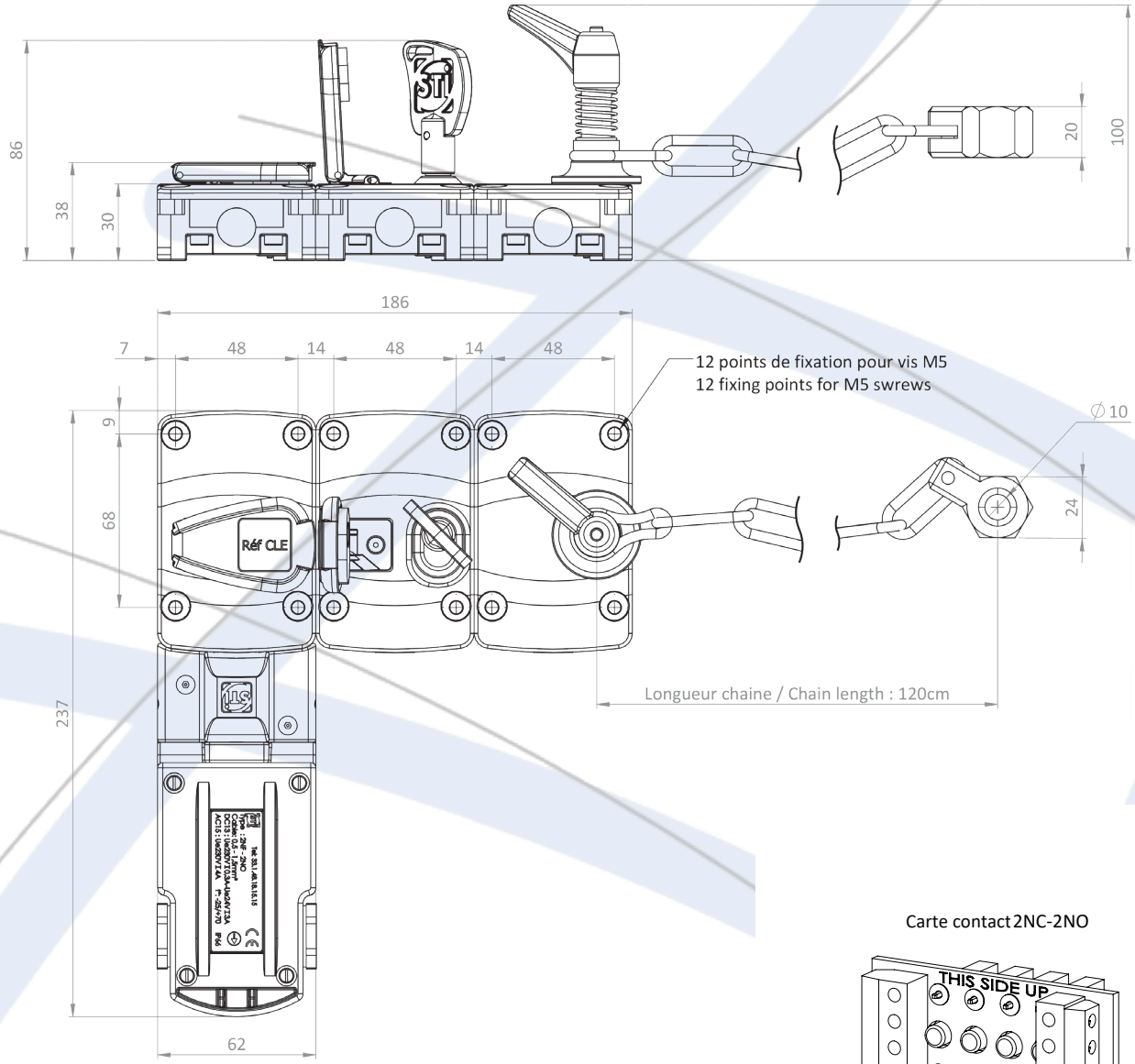
Part of the Sentric Group

DRAWING

Dimensions: in mm

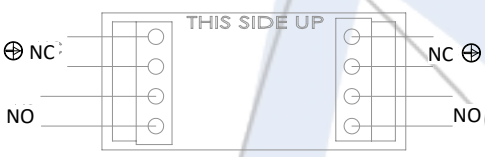
Note: For a safe mounting, use rivets or self-tapping screws.

MS access lock with two switches key entries (in front position)



Carte contact 2NC-2NO

Schéma de câblage / Wiring Diagram



*bornier à vis section max 1,5mm²

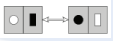
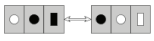
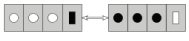
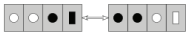
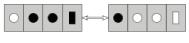
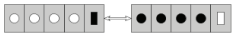
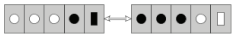
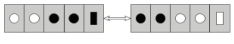
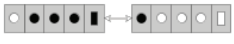
MS - Access lock

Part of the Sentric Group

ORDER INFORMATION

	MS	N° of entries	0	Latch	Function	Switch	Position	Order no
Reference	MS							
Example	MS	4	0	L85	AK	BS	2	0

1	N° of entries	From 2 to 5 entries (including 1 latch entry)
2	Latch	L85 = Standard latch 85mm C20 = Chain latch 20cm C60 = Chain latch 60cm LTS = Standard T-latch LTC = Lockout T-latch (for exchange function) LSP = Special latch (see Order no) CSP = Key catch with special chain (see Order no)
3	Function	The function determines the key position (in or out). See FUNCTION table
4	Switch	NS = No Switch BS = Back Switch FS = Front Switch
5	Position	From 1 to 5 which shows the contact position on the device starting from the right ... 2 1 
6	Order no	For specific applications. This number is assigned by STI for an adapted product

N° of entries	Function	Principle
2	BT	
3	BV	
3	BW	
4	BY	
4	BZ	
4	CA	
5	CC	
5	CD	
5	CE	
5	CF	

Legend	○	free key
	●	trapped key
	▮	trapped latch
	▯	free latch

MS - Access lock

Part of the Sentric Group

ACCESSORIES

• Latch support kit (ref. 201561)

CONTACTS

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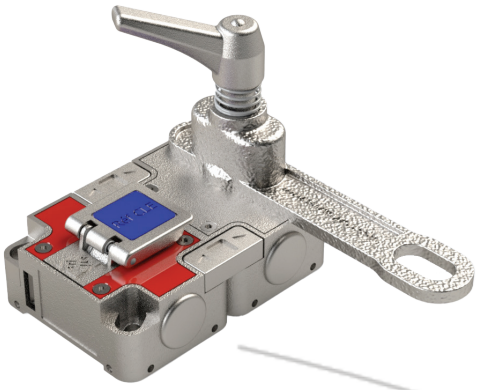
NX - Access lock

Part of the Sentric Group



The NX access lock is a locking system designed to secure access to swing and sliding doors. It is made of stainless steel for standard industrial applications. It is modular and available with up to 4 key entries and one latch entry.

The NX access lock is available in various options: painting, emergency escape device, electrical switch...

Trapped Key Interlocks

INDUSTRY

ENERGY

RAILWAY

USAGE

The NX Access lock should be used to provide safe access to hazardous areas.

The NX Access lock can be used with a single key for access hatches or with a minimum of two keys for access doors where the use of a lockout key is essential (to prevent accidental lockout).

The NX Access lock is not designed to secure access to a safe, external access to a building, for doors or access gates.

INSTALLATION

A safety lock must be fitted with appropriate fixings.

Important:

To prevent unauthorised removal, the lock must be fitted using rivets or M5 stainless steel security screws (washers, nuts and screws).

Installation must be carried out by a competent and qualified person.

MAINTENANCE

Periodic visual inspections should be carried out by the Facility Manager or Safety Manager to ensure that there is no distortion or corrosion/erosion/acid build-up and that the lock marking plate is clearly legible.

Do not lubricate the lock cylinder with oil or grease.

NX - Access lock

Part of the Sentric Group

TECHNICAL DATA

Weight	Starting at 1,2 kg (for 1 key entry and 1 latch entry)
Material	- 304 stainless steel - Flip cap gasket: Cellular Silicon - Marking plate: Aluminium - Riveted plate (Brass rivets) or glued (Acrylic - Loctite AA330)
Product finishing	- Cover: Red polyester paint (RAL 3000)
Temperature rating	-35˚C / +120˚C for both lock & switch
Salt spray tolerance	240h
Watertightness	IP4X-lock IP66-switch
IK rating	IK08 lock IK08 switch
Vibrations	0.7mm @10-55HZ 1 oct/min in 3 axes
Retentive strength	250N-key 600N-latch
Lifespan	1000000 cycles
B10d	200000 cycles
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch)
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

OPTIONS

- 1 to 4 key entries
- Switch 2NC-1NO (standard) - switches status when the key is trapped
- Without flip cap
- Not painted
- Lock with padlock guard: (lockout by padlock, if several technicians are involved)
- Emergency evacuation unit (anti-panic solution)

APPLICATION

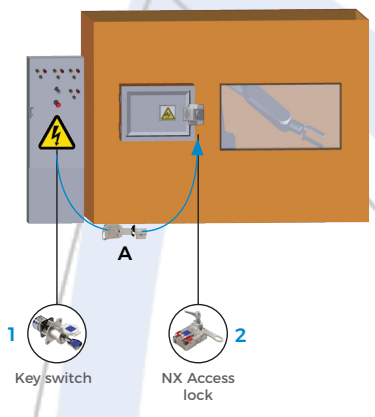
The system includes a RTK key swith to control machine control circuit and a NX access lock for entering the hazardous area. Under normal machine operation (motor powered), the power key A is trapped in the RTK and the access doors to the hazardous area are closed and locked

To access the hazardous area:

1. The operator releases the isolation key A from the RTK, thus cutting off the power to the machine.

2. The isolation key A is then trapped in the NX access lock releasing the latch allowing access to the area.

3. To put the machine back into services, the operator follows the same steps in reverse order.



NX - Access lock

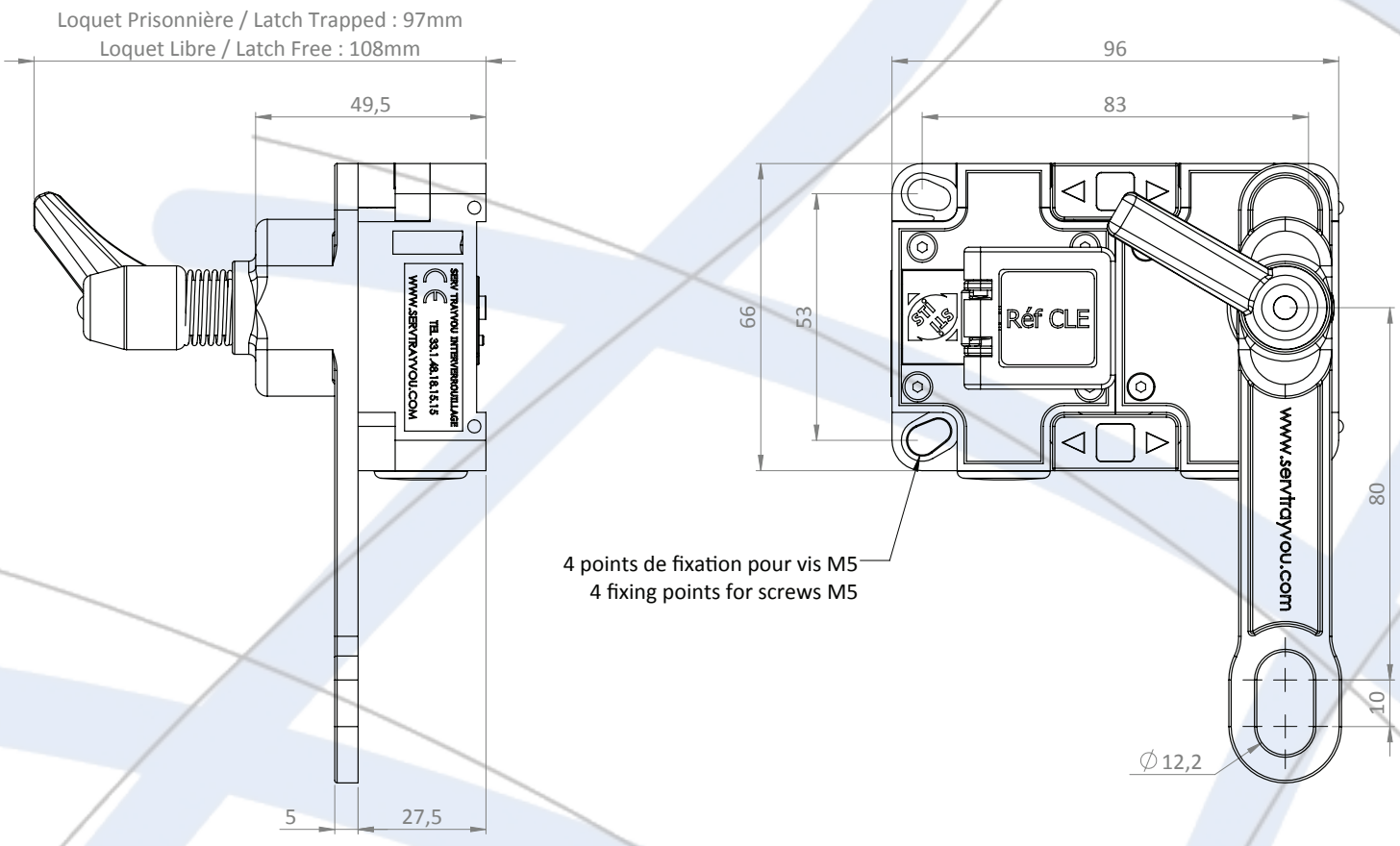
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

NX access lock with one key entry



NX - Access lock

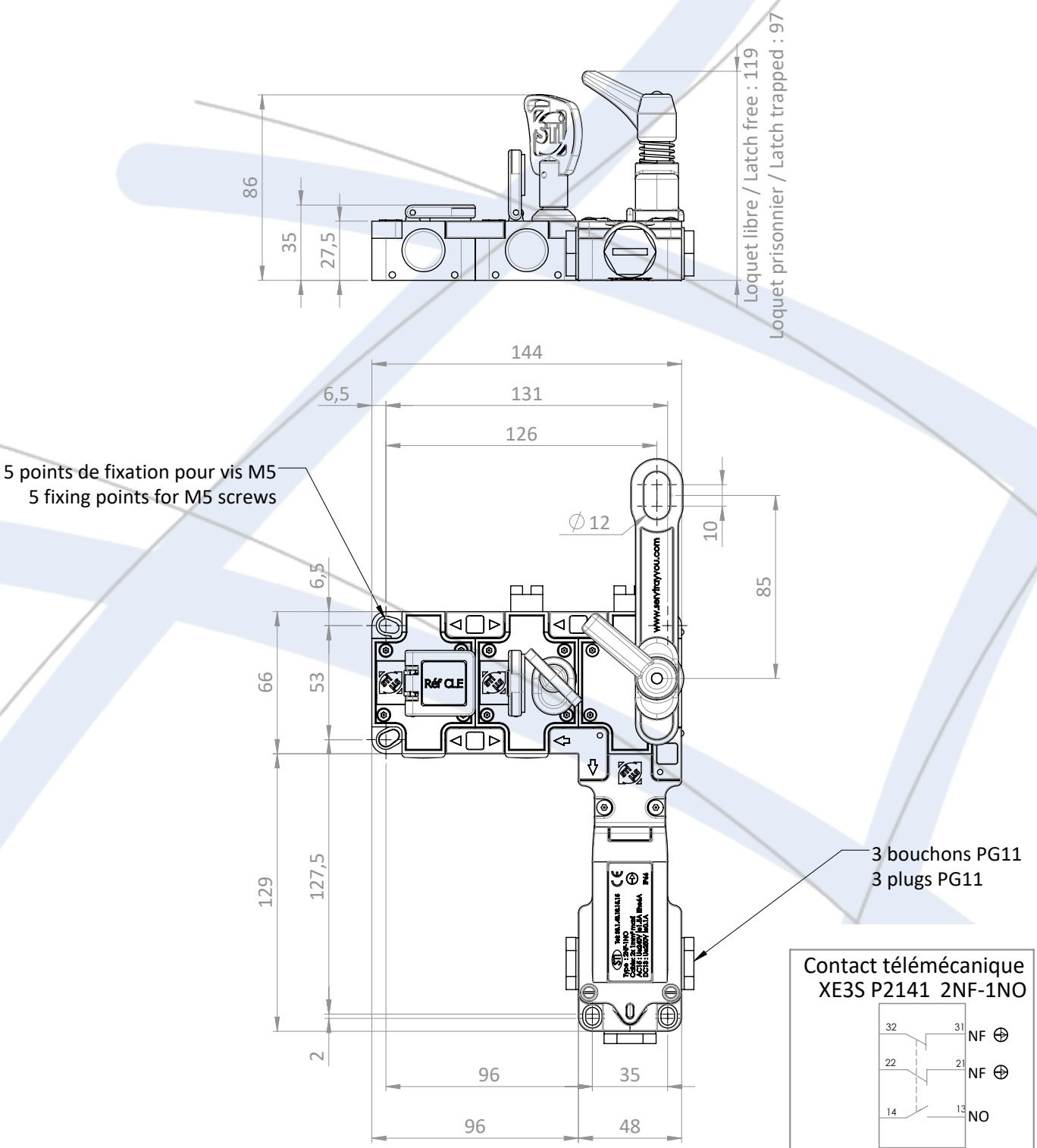
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

NX access lock with two switches key entries (in front position)



Contact télémécanique
XE3S P2141 2NF-1NO

Switches status when the key is trapped

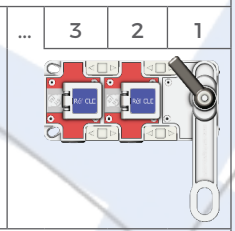
*screw terminal max section 0,75mm²

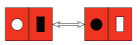
NX - Access lock

Part of the Sentric Group

ORDER INFORMATION

	NX	N° of entries	0	Latch	Function	Switch	Position	Order no
Reference	NX							
Example	NX	4	0	L85	AK	BS	2	0

1	N° of entries	From 2 to 5 entries (including 1 latch entry)
2	Latch	L85 = Standard latch 85mm C20 = Chain latch 20cm C60 = Chain latch 60cm LTS = Standard T-latch LTC = Lockout T-latch (for exchange function) LSP = Special latch (see Order no) CSP = Key catch with special chain (see Order no)
3	Function	The function determines the key position (in or out). See FUNCTION table
4	Switch	NS = No Switch BS = Back Switch FS = Front Switch
5	Position	From 1 to 5 which shows the contact position on the device starting from the right 
6	Order no	For specific applications. This number is assigned by STI for an adapted product

N° of entries	Function	Principle
2	BT	
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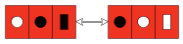
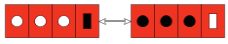
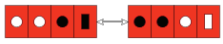
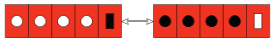
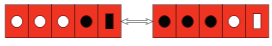
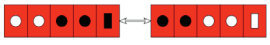
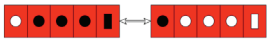
3	BW	
4	BY	
4	BZ	
4	CA	
5	CC	
5	CD	
5	CE	
5	CF	

Legend		
	○	free key
	●	trapped key
	▮	trapped latch
	▯	free latch

NX - Access lock

Part of the Sentric Group

ACCESSOIRES

- Kit support loquet (ref. 201561)

CONTACTS

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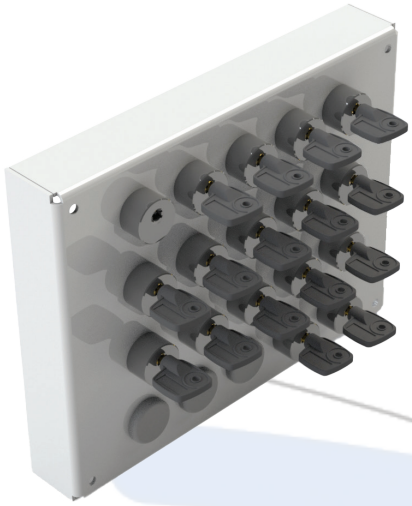
ASL/HSL Key Exchange Box

Part of the Sentric Group



The key exchange box is designed to allow the release of secondary keys by trapping one or more initial keys.

It is presented in a box format and each row has a set of 5 key entries.

The need for this type of product usually arises where there is multiple access to a hazardous area.

The key exchange box will be the link between the isolation locks and the access locks to the hazardous area.

Trapped Key Interlocks

ENERGY

USAGE

The key exchanger box is used as part of a safe guarding system.

This lock is not designed to secure access to a safe, external access to a building, for doors or access gates.

INSTALLATION

A safety lock must be fitted with appropriate fixings (not supplied with the lock).

Important:

To prevent unauthorised removal, the lock must be fitted with a stainless steel rivet or stainless steel security screws and secured with a threadlocker.

Tightening torque: 5Nm

The lock must be installed by a competent and qualified person.

MAINTENANCE

No maintenance of the product is recommended. However, to improve its operation and possibly increase its life span, adding "Xenium micronised graphite powder" to the lock is accepted.
Any other product is prohibited.

ASL/HSL Key Exchange Box

Part of the Sentric Group

TECHNICAL DATA

Weight	Starting at 1,17 kg for 6 entries
Material	- Cylinder - Rotor 5000 : 6064-T9 aluminium / Rotor 6000 : Grivory GVX-65h composite Stator : 6064-T9 aluminium - Case - AISI 304L stainless steel - Cam - PA6-6 nylon
Product finishing	Anodised black (cylinder)
Temperature rating	-35°C / +120°C for the lock
Salt spray tolerance	240h
Watertightness	IPXX
IK rating	IK08
Vibrations	0.7mm @10-55HZ 1 oct/min in 3 axes
Retentive strength	250N-key
Lifespan	1000000 cycles*
B10d	200000 cycles*
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

*Aluminium rotor version

OPTIONS

- Flat key (RONIS type) or star key (PROFALUX type)
- Rotor type (aluminium or composite)

APPLICATION

The system includes a lock on the machine's power supply control device, an exchange box, and at least 5 access locks for entering the hazardous area. Under normal machine operation (motor powered), the power key A is trapped in the Hercules lock on the machine disconnector and the access door to the hazardous area is closed and locked.

To access the hazardous area:

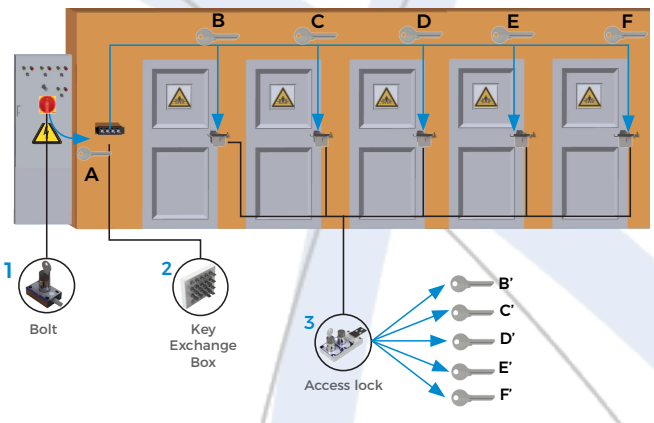
1. The operator cuts the power to the machine allowing the release of the power key A.

2. The power key A is then trapped in the key exchange box, releasing the access keys B, C, D, E and F

3. Access keys B C, D, E and F can then be trapped in the access locks, each releasing a personal key and a strike plate allowing access to the area.

The personal keys B', C', D', E' and F' are kept by the operator during operation to protect against accidental locking and starting.

4. To put the machine back into service, the operator follows the same steps in reverse order



ASL/HSL Key Exchange Box

Part of the Sentric Group

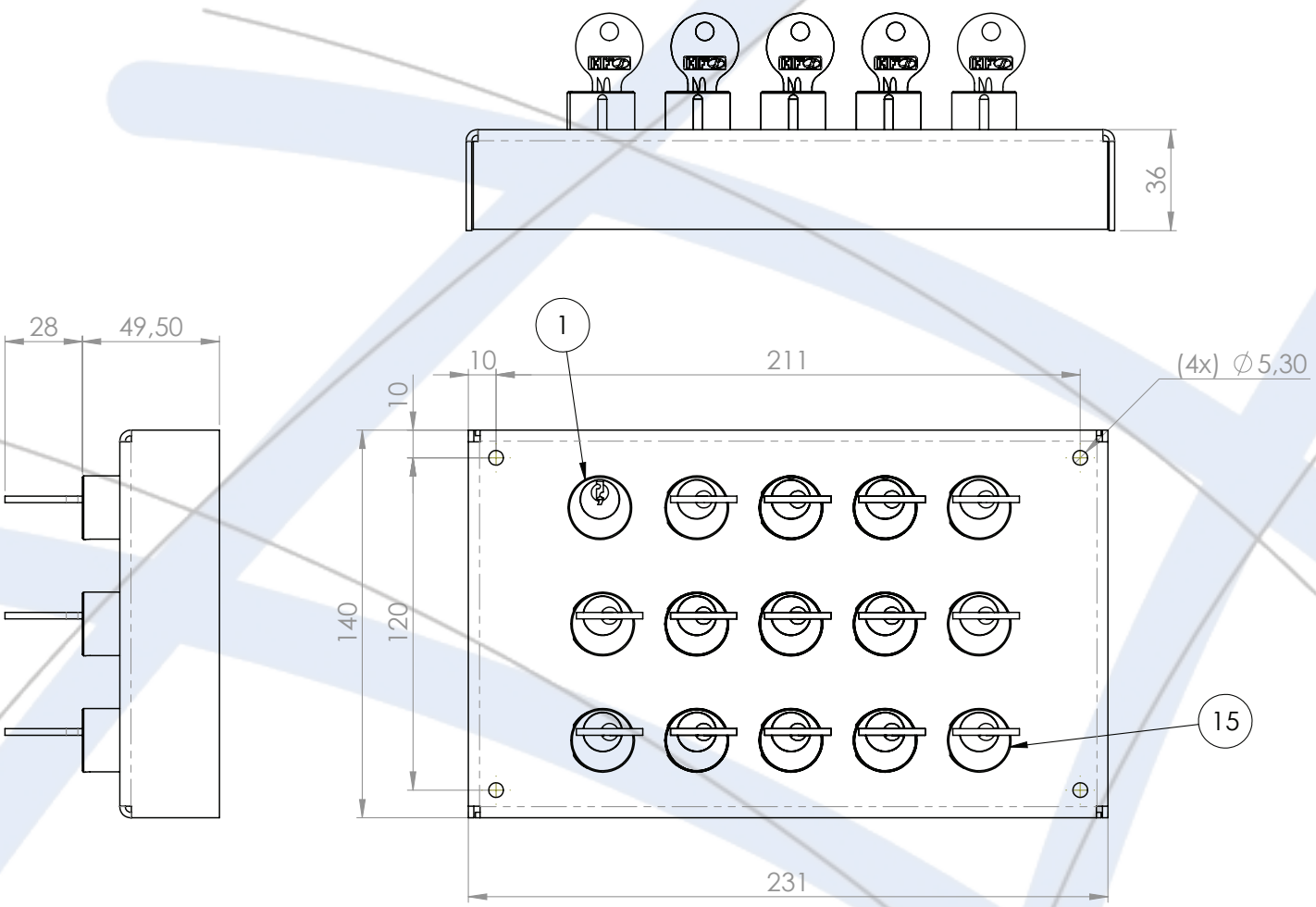
DRAWING

Dimensions: in mm

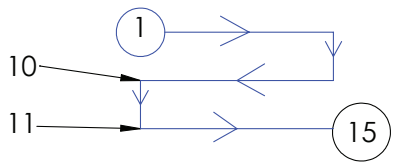
Available as a flat key (RONIS) or star key (PROFALUX)

Note: For safe mounting, use security screws.

Flat key exchange box (15 entries version)



Sens de libération des clés
(key release direction and rotation)



Note: Tous les cylindres sont en rotation 1/4 tour Droite sauf n°10 et 11 en 1/4 Gauche
(All cylinders are on 1/4 Right rotatin except n ° 10 and 11

ASL/HSL Key Exchange Box

Part of the Sentric Group

ORDER INFORMATION

	Cylinder profile	Product type	N° of cylinder	Key profile	Rotor type	Particularity
Reference		SL				
Example	A	SL	15	EL	5	000

Cylinder profile	A = Flat key H = Star key
N° of cylinder	Min. 6
Key profile	Star key = PS 5-piston flat key = EK, EL, EM, EP, ET, EV 6-piston flat key = GK, GL, GM, GP, GT, GV
Rotor type	5 = Aluminium 6 = Composite
Particularity	000 = Standard xxx = Customised

ACCESSORIES

- Flip cap (ref. D23556)

CONTACTS

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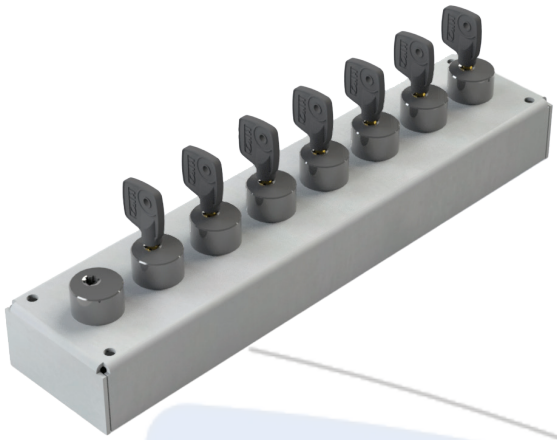
AST/HST Key Exchange Box

Part of the Sentric Group



The key exchange box is designed to allow the release of secondary keys by trapping one or more initial keys.

The need for this type of product usually arises where there is multiple access to a hazardous area.

The key exchange box will be the link between the isolation locks and the access locks to the hazardous area.

Trapped Key Interlocks

ENERGY

USAGE

The key exchanger box is used as part of a safe guarding system.

This lock is not designed to secure access to a safe, external access to a building, for doors or access gates.

INSTALLATION

A safety lock must be fitted with appropriate fixings (not supplied with the lock).

Important:

To prevent unauthorised removal, the lock must be fitted with a stainless steel rivet or stainless steel security screws and secured with a threadlocker.

Tightening torque: 5Nm

The lock must be installed by a competent and qualified person.

MAINTENANCE

No maintenance of the product is recommended. However, to improve its operation and possibly increase its life span, adding "Xenium micronised graphite powder" to the lock is accepted.
Any other product is prohibited.

AST/HST Key Exchange Box

Part of the Sentric Group

TECHNICAL DATA

Weight	Starting at 271 gr for 2 entrles
Material	- Cylinder - Rotor 5000 : 6064-T9 aluminium / Rotor 6000 : Grivory GVX-65h composite Stator : 6064-T9 aluminium - Case - AISI 304L stainless steel - Cam - PA6-6 nylon
Product finishing	Anodised black (cylinder)
Temperature rating	-35˚C / +120˚C for the lock -35˚C / +85˚C for the switch
Salt spray tolerance	240h
Watertightness	IPXX
IK rating	IK08
Vibrations	0.7mm @10-55HZ 1 oct/min in 3 axes
Retentive strength	250N-key
Lifespan	1000000 cycles*
B10d	200000 cycles*
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch)
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

*Aluminium rotor version

OPTIONS

- Flat key (RONIS type) or star key (PROFALUX type)
- Electrical switch 1NO-1NC, double break switch. Contact us to configure more switches.
- Rotor type (aluminium or composite)

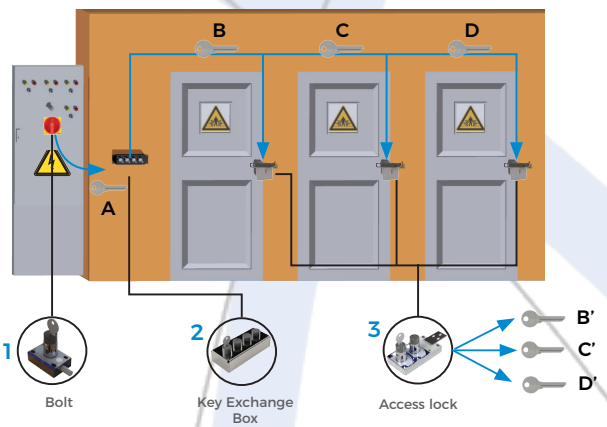
APPLICATION

The system includes a lock on the machine's power supply control device, an exchange box,, and 3 access locks for entering the hazardous area. Under normal operation (voltage emission), the power key A is trapped in the electromechanical lock and the access door to the hazardous area is closed and locked.

To access the hazardous area:

1. The operator cuts the power to the machine allowing the release of the power key A.
2. The power key A is then trapped in the key exchange box, releasing the access keys B, C and D.
3. Access keys B C and D can then be trapped in the access locks, each releasing a personal key and a strike plate allowing access to the area.

   The personal keys B', C' and D' are kept by the operator during operation to protect against accidental locking and starting.
4. To put the machine back into service, the operator follows the same steps in reverse order



AST/HST Key Exchange Box

Part of the Sentric Group

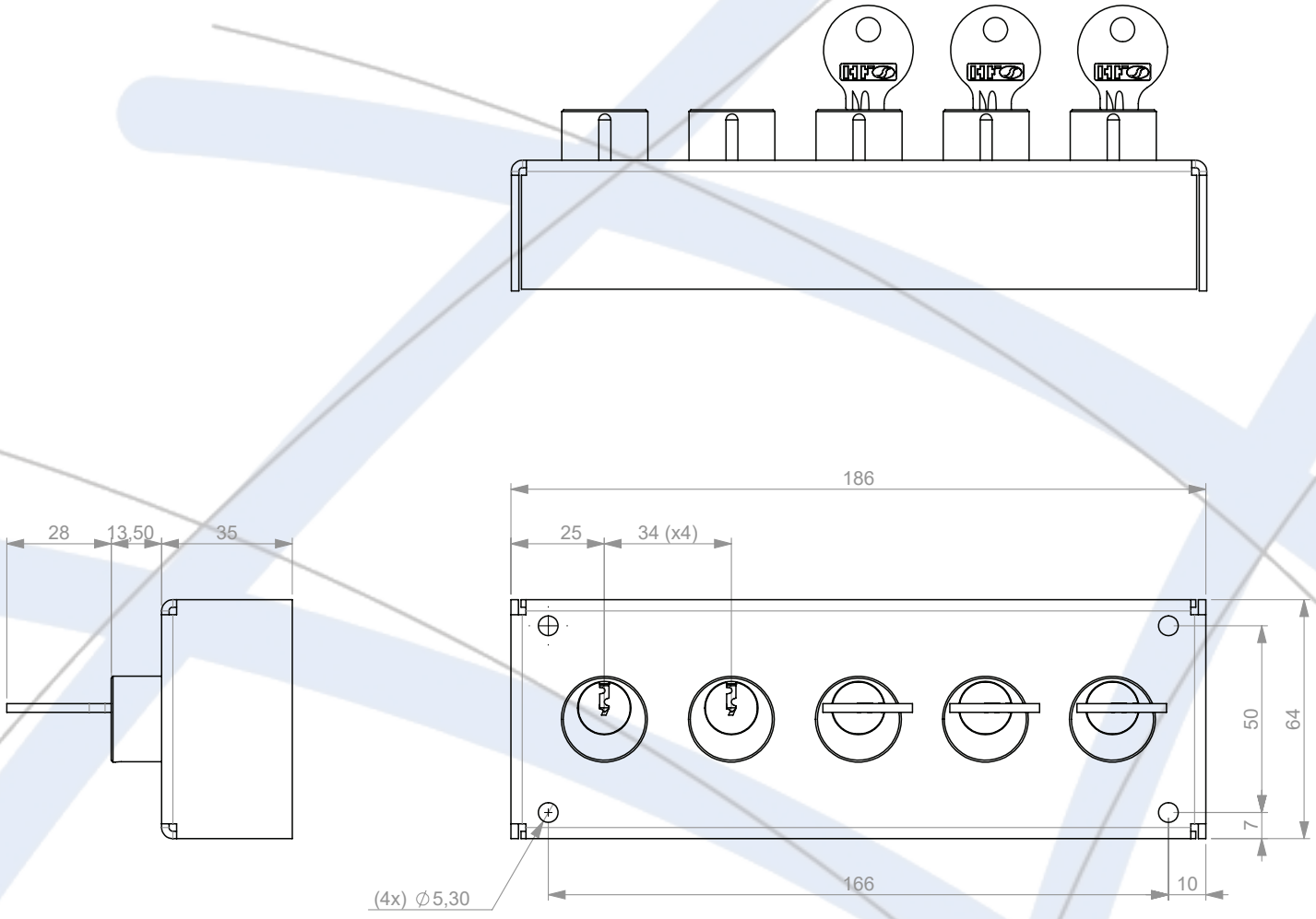
DRAWING

Dimensions: in mm

Available as a flat key (RONIS) or star key (PROFALUX)

Note: For safe mounting, use security screws.

Flat key exchange box (5 entries version)



Référence Produit avec clé type:
(product reference following key type:)

- Plate = AST5xx5000 (flat)
  - A = Clé plate
  - H = Clé étoile
  - xx = Profile EL,EK,EP,EM,ET,EV GL,GK,GP,GM,GT,GV
  - 5 = Rotor Aluminium
  - 6 = Rotor Composite

AST/HST Key Exchange Box

Part of the Sentric Group

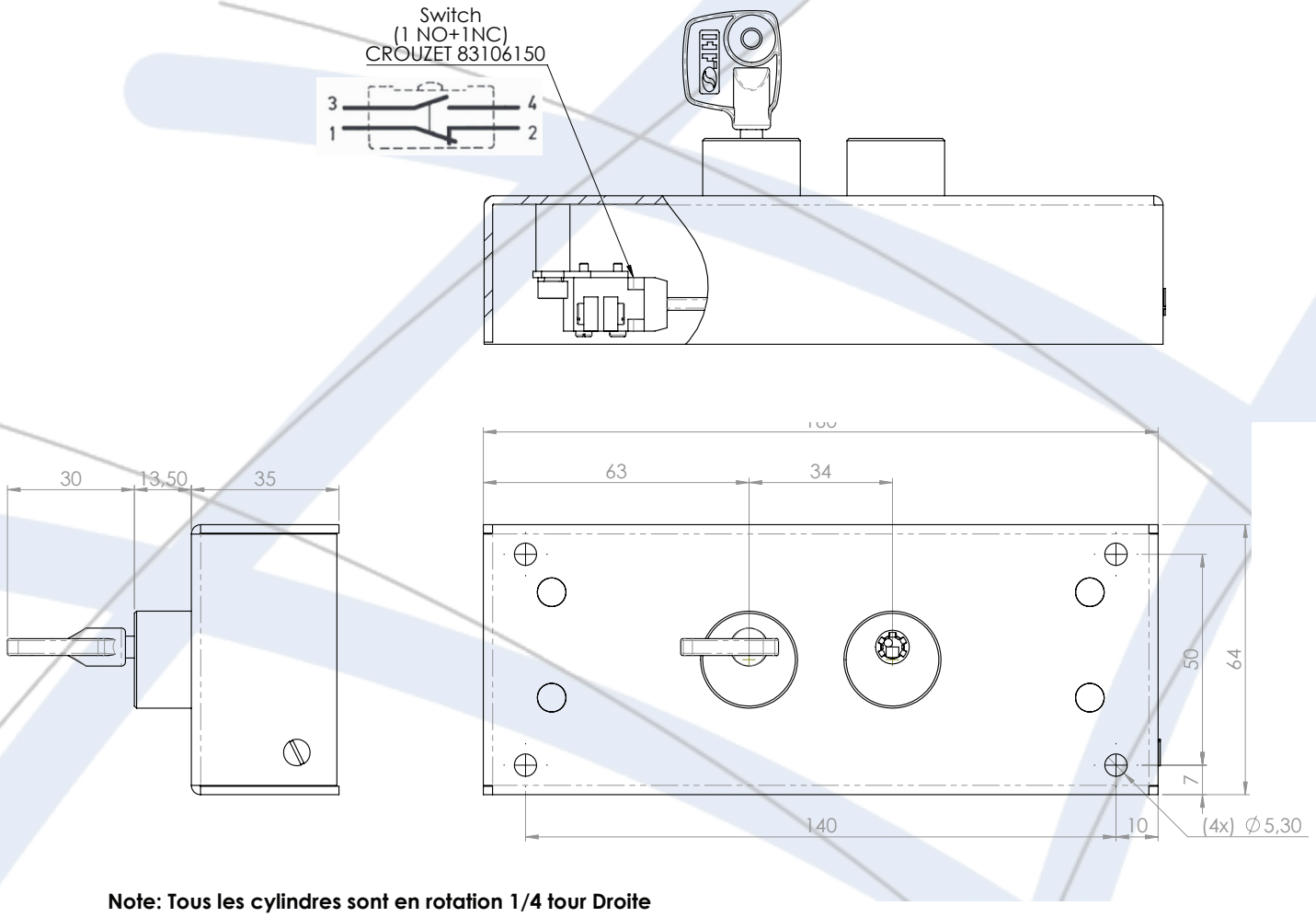
DRAWING

Dimensions: in mm

Available as a flat key (RONIS) or star key (PROFALUX)

Note: For safe mounting, use security screws.

Star key exchange box witch a switch (2 entries version)



Note: Tous les cylindres sont en rotation 1/4 tour Droite

(All cylinders are on 1/4 Right rotatin)

AST/HST Key Exchange Box

Part of the Sentric Group

ORDER INFORMATION

	Cylinder profile	Product type	N° of cylinder	Key profile	Rotor type	Particularity
Reference						
Example	A	ST	3	EL	5	000

Cylinder profile	A = Flat key H = Star key
Product type	ST = échangeur standard SC = échangeur à contact
N° of cylinder	Min. 2
Key profile	Star key = PS 5-piston flat key = EK, EL, EM, EP, ET, EV 6-piston flat key = GK, GL, GM, GP, GT, GV
Rotor type	5 = Aluminium 6 = Composite
Particularity	000 = Standard xxx = Customised

ACCESSORIES

- Flip cap (ref. D23556)

CONTACTS

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TMEC - Key Exchange Box

Part of the Sentric Group

The TMEC key exchange box is designed to allow the release of secondary keys by trapping one or more primary keys.

The need for this type of product usually arises where there is multiple access to a hazardous area. It is available with 4 or more secondary keys.

The key exchange box will be the link between the isolation locks and the access locks to the hazardous area.

Trapped Key Interlocks

INDUSTRY

ENERGY

RAILWAY

USAGE

The TMEC key exchange box should be used to provide safe access to potentially hazardous areas where there are two or more access points to that area.

The TMEC key exchange box is not designed to secure access to a safe, external access to a building, for doors or access gates.

INSTALLATION

A safety lock must be fitted with appropriate fixings.

Important:

To prevent unauthorised removal, the lock must be fitted using rivets or M5 stainless steel security screws (washers, nuts and screws).

Installation must be carried out by a competent and qualified person.

MAINTENANCE

Periodic visual inspections should be carried out by the Facility Manager or Safety Manager to ensure that there is no distortion or corrosion/erosion/acid build-up and that the lock marking plate is clearly legible.

Do not lubricate the lock cylinder with oil or grease.

TMEC - Key Exchange Box

Part of the Sentric Group

TECHNICAL DATA

Weight	Starting at 5,2 kg for TMEC 1/5
Material	- 304 stainless steel - Flip cap gasket: Silicium cellulaire - Marking plate: Aluminium - Riveted plate (Brass rivets) or glued (Acrylic - Loctite AA330)
Product finishing	Cover plate : Red polyester paint (RAL 3000)
Temperature rating	-35°C / +120°C
Salt spray tolerance	240h
Watertightness	IP4X
IK rating	IK08
Vibrations	0.7mm @10-55HZ 1 oct/min in 3 axes
Retentive strength	250N-key
Lifespan	1000000 cycles
B10d	200000 cycles
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch) - EMC Directive 2014/30/EU
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

OPTIONS

- 5 to 40 key entries
- Type S: linear key release. Trapping the primary key allows the secondary keys to be released line by line (vertically).
- Type L: random key release. Trapping the primary key allows any secondary key to be released.

APPLICATION

The system includes an RTK key switch to control the machine's power supply, a TMEC, and at least 5 NX access locks for entering the hazardous area. Under normal machine operation (motor powered), the power key A is trapped in the RTK and the access doors to the hazardous area are closed and locked.

To access the hazardous area:

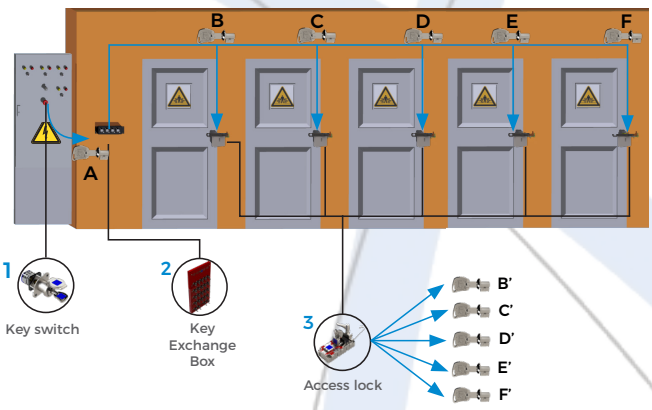
1.The operator releases the RTK's power key A, thus cutting off the machine's power.

2.The power key A is then trapped in TMEC the key exchange box, releasing the access keys B,C,D, E and F.

3.Access keys B, C, D, E and F can then be trapped in the NX access locks, each releasing a lockout key and a latch allowing access to the area.

Lockout keys B', C', D', E' and F' are kept by the operator during operation to protect against accidental locking and switching on.

4.To put the machine back into services, the operator follows the same steps in reverse order.



TMEC - Key Exchange Box

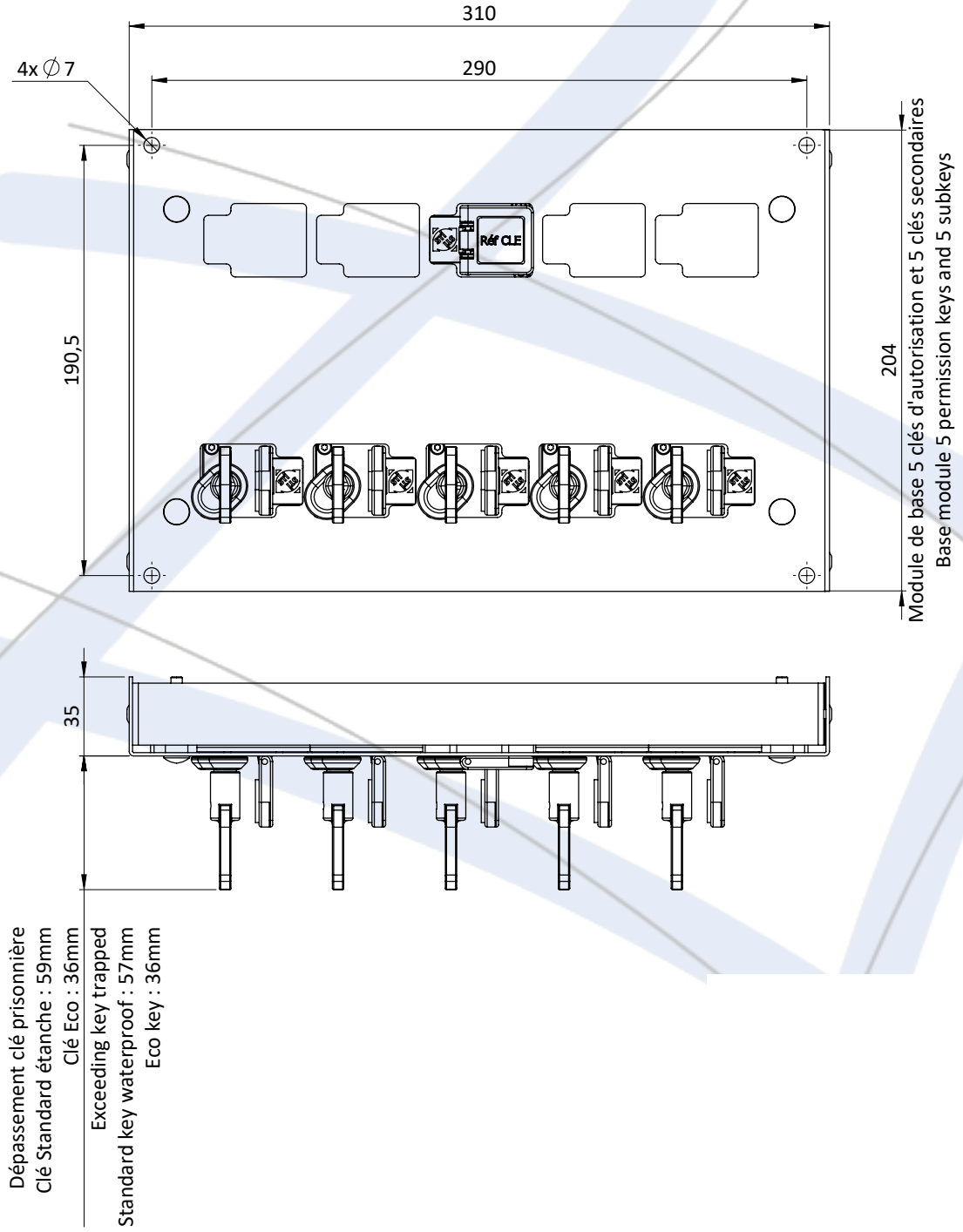
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

TMEC Key Exchange Box 1/5



TMEC - Key Exchange Box

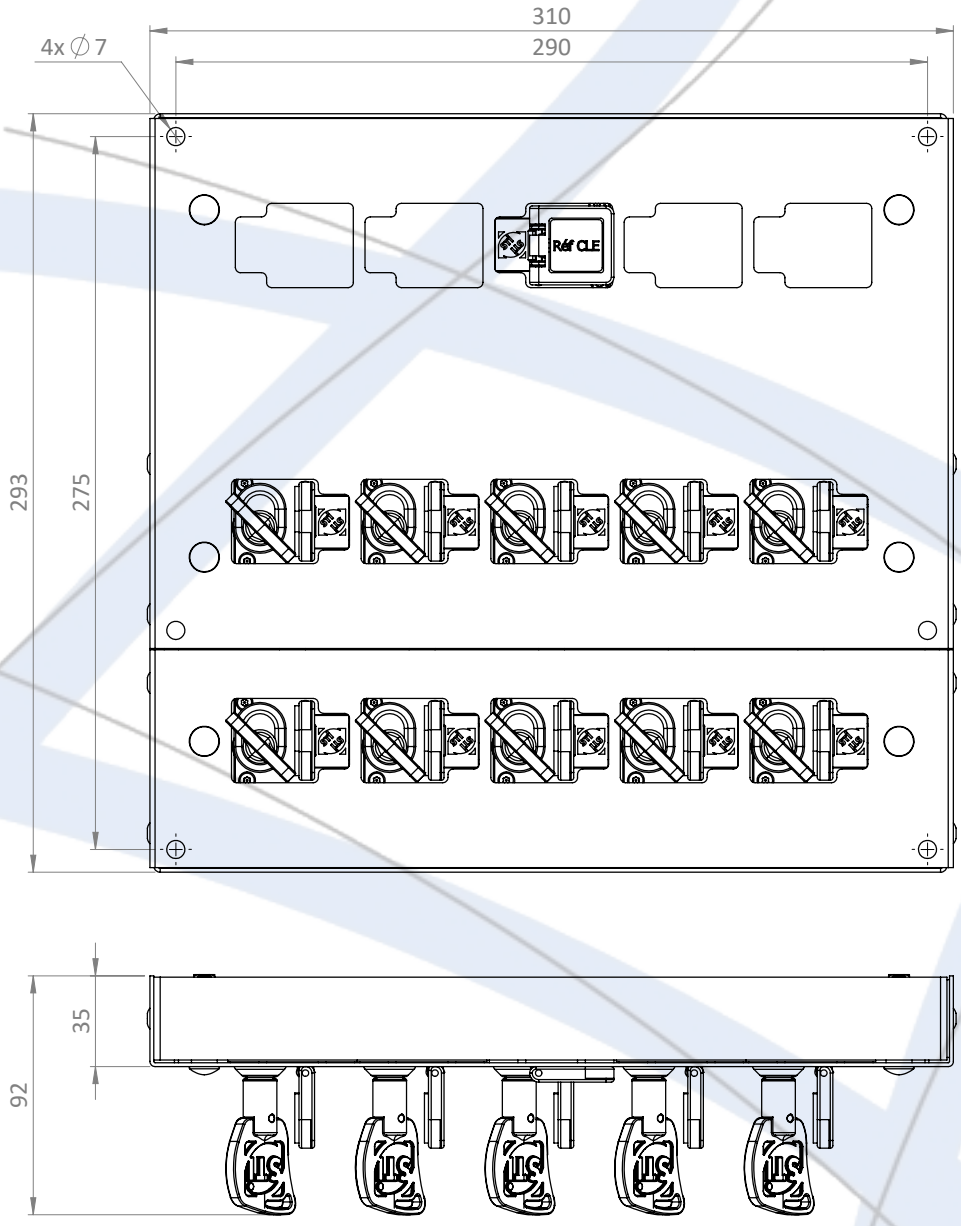
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

TMEC Key Exchange Box 1/10



TMEC - Key Exchange Box

Part of the Sentric Group

ORDER INFORMATION

	TMEC	Type	N° of primary keys	N° of secondary keys	Order no.
Reference	TMEC				
Example	TMEC	S	1E	10S	000

1	**Type**	S = Standard (linear release of secondary keys) L = LCSS (random release of secondary keys)
2	**Primary keys**	Minimum 1 and up to 35 incoming keys*. 'E' stands for incoming
3	**Secondary keys**	Minimum 4 and up to 39 outgoing keys*. 'S' stands for outgoing
4	**Order no.**	For specific applications. This number is assigned by STI for an appropriate product

*The total number of keys (in and out) combined must not exceed 40 keys

ACCESSORIES

- None

CONTACTS

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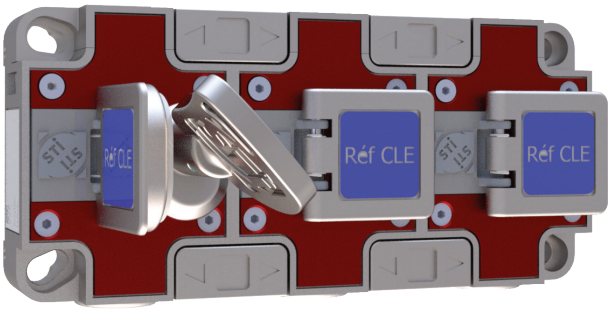
NX - Key Exchange Box

Part of the Sentric Group



The NX Exchange box is designed to allow the release of secondary keys by trapping one or more primary keys.

The need for this product type usually arises where there are multiple access points to a single hazardous area. It is available for up to 5 keys.

The key exchange box will be the link between the isolation locks and the hazardous area access locks.

Trapped Key Interlocks

INDUSTRY

ENERGY

RAILWAY

USAGE

The NX key exchange box should be used to provide safe access to a hazardous area where there are two or more access points to the area.

The NX key exchange box is not designed to secure access to a safe, external access to a building, for doors or access gates.

INSTALLATION

A safety lock must be fitted with appropriate fixings.

Important:

To prevent unauthorised removal, the lock must be fitted using rivets or M5 stainless steel security screws (washers, nuts and screws).

Installation must be carried out by a competent and qualified person.

MAINTENANCE

Periodic visual inspections should be carried out by the Facility Manager or Safety Manager to ensure that there is no distortion or corrosion/erosion/acid build-up and that the lock marking plate is clearly legible.

Do not lubricate the lock cylinder with oil or grease.

NX - Key Exchange Box

Part of the Sentric Group

TECHNICAL DATA

Weight	Starting at 0,8 kg (for 2 keys entries)
Material	- 304 stainless steel - Flip cap gasket: Cellular Silicon - Marking plate: Aluminium - Riveted plate (Brass rivets) or glued (Acrylic - Loctite AA330)
Product finishing	- Cover: Red polyester paint (RAL 3000)
Temperature rating	-35°C / +120°C for both lock & switch
Salt spray tolerance	240h
Watertightness	IP4X-lock IP66-switch
IK rating	IK08 lock IK08 switch
Vibrations	0.7mm @10-55HZ 1 oct/min in 3 axes
Retentive strength	250N-key
Lifespan	1000000 cycles
B10d	200000 cycles
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch)
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

OPTIONS

- 2 to 5 keys entries
- Switch 2NC-1NO (standard) - switches status when the key is trapped
- Without flip cap
- Not painted
- Lock with padlock guard: (lockout by padlock, if several technicians are involved)

APPLICATION

The system includes a RTK key swith to control machine control circuit, a NX key exchange box, and 3 NX access lock for entering and 3 NX access locks for entering the hazardous area. Under normal machine operation (motor powered), the power key A is trapped in the RTK and the access doors to the hazardous area are closed and locked.

To access the hazardous area:

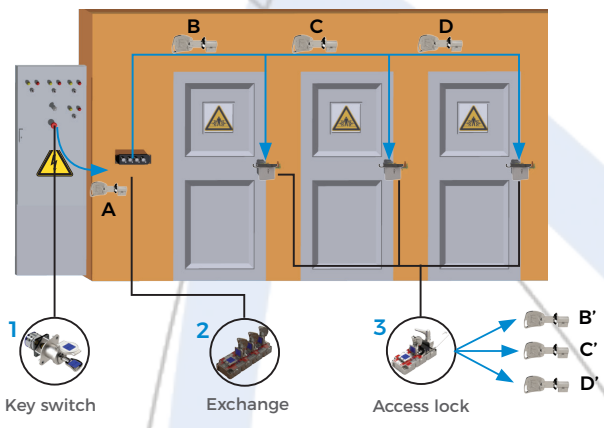
1. The operator releases the isolation key A from the RTK, thus cutting off the power to the machine.

2. The isolation key A is then trapped in the NX exchange, releasing the access keys B, C and D.

3. The access keys B, C and D can then be trapped in the MS access locks each releasing a lockout key and latch allowing access to the area.

Lockout keys B', C' and D' are held by the operator during operation to protect against accidental lockout/tagout.

4. To put the machine back into service, the operator follows the same steps in reverse order.



NX - Key Exchange Box

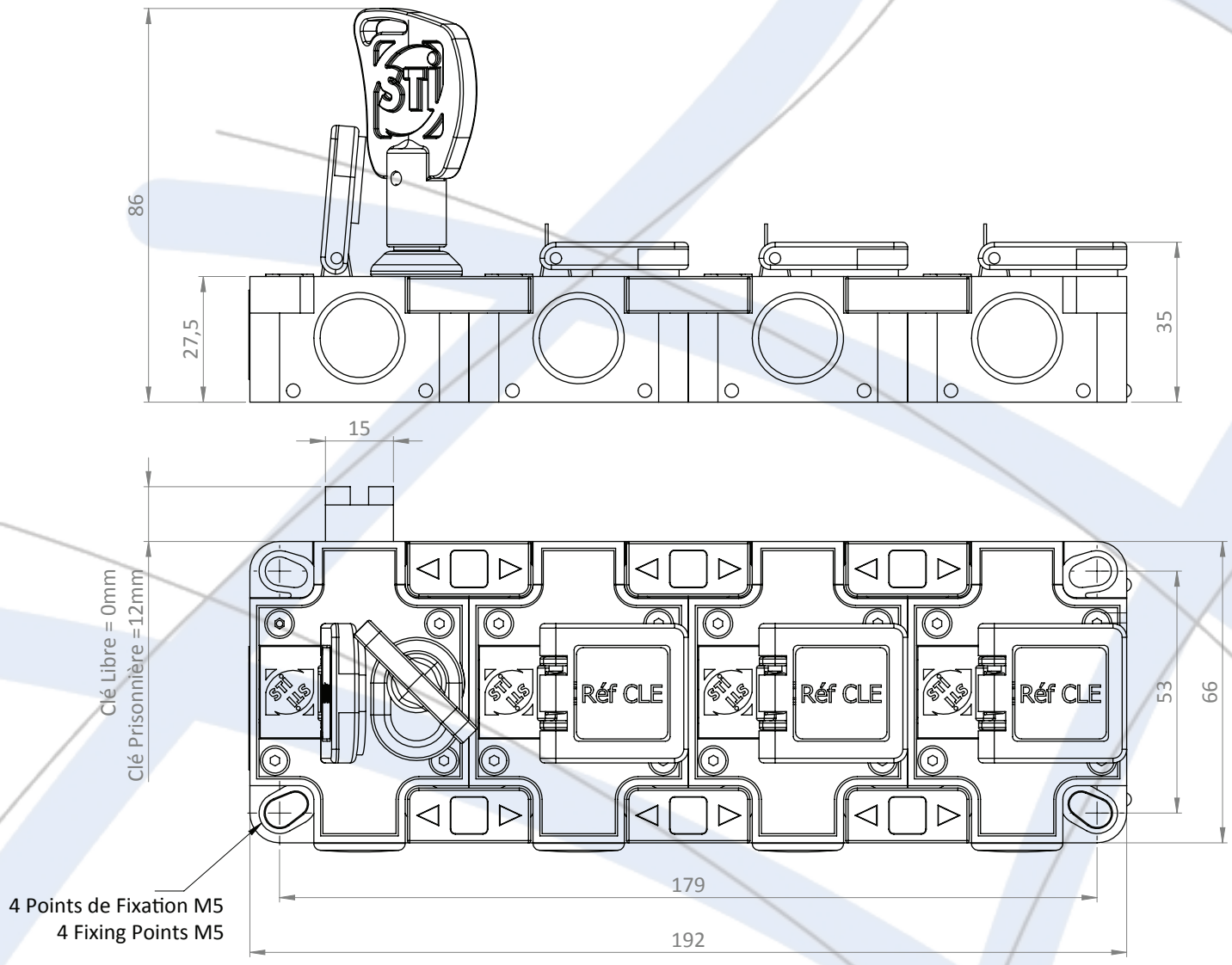
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

NX Exchange with 4 keys entries



NX - Key Exchange Box

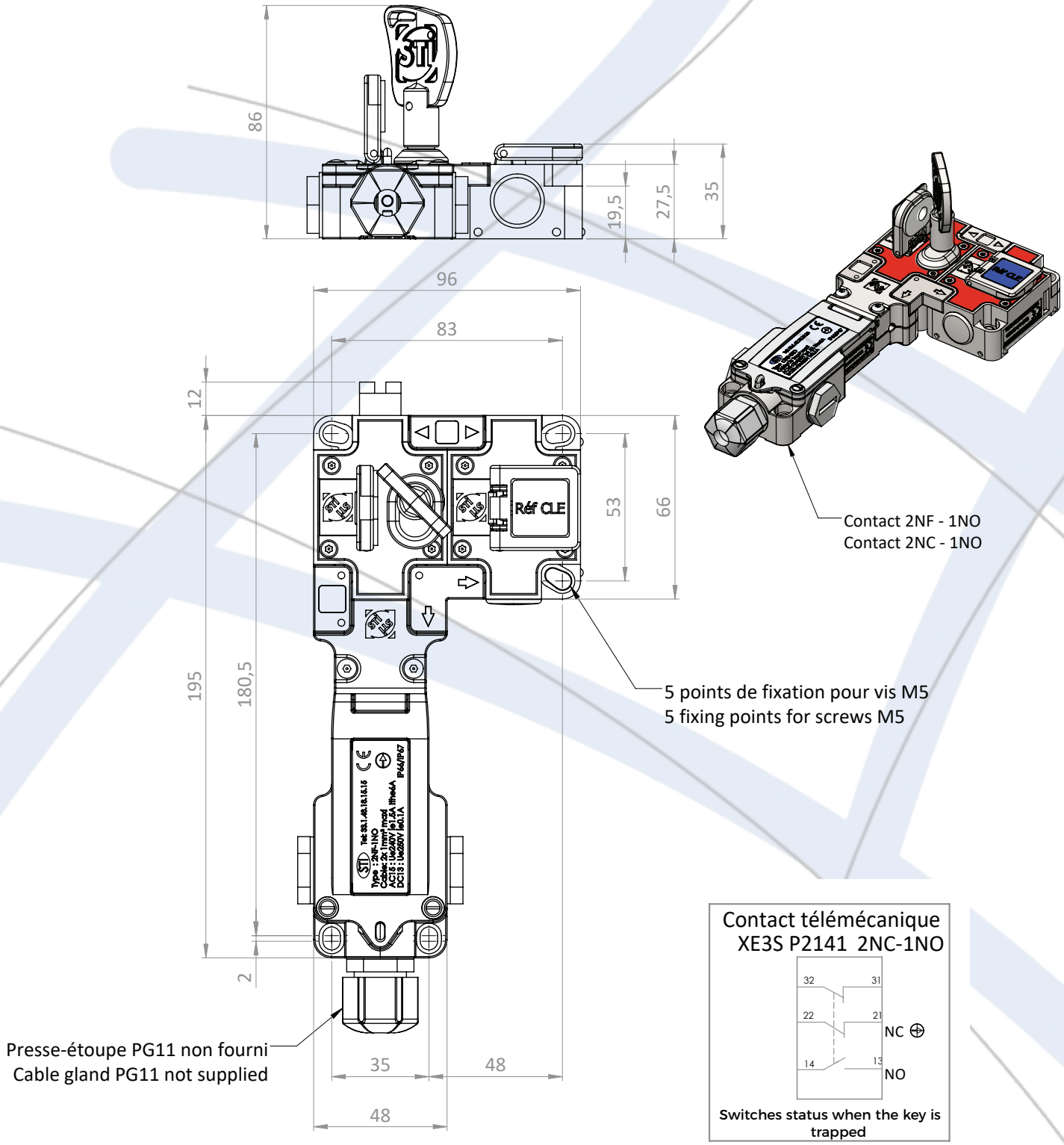
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

NX Exchange with two switches key entries (in front position)



Contact télémécanique
XE3S P2141 2NC-1NO

Switches status when the key is trapped

*screw terminal max section 0,75mm².

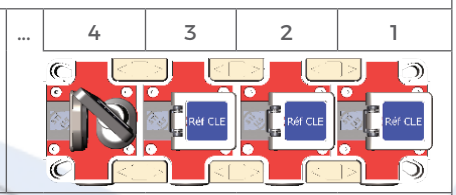
NX - Key Exchange Box

Part of the Sentric Group

ORDER INFORMATION

	NX	N° of entries	0	ECH	Function	Switch	Position	Order no
Reference	NX							
Example	NX	4	0	ECH	AK	BS	2	0

1	N° of entries	From 2 to 5 entries
2	Function	The function determines the key position (in or out). See FUNCTION table
3	Switch	NS = No Switch BS = Back Switch FS = Front Switch
4	Position	From 1 to 5 which shows the contact position on the device starting from the right
5	Order no	For specific applications. This number is assigned by STI for an adapted product



N° of entries	Function	Principle
2	AC	
3	AE	
3	AG	
4	AK	
4	AL	
4	AM	
5	AP	
5	AQ	
5	AR	
5	AS	

Legend		
	○	free key
	●	trapped key

NX - Key Exchange Box

Part of the Sentric Group

ACCESSORIES

- None

CONTACTS

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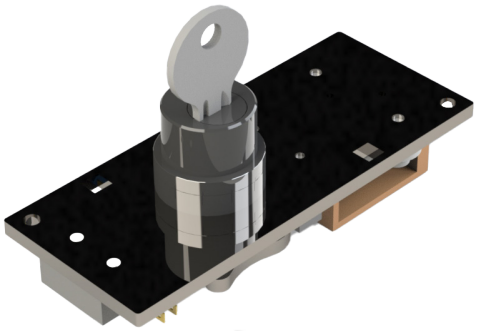
APE/HPE Electromechanical lock plate



The electromechanical lock plate is an electrically controlled isolation lock to be mounted on a panel. It can be used when the key release is conditioned by a PLC.

The lock is available as standard with 1 cylinder and has mechanical and electrical operating options.

Trapped Key Interlocks

ENERGY

USAGE

The electromechanical lock plate is used as part of a safe guarding system.

This lock is not designed to secure access to a safe, external access to a building, for doors or access gates.

INSTALLATION

A safety lock must be fitted with appropriate fixings (not supplied with the lock).

Important:

To prevent unauthorised removal, the lock must be fitted with a stainless steel rivet or stainless steel security screws and secured with a threadlocker.

Tightening torque: 5Nm

The lock must be installed by a competent and qualified person.

MAINTENANCE

No maintenance of the product is recommended. However, to improve its operation and possibly increase its life span, adding “Xenium micronised graphite powder” to the lock is accepted.
Any other product is prohibited.

APE/HPE Electromechanical lock plate

TECHNICAL DATA

Weight	Starting at 457 gr for 1 entry
Material	- Cylinder - Rotor 5000 : 6064-T9 aluminium / Rotor 6000 : Grivory GVX-65h composite Stator : 6064-T9 aluminium - Cam - AISI 304 inox - Plate - AISI 304 inox
Product finishing	Anodised black (cylinder)
Operating voltage and power consumption	24VAC / 24VDC - 7,5W 30VAC / 30VDC- 7,5W 48VAC / 48VDC- 7,5W 110VAC / 110VDC - 7,5W 125VAC / 125VDC - 7,5W 220AC / 220VDC - 7,5W
Temperature rating	Currently being evaluated
Salt spray tolerance	Currently being evaluated
Watertightness	Currently being evaluated
IK rating	Currently being evaluated
Vibrations	Currently being evaluated
Retentive strength	250N-key
Lifespan	Currently being evaluated
B10d	Currently being evaluated
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch) - EMC Directive 2014/30/EU
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Minéraux sources de conflit	Certificate available on our website, Resource Centre section

OPTIONS

- Flat key (RONIS type) or star key (PROFALUX type)
- Rotor type (aluminium or composite)
- Key release by voltage emission or absence
- Push button/warning light
- Various electrical contact configurations
- Multi-cylinder version available under feasibility study

APE/HPE Electromechanical lock plate

APPLICATION

The system includes an electromechanical lock plate as well as an access lock for entering the hazardous area. Under normal operation (voltage emission), the power key A is trapped in the electromechanical lock plate and the access door to the hazardous area is closed and locked.

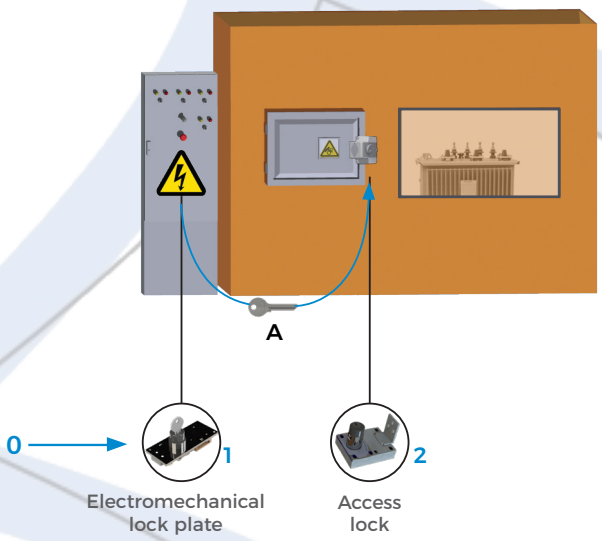
To access the hazardous area:

0. A key removal authorisation is sent to the electromechanical lock plate by a PLC when the safety conditions are met (power failure in the area).

1. The operator releases the power key A from the electromechanical lock plate.

2. The power key A is then trapped in the access lock, releasing the latch allowing access to the area.

3. To put the machine back into service, the operator follows the same steps in reverse order



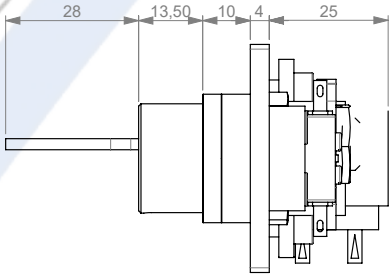
DRAWING

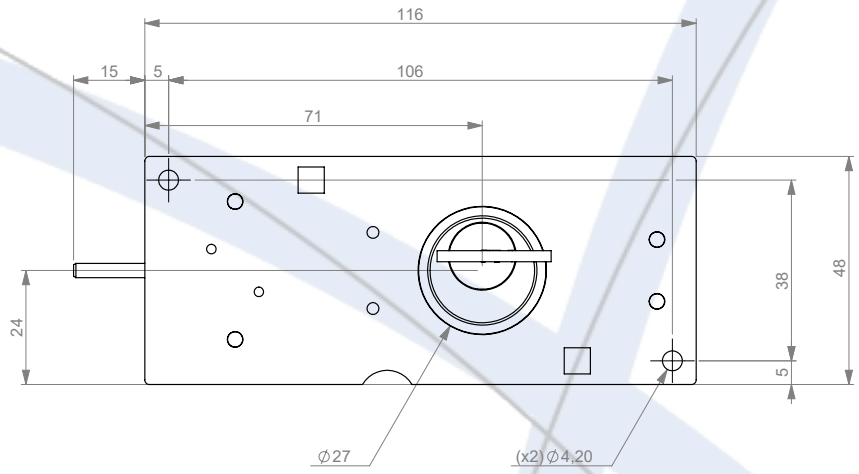
Dimensions: in mm

Available as a flat key (RONIS) or star key (PROFALUX)

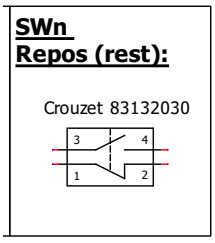
Note: For safe mounting, use security screws.

Electromechanical lock plate with one flat key entry





STANDARD WIRING DIAGRAM



APE/HPE Electromechanical lock plate

ORDER INFORMATION

	Cylinder profile	Product type	N° of cylinder	N° of bolts	Electro function	Key profile	Rotor type	Particularity
Référence								
Exemple	A	PE	1	0	A	EL	5	000

Cylinder profile	A = Flat key H = Star key
N° of cylinder	1 (multi-cylinder version on request)
N° of bolts	0
Electromechanical function	A : release by voltage emission B : voltage-free release
Key profile	Star key = PS 5-piston flat key = EK, EL, EM, EP, ET, EV 6-piston flat key = GK, GL, GM, GP, GT, GV
Rotor type	5 = Aluminium 6 = Composite
Particularity	000 = Standard 225 = 2 switches version xxx = Customised

APE/HPE Electromechanical lock plate

ACCESSORIES

• Cache entrée de clé (ref. D23556)

CONTACTS

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ASE/HSE Electromechanical lock

Part of the Sentric Group

The electromechanical lock is an electrically controlled isolation lock. It can be used when the key release is conditioned by a PLC.

The lock is available from 1 to 3 cylinders and has various options for mechanical and electrical operation, wiring, housing type, connection and ancillary functions.

Trapped Key Interlocks

ENERGY

USAGE

The electromechanical lock is used as part of a safe guarding system.

This lock is not designed to secure access to a safe, external access to a building, for doors or access gates.

When using function A and/or B the solenoid should not be energized permanently. For permanent supply, use option C (with push-button) to limit the time of the solenoid being continuously energized.

INSTALLATION

A safety lock must be fitted with appropriate fixings (not supplied with the lock).

Important:

To prevent unauthorised removal, the lock must be fitted with a stainless steel rivet or stainless steel security screws and secured with a threadlocker.

Tightening torque: 5Nm

The lock must be installed by a competent and qualified person.

MAINTENANCE

No maintenance of the product is recommended. However, to improve its operation and possibly increase its life span, adding “Xenium micronised graphite powder” to the lock is accepted.
Any other product is prohibited.

ASE/HSE Electromechanical lock

Part of the Sentric Group

TECHNICAL INFORMATION

Weight	Starting at 1,25 kg for 1 entry
Material	- Cylinder - Rotor 5000 : 6064-T9 aluminium / Rotor 6000 : Grivory GVX-65h composite Stator : 6064-T9 aluminium - Cam - AISI 304 stainless steel - Boitier - Polyamide PPA - Cover - AISI 304 stainless steel
Product finishing	Anodised black (cylinder)
Operating voltage and power consumption	24VAC / 24VDC - 7,5W 30VAC / 30VDC- 7,5W 48VAC / 48VDC- 7,5W 110VAC / 110VDC - 7,5W 125VAC / 125VDC - 7,5W 220AC / 220VDC - 7,5W
Temperature rating	Currently being evaluated
Salt spray tolerance	Currently being evaluated
Watertightness	Currently being evaluated
IK rating	Currently being evaluated
Vibrations	Currently being evaluated
Retentive strength	250N-key To be tested-bolt
Lifespan	Currently being evaluated
B10d	Currently being evaluated
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch) - EMC Directive 2014/30/EU
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

OPTIONS

- Flat key (RONIS type) or star key (PROFALUX type)
- Up to 3 cylinders
- Rotor type (aluminium or composite)
- Key release by voltage emission or absence
- Various electrical contact configurations
- Specific boxes
- Adding a bolt on key entry

ASE/HSE Electromechanical lock

Part of the Sentric Group

APPLICATION

The system includes an electromechanical lock as well as an access lock for entering the hazardous area. Under normal operation (voltage emission), the power key A is trapped in the electromechanical lock and the access door to the hazardous area is closed and locked.

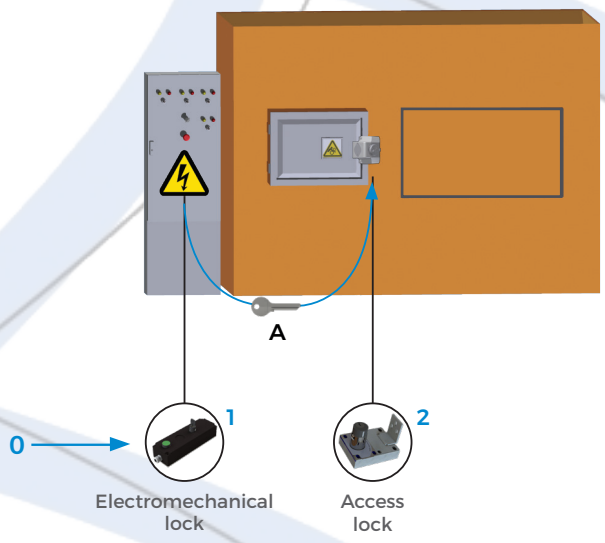
To access the hazardous area:

0. A key removal authorisation is sent to the electromechanical lock by a PLC when the safety conditions are met (power failure in the area).

1. The operator releases the power key A from the electromechanical lock.

2. The power key A is then trapped in the access lock, releasing the latch allowing access to the area.

3. To put the machine back into service, the operator follows the same steps in reverse order



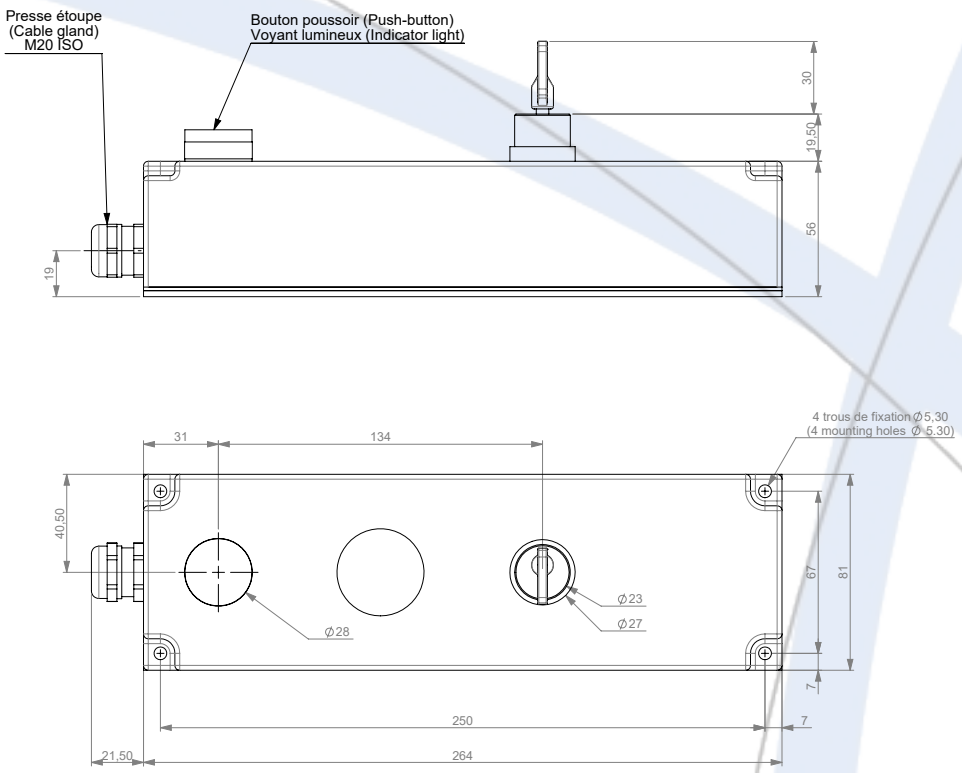
DRAWING

Dimensions: in mm

Available as a flat key (RONIS) or star key (PROFALUX)

Note: For safe mounting, use security screws.

Electromechanical lock standard version with one key entry



ASE/HSE Electromechanical lock

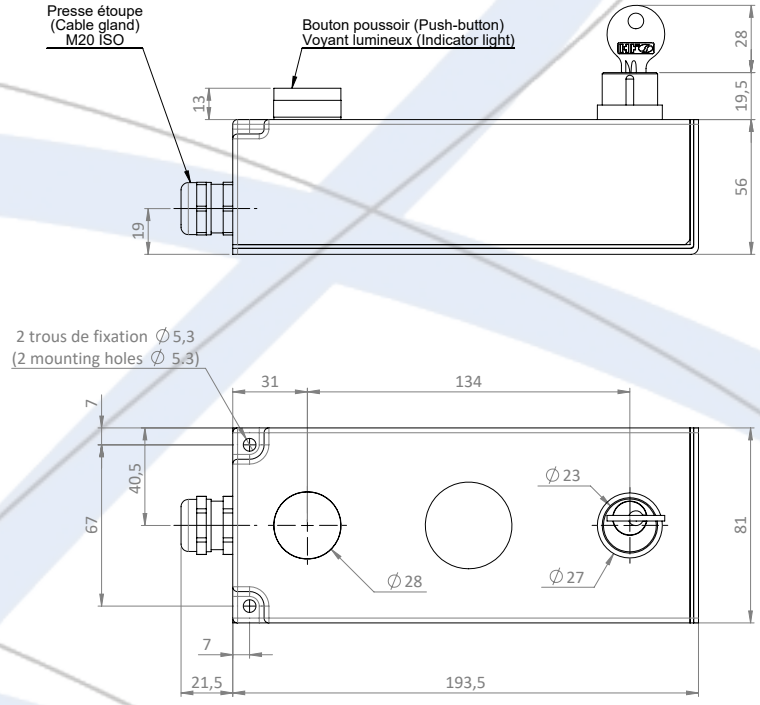
DRAWING

Dimensions: in mm

Available as a flat key (RONIS) or star key (PROFALUX)

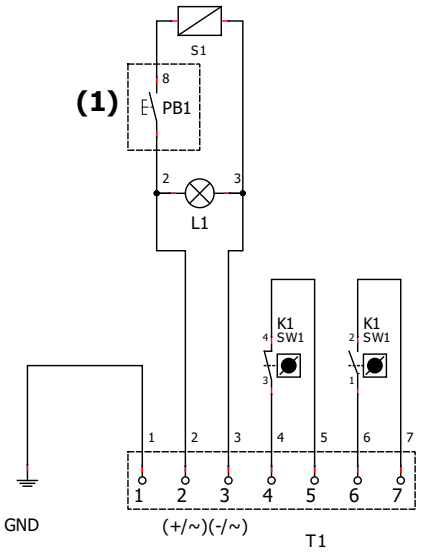
Note: For safe mounting, use security screws.

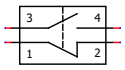
Electromechanical lock reduced box version with one key entry



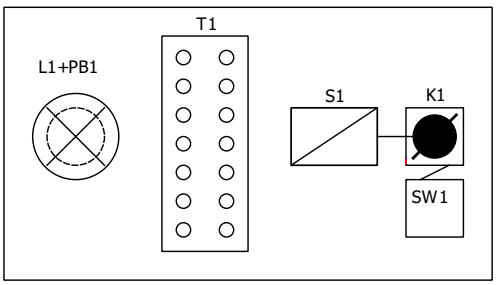
STANDARD WIRING DIAGRAM

Câblage (Wiring):



Légende (Legend):	**SWn Repos (rest):**
Tn : Bornier (Terminal) Kn : Clé (Key) Ln : Lampe (Lamp) PBn : Bouton-poussoir (Push button) SWn : Interrupteur (Switch) Sn : Electroaimant (Solenoid) GND : Terre (Ground) n : Numéro (Number)	Crouzet 83132030 

Implantation (Setting up):



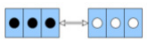
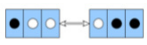
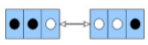
ASE/HSE Electromechanical lock

Part of the Sentric Group

ORDER INFORMATION

	Cylinder profile	Product type	N° of cylinder	Electro function	Meca function	Key profile	Rotor type	Key switches configuration	Particularity
Reference									
Example	A	SE	1	C	A	EL	5	CXX	000

Cylinder profile	A = Flat key H = Star key
N° of cylinder	From 1 to 3 cylinders
Electromechanical function	A: voltage release with warning light B : voltage-free release with indicator light C: release by voltage emission and push button with warning light D: voltage release without warning light E : voltage-free release without indicator light F : release by voltage emission and push button without indicator light
Mechanical function	The function determines the key position (in or out). See FUNCTION table
Key profile	Star key = PS 5-piston flat key = EK, EL, EM, EP, ET, EV 6-piston flat key = GK, GL, GM, GP, GT, GV
Rotor type	5 = Aluminium 6 = Composite
Key switches configuration	The contact configuration determines the type and position of the electrical key status contacts. See SWITCHES table
Particularity	000 : Standard 001 : 18mm Ø10 bolt on cylinder 1 002 : IP54 case 003 : Reduced size case xxx : contact us for customised solution

N° cylinder	Mechanical function	Principe
1	A	
2	A	
2	B	
3	A	
3	B	
3	C	

Légende		
	○	free key
	●	trapped key

Switch config	Switch type	Switch status trapped key	Switch config	Switch type	Switch status trapped key
A	1NC		H	2NC-1NO	
B	1NO		I	3NC-1NO	
C	1NC-1NO		J	1NC-3NO	
D	2NC		K	3NC	
E	2NO		L	3NO	
F	2NC-2NO		M	1NC-1NO+1NC in series with solenoid	
G	1NC-2NO		X	No switch	

ASE/HSE Electromechanical lock

Part of the Sentric Group

ACCESSORIES

- Flip cap (ref. D23556)

CONTACTS

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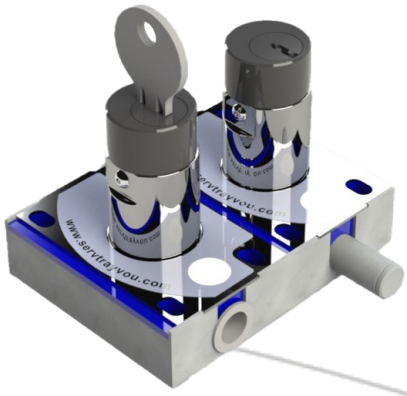
t: +33 (0)1 48 18 15 15 | f: +33 (0)1 48 59 68 50 | e: sales@servtrayvou.com

AVE/HVE boltlock

Part of the Sentric Group



The boltlock is a locking device that allows the controls of circuit breakers, switches, disconnectors or earthing switches to be locked in a certain position. The lock is used to control the rotation or movement of a handle connected to the actuator.

This lock is available with aluminium or composite cylinder, making it ideal for energy sector applications.

Under no circumstances should this lock be used to secure an access. For this, please refer to the Access Lock data sheet.

Trapped Key Interlocks

ENERGY

USAGE

The boltlock is used as part of a safe guarding system.

This lock is not designed to secure access to a safe, external access to a building, for doors or access gates.

INSTALLATION

A safety lock must be fitted with appropriate fixings (not supplied with the lock).

Important:

To prevent unauthorised removal, the lock must be fitted with a stainless steel rivet or stainless steel security screws and secured with a threadlocker.

Tightening torque: 5Nm

Drilling of the mounting plate (when the lock is mounted from the rear): 4 holes ø5,3 + 1 hole ø25 per cylinder.

The lock must be installed by a competent and qualified person.

MAINTENANCE

No maintenance of the product is recommended. However, to improve its operation and possibly increase its life span, adding "Xenium micronised graphite powder" to the lock is accepted.
Any other product is prohibited

AVE/HVE boltlock

Part of the Sentric Group

TECHNICAL DATA

Weight	Starting at 220 gr
Material	- Cylinder - Rotor 5000 : 6064-T9 aluminium / Rotor 6000 : Grivory GVX-65h composite Stator : 6064-T9 aluminium - Serrure - AISI 304L stainless steel
Product finishing	Anodised black (cylinder)
Type of Mounting	Front or back mounting with suitable fixings (flush)
Temperature rating	-35˚C / +120˚C for the lock -35˚C / +105˚C for the switch
Salt spray tolerance	240h
Watertightness	IP4X-lock IP67-switch
IK rating	IK08
Vibrations	0.7mm @10-55HZ 1 oct/min in 3 axes
Retentive strength	250N-key 600N-bolt
Lifespan	1000000 cycles*
B10d	200000 cycles*
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch)
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

*Aluminium rotor version

OPTIONS

- Flat key (RONIS type) or star key (PROFALUX type)
- Up to 3 cylinders
- Rotor type (aluminium, composite or aluminium small series)
- Electrical switch (changeover)

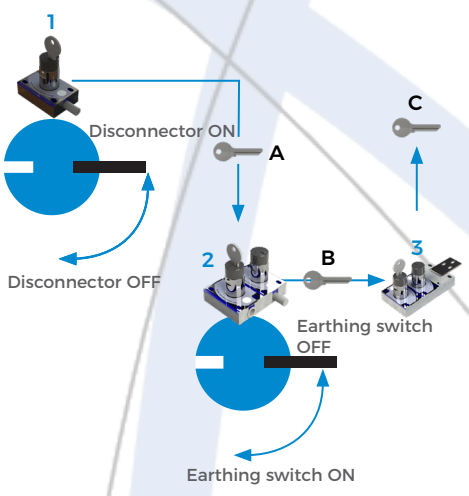
APPLICATION

The system includes a bolt on the control device for the machine's power supply, another Hercules lock on the electrical earthing system controller and a Hercules access lock for entering the hazardous area. Under normal machine operation (motor powered), the power key A is trapped in the Hercules bolt on the machine disconnector and the access door to the hazardous area is closed and locked.

To access the hazardous area:

1. The operator cuts the power to the machine allowing the release of the power key A
2. The power key A is then trapped in the Hercules lock of the earthing switch allowing the earthing of the electrical circuit. The operator can then release the access key B, thus locking the earthing switch in the closed position and ensuring that earthing cannot be interrupted.
3. The access key B is then trapped in the Hercules access lock releasing the personal key C and the strike plate allowing access to the area.

   The personal key C is kept by the operator during operation to protect against accidental locking and starting.
4. To put the machine back into service, the operator follows the same steps in reverse order



AVE/HVE boltlock

Part of the Sentric Group

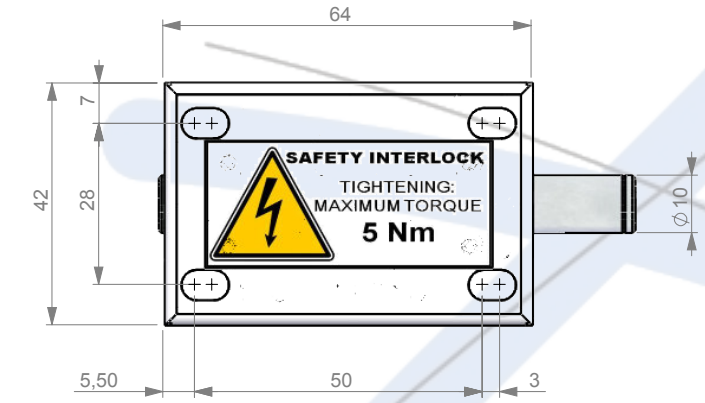
DRAWING

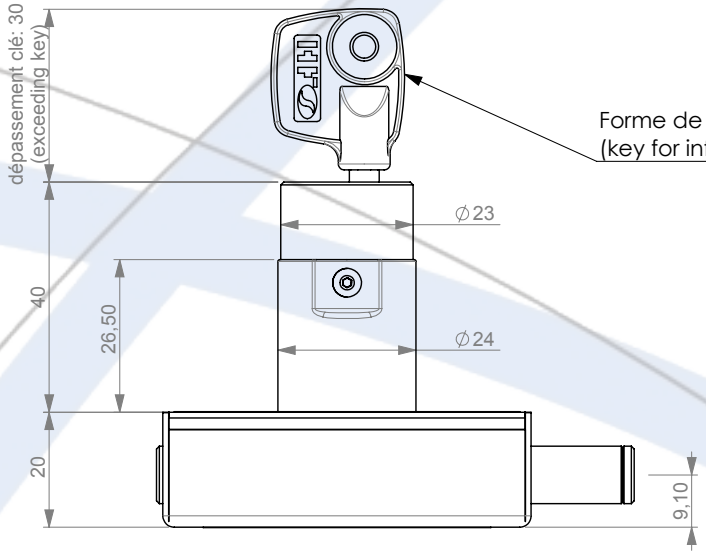
Dimensions: in mm

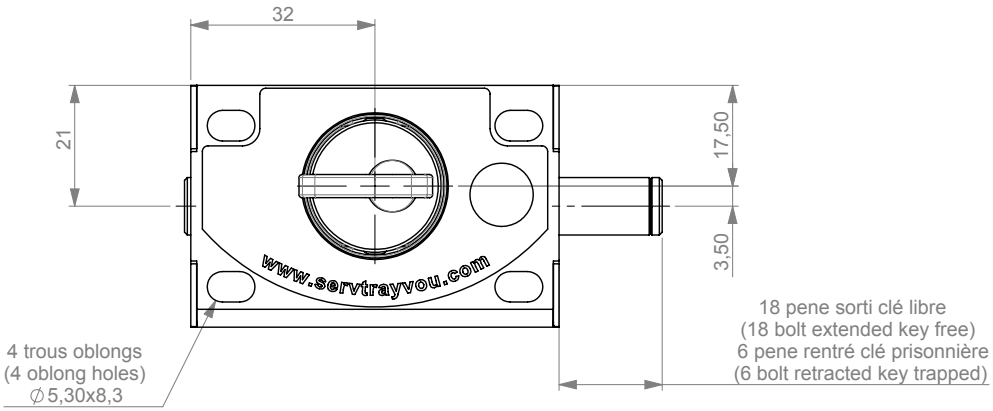
Available as a flat key (RONIS) or star key (PROFALUX)

Note: For safe mounting, use security screws.

Standard single-entry boltlock







Référence Produit avec clé type:
(product reference following key type:)

- Etoile = HVE11XPS5000
  (star)
  A = Clé plate
  H = Clé étoile
  5 = Rotor Aluminium
  6 = Rotor Composite
  X= Fonction C ou D

AVE/HVE boltlock

Part of the Sentric Group

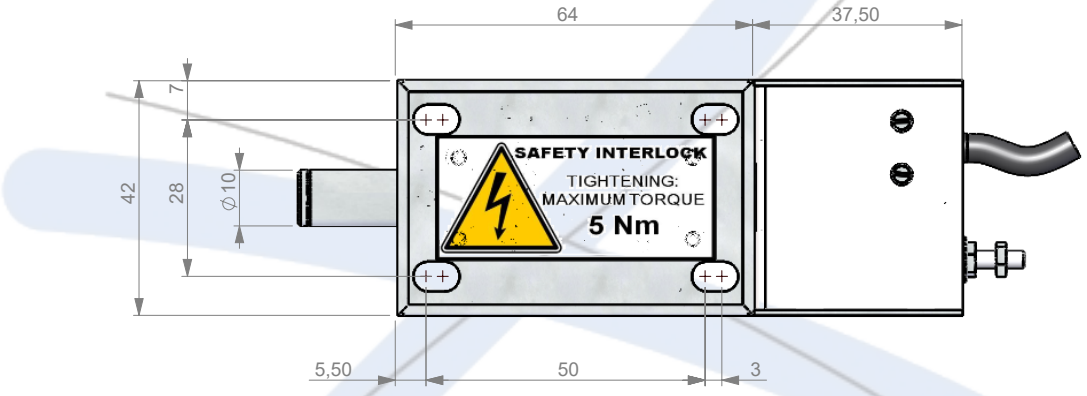
DRAWING

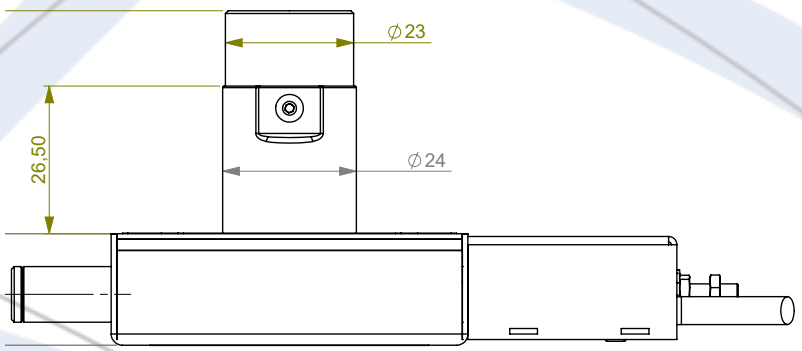
Dimensions: in mm

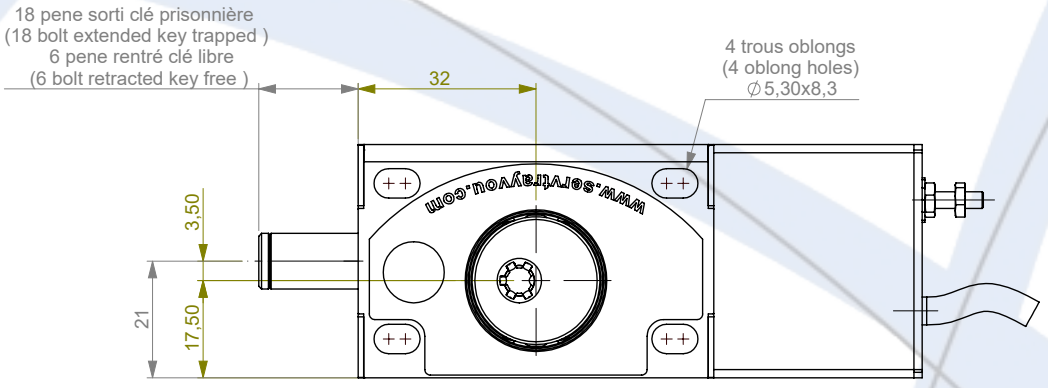
Available as a flat key (RONIS) or star key (PROFALUX)

Note: For safe mounting, use security screws.

Single-entry boltlock with a switch

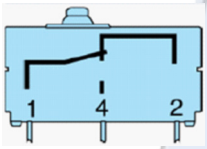






Caractéristiques du contact inverseur:
(Characteristics of the micro-switches)

reference: CROUZET 83186



- cable lg 1.2m, section 0.5mm²:
  - * 1 Noir (black) = Commun (common)
  - * 2 Gris (grey) = NF (NC) clé libre
  - * 4 bleu = NO clé prisonnière
- calibre sous 250VCA:
  (ratings at 250VCA)
  - * Nominal: 6A
  - * Thermique: 7.5
    (Thermal)
- IP67
- Température d'utilisation : -40°C / +105°C
  (operating temperature)

AVE/HVE boltlock

Part of the Sentric Group

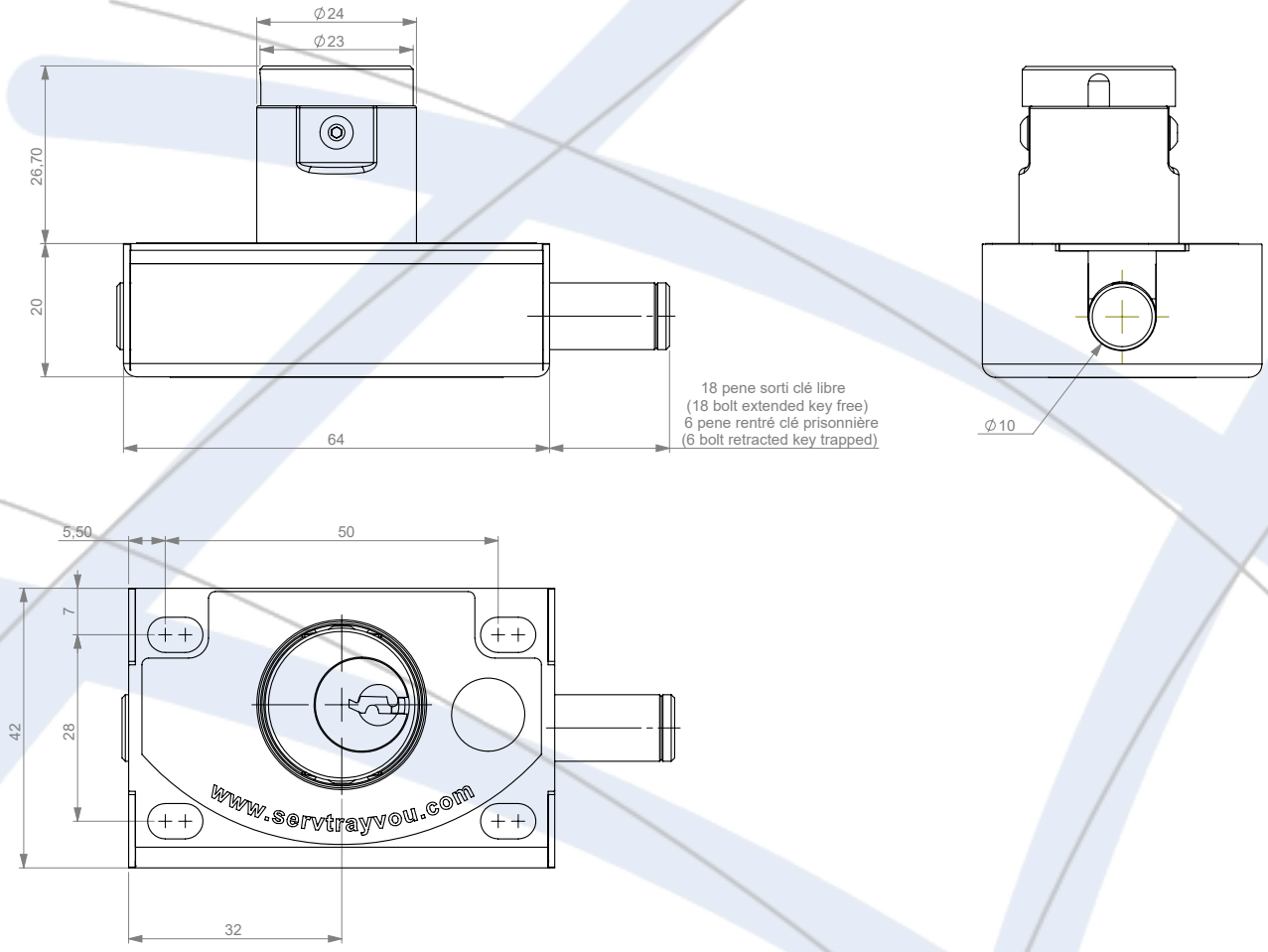
DRAWING

Dimensions: in mm

Available as a flat key (RONIS) or star key (PROFALUX)

Note: For safe mounting, use security screws.

Switch boltlock with 1 entry



AVE/HVE boltlock

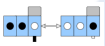
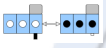
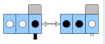
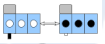
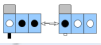
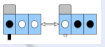
Part of the Sentric Group

ORDER INFORMATION

	Cylinder profile	Product type	N° of cylinder	N° of bolts	Function	Key profile	Rotor type	Particularity
Reference								
Example	A	VE	1	1	C	EL	5	000

Cylinder profile	A = Flat key H = Star key
Product type	VE = Standard boltlock VC = Boltlock with a switch
N° of cylinder	From 1 to 3 cylinders
N° of bolts	1 or 2 bolts
Fonction	The function determines the key position (in or out). See FUNCTION table
Key profile	Star key = PS 5-piston flat key = EK, EL, EM, EP, ET, EV 6-piston flat key = GK, GL, GM, GP, GT, GV
Rotor type	5 = Aluminium 6 = Composite 7 = Small series
Particularity	000 = Standard 004 = 35mm bolt length 005 = 35mm bolt length and 15mm diameter 225 = 2 switches version *** = Other lengths, threading, see options below or contact us

N° entries	N° bolts	Function	Principle
1	1	C	
1	1	D	
2	1	F	
2	1	H	
2	1	J	
2	1	K	
2	1	L	
2	1	M	
2	1	N	

N° entries	N° bolts	Function	Principle
2	2	H	
2	2	J	
3	1	F	
3	1	H	
3	1	J	
3	1	K	
3	1	L	
3	1	M	

Legend	○	free key
	●	trapped key
		bolt out
		bolt in
		switch position for switch version

AVE/HVE boltlock

Part of the Sentric Group

ACCESSORIES

• Flip cap (ref. D23556, drawing available on request)

- 35mm bolt
- 35mm bolt and 15mm diameter
- Threaded bolt

	Z-value			
	M3x7	M4x9	M5x12	M6x13
At the front of the bolt	x327	x328	x017	x024
At the back of the bolt	x284	x185	x087	x319

X = 5 if aluminium rotor

X = 6 if composite rotor

CONTACTS

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ABA/HBA camlock

Part of the Sentric Group

The camlock is used for the mechanical locking of switches, circuit breakers, inverters, disconnectors and earthing switches.

A cam is usually attached to the drive at the rear of the lock. Many different types of cams are available from manufacturers depending on the type of circuit breaker or switchgear. In order to reduce the length of the cam lock, it is possible to add rings on the threaded part of the camlock. These 4 or 6mm rings are supplied depending on the type of cam lock.

This camlock is available in aluminium, which makes it ideal for use in the energy sector.

Trapped Key Interlocks

ENERGY

USAGE

The camlock is used as part of a safe guarding system.

This lock is not designed to secure access to a safe, external access to a building, for doors or access gates.

INSTALLATION

A safety lock must be fitted with appropriate fixings (not supplied with the lock).

Important:

To prevent unauthorised removal, the lock must be fitted with a stainless steel rivet or stainless steel security screws and secured with a threadlocker.
Drilling of the plate: ø22.5 + flat 19.5 Use the nuts supplied and tighten to the following torque: :

- M22x0.8: max. 10Nm
- M17x1: max. 2.5 Nm

The lock must be installed by a competent and qualified person.

MAINTENANCE

No maintenance of the product is recommended. However, to improve its operation and possibly increase its life span, adding "Xenium micronised graphite powder" to the lock is accepted.
Any other product is prohibited.

ABA/HBA camlock

Part of the Sentric Group

TECHNICAL DATA

Weight	71 gr
Material	Rotor 5000: 6064-T9 aluminium Rotor 6000: Grivory GVX-65h composite Stator: 6064-T9 aluminium Nuts: brass Ring: brass
Product finishing	Anodised black
Type of Mounting	Surface mounting using fasteners appropriate to each equipment manufacturer (Schneider/ABB/SIEMENS/LEGRAND/POMMIER/EATON/ORMAZABAL/...)
Temperature rating	-35°C / +120°C for the lock -35°C / +85°C for the switch
Salt spray tolerance	240h
Watertightness	IP4X-lock
IK rating	IK08
Vibrations	0.7mm @10-55HZ 1 oct/min in 3 axes
Retentive strength	250N-key
Lifespan	1000000 cycles*
B10d	200000 cycles*
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch)
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

*Aluminium rotor version

OPTIONS

- Flat key (RONIS type) or star key (PROFALUX type)
- Electrical switch 1NO-1NC, double break switch. Contact us to configure more switches.
- Rotation (90° or 180°)
- Left or right (reversible once delivered)
- Rotor type (aluminium or composite)

APPLICATION

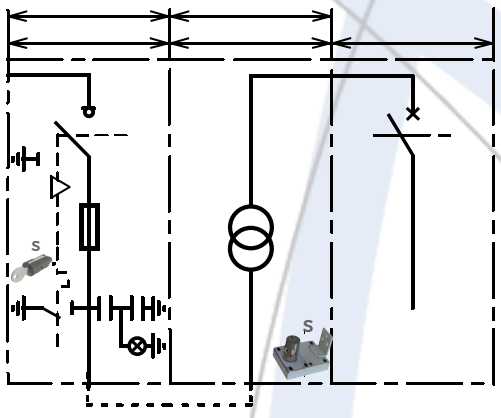
Maintenance operation of the transformer in the TR cabinet:

- Open the disconnecting switch in the low-voltage (LV) cabinet downstream of the transformer

- Open the isolating switch of the protection cabinet upstream of the transformer

- Lock the earthing switch in the "closed" position (release key S)

Using this key, unlock the connector's protection plugs (with the plugs removed, key S is trapped).



ABA/HBA camlock

Part of the Sentric Group

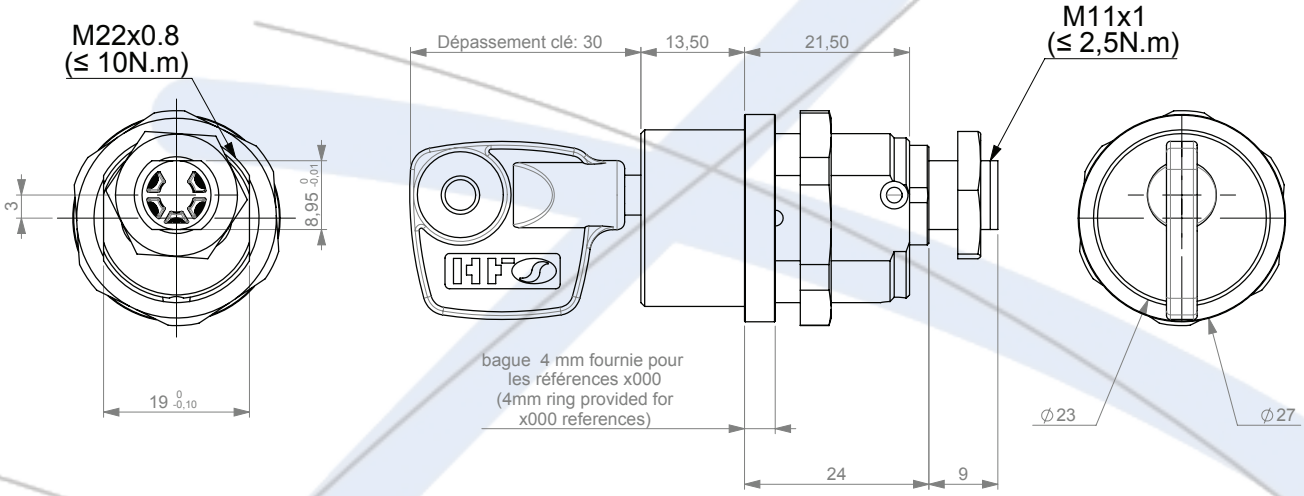
DRAWING

Dimensions: in mm

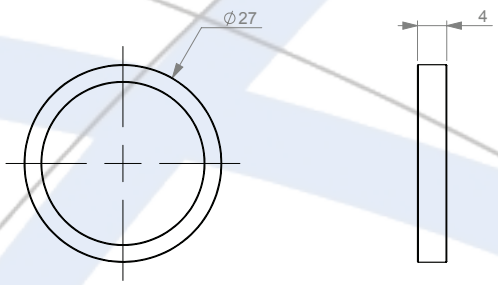
Available as a flat key (RONIS) or star key (PROFALUX)

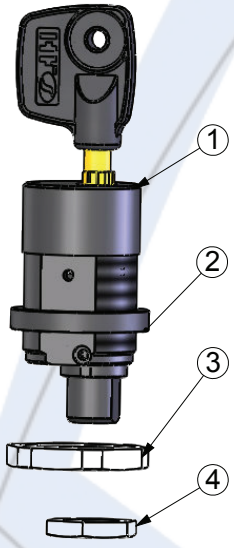
Standard Camlock

REP 1: Batteuse
(Camlock)

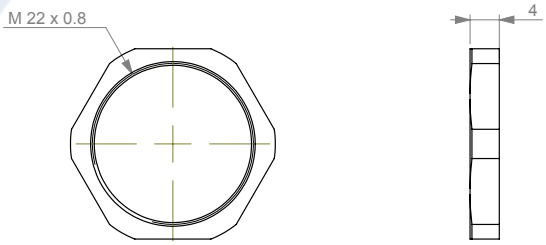


REP 2: Bague 4 MM
(Ring 4 MM)

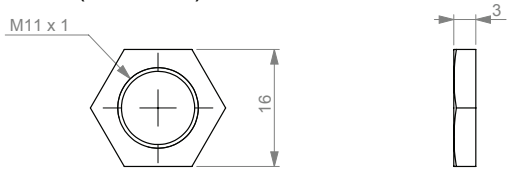




REP 3: Ecrou M 22
(Nut M 22)



REP 4: Ecrou M 11
(Nut M 11)



Référence Produit:
(product reference:)

- 1/4 de tour droite = HBA90DPSx000
  (1/4 right rotation)
- 1/4 de tour gauche = HBA90GPSx000
  (1/4 left rotation)
- 1/2 tour droite = HBADPSx000
  (1/2 right rotation)
- 1/2 de tour gauche = HBAGPSx000
  (1/2 left rotation)

5 = Rotor Aluminium
6 = RotorComposite

Produit livré avec les écrous correspondants + bague 4mm
(Product supplied with the corresponding nuts + 4 mm ring)

ABA/HBA camlock

Part of the Sentric Group

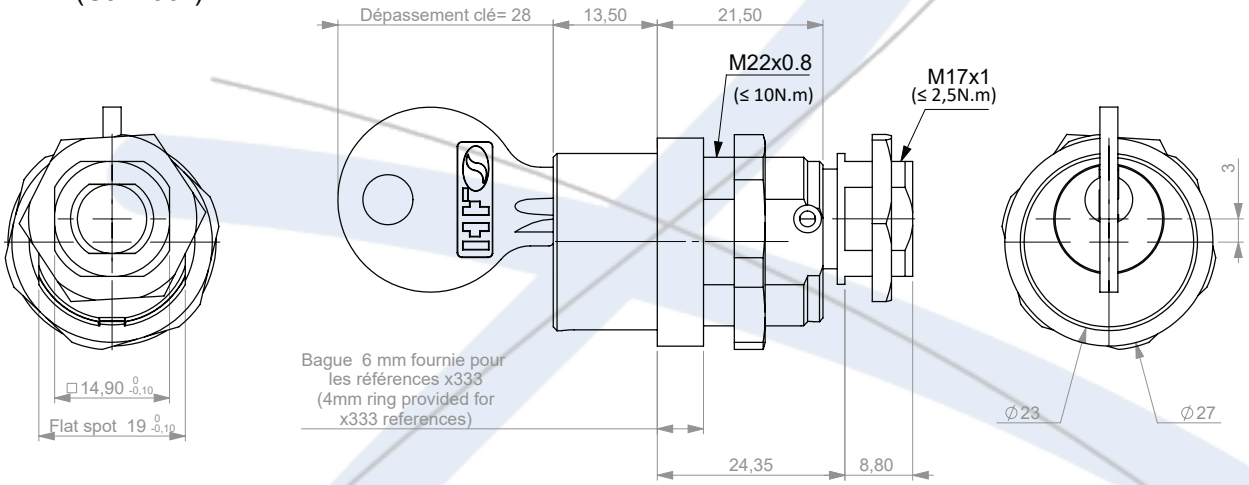
DRAWING

Dimensions: in mm

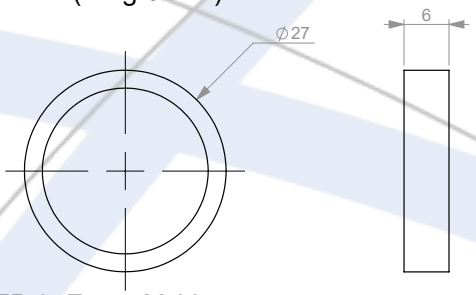
Available as a flat key (RONIS) or star key (PROFALUX)

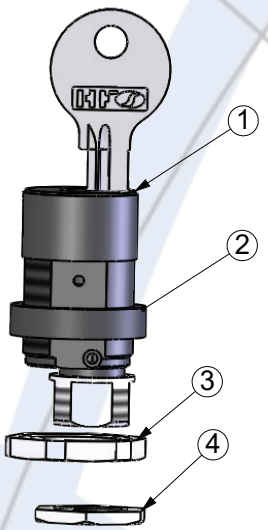
333 version Camlock

REP 1: Batteuse
(Camlock)

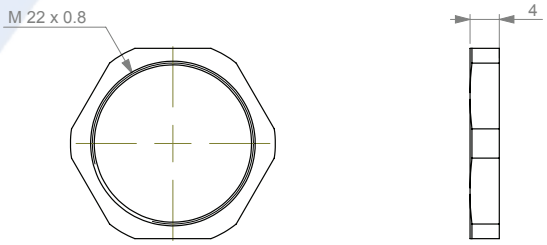


REP 2: Bague 6 MM
(Ring 6 MM)

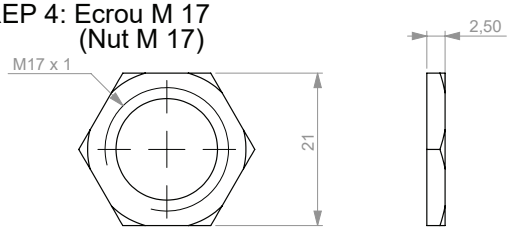




REP 3: Ecrou M 22
(Nut M 22)



REP 4: Ecrou M 17
(Nut M 17)



Produit livré avec les écrous correspondants + bague 6mm
(Product supplied with the corresponding nuts + 6 mm ring)

Référence Produit:
(product reference:)

- 1/4 de tour droite = ABA90Dxxx333
  (1/4 right rotation)
- 1/4 de tour gauche = ABA90Gxxx333
  (1/4 left rotation)
- 1/2 tour droite = ABADxxx333
  (1/2 right rotation)
- 1/2 de tour gauche = ABAGxxx333
  (1/2 left rotation)

5 = Rotor Aluminium
6 = Rotor Composite

xx = Profile EL,EK,EP,EM,ET,EV
GL,GK,GP,GM,GT,GV

ABA/HBA camlock

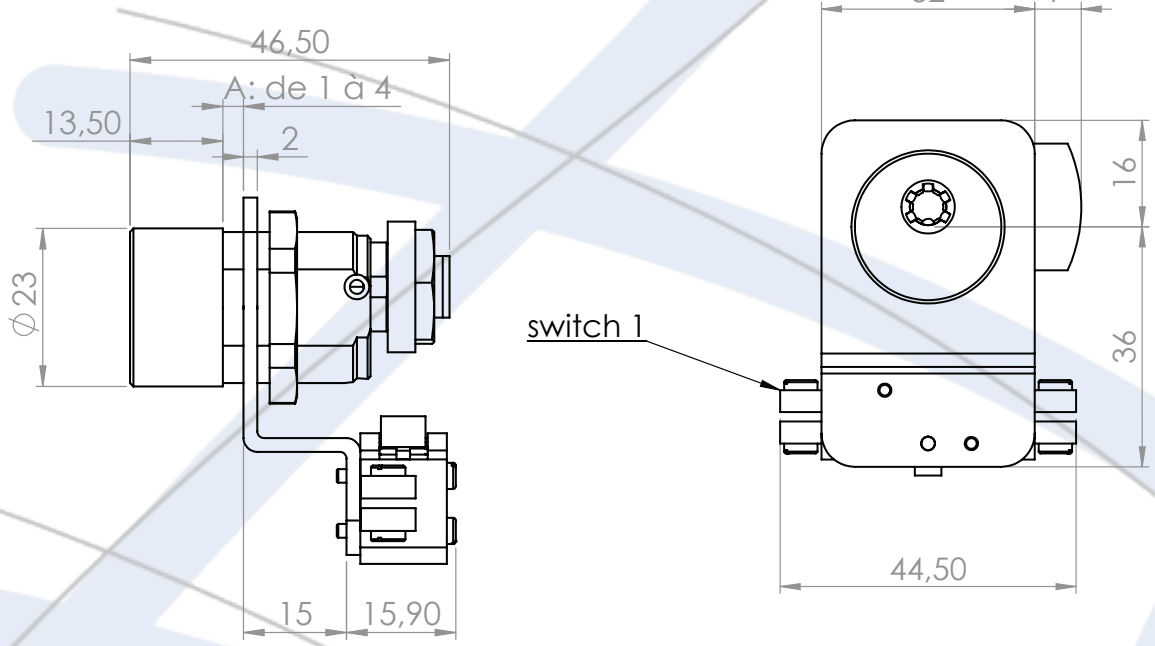
Part of the Sentric Group

DRAWING

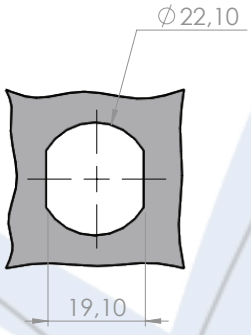
Dimensions: in mm

Available as a flat key (RONIS) or star key (PROFALUX)

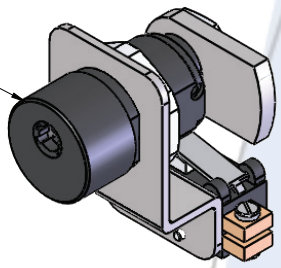
Camlock with a switch



SWITCH CROUZET 831060



Cylindre HFS Clé étoile



ABA/HBA camlock

Part of the Sentric Group

ORDER INFORMATION

	Cylinder profile	Product type	Rotation	Direction	Key profile	Rotor type	Particularity
Reference							
Example 90°	A	BA	90	G	EL	5	000
ABA90GEL5000							
Example 180°	A	BA		G	EL	5	000
ABAGEL5000							

Cylinder profile	A = Flat key H = Star key
Product type	BA = Standard Camlock BC = Camlock with a switch
Rotation	90° ou 180°
Direction	G = Gauche (left) D = Droite (right)
Key profile	Star key = PS 5-piston flat key = EK, EL, EM, EP, ET, EV 6-piston flat key = GK, GL, GM, GP, GT, GV
Rotor type	5 = Aluminium 6 = Composite
Particularity	000 = Standard (M11x1) with 2x flats at 9mm centres 003 = Fluokit M24 type 149 = Legrand type (drawing available on request) 225 = 2 switches version 283 = Siemens type (drawing available on request) 331 = Pommier type (drawing available on request) 333 = Schneider type (M17x1) with 15mm square (C15) 352 = 1 switch version in IP55 enclosure

ABA/HBA camlock

Part of the Sentric Group

ACCESSORIES

- 4mm spacer ring (if required in addition, ref. D51400200)
- 6mm spacer ring (if required in addition, ref. D51401200)
- M22 nut (if required, ref. D51700200)
- M11 nut (if required, ref. D51701000)
- M17 nut (if required, ref. D51700800)
- Coloured identification ring (ref. D1411000 red, ref. D1411100 green, ref. D1411200 yellow, ref. D1411300 blue)
- Flip cap (ref. D23556)

CONTACTS

Serv Trayvou
1 ter rue du Marais, 93100 MONTREUIL, France
t: +33 (0)1 48 18 15 15 | f: +33 (0)1 48 59 68 50 | e: sales@servtrayvou.com

ERTK - Electromechanical key switch

Part of the Sentric Group

The ERTK is an electromechanical key switch. The release (SP) or trapping (RP) of the key are electrically controlled. Any change in the key status is signalled by the switch connected to the lock. The ERTK is particularly suitable for automated systems in industry or railway equipment.

Trapped Key Interlocks

INDUSTRY

ENERGY

RAILWAY

USAGE

The ERTK electromechanical key switch is designed to be part of a safety system and is used to isolate the power supply to a dangerous machine through the use of electrical authorisation. The released key is then used to access a safe area.

The ERTK electromechanical key switch cannot be used as an access lock.

INSTALLATION

A safety lock must be fitted with appropriate fixings.

Important:

To prevent unauthorised removal, the lock must be fitted using rivets or M5 stainless steel security screws (washers, nuts and screws).

Installation must be carried out by a competent and qualified person.

MAINTENANCE

Periodic visual inspections should be carried out by the Facility Manager or Safety Manager to ensure that there is no distortion or corrosion/erosion/acid build-up and that the lock marking plate is clearly legible.

Do not lubricate the lock cylinder with oil or grease.

ERTK - Electromechanical key switch

Part of the Sentric Group

TECHNICAL DATA

Types of Mounting	Flush mounting or IP55 enclosure
Weight	Flush-mounted version: from 1.4 kg (for 1 key entry) Enclosure version: from 2.3 kg (for 1 key entry)
Material	- Sheet metal: 304 stainless steel - Cylinder: Nickel-plated brass - Mechanical: Brass - 304 stainless steel - Flip cap: 304 stainless steel - Marking plate: Aluminium - Glued plate (Acrylique - Loctite AA330) - Enclosure version: Polycarbonate enclosure
Product finishing	Flush-mounted version : Front panel in red polyester paint (RAL 3000)
Breaking capacity	20A/5,5kW (standard)
Operating voltage and power consumption	**Duty cycle 15%** **(max coil power supply 30s)** 24VAC/DC - 40W 48VAC/DC - 40W 110VAC/DC - 42W 230VAC/DC - 48W **Duty cycle 100% (without push button)** 24VAC/DC - 10W 48VAC/DC- 10W 110VAC/DC - 10W 230VAC/DC - 10W
Temperature rating	-35°C / +120°C for the lock -25°C / +80°C for the switch
Salt spray tolerance	240h
Watertightness	Flush-mounted version: IP2X Enclosure version: IP55
IK rating	IK10
Vibrations	0.7mm @10-55HZ 1 oct/min in 3 axes
Retentive strength	250N-cle
Lifespan	590000 cycles
B10d	118000 cycles
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU - EMC Directive 2014/30/EU
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

OPTIONS

- 1 to 6 key entries
- Switch 2NC-2NO, 3NC-1NO or 3NC-3NO
- Mounting on plate, stainless steel or polycarbonate enclosure
- Without flip cap
- Without light
- ATEX explosive atmosphere (under feasibility study)

ERTK - Electromechanical key switch

Part of the Sentric Group

APPLICATION

The system includes an ERTK Electromechanical key swith to control machine control circuit and a NX access lock for entering the hazardous area. Under normal machine operation (motor powered), the power key A is trapped in the ERTK and the access doors to the hazardous area are closed and locked.

To access the hazardous area:

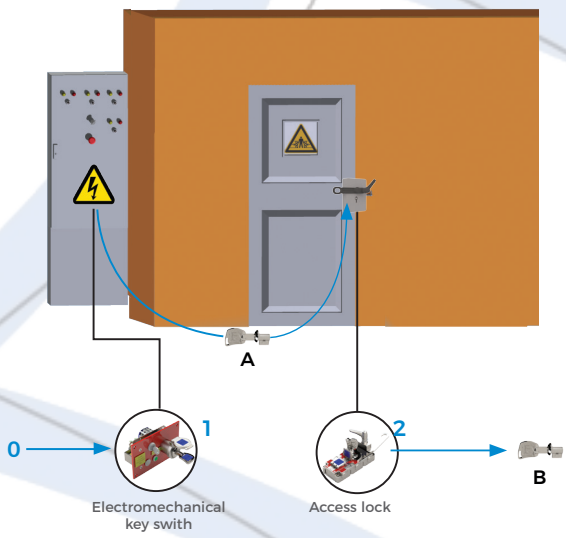
0. A key removal authorisation is sent to the ERTK by a PLC for example.

1. The operator releases the RTK's power key A, thus cutting off the machine's power.

2. The isolation key A is then trapped in the NX access lock thus releasing the lockout key B and the latch allowing access to the area.

The lockout key B is held by the operator during operation to protect against accidental lockout/tagout.

3. To put the machine back into services, the operator follows the same steps in reverse order.

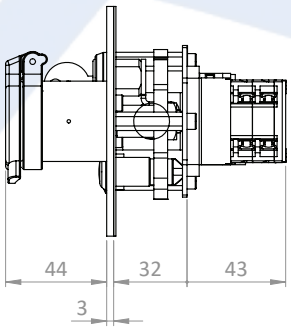


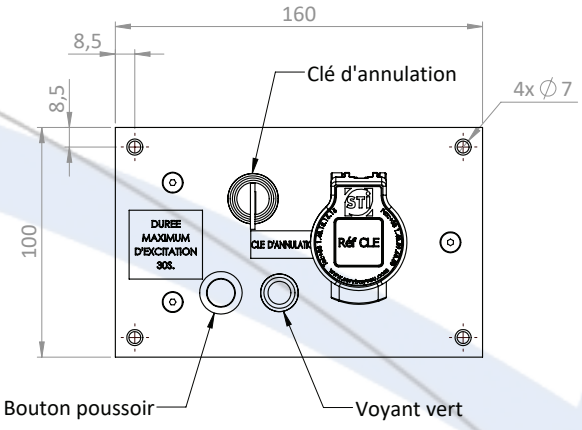
DRAWING

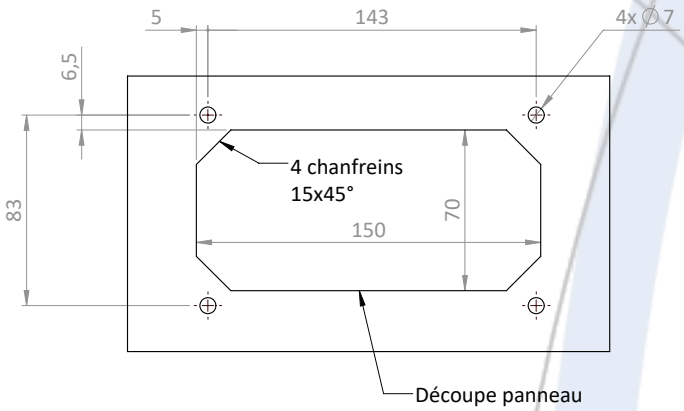
Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

ERTK one key entry flush mounted version







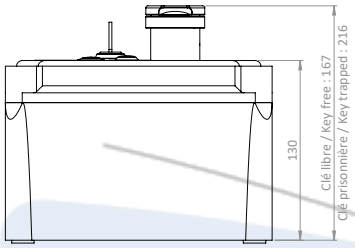
ERTK - Electromechanical key switch

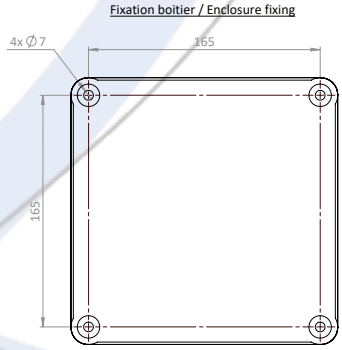
Part of the Sentric Group

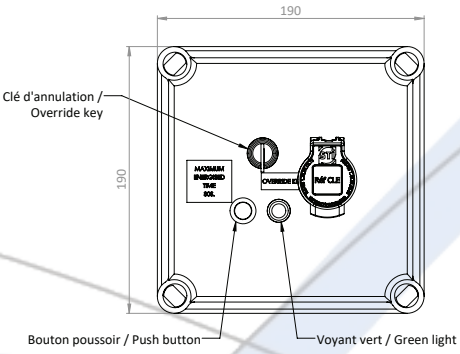
DRAWING

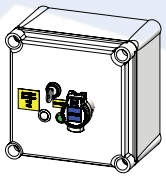
Dimensions: in mm

ERTK single entry IP55 enclosure version

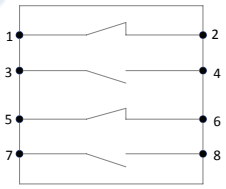




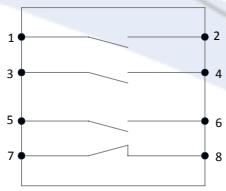




WIRING DIAGRAM



Switch 2NC2NO - 5,5 kW
(switches status when trapped key)



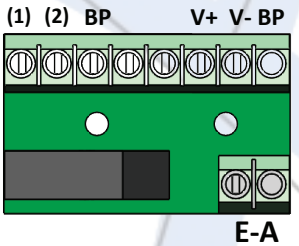
Switch 3NF1NO - 5,5 kW
(switches status when trapped key)

Designation	C6	C7
Switch	2NF-2NO	3NF-1NO
Power	5,5 kW	5,5 kW

Identification de câblage sur la carte STI:

(1) (2) : AC/DC Tension d'entrée

BP : Shunt (câblage STI)
V+ V- : Voyant (câblage STI)
E-A : Solenoïde (câblage STI)



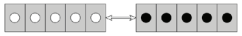
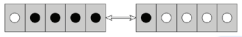
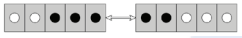
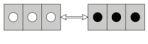
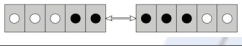
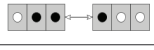
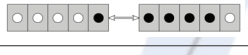
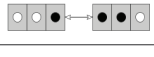
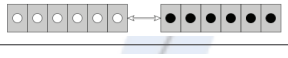
ERTK - Electromechanical key switch

Part of the Sentric Group

ORDER INFORMATION

	ERTK	Type	N° of entries	Electro function	Function	N° of switch	Switch	Language	Order no
Reference	ERTK								
Example	ERTK	E	1	SP	FS	1	C6	E	000

1	Type	E = ERTK flush mounting version (flush mount) B = ERTK enclosure version (IP55 polycarbonate enclosure)
2	N° of entries	1 to 6 key entries
3	Electromechanical function	SP = release by voltage emission RP = trapped key under voltage emission (free under both conditions)
4	Function	The function determines the key position (in or out). See FUNCTION table
5	N° of switch	From 0 to the number of entries
6	Switch	C6 = 2NC-2NO, 5.5kW, CA10 C7 = 3NC-1NO, 5.5kW, CA10F C9 = 3NC-3NO, 11kW, CA25 C11 = 3NC-3NO, 18.5kW, C42 DI = If other switch C0 = No switch
7	Language	A = Anglais (english) F = Français (french) E = Espagnol (spanish) G = Allemand (german)
8	Order no.	For specific applications. This number is assigned by STI for an adapted product

N° of entries	Function	Principle	N° of entries	Function	Principle
1	AA		5	AO	
2	AB		5	AP	
2	AC		5	AQ	
3	AD		5	AR	
3	AE		5	AS	
3	AG		6	AU	
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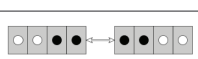
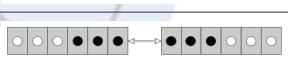
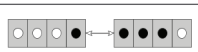
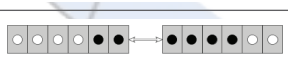
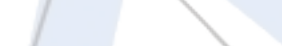
4	AK		6	AW	
4	AL		6	AX	
4	AM		6	AY	
			6	AZ	

Legend		
	○	free key
	●	trapped key

CONTACTS

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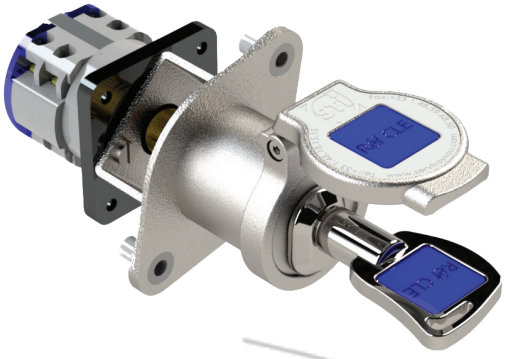
RTK - Key switch

Part of the Sentric Group



The RTK is a key switch designed for the shutting down and locking of machine control or power circuits. It can be used for short term isolation.

The RTK is available in a flush-mounted version and a surface-mounted version (IP55 enclosure).

Trapped Key Interlocks

INDUSTRY

ENERGY

RAILWAY

USAGE

The RTK key switch is designed to be part of a safety system and is used to isolate a control circuit or limited power by releasing a key which is then used to gain access to a hazardous area by means of an access lock.

The RTK key switch is not primarily designed for access control purposes.

INSTALLATION

A safety lock must be fitted with appropriate fixings.

Important:

To prevent unauthorised removal, the lock must be fitted using rivets or M5 stainless steel security screws (washers, nuts and screws).

Installation must be carried out by a competent and qualified person.

MAINTENANCE

Periodic visual inspections should be carried out by the Facility Manager or Safety Manager to ensure that there is no distortion or corrosion/erosion/acid build-up and that the lock marking plate is clearly legible.

Do not lubricate the lock cylinder with oil or grease.

RTK - Key switch

Part of the Sentric Group

TECHNICAL DATA

Types of Mounting	Flush mounting or IP55 enclosure
Weight	Flush-mounted version: from 0.8 kg (for 1 key entry) Enclosure version: from 1.5 kg (for 1 key entry)
Material	- Cylinder: Nickel-plated brass - Mechanical: Brass - 304 stainless steel - Flip cap: 304 stainless steel - Marking plate: Aluminium - Glued plate (Acrylique - Loctite AA330) - Flush-mounted version: Metal sheet in stainless steel 304 (from 2 key entries) - Enclosure version: Polycarbonate enclosure
Product finishing	From 2 key entries, front panel in red polyester paint (RAL 3000)
Breaking capacity	20A/5,5kW (standard)
Temperature rating	-35°C / +120°C for the lock -25°C / +80°C for the switch
Salt spray tolerance	240h
Watertightness	Flush-mounted version: IP2X Enclosure version: IP55
IK rating	IK10
Vibrations	0.7mm @10-55HZ 1 oct/min in 3 axes
Retentive strength	250N-key
Lifespan	650000 cycles
B10d	130000 cycles
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

OPTIONS

- 1 to 6 key entries
- ATEX explosive atmosphere (under feasibility study)

APPLICATION

The system includes a RTK key swith to control machine control circuit and a NX access lock for entering the hazardous area. Under normal machine operation (motor powered), the power key A is trapped in the RTK and the access doors to the hazardous area are closed and locked.

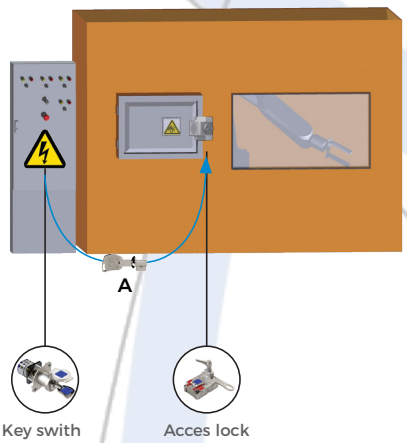
To access the hazardous area:

1. The operator releases the isolation key A from the RTK, thus cutting off the power to the machine.

2. The isolation key A is then trapped in the NX access lock releasing the latch allowing access to the area.

As long as the access to the area is open, the isolation key A is trapped in the access lock. The machine cannot be restarted with the door open.

3. To put the machine back into services, the operator follows the same steps in reverse order.



RTK - Key switch

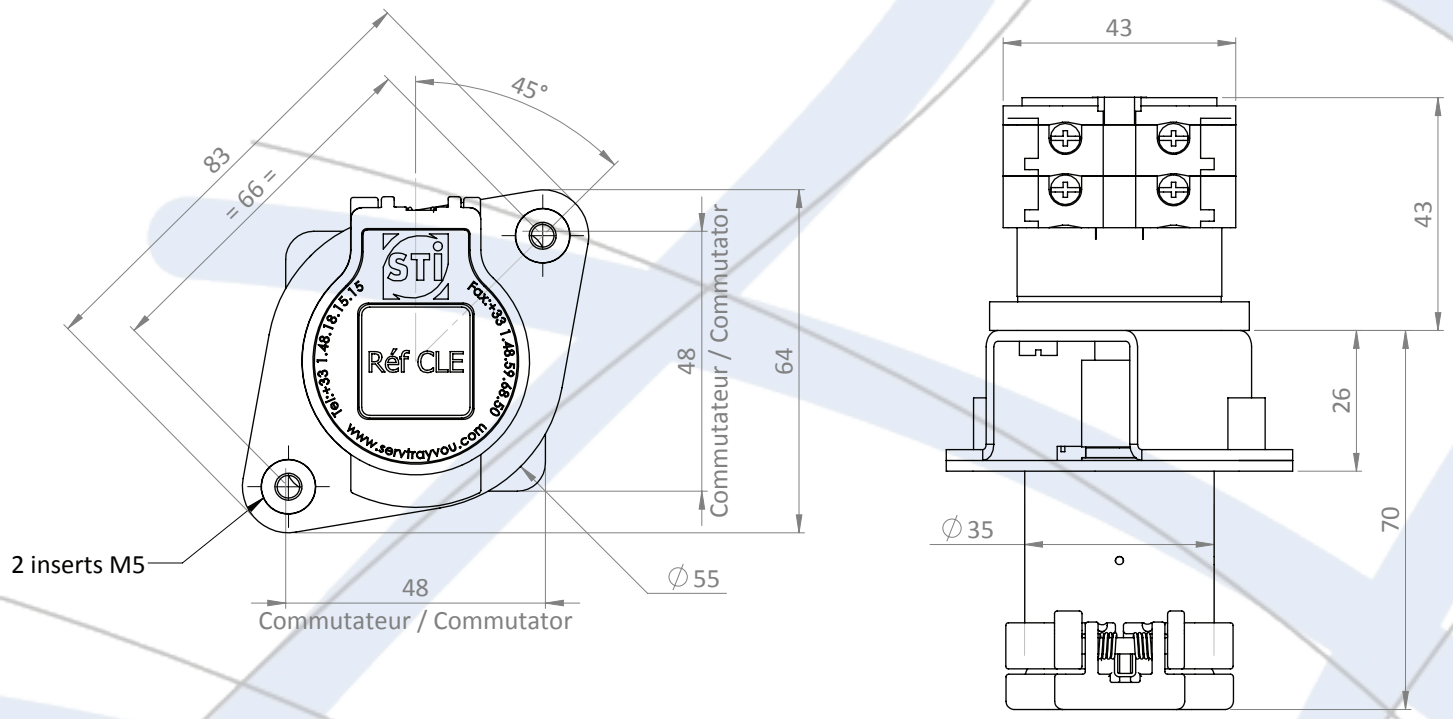
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

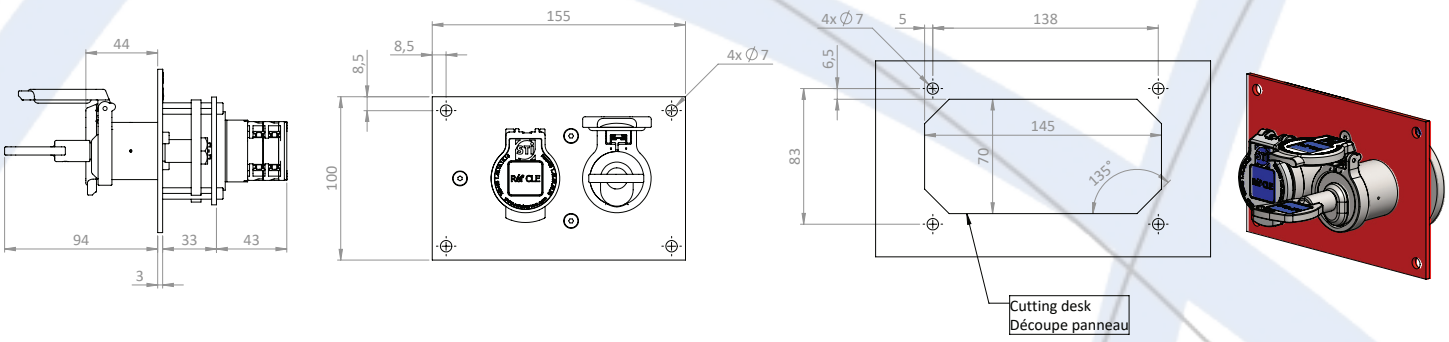
RTK one key entry flush mounted version



DRAWING

Dimensions: in mm

RTK two keys entries flush mounted version



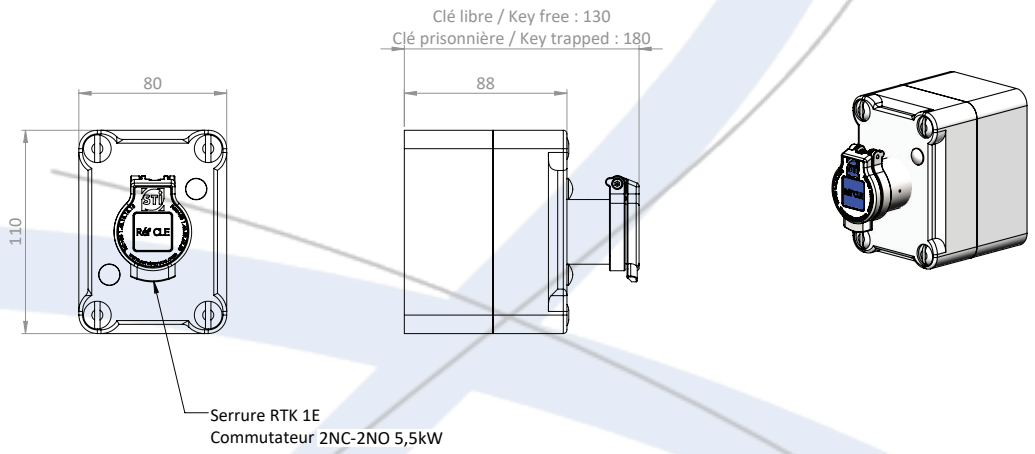
RTK - Key switch

Part of the Sentric Group

DRAWING

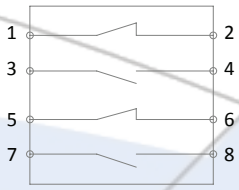
Dimensions: in mm

RTK single entry IP55 enclosure version



WIRING DIAGRAM

Type 2NC-2NO



Contact reference & Specifications		C6
		2NC-2NO
Puissance / Power		5.5kW (CA10)
Section maxi en mm² Wire section	rigide / rigid	4
	souple / flexible	2,5
Contact additionnel Additionnal contact	Par 2 en option By 2 in option	10

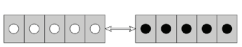
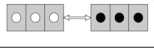
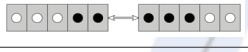
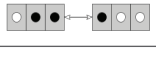
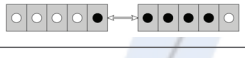
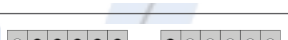
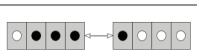
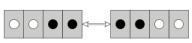
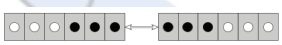
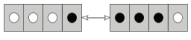
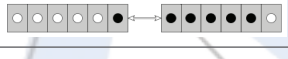
RTK - Key switch

Part of the Sentric Group

ORDER INFORMATION

	RTK	N° of entries	Type	Function	N° of switch	Switch	Order no
Reference	RTK						
Example	RTK	1	E	AA	1	C6	0

1	N° of entries	From 1 to 6 entries
2	Type	E = RTK flush mounting version (flush mount) B = RTK enclosure version (IP55 polycarbonate enclosure)
3	Function	The function determines the key position (in or out). See FUNCTION table
4	N° of switch	From 1 to the number of entries
4	Switch	C6 = 2NC-2NO, 5,5kW, CA10 C7 = 3NC-1NO, 5,5kW, CA10F C9 = 3NC-3NO, 11kW, CA25 C11 = 3NC-3NO, 18,5kW, C42 DI = If other switch C00 = No switch SP = Special switch *switch status in trapped key position
4	Order no	For specific applications. This number is assigned by STI for an adapted product

N° of entries	Funcion	Principle	N° of entries	Funcion	Principle
1	AA		5	AO	
2	AB		5	AP	
2	AC		5	AQ	
3	AD		5	AR	
3	AE		5	AS	
3	AG		6	AU	
4	AJ		6	AV	
4	AK		6	AW	
4	AL		6	AX	
4	AM		6	AY	
			6	AZ	

Legend		
	○	free key
	●	trapped key

RTK - Key switch

ACCESSORIES

- None

CONTACTS

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MS - Boltlock

Part of the Sentric Group

The MS bolt lock is a mechanical lock with a trapped key, suitable for electrical locking (disconnecting switch, circuit breaker, etc.). This model of MS allows the rotation of the power switch gyratory or the movement of the shaft of a disconnector lever to be controlled.

The lock is manufactured from aluminium bronze, making it ideal for use in harsh or corrosive environments and heavy duty use.

The MS bolt lock is typically used in the chemical, pharmaceutical, mining, steel, metallurgy, railway and power generation industries.

Trapped Key Interlocks

INDUSTRY

ENERGY

RAILWAY

USAGE

The MS bolt lock is used to lock the power circuit in the open position.

The MS bolt lock cannot be used as an access lock as key release is possible when the door is open.

INSTALLATION

A safety lock must be fitted with appropriate fixings.

Important:

To prevent unauthorised removal, the lock must be fitted using rivets or M5 stainless steel security screws (washers, nuts and screws).

Installation must be carried out by a competent and qualified person.

MAINTENANCE

Periodic visual inspections should be carried out by the Facility Manager or Safety Manager to ensure that there is no distortion or corrosion/erosion/acid build-up and that the lock marking plate is clearly legible.

Do not lubricate the lock cylinder with oil or grease.

MS - Boltlock

Part of the Sentric Group

TECHNICAL DATA

Weight	Starting at 0,78 kg (for 1 key entry)
Material	- Mechanical: Aluminium bronze - Cover: 304 stainless steel - Flip cap gasket: Cellular Silicon - Marking plate: Aluminium - Riveted plate (Brass rivets) or glued (Acrylic - Loctite AA330)
Temperature rating	Currently being evaluated
Salt spray tolerance	Currently being evaluated
Watertightness	Currently being evaluated
IK rating	Currently being evaluated
Vibrations	Currently being evaluated
Retentive strength	Currently being evaluated
Lifespan	Currently being evaluated
B10d	Currently being evaluated
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch)
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

OPTIONS

- 1 to 5 key entries
- Switch 2NC-2NO (standard)
- Adjustable bolt position
- Threaded bolt

APPLICATION

The system includes a MS bolt lock on the machine's power switching device and a MS access lock for entering the hazardous area. Under normal machine operation (motor powered), the power key A is trapped in the MS and the access doors to the hazardous area are closed and locked.

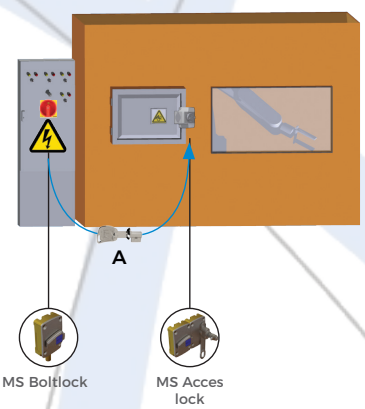
To access the hazardous area:

1. The operator cuts the machine's power allowing the release of the isolation key A.

2. The isolation key A is then trapped in the access lock MS releasing the latch allowing access to the area.

As long as the access to the area is open, the isolation key A is trapped in the access lock. The machine cannot be restarted with the door open.

4. To put the machine back into service, the operator follows the same steps in reverse order.



MS - Boltlock

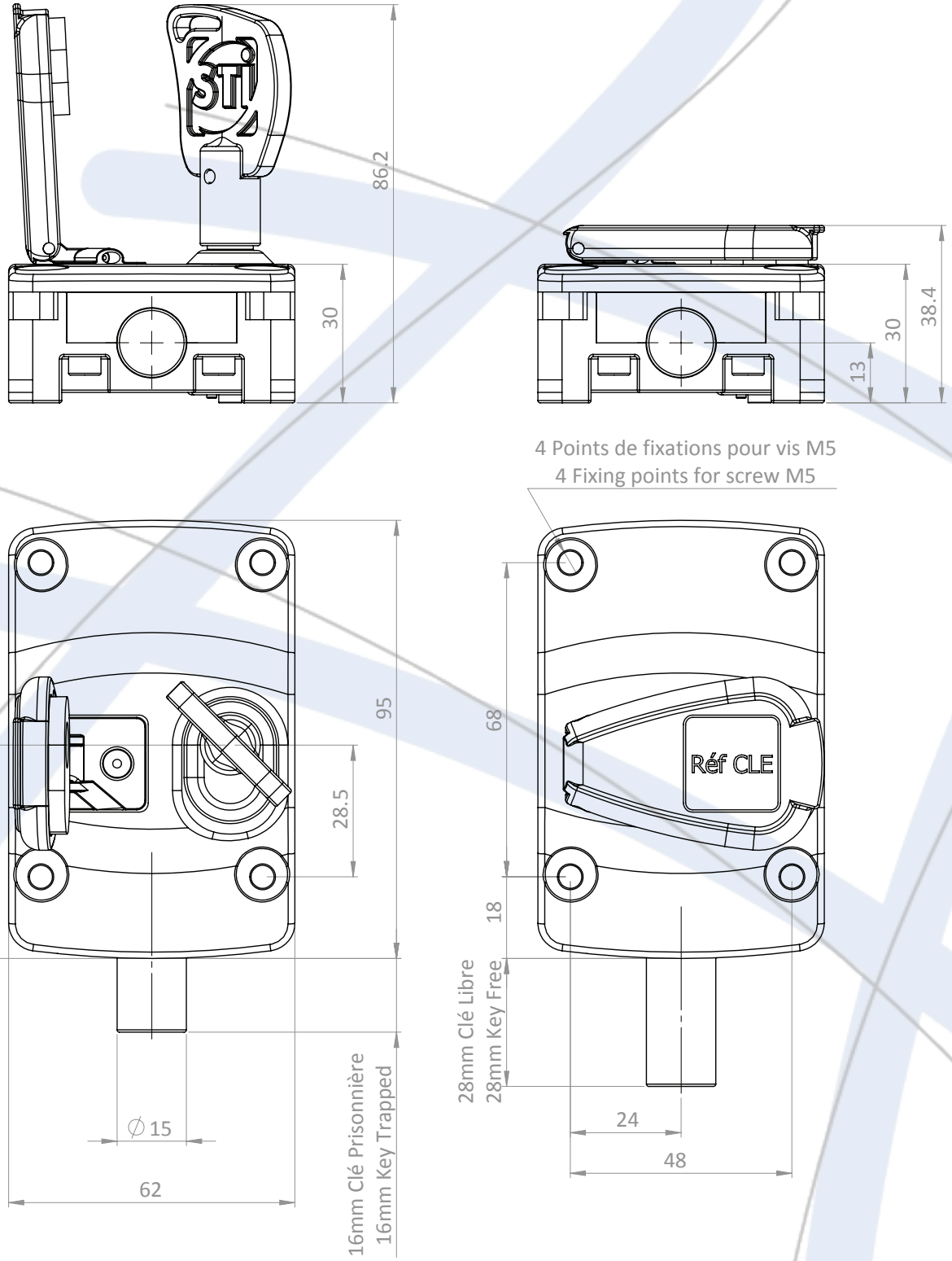
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

MS with bolt (diameter 15) with one key entry



MS - Boltlock

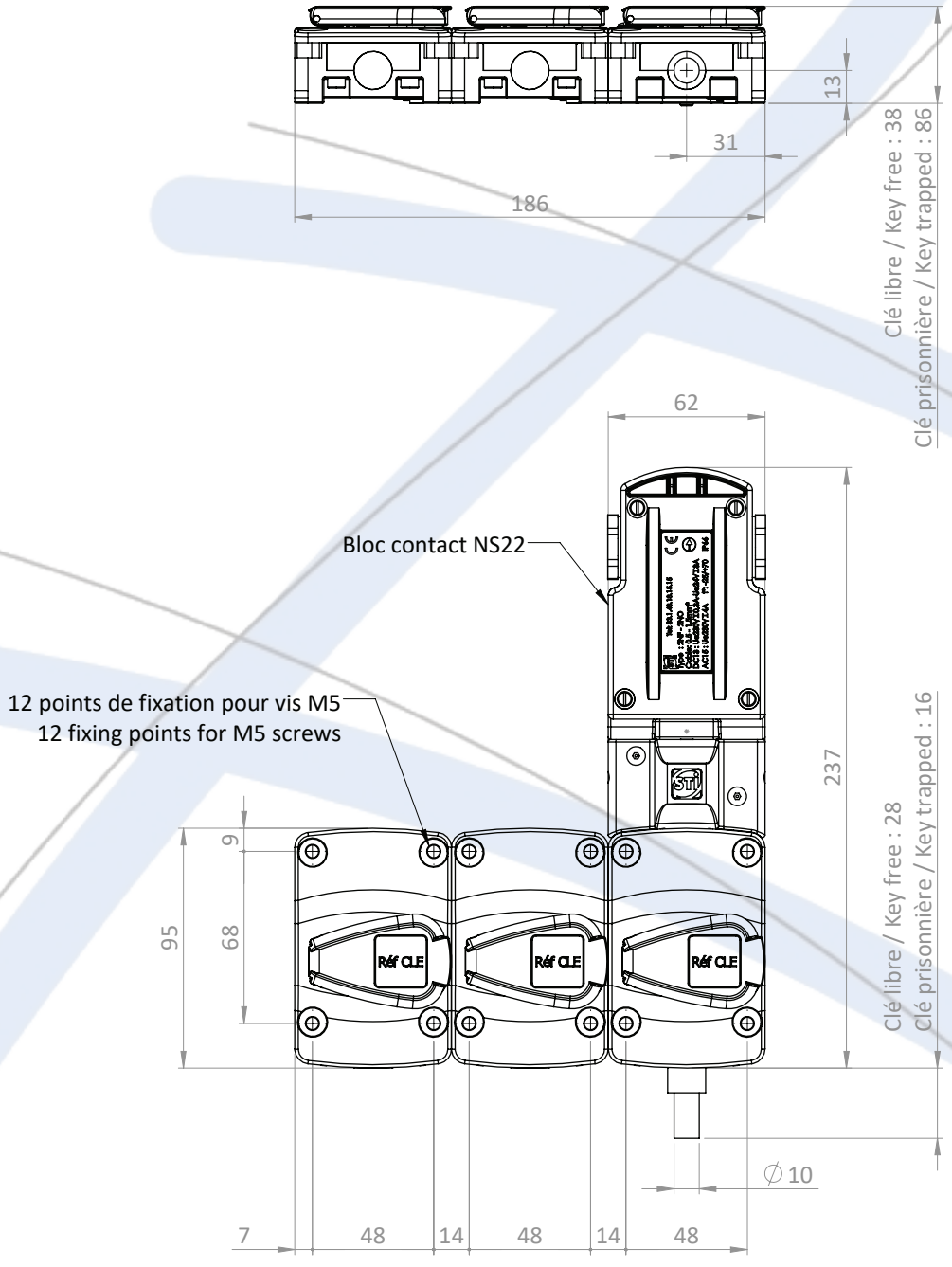
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

MS with bolt (diameter 10) with 3 switches key entries (in back position)



Carte contact 2NC-2NO

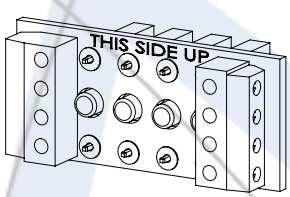
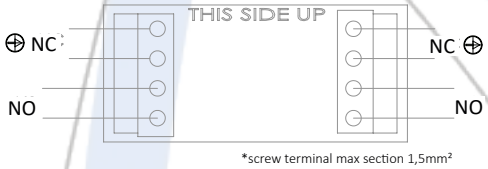


Schéma de câblage / Wiring Diagram



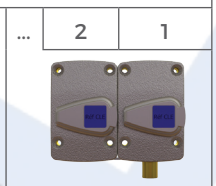
*screw terminal max section 1,5mm²

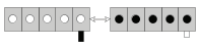
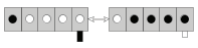
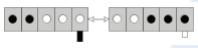
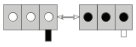
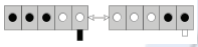
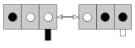
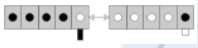
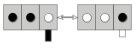
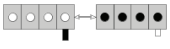
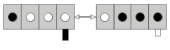
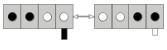
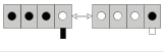
MS - Boltlock

Part of the Sentric Group

ORDER INFORMATION

	MS	N° of entries	N° of bolts	Diameter	Function	Switch	Position	Order no
Reference	MS							
Example	MS	2	1	P15	AC	NS	0	000

1	N° of entries	From 1 to 5 entries
2	N° of bolts	From 1 to the number of entries
3	Diameter	P15 = Bolt diameter Ø15 P10 = Bolt diameter Ø10 P08 = Bolt diameter Ø08
4	Function	The function determines the key position (in or out). See FUNCTION table
5	Switch	NS = No Switch BS = Back Switch FS = Front Switch
6	Position	From 1 to 5 which shows the contact position on the device starting from the right 
7	Order no	For specific applications. This number is assigned by STI for an adapted product

N° of entries	Function	Principle	N° of entries	Function	Principle
1	AA		5	AO	
2	AB		5	AP	
2	AC		5	AQ	
3	AD		5	AR	
3	AE		5	AS	
3	AG				
4	AJ				
4	AK				
4	AL				
4	AM				

Legend		
	○	free key
	●	trapped key
		bolt out
		bolt in

MS - Boltlock

Part of the Sentric Group

ACCESSORIES

- None

CONTACTS

Serv Trayvou
1 ter rue du Marais, 93100 MONTREUIL, France
t: +33 (0)1 48 18 15 15 | f: +33 (0)1 48 59 68 50 | e: sales@servtrayvou.com

NX - Boltlock

Part of the Sentric Group

The NX bolt lock is a mechanical lock with a trapped key, suitable for electrical locking (disconnecting switch, circuit breaker, etc.). This model of NX allows the rotation of the power switch gyratory or the movement of the shaft of a disconnector lever to be controlled.

The NX bolt lock is made of stainless steel, which makes it ideal for use in outdoor and corrosive environments or heavy industry.

Trapped Key Interlocks | INDUSTRY | ENERGY | RAILWAY

USAGE

The NX bolt lock is used to lock the power circuit in the open position.

The NX bolt lock cannot be used as an access lock as key release is possible when the door is open.

INSTALLATION

A safety lock must be fitted with appropriate fixings.

Important:

To prevent unauthorised removal, the lock must be fitted using rivets or M5 stainless steel security screws (washers, nuts and screws).

Installation must be carried out by a competent and qualified person.

MAINTENANCE

Periodic visual inspections should be carried out by the Facility Manager or Safety Manager to ensure that there is no distortion or corrosion/erosion/acid build-up and that the lock marking plate is clearly legible.

Do not lubricate the lock cylinder with oil or grease.

NX - Boltlock

Part of the Sentric Group

TECHNICAL DATA

Weight	Starting at 0,43 kg (for 1 key entry)
Material	- 304 stainless steel - Flip cap gasket: Cellular Silicon - Marking plate: Aluminium - Riveted plate (Brass rivets) or glued (Acrylic - Loctite AA330)
Product finishing	- Passivated stainless steel - Cover: Red polyester paint (RAL 3000)
Temperature rating	-35°C / +120°C for both lock & switch
Salt spray tolerance	240h
Watertightness	IP4X-lock IP66-switch
IK rating	IK08 lock IK08 switch
Vibrations	0.7mm @10-55HZ 1 oct/min in 3 axes
Retentive strength	250N-key 600N-bolt
Lifespan	1000000 cycles
B10d	200000 cycles
DC	90%
Compliance	- CE Marking Directive 2001/95/EC - Machinery Directive 2006/42/EC - Low Voltage Directive 2014/35/EU (with a switch)
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

OPTIONS

- 1 to 5 keys entries
- Switch 2NC-1NO (standard) - switches status when the key is trapped
- Without flip cap
- Not painted
- Lock with padlock guard: (lockout by padlock, if several technicians are involved)

APPLICATION

The system includes a NX bolt lock on the machine's power switching device and a NX access lock for entering the hazardous area. Under normal machine operation (motor powered), the power key A is trapped in the NX and the access doors to the hazardous area are closed and locked.

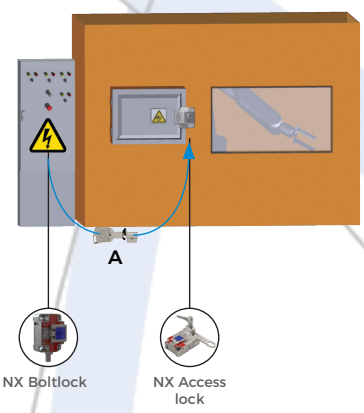
To access the hazardous area:

1. The operator cuts the machine's power allowing the release of the isolation key A.

2. The isolation key A is then trapped in the access lock NX releasing the latch allowing access to the area.

As long as the access to the area is open, the isolation key A is trapped in the access lock. The machine cannot be restarted with the door open.

4. To put the machine back into service, the operator follows the same steps in reverse order.



NX - Boltlock

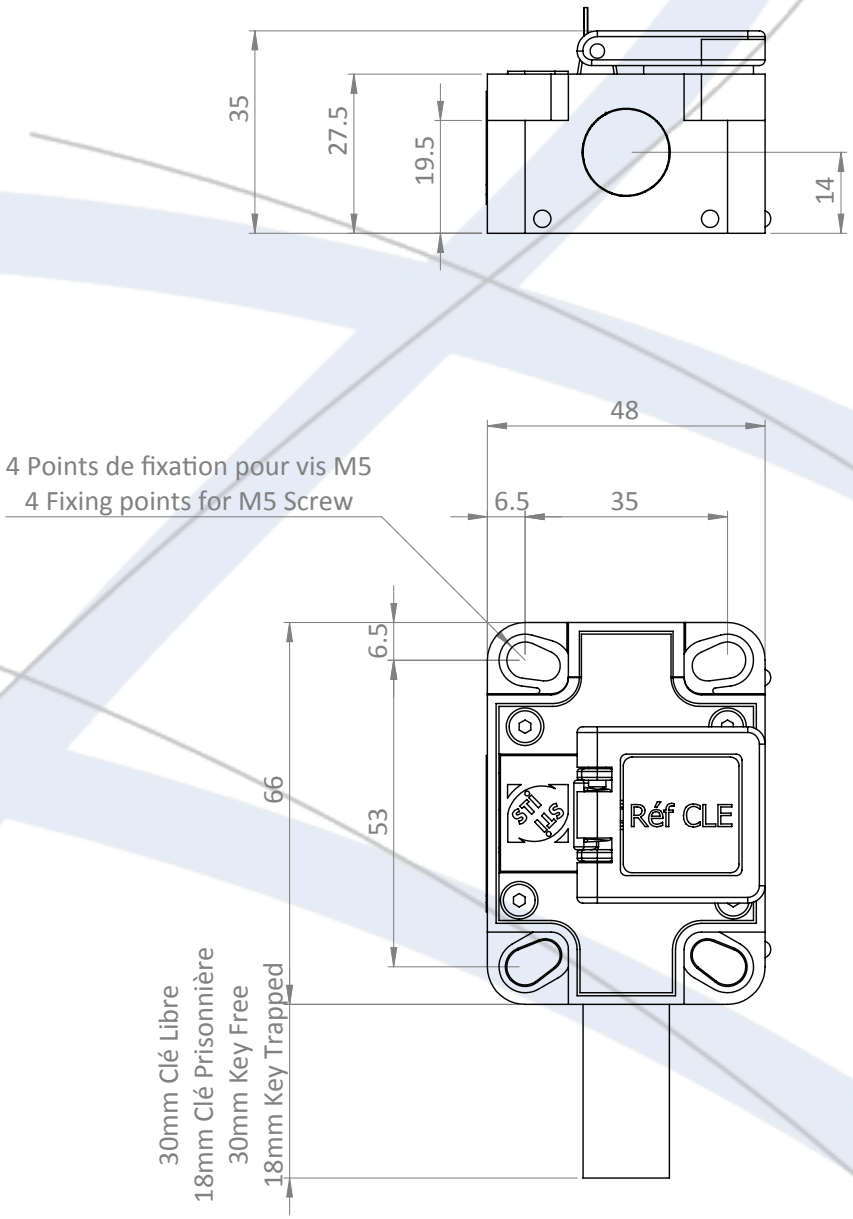
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

NX with bolt (diameter 15) with one key entry



NX - Boltlock

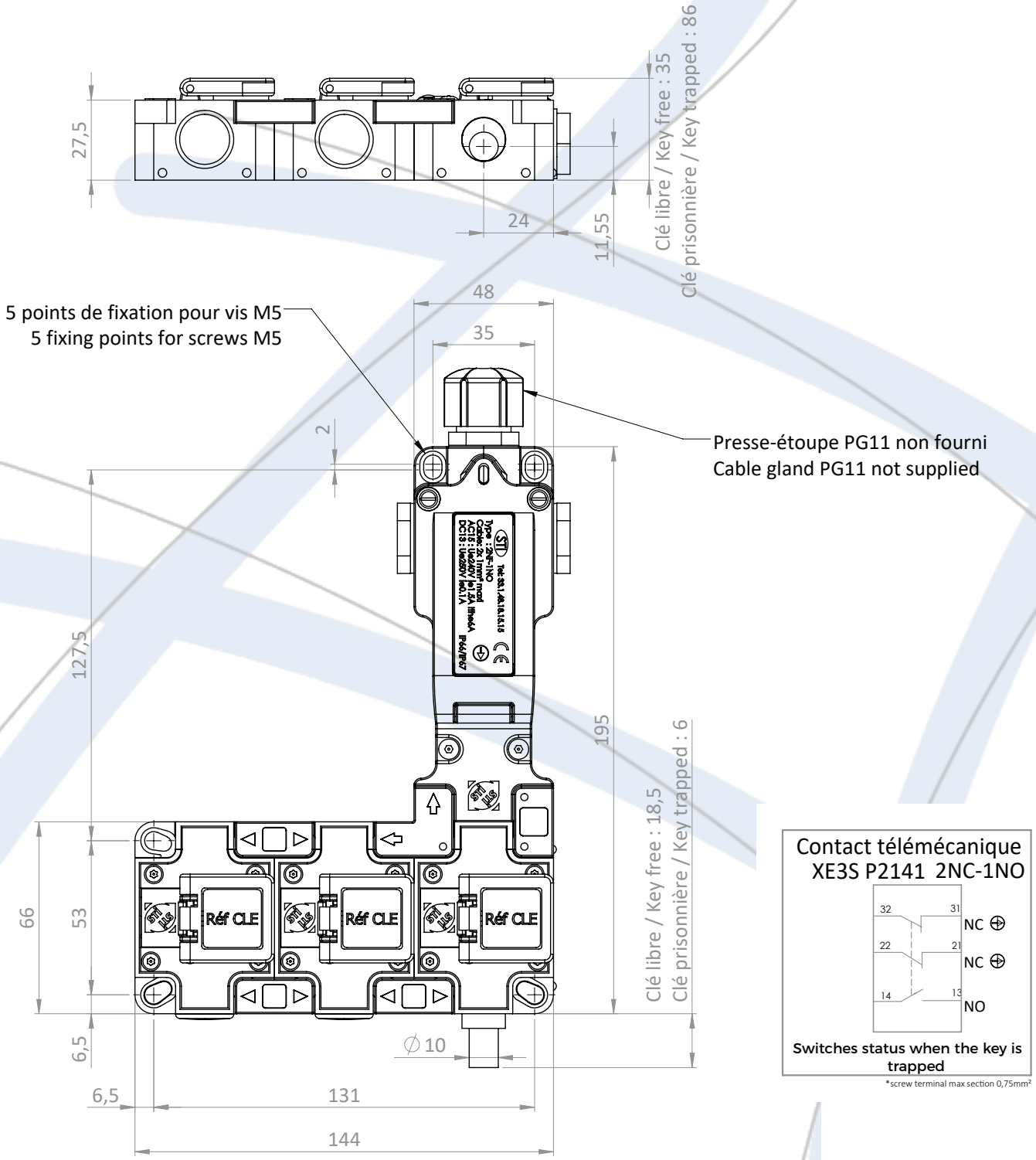
Part of the Sentric Group

DRAWING

Dimensions: in mm

Note: For a safe mounting, use rivets or self-tapping screws.

NX with bolt (diameter 10) with 3 switches key entries (in back position)



Contact télémécanique
XE3S P2141 2NC-1NO

Switches status when the key is trapped

*screw terminal max section 0,75mm²

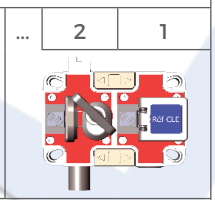
NX - Boltlock

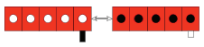
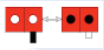
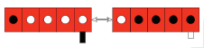
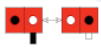
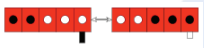
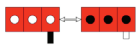
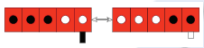
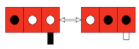
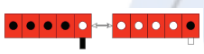
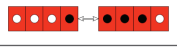
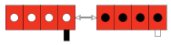
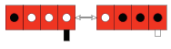
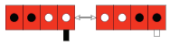
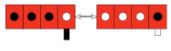
Part of the Sentric Group

ORDER INFORMATION

	NX	N° of entries	N° of bolts	Diameter	Function	Switch	Position	Order no
Reference	NX							
Example	NX	2	1	P15	AC	NS	0	000

1	N° of entries	From 1 to 5 entries
2	N° of bolts	From 1 to the number of entries
3	Diameter	P15 = Bolt diameter Ø15 P10 = Bolt diameter Ø10 P08 = Bolt diameter Ø08
4	Function	The function determines the key position (in or out). See FUNCTION table
5	Switch	NS = No Switch BS = Back Switch FS = Front Switch
6	Position	From 1 to 5 which shows the contact position on the device starting from the right
7	Order no	For specific applications. This number is assigned by STI for an adapted product



N° of entries	Function	Principle	N° of entries	Function	Principle
1	AA		5	AO	
2	AB		5	AP	
2	AC		5	AQ	
3	AD		5	AR	
3	AE		5	AS	
3	AG				
4	AJ				
4	AK				
4	AL				
4	AM				

Legend	○	free key
	●	trapped key
	▮	bolt out
	▮	bolt in

NX - Boltlock

Part of the Sentric Group

ACCESSORIES

- None

CONTACTS

Serv Trayvou
1 ter rue du Marais, 93100 MONTREUIL, France
t: +33 (0)1 48 18 15 15 | f: +33 (0)1 48 59 68 50 | e: sales@servtrayvou.com

Star key (Profalux type)

Part of the Sentric Group

A range of keys available to suit various applications. This key pattern is proprietary to STI, non-reproducible and with millions of combinations available.

This star model was formerly called PROFALUX. It is the most secure key model we offer in our energy range.

There are over 2,000,000 possible combinations.

The combinations are directly assigned by STI and are kept in a database for security and traceability.

The metal head version (PSTI5N) is more robust, waterproof and has a nickel-plated finish (against corrosion).

Trapped Key Interlocks

ENERGY

USAGE

o Available in nylon or metal head versions

o Customisable coding

- Laser marking right on the stainless steel key
- 1 row with lock code/key
- Marker in addition to the key code (if requested by the customer)
- 1 row (possibility of 2 rows but smaller engraving)
- 8 characters maximum
- Any alpha- (A-Z) and digital (0-9) configuration

o 2,000,000 available codes

o Master and spare keys available (for safety reasons, a release letter will be requested for all spare key orders)

o New key codes (combinations) can only be assigned by STI

o Master Key available - must be specified when starting a project

o Locks using 2 different keys available - must be specified at the start of a project

Star key (Profalux type)

Part of the Sentric Group

TECHNICAL DATA

Weight	10 gr nylon key / 20 gr metal key / 36 gr handle key
Material	Nylon key: TENAC 5010 black (head) / Brass (insert) Metal key: Zamak (head) / Brass (insert) Handle key: Polyamide PPA (handle) / Brass (insert)
Product finishing	Metal key head: Nickel
Temperature rating	-35°C / +120°C
Salt spray tolerance	240h
Torsional strength	No breaking at 5Nm in trapped key position
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

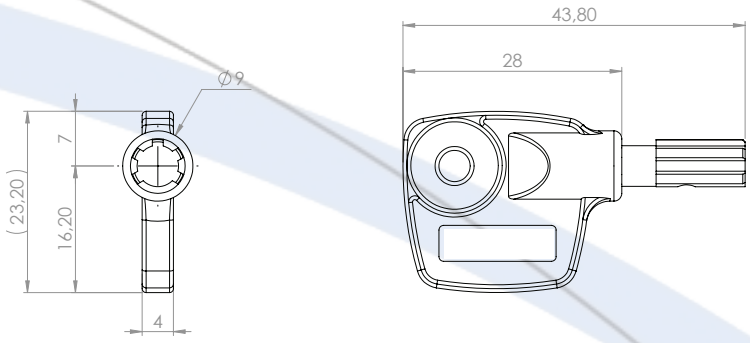
OPTIONS

- Coloured stitch for key visual identification
- Key ring / Welded ring: SKMKH01AV001
- Plaque for key ring: contact us

DRAWING

Dimensions: in mm

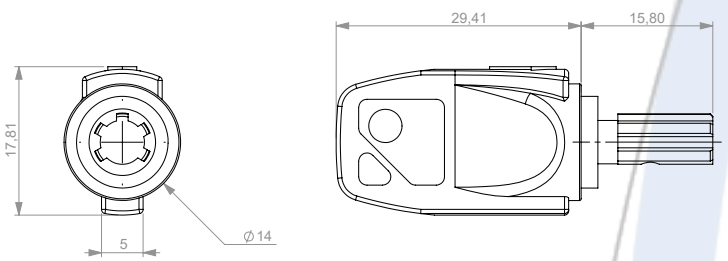
Star key with nylon key head



DRAWING

Dimensions: in mm

Waterproof star key with nickel-plated key head



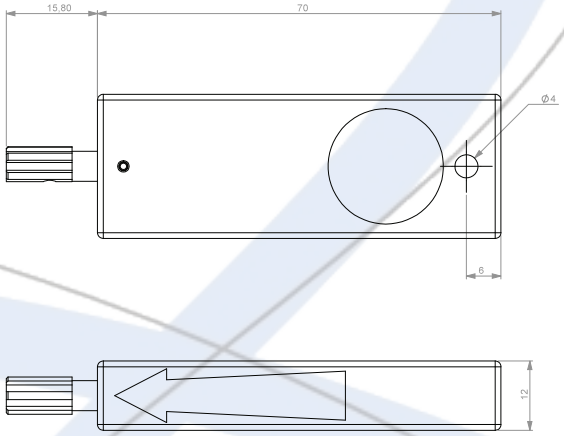
Star key (Profalux type)

Part of the Sentric Group

DRAWING

Dimensions: in mm

Star key with PPA handle



REFERENCES

PCHF5	Star key - nylon key head
PSTI5N	Waterproof star key - nickel-plated key head
PSTI5+/SERV	Star key - PPA key handle (special)

DISCHARGE

IMPORTANT:

We must draw your attention to the potential danger of issuing spare keys, master keys or masker keys.

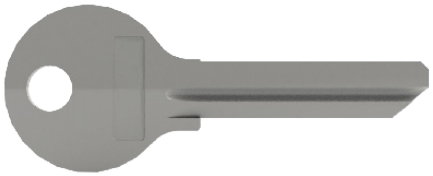
Trapped key interlocks control safety procedures in a strict sequence. If this sequence is altered by the use of spare keys or Masker Keys, the integrity of your security system can be compromised, resulting in serious injury or death, or damage to processes and plant.

In inappropriate hands, spare keys or Masker Keys could expose one or more people to danger, even with a locking system that is supposed to protect them.

CONTACTS

Serv Trayvou
1 ter rue du Marais, 93100 MONTREUIL, France
t: +33 (0)1 48 18 15 15 | f: +33 (0)1 48 59 68 50 | e: sales@servtrayvou.com

Flat key (Ronis type)



A range of keys available to suit various applications

Standard key with hundreds of thousands combinations.

Flat keys (RONIS type) are available in 5 and 6 pin versions.

With 5 pins and all profiles (EL/EM/ET/EK/EP/EV) we offer at least 53,000 combinations.

With 6 pins, and all profiles combined (GL/GM/GT/GK/GP/GV), we can offer you at least 478,000 combinations, which is 9 times safer than the 5-pin version.

Trapped Key Interlocks

ENERGY

USAGE

5 or 6 pins, each with 6 different profiles

- o Nickel-plated brass
- o Customisable coding
  - • Laser marking directly on the key
  - • 1 line with lock / key code
  - • Marking in addition to the keycode (if desired by customer)
  - • 1 line (possibility to have 2 lines but smaller engraving)
  - • 8 characters
  - • Any alpha (A-Z) and numeric (0-9) configuration
- o 53,000 code combinations available for 5 pin locks, 478,000 for 6 pin locks
- o Master and spare keys available (for safety reasons, a release letter will be requested for all spare key orders)
- o New key codes (combinations) can only be assigned by STI
- o Master Key available - must be specified when starting a project

Flat key (Ronis type)

Part of the Sentric Group

TECHNICAL DATA

Weight	12 gr for the 5 pin version / 15 gr for the 6 pin version
Material	Brass
Product finishing	Nickel
Temperature rating	-35°C / +120°C
Salt spray tolerance	240h
Torsional strength	Key break: 4.8Nm in trapped key position
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

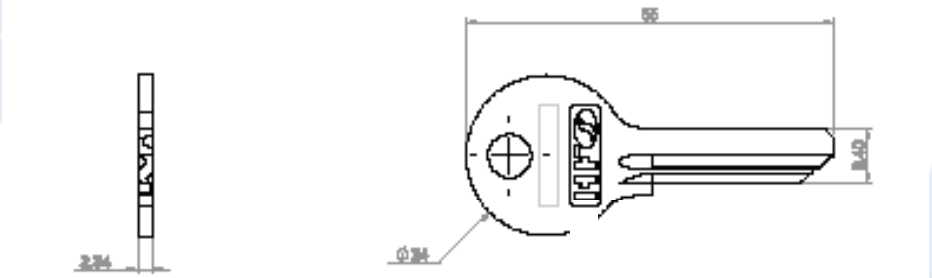
OPTIONS

- Coloured identification ring
- Key ring / Welded ring : SKMKH01AV001
- Plaque for key ring: contact us

DRAWING

Dimensions: in mm

5 pins flat key



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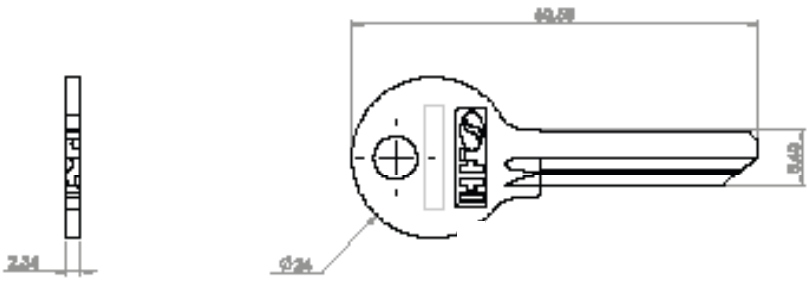
DRAWING

Dimensions: in mm

6 pins flat key



Flat key (Ronis type)

Part of the Sentric Group

REFERENCES

RCE*5	Flat key - 5 pins profile * : profile (L K M P T V)
RCG*6	Flat key - 6 pins profile * : profile (L K M P T V)

DISCHARGE

IMPORTANT:

We must draw your attention to the potential danger of issuing spare keys, master keys or masker keys.

Trapped key interlocks control safety procedures in a strict sequence. If this sequence is altered by the use of spare keys or Masker Keys, the integrity of your security system can be compromised, resulting in serious injury or death, or damage to processes and plant.

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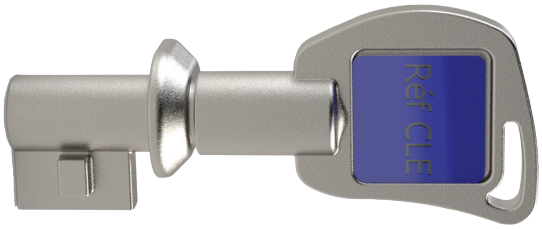
SENTRIC GROUP

Dustproof key

Part of the Sentric Group



A range of keys is available to suit various applications.

Trapped Key Interlocks

INDUSTRY

ENERGY

RAILWAY

USAGE

- 304 stainless steel (Standard)
- Dust cover
- Coding assigned by STI according to installation site
- Marking plate (blue by default; other colours possible)
- Marking:
  - + 2 rows maximum
  - + Maximum marking 8 characters per row
  - + Any alpha- (A-Z) and digital (0-9) configuration
- Master and part master keys available (contact us for more information)

Dustproof key

Part of the Sentric Group

TECHNICAL DATA

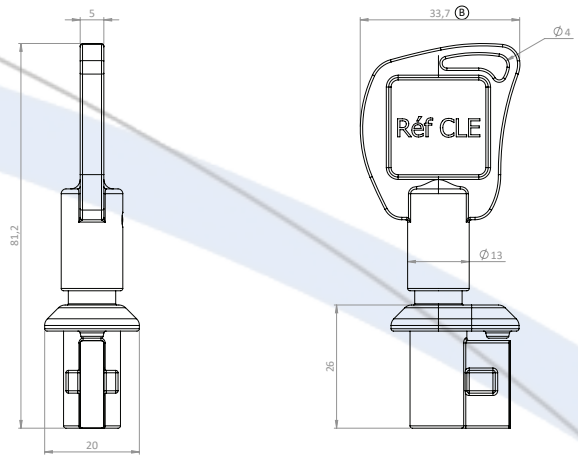
Weight	95 g
Material	- 304 stainless steel - Marking plate: Aluminium (riveted or glued) Brass rivet - Glued plate (Acrylique - Loctite AA330)
Product finishing	None
Temperature rating	-35°C / +120°C
Salt spray tolerance	240h
Torsional strength	No key breaking at 5Nm
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

OPTIONS

- Marking plate Red, Yellow, Green, Orange ou White
- Laser marking directly on stainless steel key

DRAWING

Dimensions: in mm



Dustproof key

Part of the Sentric Group

REFERENCES

SCET3000	Standard dustproof key

DISCHARGE

IMPORTANT:

We must bring to your attention the potential risk of providing spare keys, master keys or part keys.

⚠ Trapped key interlocks control safety procedures in a strict sequence. If this sequence is altered by the use of spare keys or Master keys, the integrity of your security system can be compromised, resulting in serious injury or death, or damage to processes and plant.

In inappropriate hands, spare keys and Master keys could expose one or more people to danger, even with a locking system that is supposed to protect them.

A release letter will be requested when ordering a spare key or pass.

CONTACTS

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1 ter rue du Marais, 93100 MONTREUIL, France
t: +33 (0)1 48 18 15 15 | f: +33 (0)1 48 59 68 50 | e: sales@servtrayvou.com

Eco key

A range of keys is available to suit various applications.

Trapped Key Interlocks

INDUSTRY

ENERGY

RAILWAY

USAGE

- 304 stainless steel (Standard)
- Coding assigned by STI according to installation site
- Marking plate (blue by default; other colours possible)
- Marking:
  + 2 rows maximum
  + Maximum marking 8 characters per row
  + Any alpha- (A-Z) and digital (0-9) configuration
- Master and part master keys available (contact us for more information)

Eco key

Part of the Sentric Group

TECHNICAL DATA

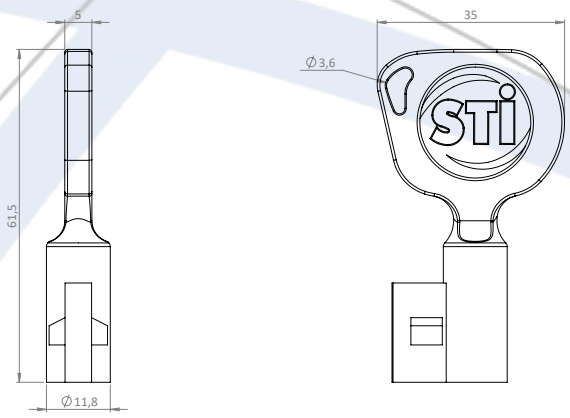
Weight	55 g
Material	- 304 stainless steel - Marking plate: Aluminium (glued) - Glued plate (Acrylique - Loctite AA330)
Product finishing	None
Temperature rating	-35°C / +120°C
Salt spray tolerance	240h BS
Torsional strength	No key breaking at 5Nm
ROHS	Certificate available on our website, Resource Centre section
REACH	Certificate available on our website, Resource Centre section
Conflict Minerals Declaration	Certificate available on our website, Resource Centre section

OPTIONS

- Marking plate Red, Yellow, Green, Orange ou White
- Laser marking directly on stainless steel key

DRAWING

Dimensions: in mm



Eco key

Part of the Sentric Group

REFERENCES

SCEC3000	Standard eco key

DISCHARGE

IMPORTANT:

We must bring to your attention the potential risk of providing spare keys, master keys or part keys.

Trapped key interlocks control safety procedures in a strict sequence. If this sequence is altered by the use of spare keys or Master keys, the integrity of your security system can be compromised, resulting in serious injury or death, or damage to processes and plant.

In inappropriate hands, spare keys and Master keys could expose one or more people to danger, even with a locking system that is supposed to protect them.

A release letter will be requested when ordering a spare key or pass.

CONTACTS

Serv Trayvou
1 ter rue du Marais, 93100 MONTREUIL, France
t: +33 (0)1 48 18 15 15 | f: +33 (0)1 48 59 68 50 | e: sales@servtrayvou.com

Hercule range accessories

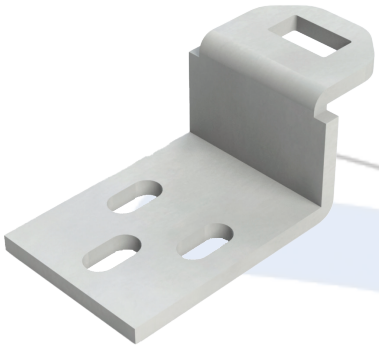
Part of the Sentric Group

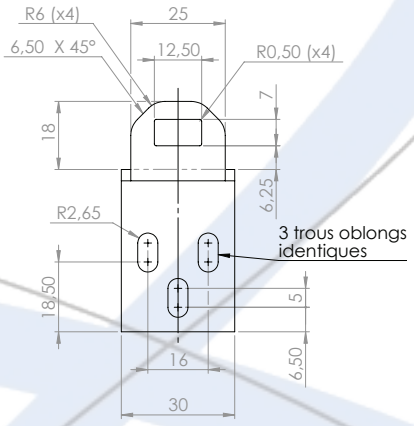
BEND STRIKE PLATE

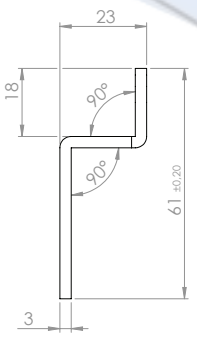
Dimensions: in mm

Ref. D531001000

Comes as standard





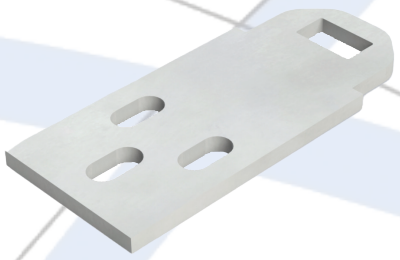


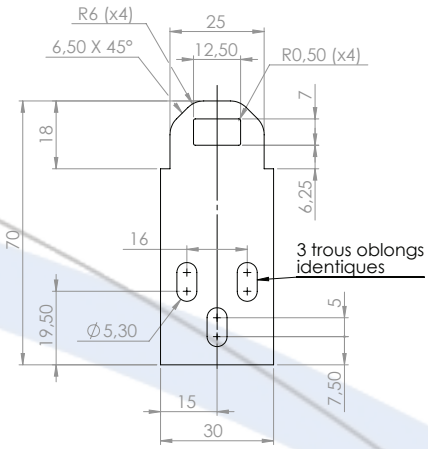
STRAIGHT STRIKE PLATE

Dimensions: in mm

Ref. D531002000

Available as an option



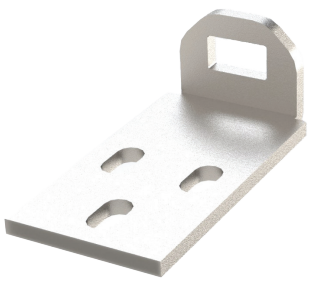


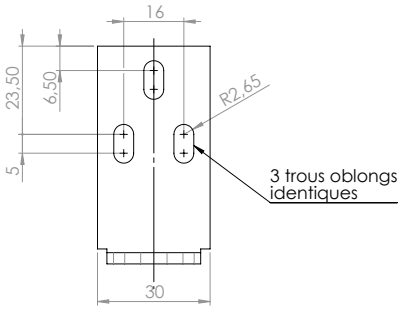
90° BEND STRIKE PLATE

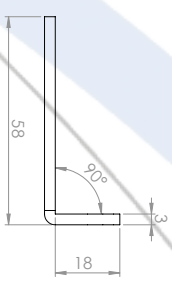
Dimensions: in mm

Ref. D531003000

Available as an option







Hercule range accessories

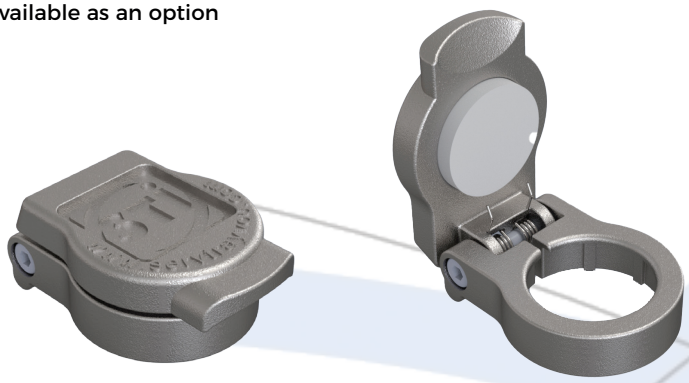
Part of the Sentric Group

FLIP CAP

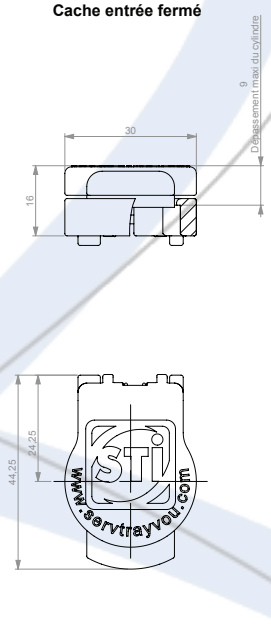
Dimensions: in mm

Ref. D23556

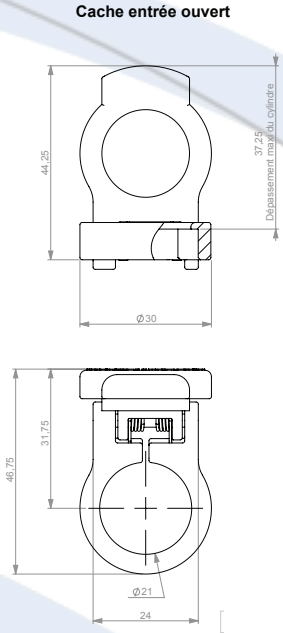
Available as an option



Cache entrée fermé



Cache entrée ouvert

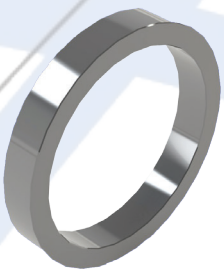


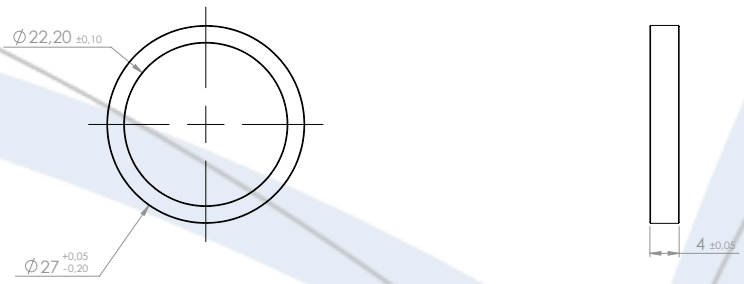
4MM SPACER RING

Dimensions: in mm

Ref. 514002000

Available as an option



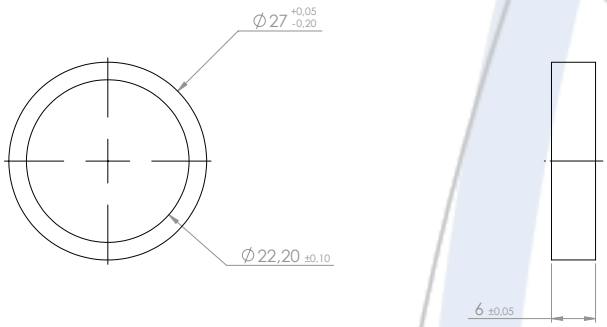


6MM SPACER RING

Dimensions: in mm

Ref. 514012000

Available as an option



Hercule range accessories

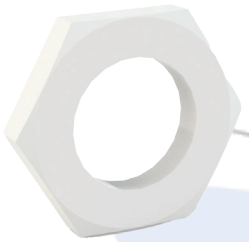
Part of the Sentric Group

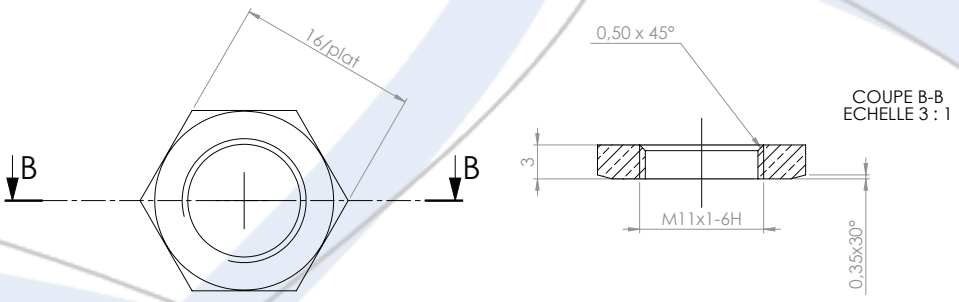
M11 NUT

Dimensions: in mm

Ref. D51701000

Available as an option



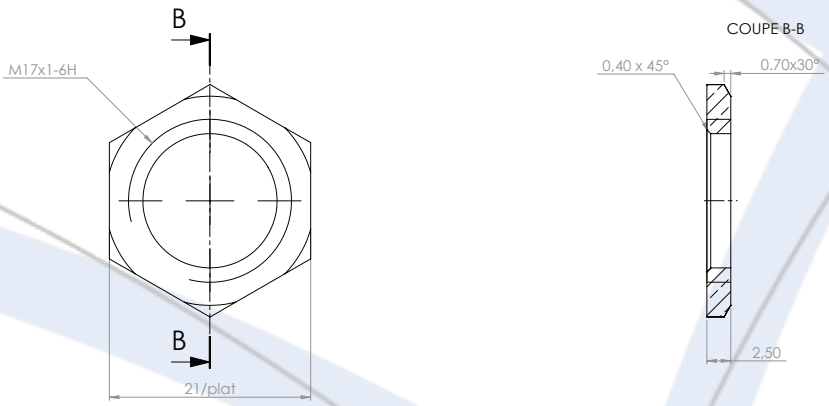


M17 NUT

Dimensions: in mm

Ref. D51708000

Available as an option

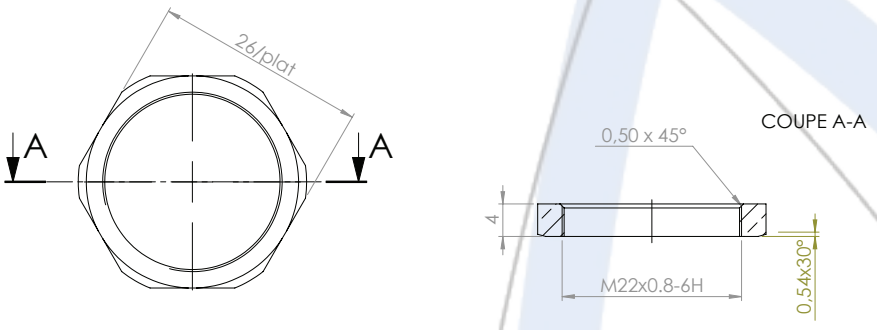


M22 NUT

Dimensions: in mm

Ref. D51702000

Available as an option



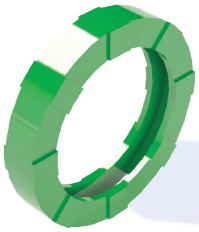
Hercule range accessories

COLOURED IDENTIFICATION RING

Only available on flat keys (RONIS)

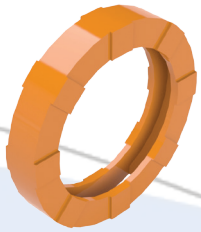
Green: Ref. D514015000

Available as an option



Orange: Ref. D514033000

Available as an option

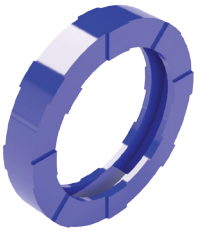


Pink: Ref. D514017000

Available as an option

Blue: Ref. D514022000

Available as an option



Yellow: Ref. D514016000

Available as an option

White: Ref. D514046000

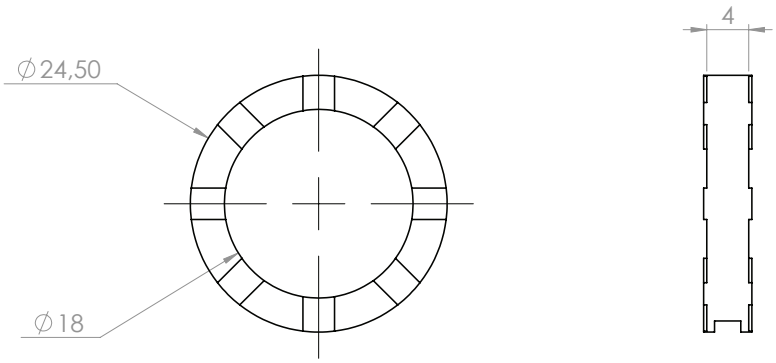
Available as an option

Red: Ref. D514023000

Available as an option

Black: Ref. D514021000

Available as an option



CONTACTS

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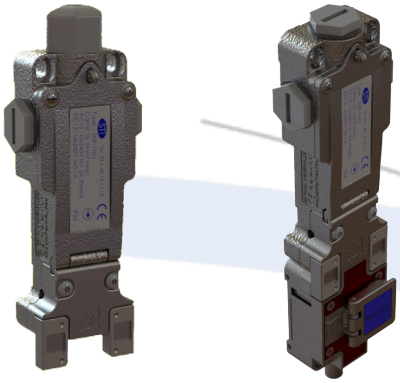
SERV range accessories

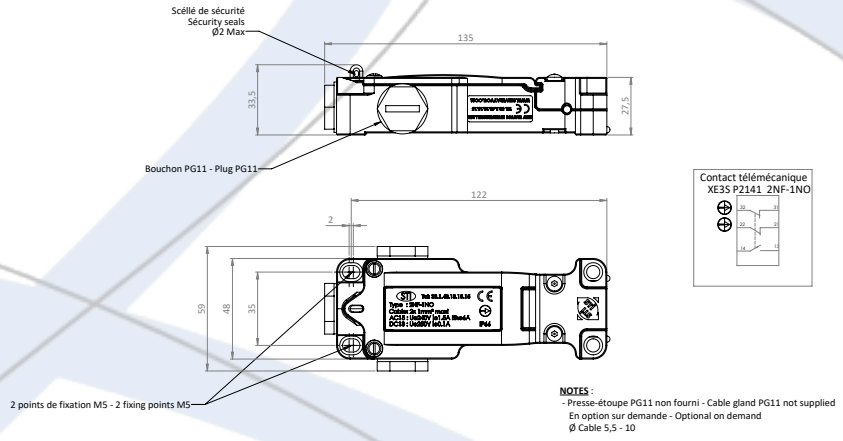
NC2 ELECTRICAL SWITCH FOR NX

Dimensions: in mm

Front Mounting: Ref. 110052 / Back Mounting: Ref. 110040

The NC2 is an electrical switch type 2NC-1NO (switch status in trapped key position) manufactured in stainless steel AISI304, IP66 and IK08 compatible with all NX range locks.





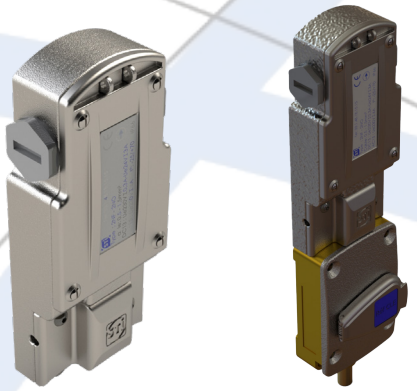
NOTES :
- Presse-étoupe PG11 non fourni - Cable gland PG11 not supplied
En option sur demande - Optional on demand
Ø Cable 5,5 - 10

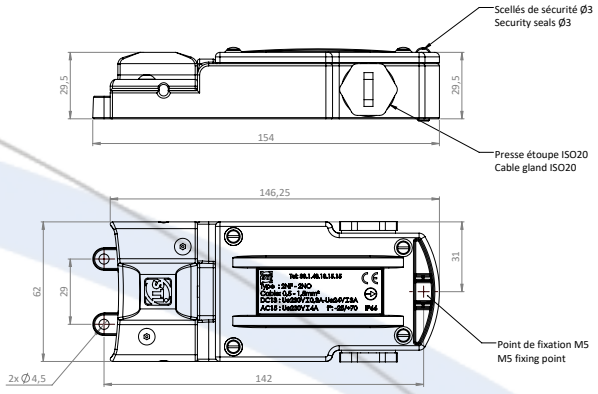
NS22 ELECTRICAL SWITCH FOR MS

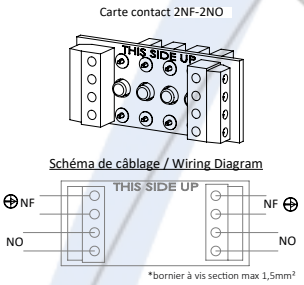
Dimensions: in mm

Front Mounting: Ref. 112846 / Back Mounting: Ref. 111469

The NS22 is an electrical switch type 2NC-2NO (switch status in trapped key position) manufactured in stainless steel AISI304, IP66 and IK08 compatible with all MS range locks.





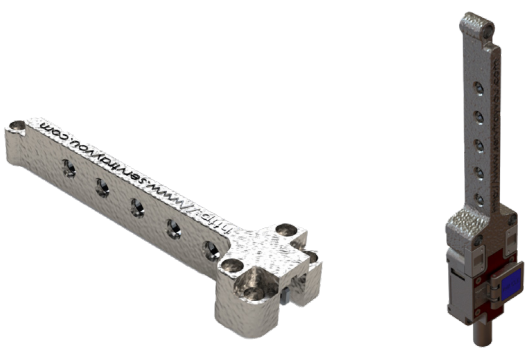


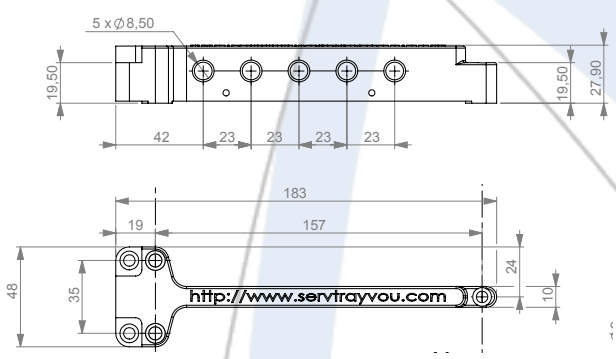
LOCK WITH PADLOCK GUARD FOR NX

Dimensions: in mm

Ref. 23114

This lock with padlock guard allows you to lock out NX locks. Up to 5 padlocks can be used for this purpose.





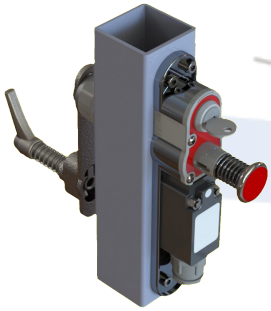
SERV range accessories

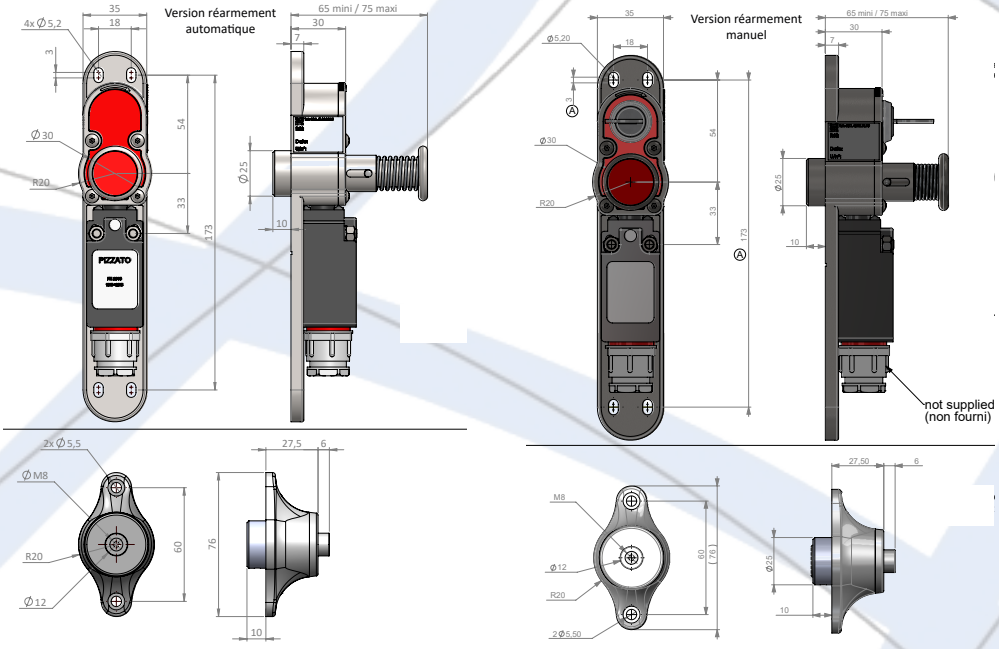
EMERGENCY EVACUATION UNIT FOR NX ACCESS

Dimensions: in mm

Ref. DEUAFS000 / Ref. DEUMFS000

The Emergency Evacuation Unit (DEU) allows an operator trapped in an area locked by an NX access, to evacuate the area.
The DEU is equipped with an electrical switch to be wired on the machine emergency stop button and is available in two versions: automatic or manual reset.



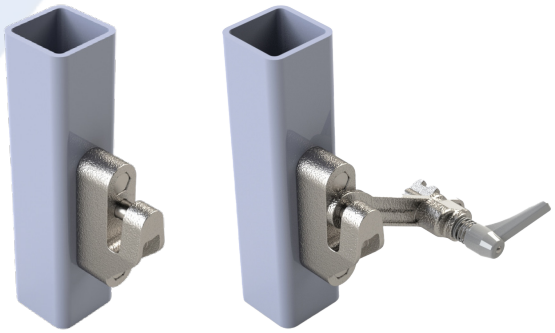


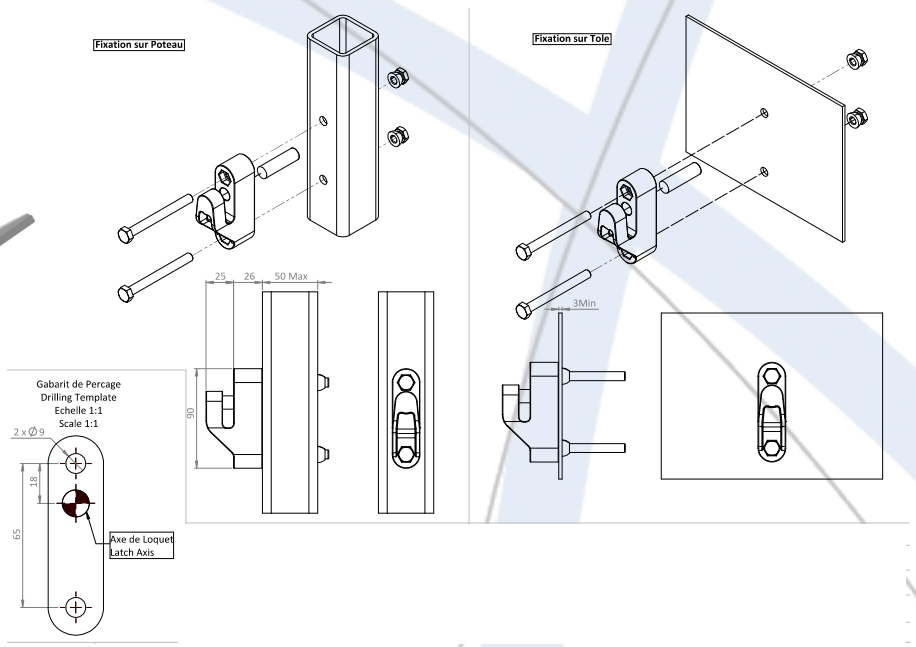
LATCH SUPPORT KIT

Dimensions: in mm

Ref. 201561

The Latch Support Kit is designed to assist in the mounting of 85, T and TC latches to posts or mounting plates. It is suitable for use on posts up to 50mm or sheet metal of 3mm at least.





SERV range accessories

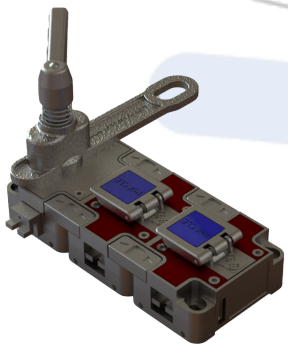
LATCH 85 - LATCH 180

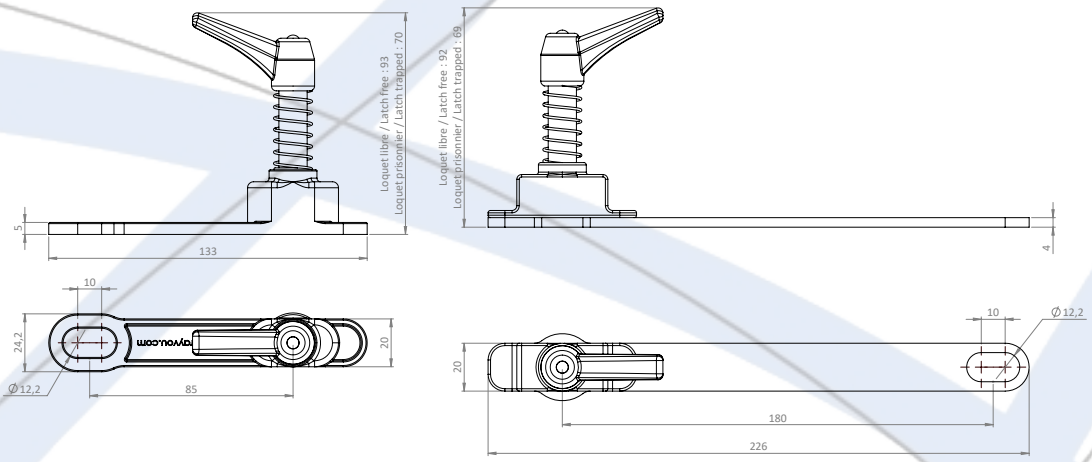
Dimensions: in mm

Ref. 1603 / Ref. 1745

Straight latch, mounts at 90° to the lock. Available in 2 lengths: 85mm and 180mm.

The 85 and 180 latches are fitted as standard to all SERV access locks. They are all fitted with a flip cap and a compensating spring.





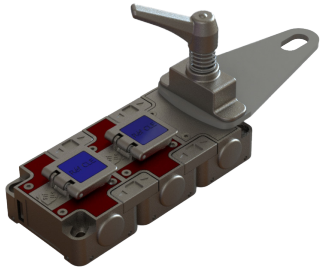
LATCH T

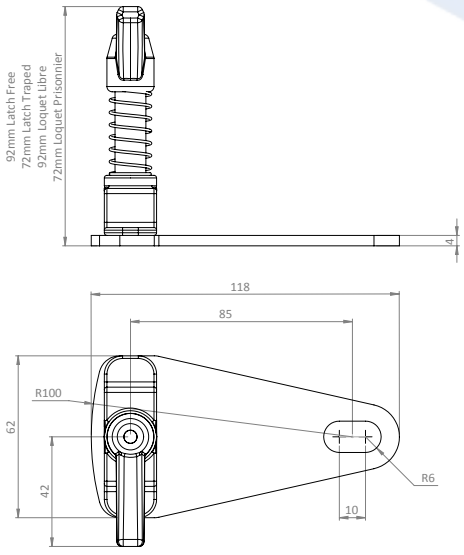
Dimensions: in mm

Ref. 110247

Triangle latch, allows mounting in line with the lock.

The latch is standard on all SERV access locks. It is equipped with a flip cap and a compensation spring





SERV range accessories

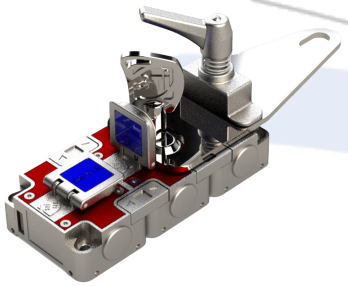
LATCH TC FOR NX & MS

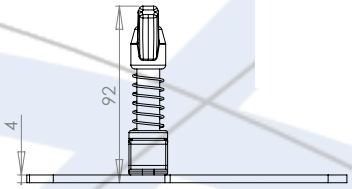
Dimensions: in mm

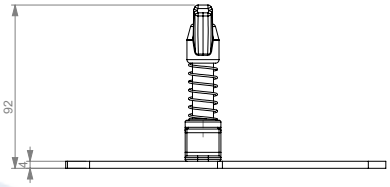
Ref. 1602 / Ref. 113082

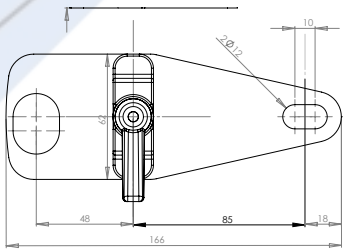
Special lockout key latch. To be used to force the operator to take the lockout key to protect against accidental enclosure and commissioning of the hazardous machine.

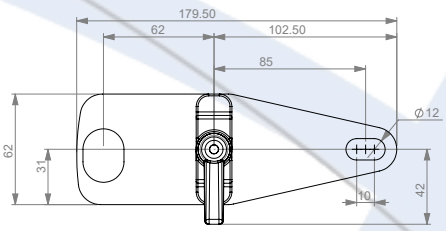
The TC latch is fitted as standard to the NX and MS access locks. It is equipped with a flip cap and a spring compensation.









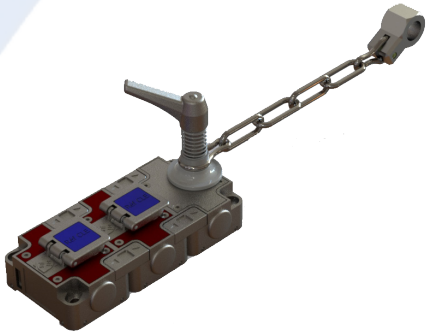


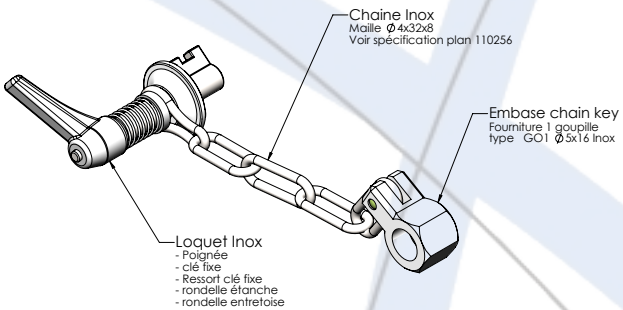
CHAIN KEY

Dimensions: in mm

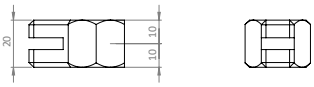
Ref. 001308 (length 20cm)

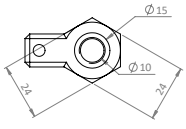
The chain key is particularly recommended for use in extremely harsh environments and on access points exposed to vibration. Other lengths are available on request.





Embase chain key





SERV range accessories

CONTACTS

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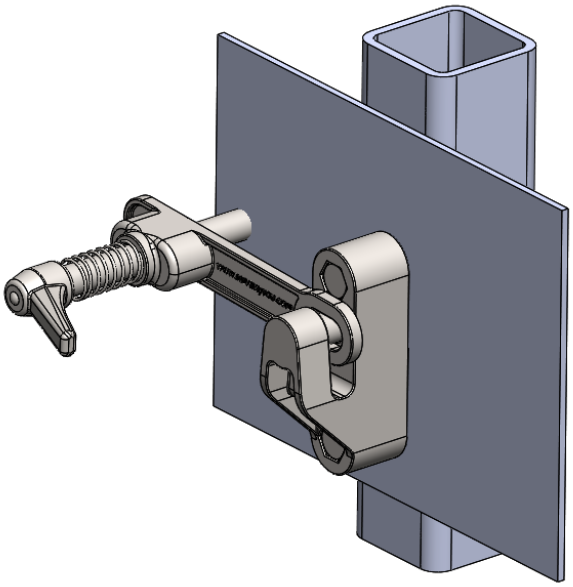
e : sales@servtrayvou.com

Latch holder kit



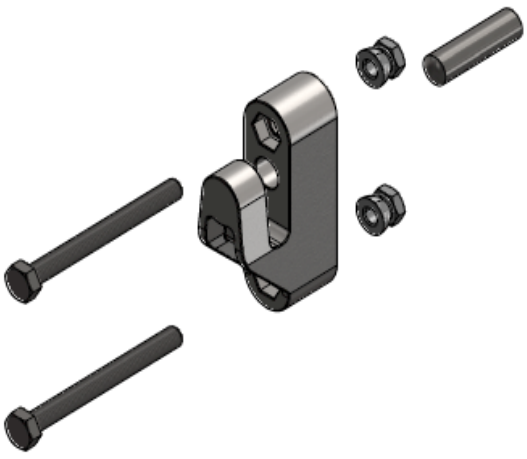
With an high breaking torque and safety screws, this two-point fixing kit makes the latches of your safety locks unmountable. Recommended by International control & standard laboratories, and directly complying with the machine directive 2006/42/CE; it will allow you to increase your safety performance level.

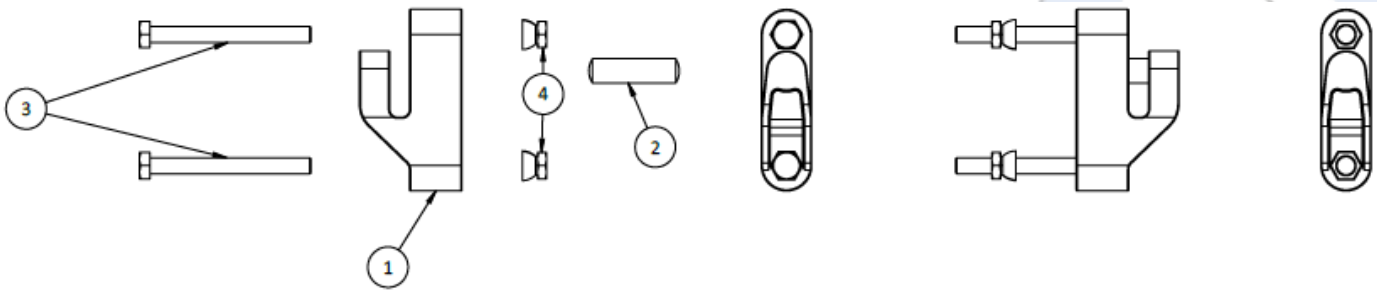
Designed in stainless steel for the most aggressive environments, it is compatible with many type of locks including NX, MS, SOL and XSOL models.

REF : 201561

INDUSTRY Railway ENERGY

KIT CONTENT

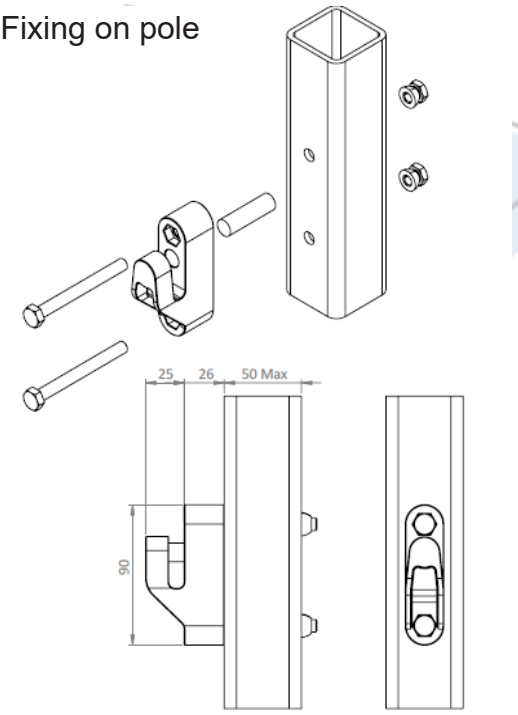




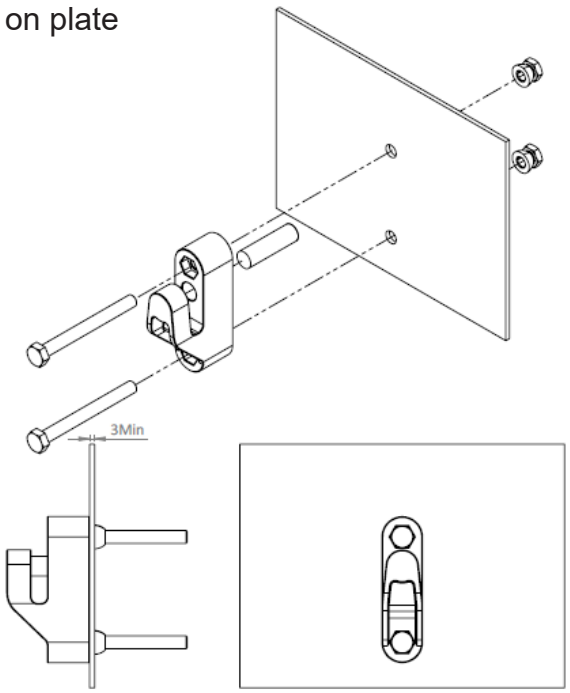
Latch holder kit

INSTALLATION

Fixing on pole



Fixing on plate



Nota: Couple de rupture des écrous 13-25 N/m
Nut Breaking Torque 13-25 N/m
Fixation sur Tole 3mm épaisseur 3mm minimum
Fixing on plate Thickness 3mm minimum
Fixation sur Poteau épaisseur 50mm maximum
Fixing on Pole Thickness 50mm maximum

TECHNICAL DATA

Description	Matérial	Amount	Item n°
Latch holder	AISI 304	1	1
Cylindrical Pin 12x45	Saintless steel A2	1	2
Stainless steel screw H M8x80	Saintless steel A2	2	3
Inviolable M8 bolt	Saintless steel A2	2	4