



# Telemecanique Sensors XCSE5513 Solenoid Locking Interlock Switch Instructions

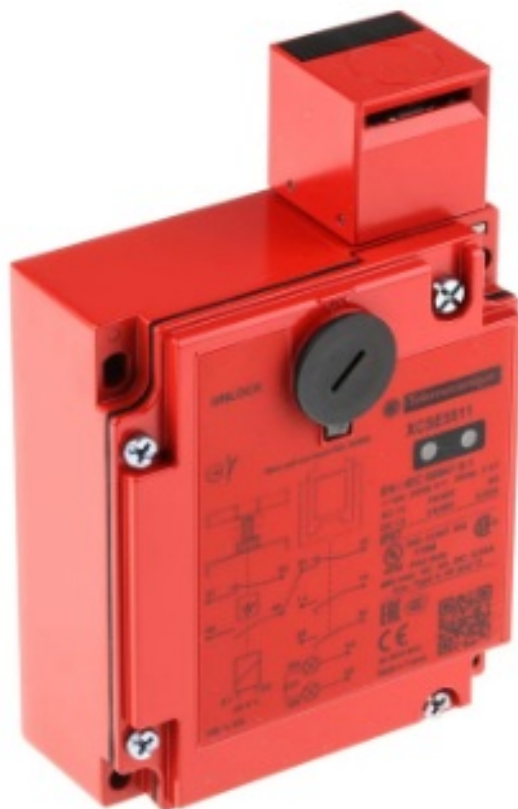
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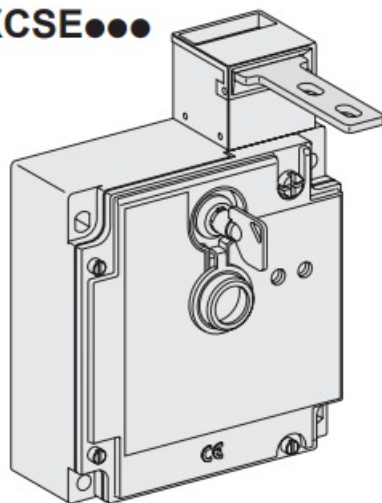
**Telemecanique**  
**Sensors**

**Telemecanique Sensors XCSE5513 Solenoid Locking Interlock Switch**

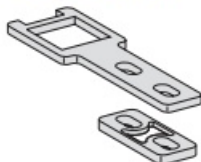


Safety interlock switch

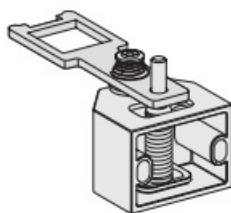
**XCSE●●●**



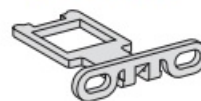
**XCSZ01**



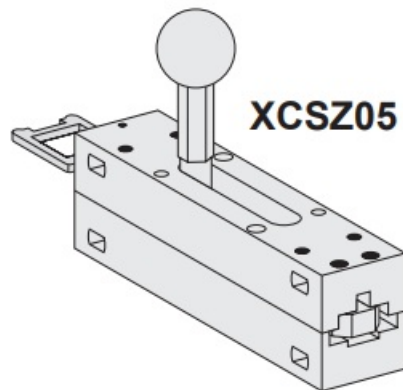
**XCSZ03**



**XCSZ02**



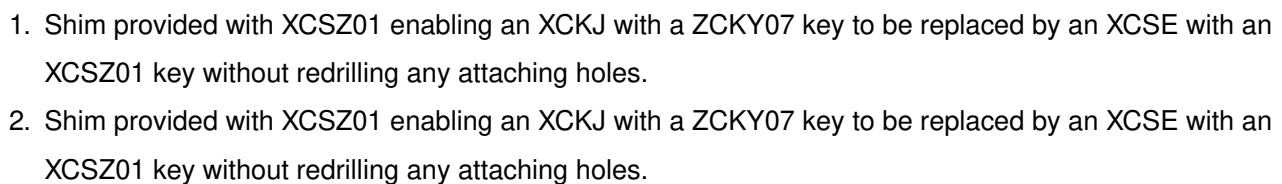
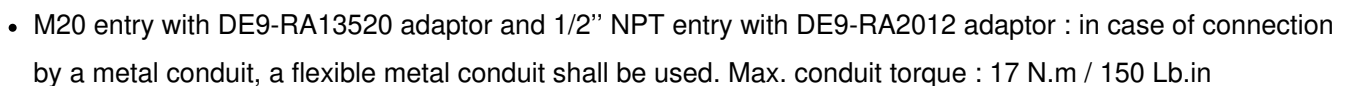
**XCSZ05**



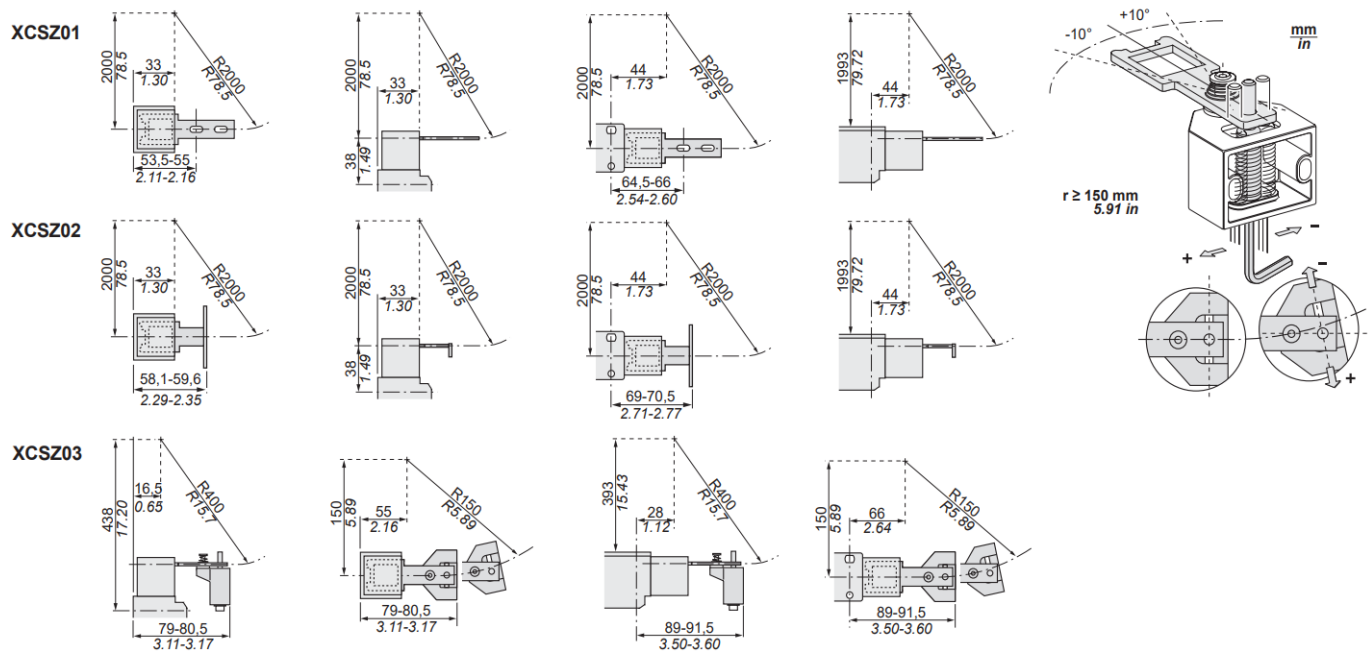
- <http://qr.tesensors.com/XCS004>



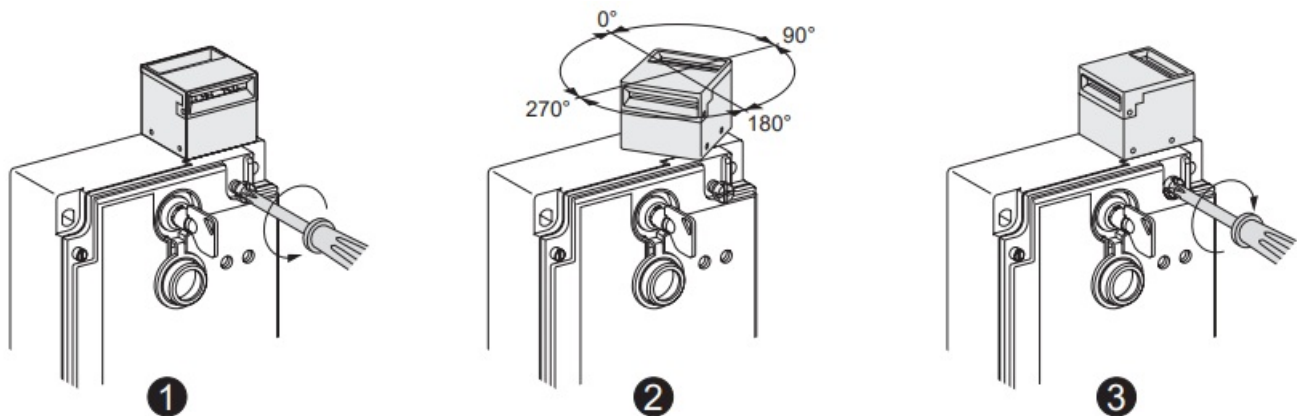
- XCSE...1 (13P/Pg13)
- XCSE...2 (M20)
- XCSE...3 (1/2" NPT)
- XCSE...1 (M20 with DE9RA13520 adaptor)
- XCSE...2 (1/2" NPT with DE9RA2012 adaptor)



### Tongued key actuation radii

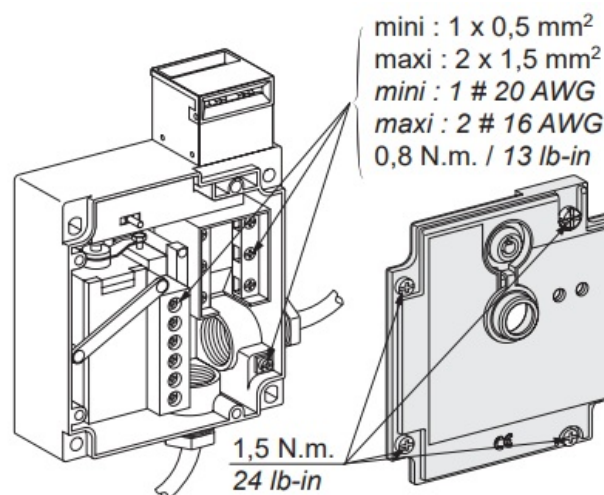


## Head orientation



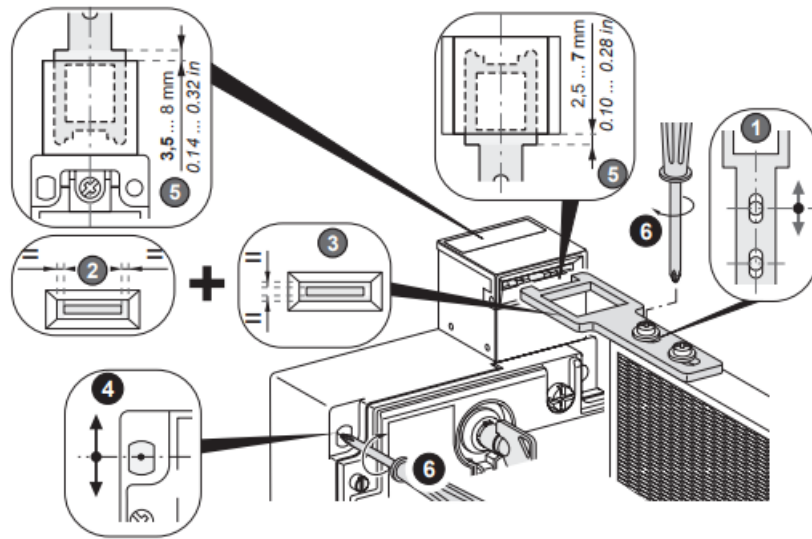
## Tightening torque, tightening capacity

- 1/2" NPT : in case of connection by a metal conduit, a flexible metal conduit shall be used. Max. conduit torque : 9 N.m / 80 Lb.in



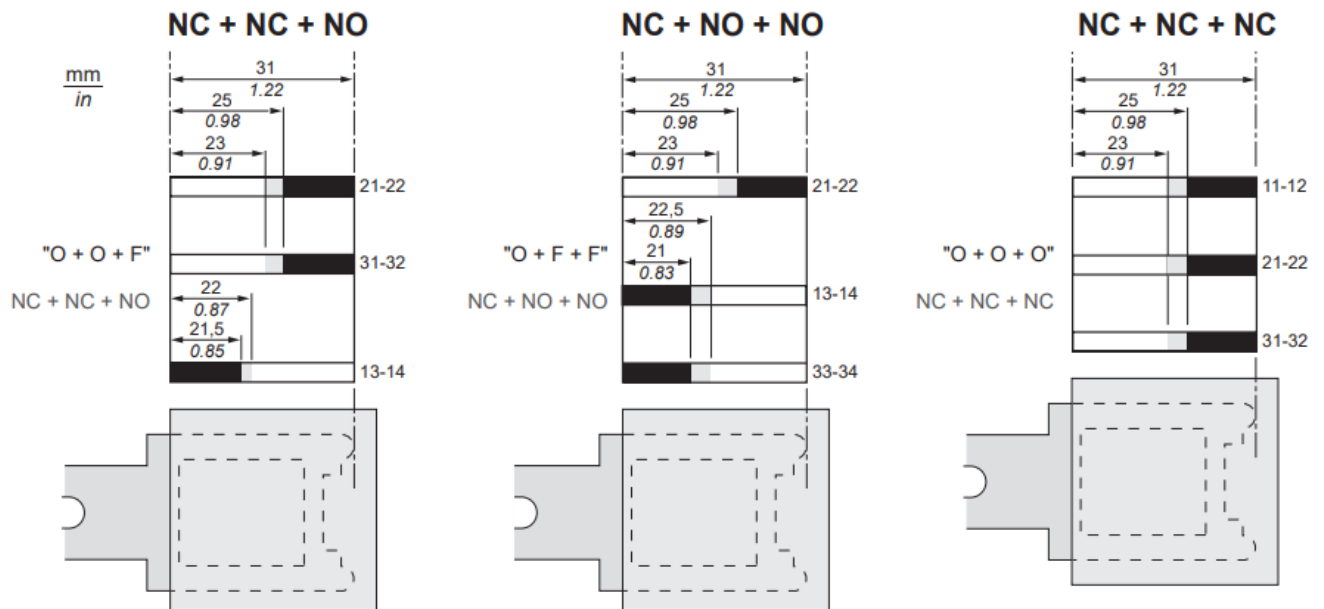
## Adjustment of tongued keys

- The safety interlock switch must not be used as a mechanical stop or as a centring tool for the moving guard.
- An additional limit stop on the fixed part must be anticipated.
- After adjustment, make it impossible to dismantle the support key.
- Only keys XCSZ 01/02/03/05 must be used.

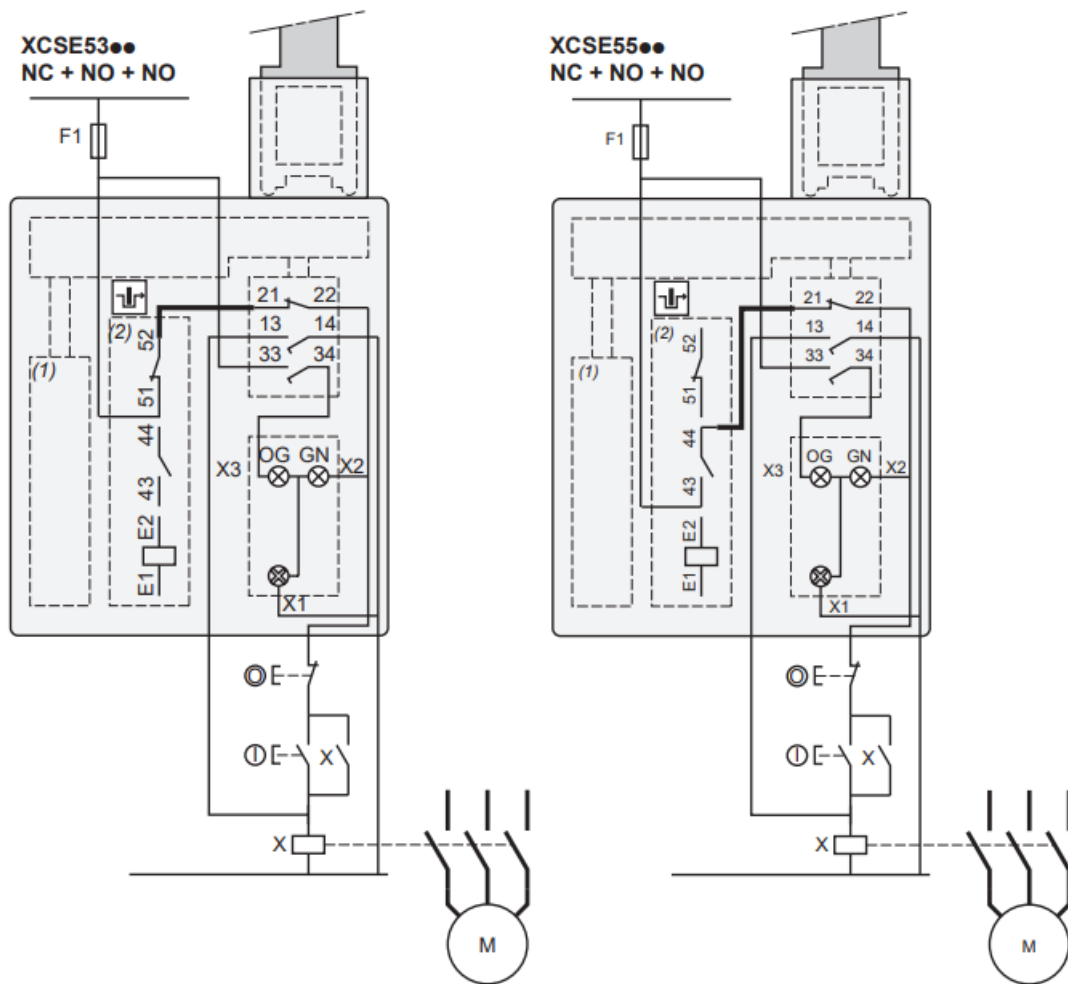


## Contacts state

- Transient state
- Contact open (0)
- Contact closed (1)

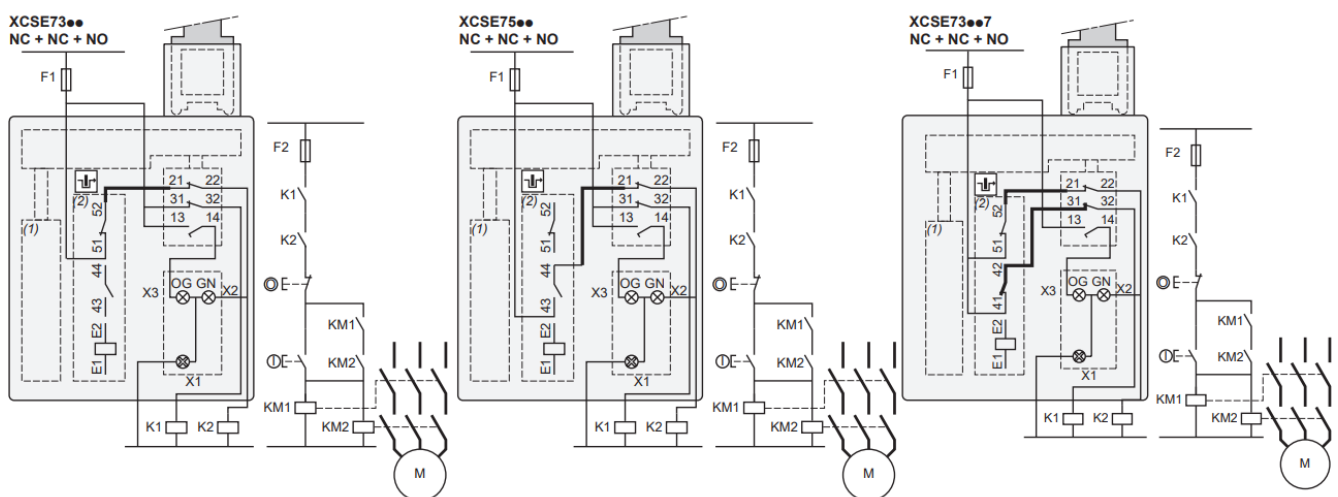


## Wiring diagram



- Contacts represented with the actuating key inserted and solenoid not energized.

1. Solenoid
2. Solenoid contacts
3. Safety pre-wiring mandatory



## DANGER

HAZARD OF ELECTRIC SHOCK, BURN OR EXPLOSION Turn off all power before working on this equipment. Failure to follow these instructions will result in death or serious injury.

## INCORRECT INSTALLATION

- All spare actuating keys must be stored in a safe place and only used or installed by authorized persons.
- Do not use a master key, modified or dummy actuating key.
- Actuating keys must be permanently mounted by soldering, riveting or One-way screws.

Failure to follow these instructions can result in equipment damage.

- Operation example of a safety switch XCSE: Locking when the solenoid is unpowered (Locking on de-energisation models) or locking when the solenoid is powered (Locking on energisation models).

- Machine sequence	- Guard position	- Guard states	- Main contacts states		- Solenoid states	- Solenoid contacts states		- Functions	- LED orange	- LED green	- Machine safety circuit sécurité haltung line seguridad  macchina s da
			XCSE5●●● O + F + F NC+NO+NO	XCSE7●●● O + O + F NC+NC+NO		O + F NC + NO	O + O NC + NC				
- Machine stopped with power off.	- Open	- Free movement			OFF			- Machine is non operation state			- Open
- Machine stopped with power on	- Open	- Free movement			ON			- Machine cannot start			- Open
					OFF						
- Machine stopped ready to start	- Closed	- Free movement			ON			- Guard is closed, flat-head key may be locked. It is locked at the start command.			- Open
					OFF						
- Machine running	- Closed	- Locked			OFF			- Start command is given, machine is in operational state			- Closed sseen
					ON						
- Stop sequence	- Closed	- Locked			OFF			- Start command is given, machine slows down until complete stop.			- Closed n
					ON						

- Machine stopped with power on	- Closed	- Free movement		ON			- When machine has stopped, guard may be opened.			- Open
				OFF						
XCSE•5••										
Differences lincks with locking on energisation										

## Characteristics

<b>Product certifications</b>	<b>UL, CSA, CCC, EAC</b>
<b>Ambient air temperature</b>	Operation : -25...+40 C° / -13...104 F° – Storage : -40...+70 C° / -40...158 F°
<b>Vibration resistance</b>	5 gn (10-500 Hz) conforming to <b>EN/IEC 60068-2-6</b>
<b>Shock resistance</b>	10 gn (11 ms) conforming to <b>EN/IEC 60068-2-27</b>
<b>Number of operations</b>	> 10 <sup>6</sup>
<b>Reliability data B10d</b>	5.500.000 (data value for a service life of 20 years can be limited by contact and mechanical wear)
<b>Rated electric characteristics of use</b>	<b>a AC-15, B300 : Ue = 240 V, Ie = 1,5 A or Ue = 120 V, Ie = 3 A,</b> <b>c DC-13, Q300: Ue = 250 V, Ie = 0,27 A or Ue = 125 V, Ie = 0,55 A conforming to IEC 60 947-5-1, EN 60 947-5-1</b>
<b>Electric shock protection</b>	Class I conforming to <b>EN/IEC 61140</b>
<b>Actuation speed</b>	mini = 0,01 m/s (0.39 in/s) – maxi = 0,5 m/s (19.68 in/s)
<b>Short-circuit protection</b>	10 A gG (gl) cartridge fuse (use type CC in the United States)
<b>Cable connection</b>	Screw clamps terminals – Clamping capacity : min : 1 x 0.5 mm <sup>2</sup> / 1 # 20 AWG, max : 2 x 1.5 mm <sup>2</sup> / 2 # 16 AWG.
<b>Resistance to forcible withdrawal of actuator</b>	F1max = 2600N / 584.5 lbf, fZh = 2000N / 449.6 lbf



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- The diagram illustrates the electrical control system for the XPSUAF unit. It includes a power supply section with L(+) and N(-) lines, a fuse F1, and a thermal switch XCS E. The XPSUAF unit has various input and output terminals, including DC+, CH+, DC-, CH-, Input, Input(1), Start, K1, K2, and EXT. These are connected to a relay assembly (E1, E2) and a solenoid (X1). The solenoid is controlled by signals X2 and X3, which are connected to a ground (GN, OG). A 'Unlocking command' is also shown as an input to the system.

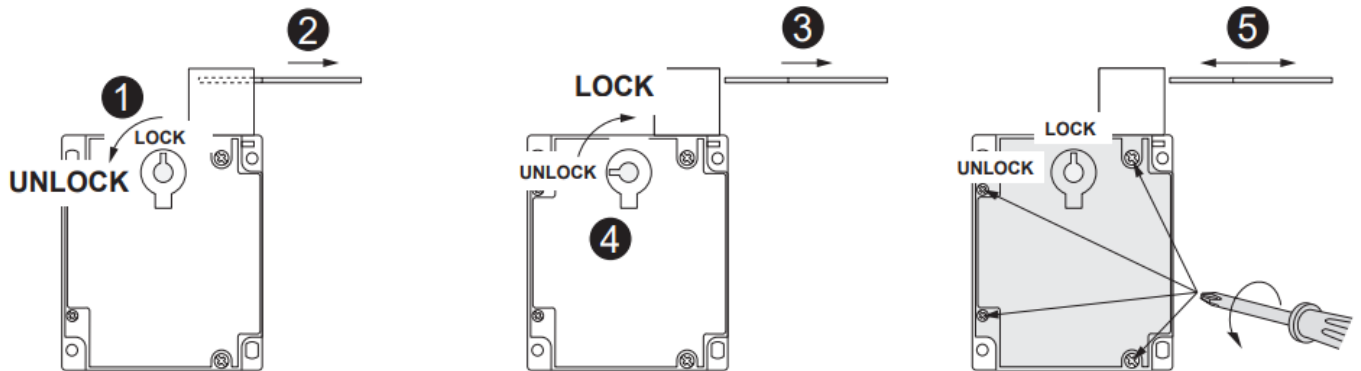
## Maintenance

It is imperative to check the following points regularly

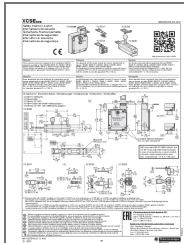
- the mechanical adjustment of product XCSE with the XCSZ 01/02/03/05 tongued key
- wear: the devices should not be used beyond the characteristics stated in catalogs
- make sure of the good electric switching
- it is forbidden to modify the devices.

Any and all liability shall be excluded in case of noncompliance with the requirements of this notice.

## Servicing precautions



## Documents / Resources



[Telemecanique Sensors XCSE5513 Solenoid Locking Interlock Switch](#) [pdf] Instructions XCSE5513, Solenoid Locking Interlock Switch, Locking Interlock Switch, Solenoid Interlock Switch, Interlock Switch, Switch

## References

- [XCSE | Telemecanique Sensors](#)
- [Telemecanique Sensors - Simply easy! | Telemecanique Sensors](#)