Coded Magnetic Safety Switch Code-LC

Code-LC is a coted magnetic safety switch with transistor output. It is simple to install, IP67 washdown suitable and has no moving or touching parts. Anything other than the CODE actuator will not trigger the switch. In combination with a dual channel MEYLE safety relay the swtiches can be used as emergency stop devices monitoring for up to category 4.

- *Coded sensor with switch indication LED*
- *2 non-contact safety outputs*
- *Easy to install*
- *Wide tolerance to guard misalignment*
- *Protection IP67*
- *High operational life*
- *No moving or touching parts*
- *Direct connection to a safety emergency stop relay*
- *Connect up to 6 switches to one MEYLE- safety relay*

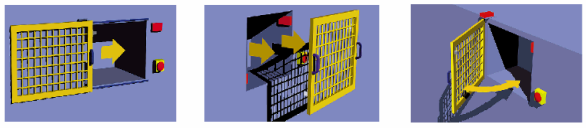
Code-LC

4

Application

Coded magnetic non contact safety switches Code-LC are designed to interlock hinge, sliding or removal guard doors. They are specifically advantageous when:

- poor guard alignment exists
- a high manipulation security is necessary
- high protection and hygiene requirements exist, e.g. food industry hose down
- a long mechanical life is required (no moving or touching parts)


Application

Safety warnings

- **Installation and operation must be carried out by qualified personnel only.**
- **The electrical installation must be performed after disconnecting the device and the machine from the mains supply.**
- **The wiring must be carried out according to the instructions of this operating manual, or the safety function may be lost.**
- **Opening the device, any manipulation of the device and the avoidance of the safety facilities are not permitted.**
- **All relevant safety regulations and standards must be attended to.**
- **Non-observance of the safety regulations may cause death, severe injuries or substantial damage to property.**

Operation

The Code-LC safety switches correspond to the requirement of the standards EN954-1, IEC947-5-3, EN1088 and EN60204-1. They have a magnetic sensing system which provides a wide (> 10mm) sensing distance and provides a high tolerance to misalignment after sensing. They can be fitted behind stainless steel fittings and can operate from 4 directions even in extreme environments of temperature and moisture.

Installation

The installation of all Code-LC safety switches must be in accordance with a risk assessment for the individual application. The use of a MEYLE “SRC" safety relay is recommended for monitoring Code-LC switches. A dual-channel connection of a single switch statisfies safety category 4 according to EN 954 -1.

However, it is also possible to connect up to 6 sensors to one emergency relay “SRC " (up to safety category 3). For recognizing possible single faults each door should be opened and closed individually.

M4 mounting bolts must be used to fix the switches and actuators. Tightening torque for mounting bolts to ensure reliable fixing is 1.0Nm. Always mount on to Non Ferrous materials. The recommended setting gap is 5mm. The safety switches must not be used as a mechanical stop. The actuators must not be allowed to strike the switch. An adjustment by striking with a hammer is inadmissible. Do not mount adjacent switches or actuators closer than 30mm. Typical misalignment tolerance after setting is 5mm in any plane.

After installation always check each switch function by opening and closing each guard individually in turn. Ensure that, while the door is closed, the green LED at the switch and also both LED´s on the safety inputs of the emergency relays are illuminated and are extinguished when the switch is open. Check that the machine stops and cannot be re-started when each switch is open.

Meyer Industrie-Electronic GmbH – MEYLE
Carl-Bosch-Straße 8 Tel.: +49 (0) 5481-9385-0 Internet: www.meyle.de
49525 Lengerich/Germany Fax: +49 (0) 5481-9385-12 E-Mail: sales@meyle.de

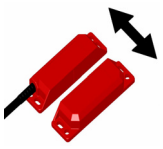
Coded Magnetic Safety Switch Code-LC

Maintenance

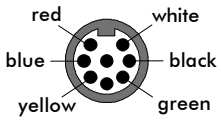
Monthly: Check alignment of actuator. Check switch case and wiring for signs of mechanical damage.

Every 6 month: Check each switch function and each door (see Installation). Check that the machine stops and cannot be re-started when each switch is open.

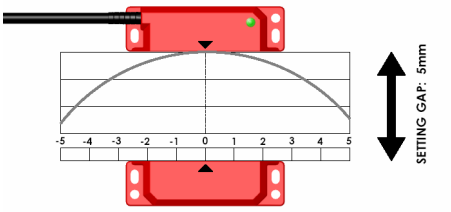
Never repair any switch, actuator or integral cables. Replace any switch displaying signs of mechanical damage to casing or cables.



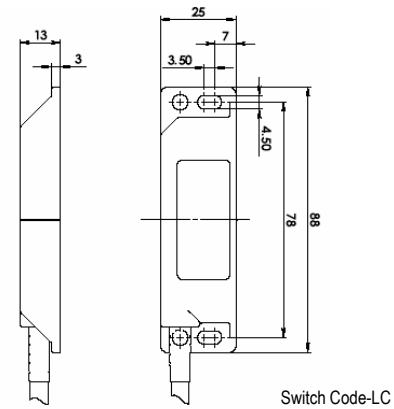
Actuation direction Code-LC



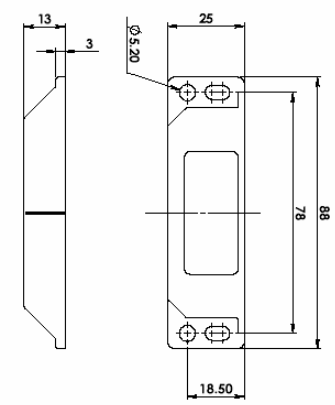
M12 Connector Code



5mm misalignment tolerance after setting

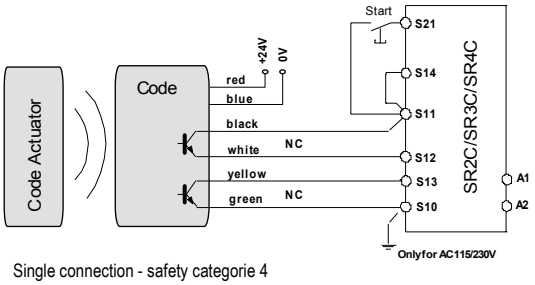


Switch Code-LC

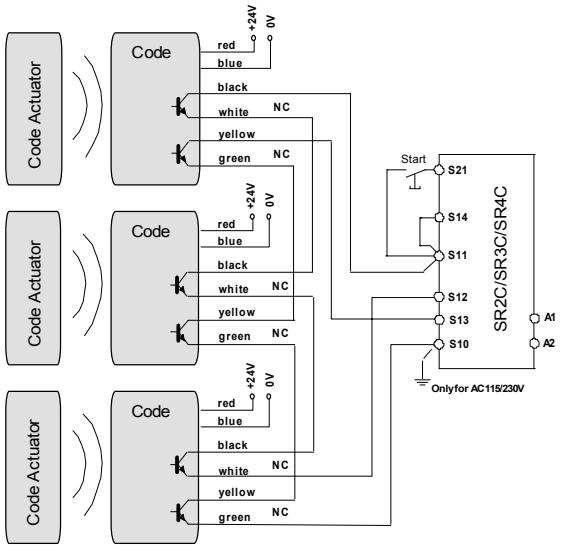


Actuator Code-LC

Technical Data	
Conforms to standards	EN1088, IEC 947-5-3, EN60204-1, EN954-1
Approvals	CE, cUL pending , TÜV pending
Power Supply	DC24V, +/-15%, max. 50mA
Contact rating outputs	DC24V / max. 200mA short circuit proof
Contact release time	max. 2ms
Minimum switched current	10mA
Delectric withstand	AC250V
Recommended setting gap	5mm
Switching Distance, max.	10mm Close, 22mm Open
Tolerance to misalignment	5mm in any direction from 5mm setting gap
Switching frequency	max. 1.0 Hz
Approach speed	200mm/min - 1000mm/s
Body material	Red polyester
Protection	IP67 switch and actuator
Temperature range	-25°C to +80°C
Shock Resistance	11ms 30g according to IEC68-2-27
Vibration Resistance	10-55Hz 1mm according to IEC68-2-6
Cable	PVC 6 core, 6mm O.D. for 2NC
Mounting	each 2x M4 screws; 0.8Nm recommended Any position
Weight with 2m cable	approx. 200g



Single connection - safety categorie 4



Connecting **up to 6 Code in series** to one SR"C" - safety categorie 3

Order No.	Item
940140	Code-LC, 2m cable, 2NC, polyester, incl. actuator
940141	Code-LC, 5m cable, 2NC, polyester, incl. actuator
940142	Code-LC, M12 connector, 2NC, polyester, incl. actuator

Meyer Industrie-Electronic GmbH – MEYLE
Carl-Bosch-Straße 8 Tel.: +49 (0) 5481-9385-0 Internet: www.meyle.de
49525 Lengerich/Germany Fax: +49 (0) 5481-9385-12 E-Mail: sales@meyle.de