7SSR24V & 7SSR-HYG-MKT

Date of update : 07/10/20

EU DECLARATION OF CONFORMITY

This document is the conformity declaration concerning safety switches and relays, conform to the Machine Directive 2006/42/CE, EMC Directive 2014/30/UE, RoHS2 Directive 2011/65/EU

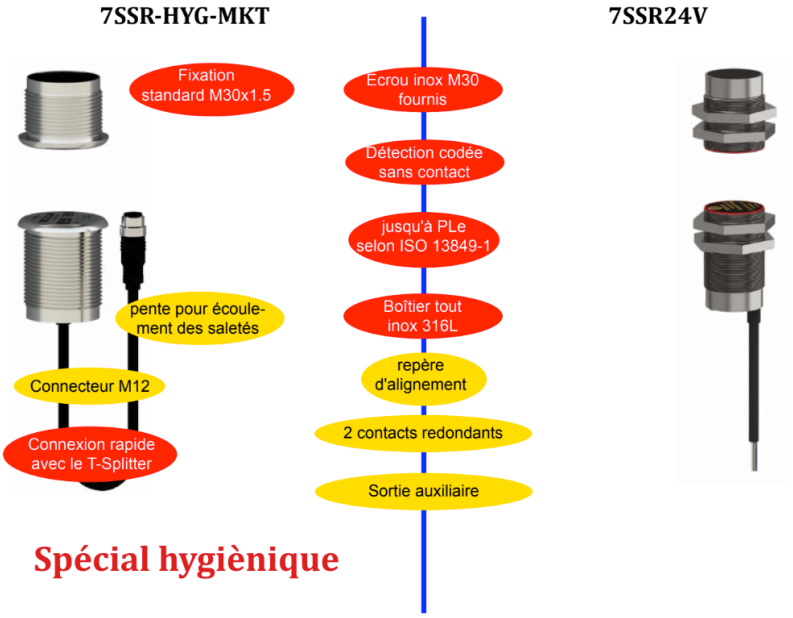
ELECTROMECHANICAL SAFETY SWITCHES

Range	Classification IEC 60947-5-2	Safety Standards	Information
7SSR24V	M3A30AU1	IEC 60947-5-3 IEC 60204-1 ISO 14119 ISO 13849-1	PDDB PELV/SELV TYPE 4 PL c
7SSR-HYG-MKT	M3A30AU2		

Safety category = 1
B10d=2 000 000
TM= 20 years
Checking period=1/year
Type 4 acc. ISO 14119
average level on request

The new requirements do not impact the product. Low-voltage switchgear and controlgear including dimensional standardization is EN 60947-5-1:2004/A1:2009

This range of safety switches is designed to replace mechanical safety switches used on doors and cranckcases of dangerous machines. It uses our process ACOTOM®. All the safety switches and safety modules are designed and manufactured following UL508/CSA C22.2 regulation. Safety switches and safety modules must be used following diagramm and directives described in our data sheet.



1. Benefits: 7SSR-HYG-MKT

- Compatible "hygienic design" thanks to the sloping sides of the housing, the absence of cavities that prevent
fluid retention and adhesion of organic matter
- Non-adhesion of bacteria thanks to the mirror polished INOX316L
- Controls the opening of doors and movable guards of dangerous machines
- This product is waterproof IP69K and works without contact.
- LED diagnostics: white=open door
- Connection by means of a moulded M12 connector to a 50 cm or 220 cm PUR cable
- Automatic connection via T-Splitter, up to 30 sensors in series

1.1 Benefits: 7SSR24V

- Range 10mm
- Hysteresis 2mm
- Offset in the 4 axes 5mm
- Offset +/- 15°.

2. Scope of application

This product is a stand-alone, electronically coded sensor using our ACOTOM process to detect the opening of movable guards on hazardous machinery. Consisting of two 316L stainless steel elements, one named transmitter, the other receiver, it provides two potential-free NO contact lines and an auxiliary NC line.

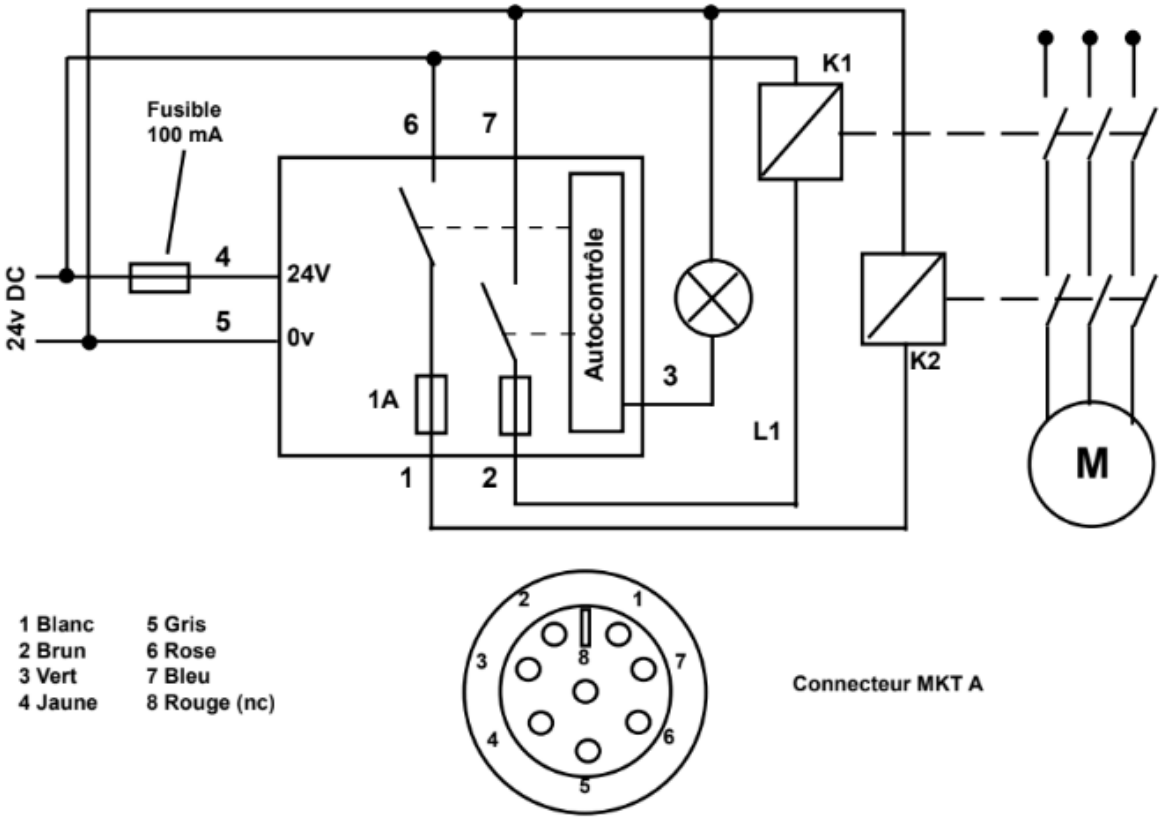
3. Operation

The product is supplied with 24V DC. When the two marks (engraved point) of the transmitter and receiver are opposite each other, if there is code recognition, the NO contacts close and the auxiliary line opens and the led lights up. If the code is not recognized or if the alignment is not carried out, the LED goes out, the contacts remain open and the auxiliary line closes. In order to avoid mechanical damage to the elements, it is advisable to leave a minimum distance of 1mm between the two elements; detection is carried out at a distance of 6mm. Detection through a 4mm stainless steel or polycarbonate wall.

Remark

All security installations must be checked periodically. Our team of engineers is at your disposal to answer your questions and to analyze any particular request (study, specific manufacturing...).

4. Wiring: 7SSR24V & 7SSR-HYG-MKT



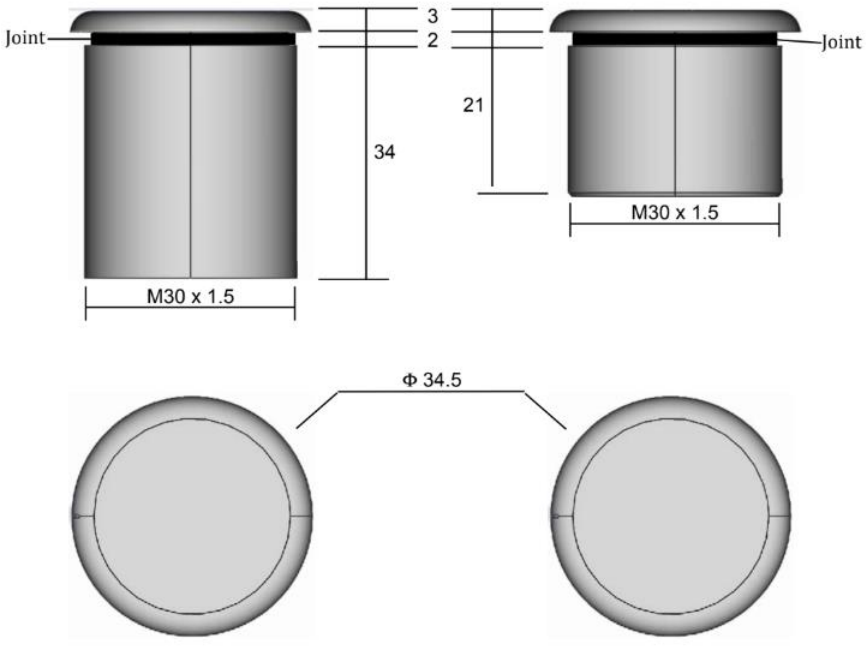
5. Assembly instructions

a) Drill the holes of the mounting bracket at F=30.5 mm
b) Attach the sensor using the 2 nuts provided (7SSR24V) / 1 nut provided (7SSR-HYG-MKT)
c) Align the "transmitter" and "receiver" marks and tighten the nuts.
d) When the door or housing is closed, the distance between the transmitter and the receiver must be at least 1
mm. This product should never be used as a mechanical stop.
e) Our product can be made invisible, behind a wall (stainless steel, aluminium) with a maximum thickness of 3 mm.
In this case the sensor is screwed directly into the profile, previously threaded M30x1.5.
f) The bending radius of the cable must be greater than 50 mm.

6. Main characteristics

Power supply	24V dc - 15% +10%	
Current consumption	45mA	
Carry/ Hysteresis	6mm / 2mm	
Line protection	1A Fusible rapide	
Output contacts - Min. current	48V / 1A cos diameter=1 - 5V / 10mA	
Auxiliary contacts	PNP 1A	
Protection	side : IP 69K, back : IP 67	
Temperature	-25 °C / +60 °C	
Material - Shock - Vibration	STAINLESS STEEL 316L - 10G - 10 à 55 Hz /1,5 mm	
Dimensions LxWxH 7SSR24V	Transmitter M30 x 26 mm	Receiver M30 x 39 mm
Weight 7SSR24V	Transmitter : 65g	Receiver : 95g
Weight 7SSR-HYG-MKT	Transmitter : 75g	Receiver : MKT220 : 320g Receiver : MKT50 : 210g

7. Receiver dimensions / Transmitter dimensions: 7SSR-HYG-MKT



7.1. Receiver dimensions / Transmitter dimensions: 7SSR24V