

Safety Tongue Switches the TTS1

Description

The TTS1 is a tongue-operated (or key-operated) safety interlock switch designed to fit at the leading edge of sliding, hinged or lift-off guards. With its dual entry slots and rotatable head, the versatile TTS1 can offer up to eight different actuator entry options. The unique compact housing (103 × 31 × 31 mm) has industry standard DIN 50047 fixing centers for ease of mounting.

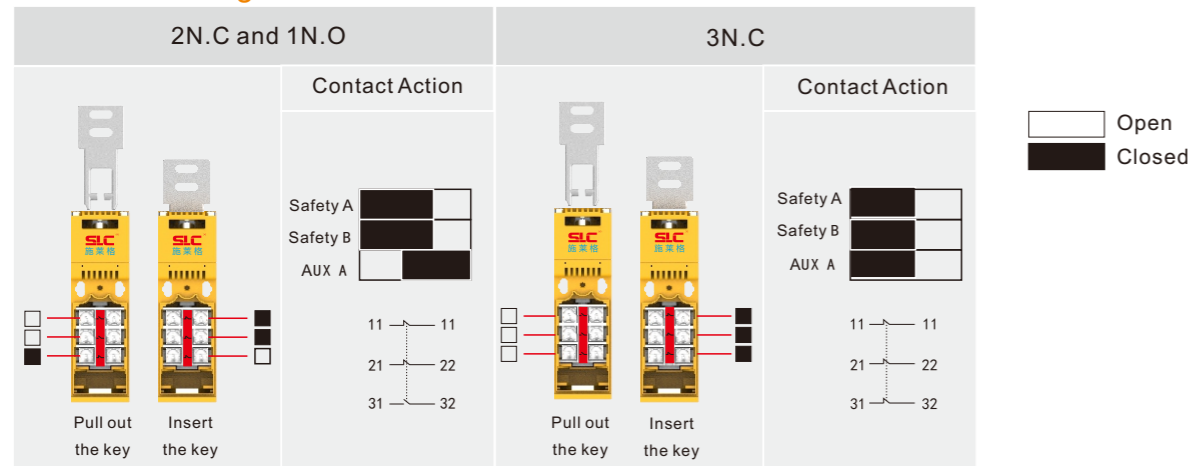
Operation of the switch is achieved through the insertion of a specially-profiled stainless-steel key that is permanently mounted to the guard door.

Available with a variety of contact configurations, the TTS1 is sealed to IP67. A blanking plug is supplied for the unused key entry.

Features

- Compact size
- Ideal for small, lightweight guards
- Contacts, 2 N.C. and 1 N.O. or 3 N.C
- Sealed to Ip67
- Eight possible actuator entry points, easy to install
- Industry standard fixing centres to DIN 50047

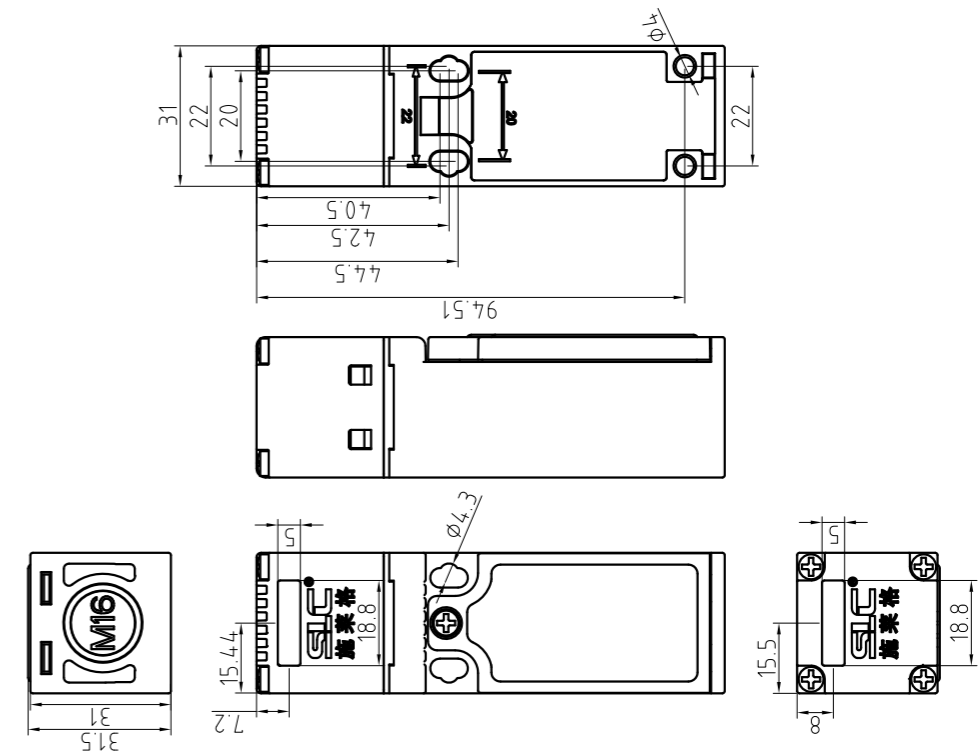
Contact Configuration and Contact Action



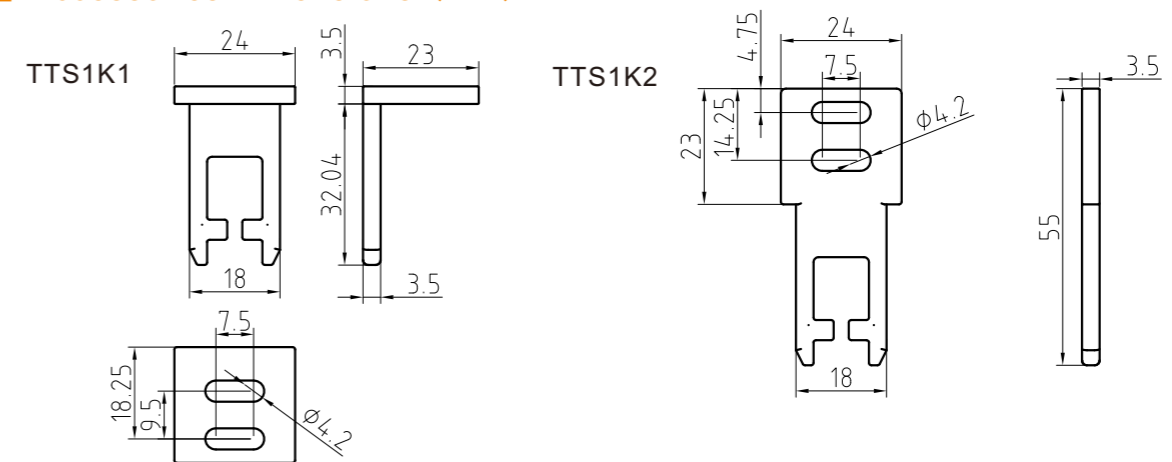
Product Selection

Product Type	Contact Configuration	Picture	LOT
TTS13C	3 N. C		LOT1033220L30
TTS12C10	2 N. C and 1 N. O		LOT1033220L21
TTS1K1	90° Key		LOTTTS1-L1
TTS1K2	180° Key		LOTTTS1-B1

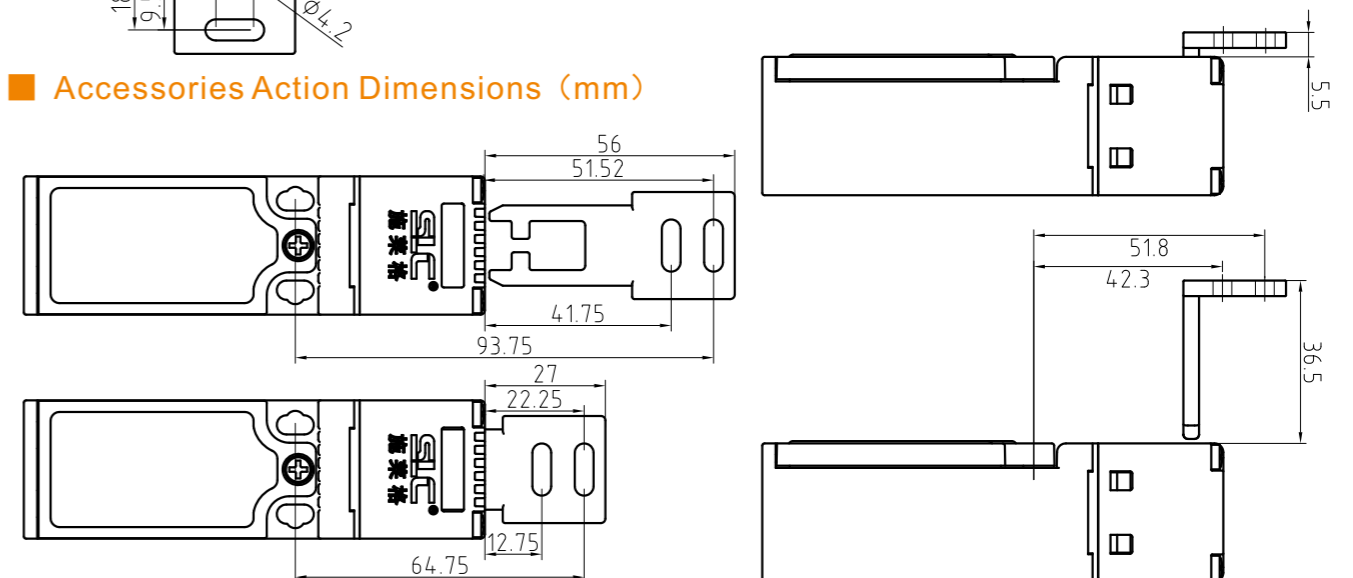
Approximate Dimensions (mm)



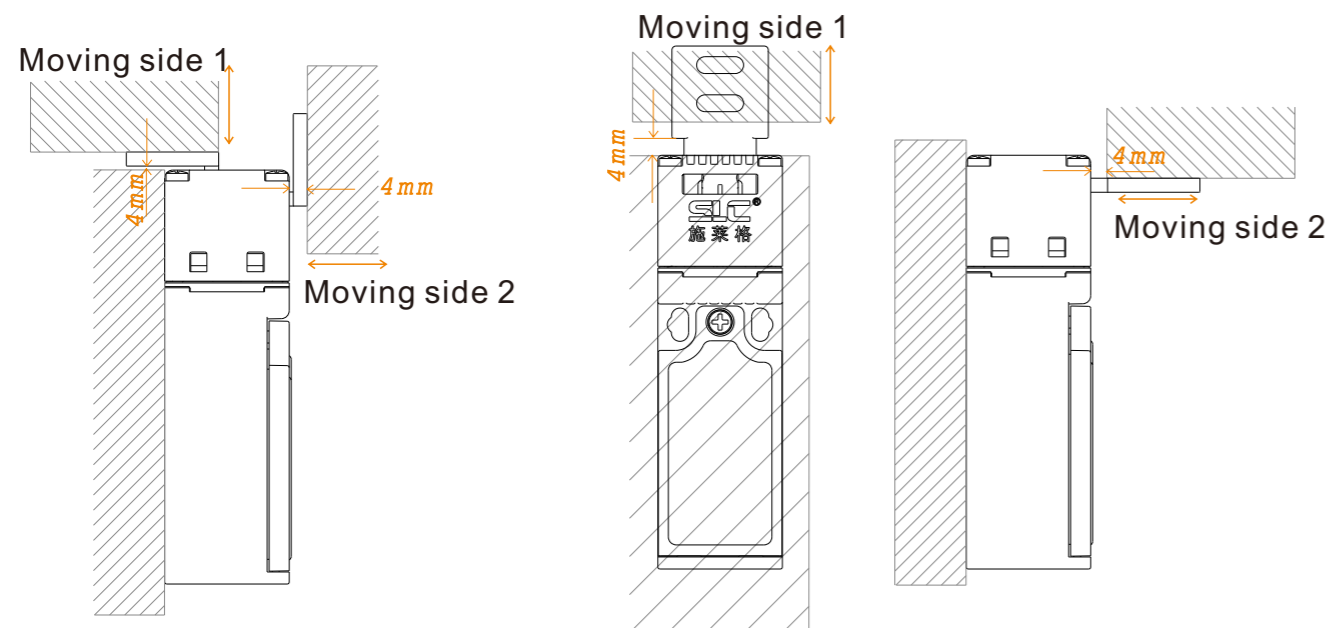
Accessories Dimensions (mm)



Accessories Action Dimensions (mm)



Typical applications



Maximum movement distance of accessories 28mm

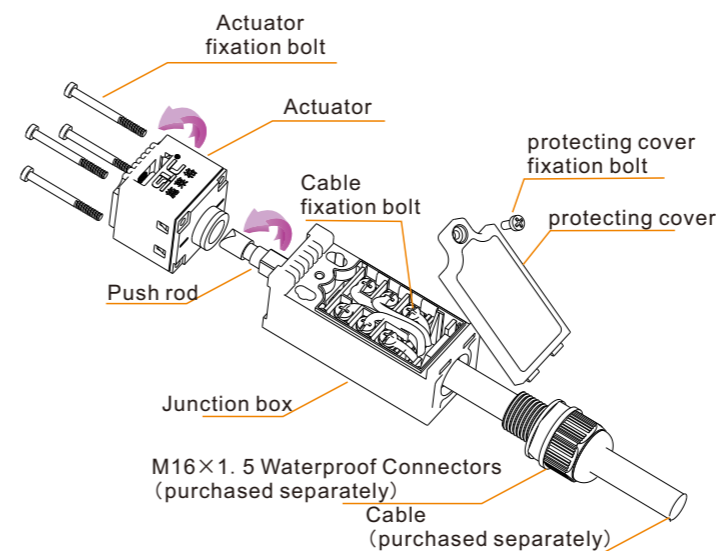
Specifications

Safety Ratings	
Standards	EN60947-5-1/GB14048.5
Safety Classification	Cat.1 device per EN 954-1 dual channel interlocks Suitable for Cat.3 or 4 systems
Certifications	CE
Mechanical Life	1×10 ⁶ operations
Electrical Life@50mA	1×10 ⁶ operations
Electrical Characteristics	
Rated Insulation Voltage	(Ui)300V
Operating Voltage	Class II
Pulse voltage (EN60947-5-1)	2.5KV
Switching Current@Voltage,Min	5mA@5V DC
Operating Characteristic	
Break Contact Force,Min.	≤15N
Actuation sPEED,MAX.	≤160mm/s
Actuation Frequency,MAX.	2cycles/s
Contact Type	
Safety Contact	2 N.C 3 N.C
Aux Contact	1 N.O -

Utilization Category		
Load Type	AC-15	DC-13
Nominal voltage (Ue)	240V	24V
Rated current (Ie)	3A	2A
Environmental		
Enclosure Type Rating	Ip67	
Operating Temperature	-20~+80°C	
Ambient humidity	≤95%	
Vibration resistance	10~55Hz(Unilateral amplitude0.75mm)	
Impact resistance	300m/s ²	
Physical Characteristics		
Weight	200g	
Color	Yellow	
Housing Material	UL Approved thermoplastic plastics	
Actuator Material	Stainless steel	

Installation procedure

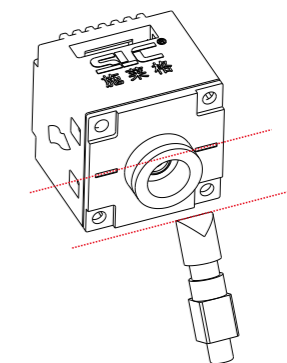
Many safety switches allow the head of the switch to rotate, offering different options on how the switch can be operated and mounted on the guard. This offers flexibility to best fit typical applions.
The head can be rotated 4 times at 90° allowing the key to fit the switch in 8 different positions.



Wiring diagram



The actuator needs to rotate in sync with the push rod



ShenzhenTongchuang Mechatronics Co.,Ltd.

Shenzhen Head office

Tel:0755-85269235 85261930 85269721 33979310
Fax:0755-86193854 33609570
Web:http://www.sztcjd.com
Add:5/F, Block 8, The second industrial park , Nangang,
Xili,Nanshan District, Shenzhen, China

Kunshan office

Tel:0512-36857571 36857572
Fax:0512-36857570
E-fax:0512-82175280

Chongqing office

Tel:023-67394030 67394033
Fax:023-67303505
E-fax:0512-82175280

E-mail:szslcgd@163.com sales@sztcjd.com