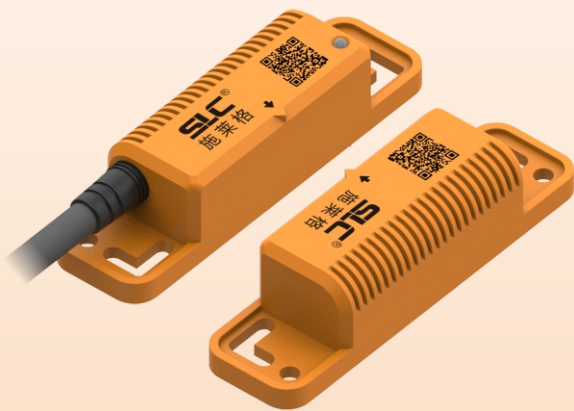# TMC6
TMC7
TMC8
TMC9
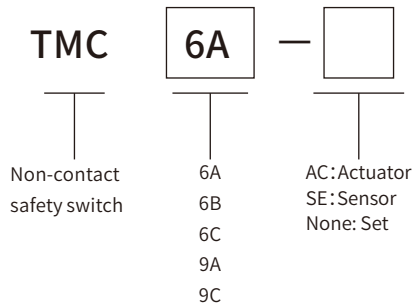# non - contact RFID safety switches

Functional features

Compared with mechanical switch or magnetic switch, the safety switch based on RFID technology has the characteristics of security detection, strong anti-interference, safety and reliability. Can effectively prevent misstatement or false alarm, or artificial abnormal trigger. The safety level of SIL3 or PLe can be achieved by using the safe dual-channel output technology, so it can be applied to a variety of high risk situations. It can be used with safety latch.
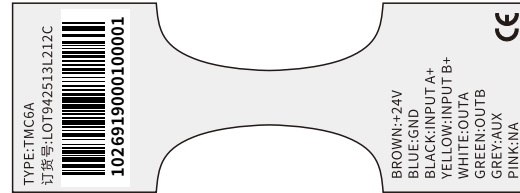
Technical parameters

Security level	
Standard	ISO 13849-1, IEC/EN60947-5-3
Security classification	Achieved ISO13849-1 4 types of switches/SIL3 ; Dual channel interlock fit in PLe/PLd
Protection	
Safety short circuit protection	
Current limit	
Overload protection	
Over voltage protection	
Overheat protection stops and restarts	
Reverse polarity protection	
Transient noise protection	
Failure pulse protection	
Output	
Safety output	Two redundant PNP outputs
Aux contact output	Single channel PNP output (non-safe output)
Technical parameters	
Working distance	Make.Min：15mm
Working voltage	24VDC±15%
Working current	50mA
Output current	200mA
Response time	60ms
Protection grade	IP67
Operating frequency	1Hz
Working temperature	-10~+55℃
Relative humidity	5~95%
Material	UL certified thermoplastics

Model specification

TMC   6A   —   ☐

Non-contact safety switch

6A
6B
6C
9A
9C

Refer to selection table

AC：Actuator
SE：Sensor
None: Set

TYPE:TMC6A
订货号:LOT942513L212C

1026919000100001

BROWN:+24V
BLUE:GND
BLACK:INPUT A+
YELLOW:INPUT B+
WHITE:OUTA
GREEN:OUTB
GREY:AUX
PINK:NA

CE

## Selection table

Model			Specification
Actuators	Sensor	Actuators +Sensor	
TMC6A-AC	TMC6A-SE	TMC6A	8-core direct lead universal code safe RFID switch with cascade function
TMC6B-AC	TMC6B-SE	TMC6B	8-core M12 universal code safe RFID switch with cascade function
TMC6C-AC	TMC6C-SE	TMC6C	8-core direct lead universal code safe RFID switch without cascade function
TMC6D-AC	TMC6D-SE	TMC6D	8-core M12 universal code safe RFID switch without cascade function
TMC7A-AC	TMC7A-SE	TMC7A	With magnetic holding, 8-core direct lead general code safe DFID switch with cascade function
TMC7B-AC	TMC7B-SE	TMC7B	Magnetic holding, 8-core M12 universal coding security RFID switch band with cascade function
TMC7C-AC	TMC7C-SE	TMC7C	With magnetic holding, 8-core direct lead general code safety DFID switch without cascade function
TMC7D-AC	TMC7D-SE	TMC7D	Magnetic holding, 8-core M12 universal coding security RFID switch band without cascade function
TMC8A-AC	TMC8A-SE	TMC8A	8-core direct lead uniquely coded secure RFID switch with cascade function
TMC8B-AC	TMC8B-SE	TMC8B	8-core M12 uniquely coded secure RFID switch with cascade function
TMC9A-AC	TMC9A-SE	TMC9A	Magnetic holding, 8 - core direct lead unique code safe RFID switch, with cascade function
TMC9B-AC	TMC9B-SE	TMC9B	Magnetic holding, 8 - core M12 unique coding safe RFID switch, with cascade function

Installation dimensions(mm)
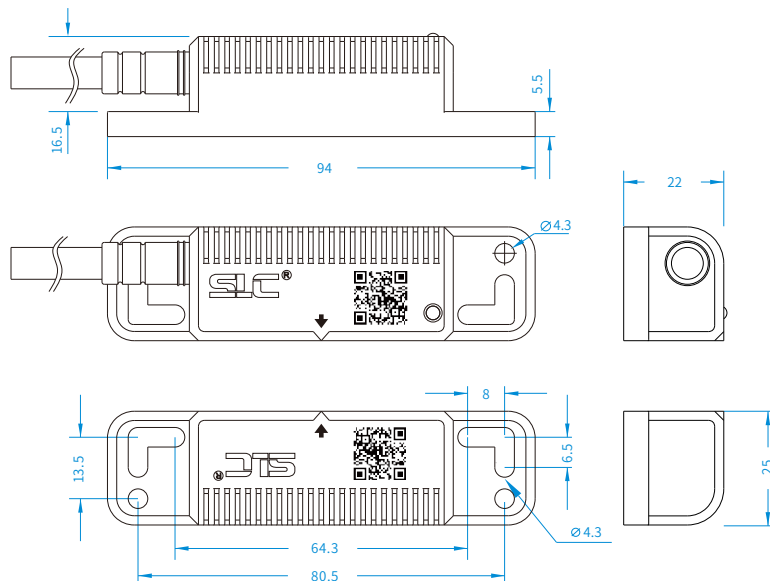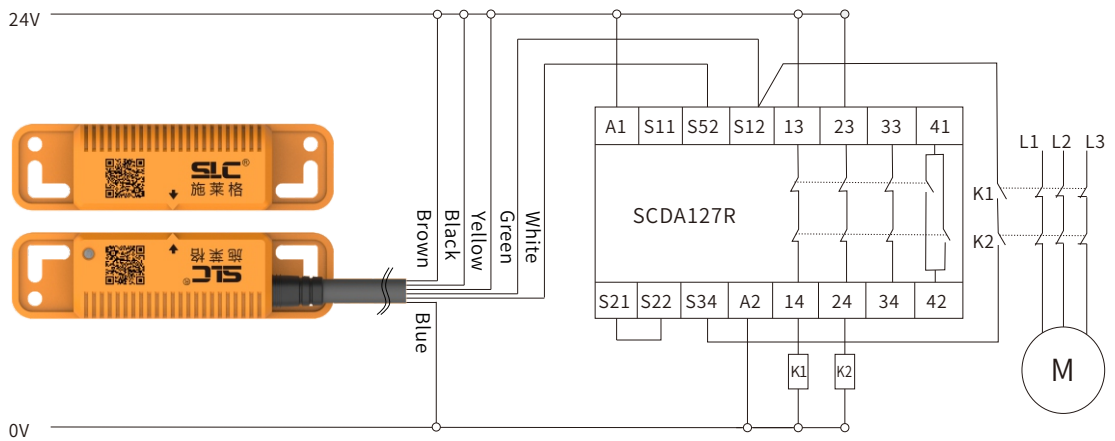

16.5
5.5
94
22
Ø4.3
8
6.5
13.5
25
Ø4.3
64.3
80.5

※Depending on the product configuration and manufacturing process, the actual product size and weight may vary, please refer to the actual product.

TMC6 TMC7 TMC8 TMC9
SERIES OF NON - CONTACT RFID SAFETY SWITCHES

Examples of application wiring with cascading function
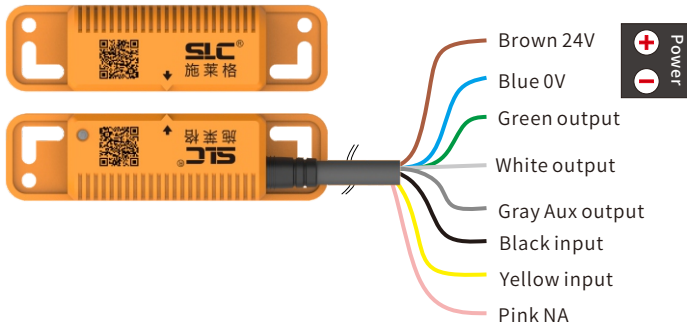
Brown 24V
Blue 0V
Green output
White output
Gray Aux output
Black input
Yellow input
Pink NA

Power + / −

No.	Signal definition	Color	Illustrate
1	24V	Brown	Power +
2	0V	Blue	Power -
3	Output	Green	Safety output(PNP)
4	Output	White	Safety output(PNP)
5	Aux outpu t	Gray	Non-safety output
6	Input	Black	Cascade input (monitored)
7	Input	Yellow	Cascade input (monitored)
8	NA	Pink	

24V

Brown
Black
Yellow
Green
White
Blue

A1 S11 S52 S12 13 23 33 41

SCDA127R

S21 S22 S34 A2 14 24 34 42

K1
K2

L1 L2 L3

K1 K2

M

0V

Multi - switch cascade with SCDA127R wiring diagram

24V   0V

Brown
Black
Yellow

White
Green
Blue

Brown
Black
Yellow

White Green Blue

Brown
Black
Yellow
Green
White
Blue

L3
L2
L1

K1 K2

M

41		42	
33		34	
23		24	K2
13		14	K1
S12		A2	
S52	SCDA127R	S34	
S11		S22	
A1		S21	

※Depending on the product configuration and manufacturing process, the actual product size and weight may vary, please refer to the actual product.
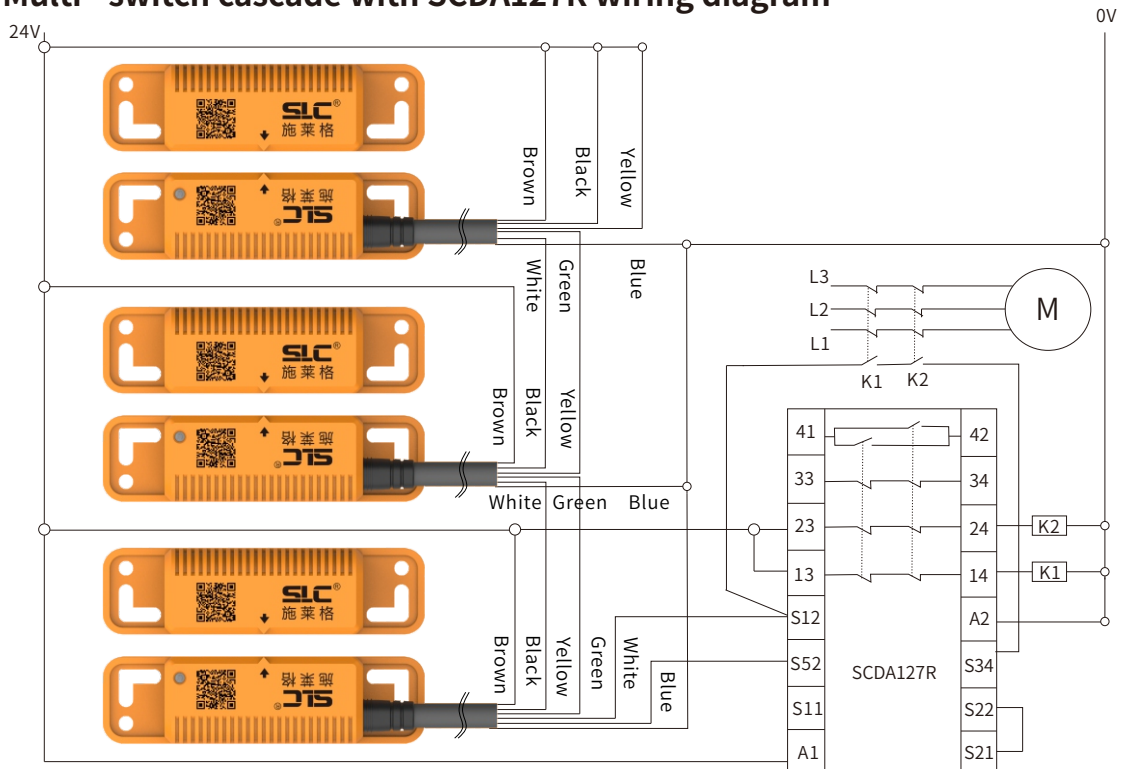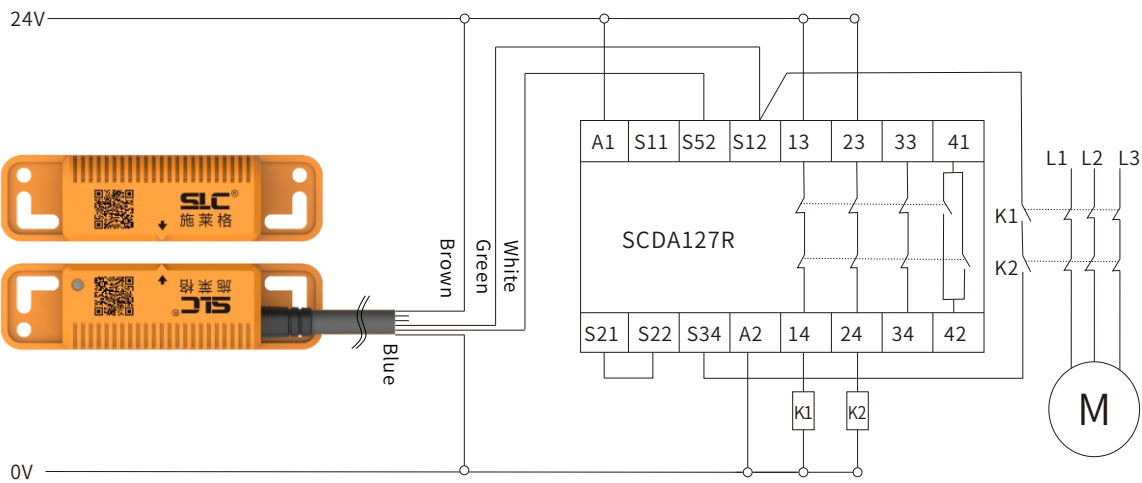
No cascading functional wiring
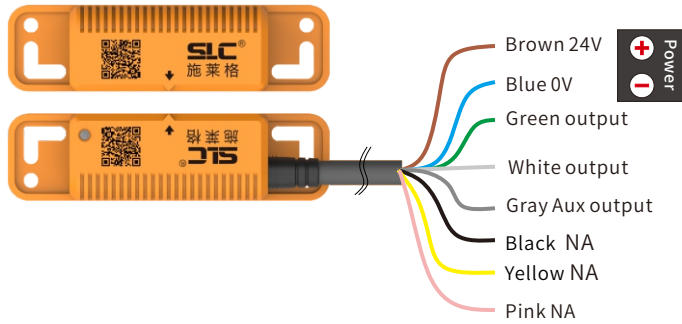
Brown 24V
Blue 0V
Green output
White output
Gray Aux output
Black NA
Yellow NA
Pink NA

Power + −

No.	Signal definition	Color	Illustrate
1	24V	Brown	Power +
2	0V	Blue	Power -
3	Output	Green	Safety output(PNP)
4	Output	White	Safety output(PNP)
5	Aux output	Gray	Non-safety output
6	NA	Black	
7	NA	Yellow	
8	NA	Pink	

24V

A1	S11	S52	S12	13	23	33	41

SCDA127R

S21	S22	S34	A2	14	24	34	42

Brown
Green
White
Blue

L1 L2 L3

K1
K2

K1 K2

M

0V

Indicator state

LED display	Output state			Statements
	Main output A	Main output B	Aux output	
Red on	Break	Break	Break	No actuator or incomplete alignment
Red 4Hz flash	Break	Break	Break	For unrecoverable errors, check the input line
Red 1Hz flash	Break	Break	Break	Output error, check output line
Green on	Make	Make	Make	Induction of normal

SLC
施 莱 格

TMC6 TMC7 TMC8 TMC9
SERIES OF NON - CONTACT RFID SAFETY SWITCHES

❯ Approach direction
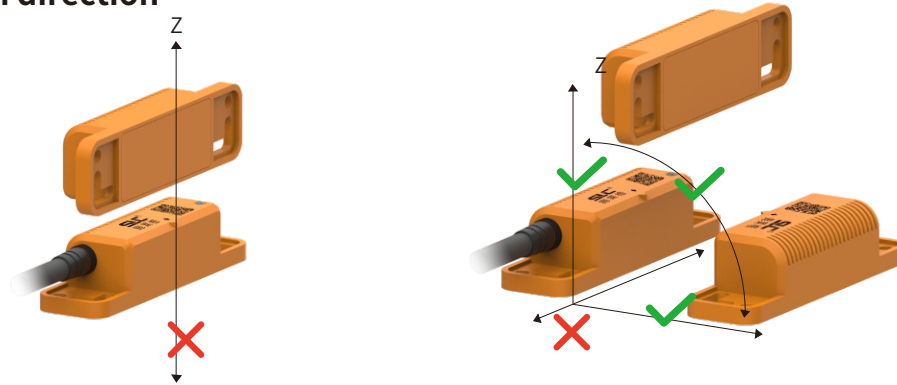
❯ Induction curve

	Misalignment deviatio	Make	Break	On the schematic
Horizontal alignment	The deviation is in the X direction ±4mm range	The Y direction induction can reach a minimum of 15mm	Y direction sensing distance >30mm	
	The deviation is in the X 4mm ~8mm and-8mm~4mm range	The Y direction induction can reach a minimum of 11mm		
	The deviation is in the X direction >8mm and <-8mm	Not recommended		
The vertical alignment	The deviation is in the X direction ±4mm range	The Z direction induction can reach a minimum of 15mm	Z direction sensing distance >30mm	
	The deviation is in the X 4mm ~10mm and -10mm~-4mm range	Z direction induction decreases from 8mm to 10mm		
	The deviation is in the X direction >10mm and <-10mm	Not recommended		

❯ Magnetic curve

吸力