



Product introduction

Safety door switch is a kind of safety device, specialized for monitoring open/ close of protective mechanism (like safety fence door, protective cover). SSR22 series safety door switch with RFID technology to ensure high safety and confidentiality. The sensor & label support universal coding and unique coding. Small size is better for mounting.

Product feature

- Self-diagnose and cross-diagnose design: periodic mutual diagnose improve the safety level.
- Independent and redundant output: In case any risk caused by single loop failure.
- Magnetic holding force can reach 15N, which can replace the door magnet.

SSR22 Contactless Safety Door Switch

Product parameter

Standard	ISO 13849-1 (Cat. 4/PLe) ; IEC/EN60947-5-1 ; IEC/EN60947-5-3
Power supply	DC24V±15%
Capacity	<1W
Risk time	50ms
Response time	50ms
Magnetic holding force	>15N
Operating frequency	1Hz
OSSD output	PNP or NPN signal. Load below 200mA, residual voltage below 1V (except voltage caused by cable extension), leakage current below 1mA
Protective circuit	Overvoltage protection, power supply reverse polarity protection and overcurrent protection.
Coding mode	Universal coding, unique coding
Enclosure rating	IP65
Hosing sectional size	48*30mm
Vibration resistance	Frequency 10Hz-55Hz, amplitude 0.35±0.05mm, 20 times each at X, Y and Z directions.
Working temperature	-10°C~+55°C (No freezing)
Storage temperature	-30°C~+70°C (No freezing)
Working humidity	When 20°C, the humidity max <85%

Model selection (e.g. :SSR22-00NC-3)

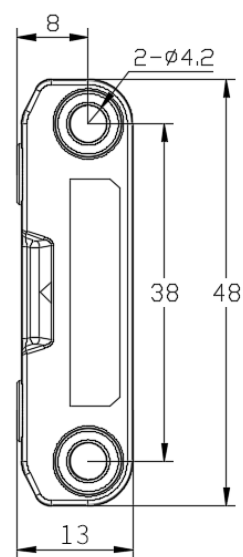
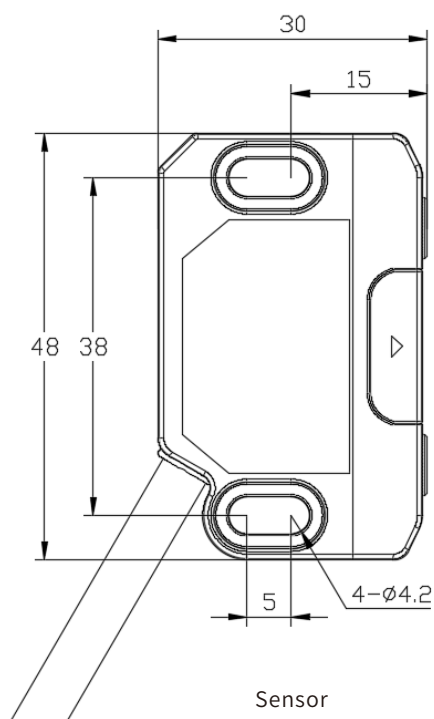
Product series	Configuration	Coding method	Output	Connector	Cable length
SSR22	— 				— 
	0: Basic mode 1: Standard mode 2: Advanced mode	0: Universal coding 1: Unique coding	N: NPN P: PNP	C: M12 connector No mark: leading wire	3: 3m 5: 5m 10: 10m 20: 20m

Function of configuration					
	Safety output	Cascade	EDM function	Reset	AUX output
Basic mode	●	—	—	—	—
Standard mode	●	●	—	—	—
Advanced mode	●	●	●	●	●

Selection table

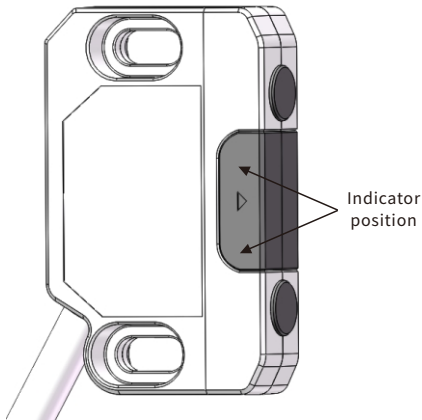
Mode	Output	Coding mode	Model
Basic mode	NPN	Universal coding	SSR22-00N
		Unique coding	SSR22-01N
	PNP	Universal coding	SSR22-00P
		Unique coding	SSR22-01P
Standard mode	NPN	Universal coding	SSR22-10N
		Unique coding	SSR22-11N
	PNP	Universal coding	SSR22-10P
		Unique coding	SSR22-11P
Advanced mode	NPN	Universal coding	SSR22-20N
		Unique coding	SSR22-21N
	PNP	Universal coding	SSR22-20P
		Unique coding	SSR22-21P

Product size



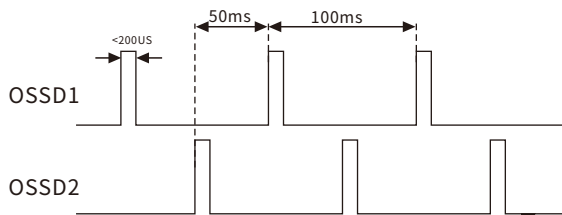
SSR22 Contactless Safety Door Switch

Indicator status

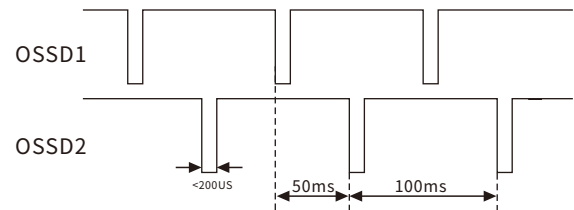


Indicator Status	Indicator
EEPROM error/SPI error	Red 4Hz blink
Output error/ EDM error	Red 1Hz blink
Voltage error	Red double blink
Unique coding unmatched	Red & green blink alternately at 4Hz
No error, No RFID, no output	Red ON
No error, RFID, cascade, waiting for reset signal	Green 4Hz blink
No error, RFID, not cascade	Green 1Hz blink
No error, RFID, cascade signal error	Green double blink
No error, all condition okay, with output	Green ON

Timing chart



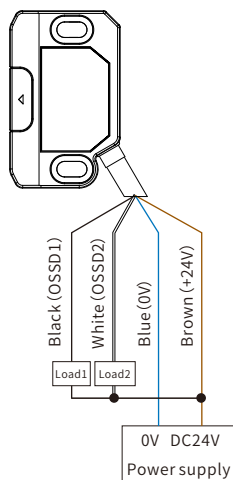
NPN



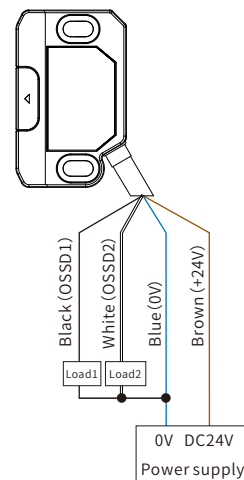
PNP

Wiring diagram

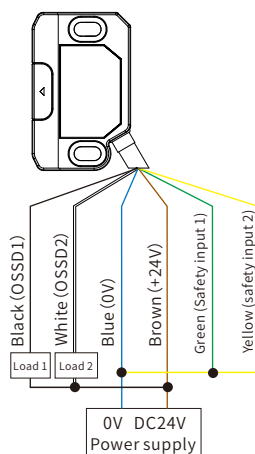
SSR22 Basic mode (NPN)



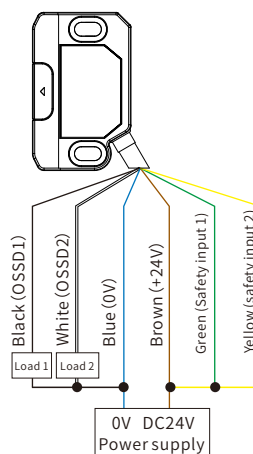
SSR22 Basic mode (PNP)



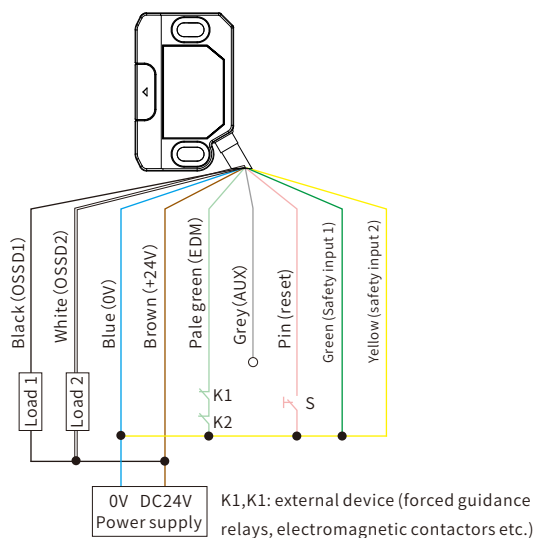
SSR22 Standard mode (NPN)



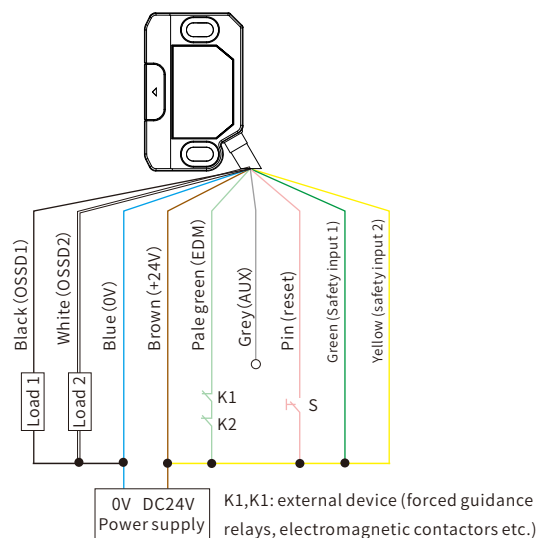
SSR22 Standard mode (PNP)



SSR22 Advanced mode (NPN)



SSR22 Advanced mode (PNP)



Wire details

Color	Function	Wire introduction
Brown	Power supply positive	Connect to power supply 24V.
Blue	Power supply negative	Connector to power supply 0V.
Black	Safety output 1	Connect safety PLC or interface of other safety input.
White	Safety output 2	
Green	Safety input 1	Cascade: connect to safety input of switch.
Yellow	Safety input 2	
Pale green	EDM	External relay or solenoid valve monitoring device.
Pin	Reset	Connect to reset button.
Grey	AUX	Connect to PLC.