

SLM13 Series

4 Contacts Safety Door Switch



Safety protection forced lock

- EN 60947-5-1/IEC 60947-5-1
- GB/T 14048.5
- EN ISO 14119/ISO 14119
- GB/T 18831



Product introduction

SLM series is the most common door interlock technology. It use a inserting key to detect the movement of the protective door. As the small and light weight size, various contact configurations, and locking functions, safety door locks are usually the lowest cost solution. In addition, the flexible keys improves its misalignment tolerance, make it a wide range of applications. Rotated head (support 7 different key inserting position), power to lock/ power to release ensure various option on working method and installation method. It improve the flexibility of the switch and make it suitable for use on various doors.

Product feature

- Multiple and optional contacts constructure.
- 1300N holding force.
- IP67 protection rate.
- PA66 fire retardant material.
- Support general load and micro-load.

SLM13 Series Safety Door Switch

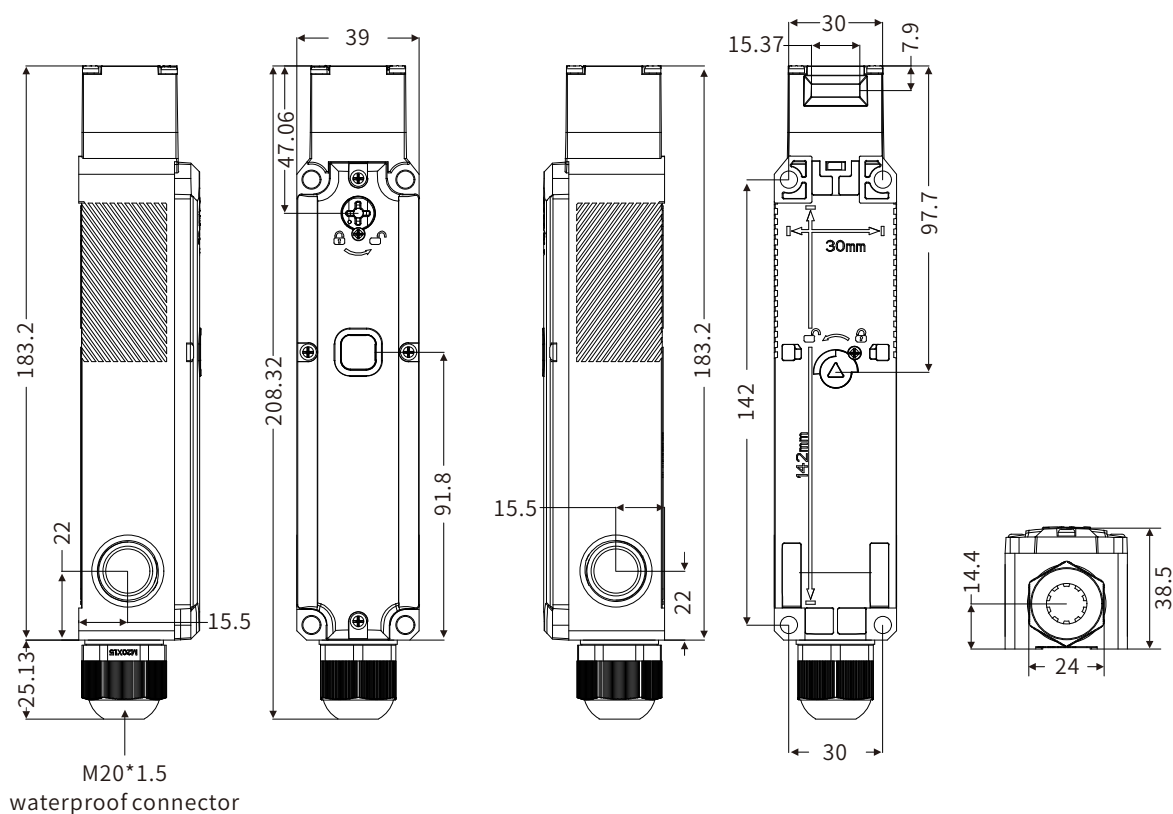
Technical parameter

Electromagnetic tube		
Rated operating voltage	DC24V	
Power	4.8W	
Rated current	Approximate 200mA	
Insulation	Class B (130°C)	
LED indicator		
Rated operating voltage	DC24V	
Rated current	Approx. 2mA	
Luminous color (LED)	Green	
Safety level	PL d (ISO 13849-1)	
Certificates	Rheinland	
Standard	EN60947-5-1、IEC60947-5-1、GB/T 14048.5、EN ISO 14119、GB/T 18831	
Protection rate	IP67	
Material	PA66 fire retardant	
Mechanical lifespan	Over 1,000,000	
Electrical lifespan	Over 150,000 (AC240V3A, resistive load)	
Using type	AC-15	DC-13
Rated operating voltage (Ue)	240V	24V
Rated operating current (Ie)	3A	2A
Electrical parameters		
Contact resistance	<200mΩ	
Nominal discharge current (Ith)	10A	
Rated insulation voltage (Ui)	300V	
Anti-electric shock level	Class II (Double insulation)	
Pulse withstand voltage (EN60947-5-1)	2.5KV	
Insulation resistance	100MΩ以上	
Short-circuit protection	10A,250V Requires a quick-break fuse	
Vibration resistance	10-55HZ Double amplitude 1.5mm	
Impact resistance	Durability 1000m/s ²	
Conditional short-circuit current	100A (EN 60947-5-1)	
Space of contact	2×2mm above	
Action characteristic		
Direct opening force	>10mm	
Operating speed	0.1 m ~ 0.5m/s	
Allowed operating frequency	Maximum 30 times/ minutes	
Holding force	1300N	
Environment		
Operating environment	3 (EN60947-5-1)	
Operating temperature	-10°C~+55°C (no freezing)	
Operating humidity	<95% RH	

Model selection (eg.: SLM13-APM-B)

Product series	Switch contact (Door monitor + lock monitor)	Head direction/ Material	Door lock/ release method	Release key position
SLM13	—	□	□	—
A: 1NC/1NO(Slow action)+1NC/1NO(Slow action) B: 1NC/1NO(Slow action)+2NC(Slow action) C: 2NC(Slow action)+1NC/1NO(Slow action) D: 2NC(Slow action)+2NC(Slow action) E: 1NC/2NO(Slow action)+1NC(Slow action) F: 3NC(Slow action)+1NC(Slow action) G: 2NC/1NO(Slow action)+1NC(Slow action) H: 1NC(Slow action)+3NC(Slow action) I: 1NC(Slow action)+1NC/2NO(Slow action) J: 1NC(Slow action)+2NC/1NO(Slow action) K: 1NO(Slow action)+3NC(Slow action) L: 1NO(Slow action)+2NC/1NO(Slow action)		P: 4 optional directions (Default front side installation)/plastic	M: DC24V power to release (mechanical lock) E: DC24V power to lock	No mark: front B: Rear to release

Product size



SLM13 Series Safety Door Switch

 **SLM13 model selection table**

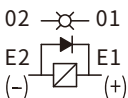
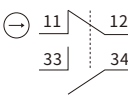
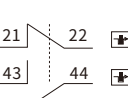
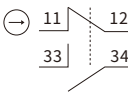
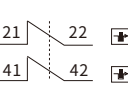
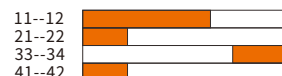
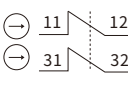
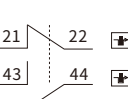
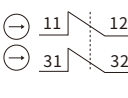
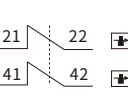
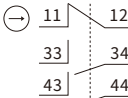
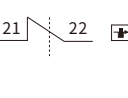
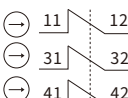
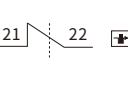
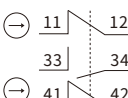
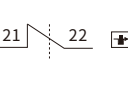
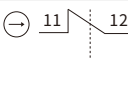
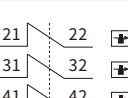
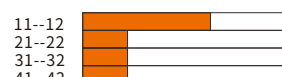
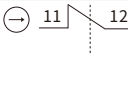
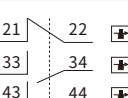
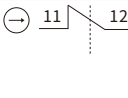
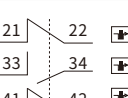
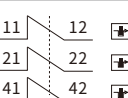
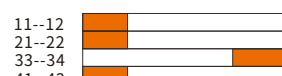
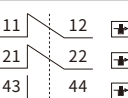
Release position	Head material	Magnetic voltage/ indicator	Lock/ Release method	Contact type (door monitor + lock monitor)	Connector size	Model
Top release	Plastic	Electromagnetic DC24V Green LED	Power to release	1NC/1NO+1NC/1NO	M20×1.5	SLM13-APE
				1NC/1NO+2NC	M20×1.5	SLM13-BPE
				2NC+1NC/1NO	M20×1.5	SLM13-CPE
				2NC+2NC	M20×1.5	SLM13-DPE
				1NC/2NO+1NC	M20×1.5	SLM13-EPE
				3NC+1NC	M20×1.5	SLM13-FPE
				2NC/1NO+1NC	M20×1.5	SLM13-GPE
				1NC+3NC	M20×1.5	SLM13-HPE
				1NC+1NC/2NO	M20×1.5	SLM13-IPE
				1NC+2NC/1NO	M20×1.5	SLM13-JPE
				1NO+3NC	M20×1.5	SLM13-KPE
				1NO+2NC/1NO	M20×1.5	SLM13-LPE
			Power to lock	1NC/1NO+1NC/1NO	M20×1.5	SLM13-APM
				1NC/1NO+2NC	M20×1.5	SLM13-BPM
				2NC+1NC/1NO	M20×1.5	SLM13-CPM
				2NC+2NC	M20×1.5	SLM13-DPM
				1NC/2NO+1NC	M20×1.5	SLM13-EPM
				3NC+1NC	M20×1.5	SLM13-FPM
				2NC/1NO+1NC	M20×1.5	SLM13-GPM
				1NC+3NC	M20×1.5	SLM13-HPM
				1NC+1NC/2NO	M20×1.5	SLM13-IPM
				1NC+2NC/1NO	M20×1.5	SLM13-JPM
				1NO+3NC	M20×1.5	SLM13-KPM
				1NO+2NC/1NO	M20×1.5	SLM13-LPM

SLM13 model selection table

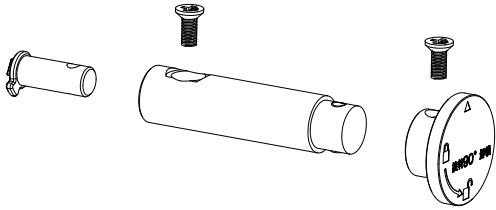
Release position	Head material	Magnetic voltage/ indicator	Lock/ Release method	Contact type (door monitor + lock monitor)	Connector size	Model
Front release	Plastic	Electromagnetic DC24V Green LED	Power to release	1NC/1NO+1NC/1NO	M20×1.5	SLM13-APE-B
				1NC/1NO+2NC	M20×1.5	SLM13-BPE-B
				2NC+1NC/1NO	M20×1.5	SLM13-CPE-B
				2NC+2NC	M20×1.5	SLM13-DPE-B
				1NC/2NO+1NC	M20×1.5	SLM13-EPE-B
				3NC+1NC	M20×1.5	SLM13-FPE-B
				2NC/1NO+1NC	M20×1.5	SLM13-GPE-B
				1NC+3NC	M20×1.5	SLM13-HPE-B
				1NC+1NC/2NO	M20×1.5	SLM13-IPE-B
				1NC+2NC/1NO	M20×1.5	SLM13-JPE-B
				1NO+3NC	M20×1.5	SLM13-KPE-B
				1NO+2NC/1NO	M20×1.5	SLM13-LPE-B
			Power to lock	1NC/1NO+1NC/1NO	M20×1.5	SLM13-APM-B
				1NC/1NO+2NC	M20×1.5	SLM13-BPM-B
				2NC+1NC/1NO	M20×1.5	SLM13-CPM-B
				2NC+2NC	M20×1.5	SLM13-DPM-B
				1NC/2NO+1NC	M20×1.5	SLM13-EPM-B
				3NC+1NC	M20×1.5	SLM13-FPM-B
				2NC/1NO+1NC	M20×1.5	SLM13-GPM-B
				1NC+3NC	M20×1.5	SLM13-HPM-B
				1NC+1NC/2NO	M20×1.5	SLM13-IPM-B
				1NC+2NC/1NO	M20×1.5	SLM13-JPM-B
				1NO+3NC	M20×1.5	SLM13-KPM-B
				1NO+2NC/1NO	M20×1.5	SLM13-LPM-B

SLM13 Series Safety Door Switch

Contacts action

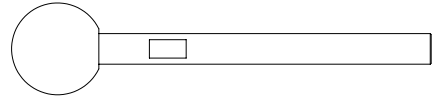
Model	Contact (door minitor+ lock monitor)	Wire diagram		Contact action  Contact ON  Contact OFF
		door monitor	lock monitor	
	door monitor lock monitor NC  NC  NO  NO 			Operation key complete insertion Travel Operation key extraction 
SLM13-APE/M	1NC/1NO+1NC/1NO			
SLM13-BPE/M	1NC/1NO+2NC			
SLM13-CPE/M	2NC+1NC/1NO			
SLM13-DPE/M	2NC+2NC			
SLM13-EPE/M	1NC/2NO+1NC			
SLM13-FPE/M	3NC+1NC			
SLM13-GPE/M	2NC/1NO+1NC			
SLM13-HPE/M	1NC+3NC			
SLM13-IPE/M	1NC+1NC/2NO			
SLM13-JPE/M	1NC+2NC/1NO			
SLM13-KPE/M	1NO+3NC			
SLM13-LPE/M	1NO+2NC/1NO			

Rear release unit



Model :SU-50 (Sold Separately)

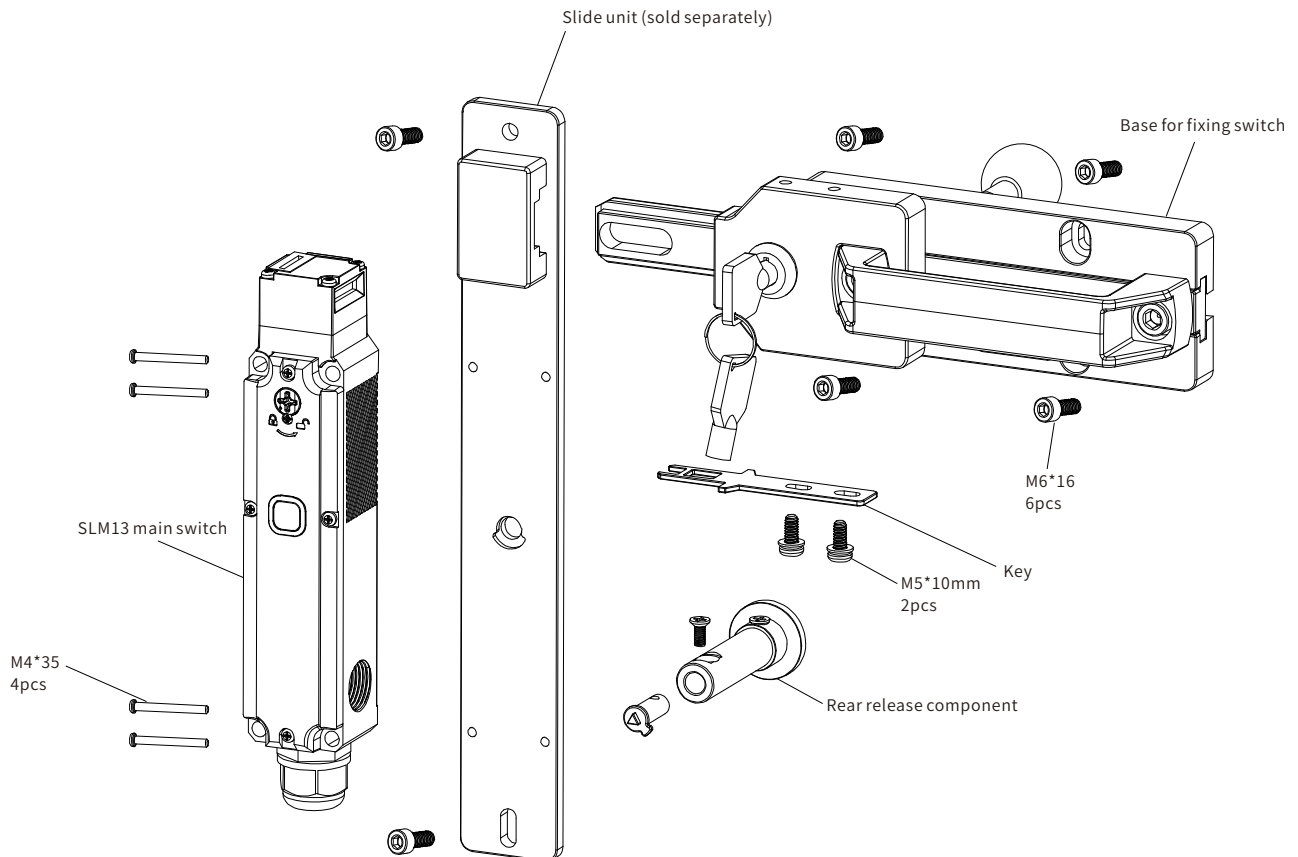
Back handle



Model :SH-1 (Sold Separately)

Installation method (Slide unit sold separately)

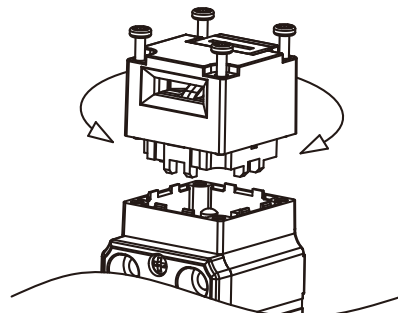
1. 4pcs M6*16 screw to fix the base of slide unit
2. 4pcs M5*10 screw fix the keys
3. 4pcs M4*35 screw fix the switch
4. 2pcs M6*16 screw fix the base of switch



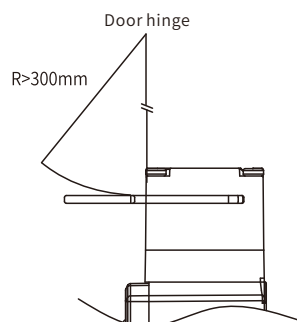
SLM13 Series Safety Door Switch

✂ Product installation

- ★ Loosen 4 screw on top of head, rotate the head to the right key inserting position and then install it.

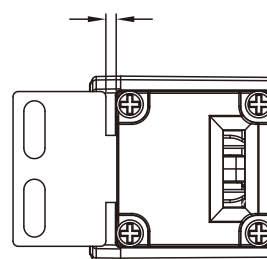


- ★ When install on slide hung door, it should be over than semidiameter.



- ★ Please install the safety switch and insertion key under range 1-3.5mm.

Prepare position
1.0~3.5mm



- ★ The installation of operation key allows $\pm 1\text{mm}$ deviation within the key insertion center of the hole.

