

KELi 科力

Shandong Keli Opto-electronic Technology Co., Ltd.

SAFETY MATS

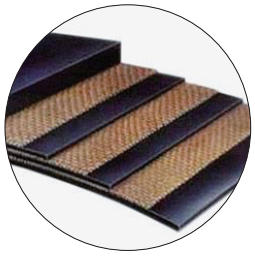
Selection Manual

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Product advantages

Safety mat is a safety solution that takes applicability of the work area into account the. Safety performance on site will be greatly improved by accurately setting safety mat in areas that not proper for other sensors. Typical applications of MAT safety mat include: welding robots, rubber and plastic machinery, assembly machinery, material handling, packaging machinery, stamping machinery, pressure machinery, automobile manufacturing, iron and steel metallurgy and other industrial fields.

MAT2





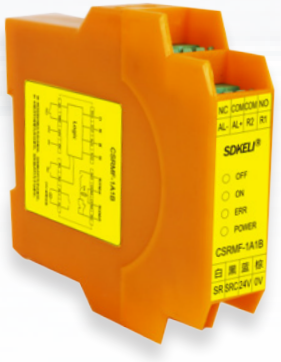


- Nitrile rubber raw material to achieve higher wear resistance;
- Nylon wiring inside the rubber board, greatly reducing the deformation of the rubber board;
- Multi-layer nylon strengthens the toughness of the rubber sheet, reduces the deformation of the carpet, and increases the service life by 200%;
- Imported galvanized copper woven mesh, more resistant to pressure, wear and aging;
- Controller is divided into CSRMF and SC6 models;
- Compliant with EMC safety certification;
- 7 * 24 hours quick response in 23 offices across the country.

Controller

CSRMF Safety controller

The safety mat controller cooperates to sense the external pressure and stop the equipment.



- Power supply of safety controller DC24V ;
- 1 group of normally closed contact output, 1 group of normally open contact output ;
- Dual-channel operation mode for self-checking of mat and controller ;
- Indicator for power supply and indicator for output status;
- Number of safety contacts can be increased by expansion modules;
- Switchable between manual reset and automatic reset;
- One DC24V active alarm output;

SC6 Safety controller

Multiple mats controlled by one controller for full protection

- This controller is designed for linkage of safety mats. It can connect with 6 safety mats;
- Each group of input signals has separate switch for protection and non-protection function (suppression);
- Indicator light shows the working status of each mat, including work, failure;
- Indicator for power supply and indicator for output status;
- Power supply of safety controller DC24V;
- 1 group of normally closed contact output, 1 group of normally open contact output;
- Dual-channel operation mode for self-checking of mat and controller;
- Witchable between manual reset and automatic reset;
- With a DC24V active alarm output, can detect the status of any mat in the system;



Regular model

Standard selection

MAT		
No.	Description	Size
	MAT	Length x width
1	250-250	250x250mm (Minimum size for one mat)
2	500-250	500x250mm
3	500-500	500x500mm
4	1000-500	1000x500mm
5	1000-750	1000x750mm
6	1000-1000	1000x1000mm
7	1500-1000	1500x1000mm
8	2000-1000	2000x1000mm (Maximum size for one ma)

Note: the size of each frame is 45mm, 5mm installation margin, so there is 50mm installation margin. For example the selected model should be MAT2—1900—900 for area 2m × 1m.

Technical parameters

Model	MAT2	
standard	GB/T 17454.1-2017 / ISO 13856-1:2013	
material	Nitrile rubber	
protection level	IP65	
working environment	Temperature : -30℃ ~ 55℃ (non-condensing)	humidity : 35% ~ 85%
mounting height	15mm	
Maximum allowable load	2000N	
Inspection weight	30Kg 以上	
Inspection method	pressure sensing method	
Response time	≤ 20ms	
Mechanical life	1 million times	
Supporting controller	CSRMF safety mat controller	SC6 Safety mat controller

Specifications model

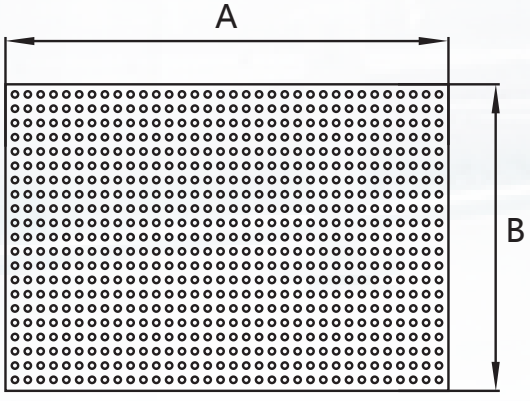
MAT2 – □□□□ – □□□□ – □ □□ / □

- Installation: P-expansion bolts; N-hexagonal screws
- Output form: OC- one group of relay normally open contact and one group of relay normally closed contact output
- F-CSRMF safety mat controller ; S-SC6 safety mat controller
- Width dimension: in 4 digits, mm, (0500 means mat width is 500mm)
- length dimension: in 4 digits, mm, (1000 means mat length is 1000mm)
- MAT2 safety mat protection device

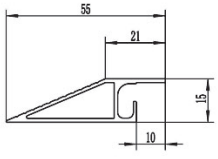
Installation

Size

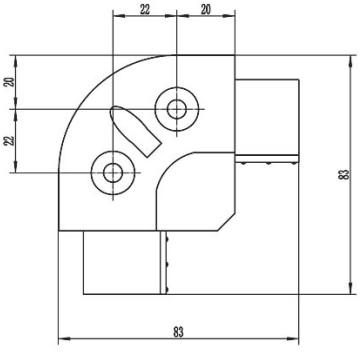
All measurement units



45mm is the size of the frame, and the customized size of the model does not include the frame ;
size: A=length B=width
Special size can be customized



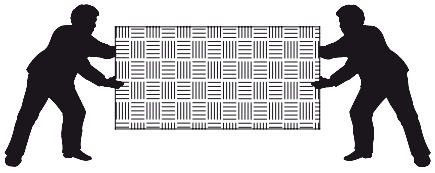
Blanking

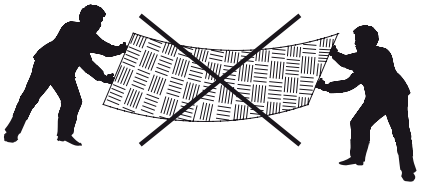


Corner

Check before installation

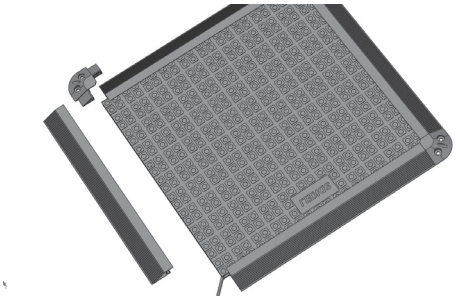
- Whether the outward safety mat is complete.
- The mounting surface must be flat, clean and dry
- The cable must be protected from damage. Use a multimeter to measure the on and off states of the four output wires of the safety mat (white and black on, blue and brown on, and white and black and blue and brown off).





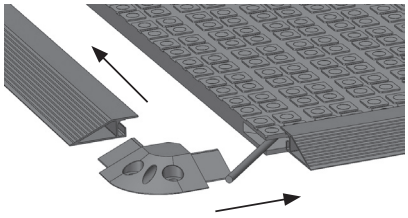
Installation

1、Place safety mat in the area to be installed



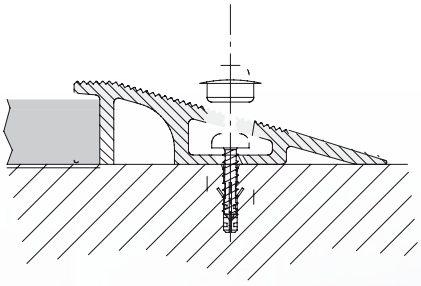
1

2、Install the aluminum alloy blank and the corner connecting the aluminum alloy blank



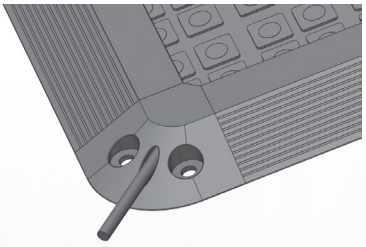
2

3、After locating the installation position, mark through corner screw holes, then drill and mount the screws



3

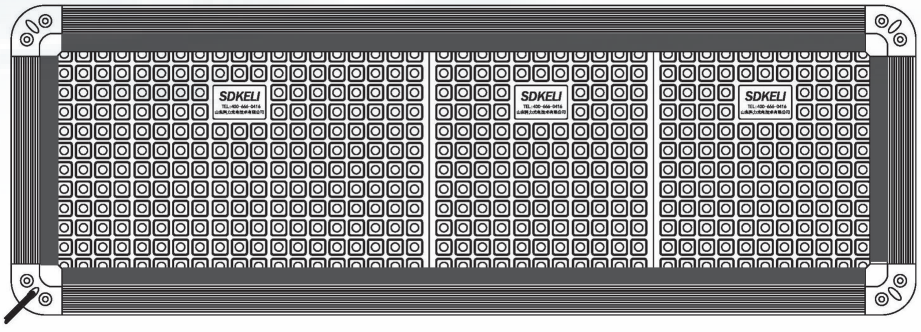
4、Mat transmission cable connect to cabinet



4

Multiple mats splicing

When a single mat is not enough to cover the area need protect, multiple mats can be used for splicing.



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“KELI” pursuits excellence
“SHUANGSHOU” brings security

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