

# MRS12 Series - Reed Proximity Switch

SHR AUTOSENSOR TECH LIMITED Website: [www.reed-relay.com](http://www.reed-relay.com)

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## 1. Features

- Output reliable contact switch
- High-end sensor applications
- High insulation resistance
- Suitable for low power operation
- Custom design available
- Conforming to RoHS directive

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## 2. Performance Data

Parameter	Units	Value
Rated Power (max.)	W	10
Switching Voltage (Max DC/Peak AC)	V	180
Switching Current (Max DC/Peak AC)	A	0.5
Carry Current (max.)	A	1.25
Contact Resistance (@0.5V & 50mA)	mΩ	150
Breakdown Voltage	VDC	250
Insulation Resistance (Rh <45%, 100V Test)	Ω	10 <sup>10</sup>
Operating Time (max.)	ms	0.7
Release Time (max.)	ms	0.05
Capacitance (typ.)	pF	0.3
Vibration Resistance	G	20
Shock Resistance (1/2 sine wave, 11ms)	G	30
Operating Temperature	°C	-30 +80
Storage Temperature	°C	-40 +85

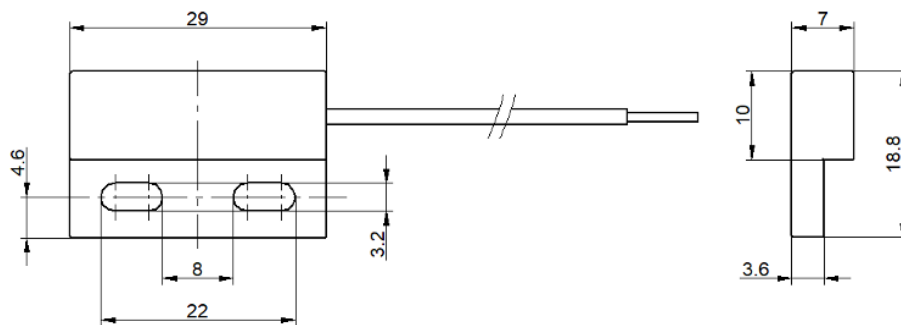
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### 3. Example of Order Marking

MRS12 - □ - □ - □ - □ (XXX)

Position	Description	Options
①	Product model	MRS12
②	Contact form	1A: Form A; 1B: Form B; 1C: Form C
③	Switch characteristic	1: 10W; 2: 10W(HV)
④	Magnetic sensitivity (AT)	A: 05-10; B: 10-15; C: 15-20; D: 20-25; E: 25-30; F: 30-35; G: 35-40
⑤	Cable Length (mm)	1: 200; 2: 300; 3: 500; 4: 1000; 5: 1500; 6: 2000; 7: 3000; 8: 5000
⑥	Special code	Customer special requirement

### 4. Outline Drawing



*MRS12 Outline Drawing*

Refer to technical drawings for exact dimensions and mounting configuration.

### 5. Layout



*MRS12 PCB Layout*

Standard PCB footprint layout for MRS12 series switches.

## 6. Precautions for Use

1. **Environment:** Avoid installation in areas directly exposed to rain, strong magnetic fields, or near objects with thermal radiation.
2. **Density:** Avoid excessive bulk density in use, which may affect the electrical characteristics of the switch.
3. **Mechanical Shock:** Excessive mechanical shock strength may change its magnetic sensitivity or even damage the switch.
4. **Soldering:** Use appropriate pin tightening or heat dissipation to prevent mechanical or thermal stress during welding.
5. **Wire Handling:** The minimum bending distance from the wire to the housing is 5mm, and dragging is prohibited.

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## Technical Support

For specific parameters and performance details, please refer to the specifications and samples provided by SHR AUTONSENSOR TECH LIMITED.

Performance parameters vary from application area to application area. Customers should choose the appropriate product according to the specific conditions of use.

### Contact Information:

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## Disclaimer

This document is for customer reference only. Specifications and parameters may be changed due to product improvement without further notice.

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