

MRS13 Series

Reed Proximity Switch

1 Feature

- ◆ Output reliable contact switch
- ◆ High-end sensor applications
- ◆ High Insulation resistance
- ◆ Suitable for low power operation
- ◆ Custom Design, conforming to Rohs directive



2 Performance Data

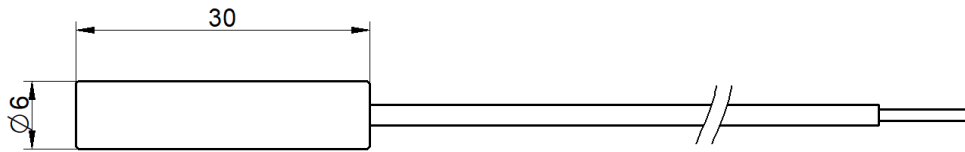
Parameter	Units	Value			
		A(NO)			B(NC)/C(SPDT)
Model	/				B(NC)/C(SPDT)
Rated Power(max.)	W	10	10 (HV)	100	10
Switching Voltage(Max DC/Peak AC)	V	180	AC 260/DC 200	1000	175
Switching Current(Max DC/Peak AC)	A	0.5	AC 0.3/DC 0.4	1.0	0.5
Carry current(max.)	A	1.25	1.4	2.5	1.0
Contact Resistance(@0.5V&50mA)	mΩ	150	150	150	150
Breakdown Voltage	VDC	250	400	1500	200
Insulation Resistance(Rh<45%,100V Test Voltage)	Ω	10 ¹⁰	10 ¹⁰	10 ¹⁰	10 ⁹
Operating Time(max.)	ms	0.7	0.7	1.1	0.7
Release Time(max.)	ms	0.05	0.1	0.05	1.5
Capacitance(typ.)	pF	0.3	0.3	0.5	1.5
Vibration Resistance	G	20	20	20	20
Shock Resistance(1/2 sine wave duration 11ms)	G	30	30	30	30
Operating Temperature	°C	-30~+80	-40~+80	-30~+80	-30~+80
Storage Temperature	°C	-40~+85	-40~+85	-40~+85	-40~+85

3 Example of order marking

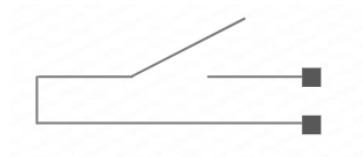
MRS13 - - - - (XXX)
 ① ② ③ ④ ⑤ ⑥

- ① Product model: MRS13
- ② Contact form: 1A: 1 Form A; 1B: 1 Form B; 1C: 1 Form C
- ③ Switch characteristic: 1: 10W; 2: 10W(HV); 3: 100W
- 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



5 Layout



6 Precautions for use

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

⚠Statement:

The document is for customer reference only. Specifications and parameters may be changed due to product improvement. For the specific parameters and performance of each product, please refer to the specifications and samples provided by Mirelay without further notice.

Performance parameters vary from application area to application area, so customers should choose the appropriate product according to the specific conditions of use, if in doubt, please contact Shanghai MiRelay Electronics Co., Ltd. for more technical support.