

APPLICATIONS

- Position and limit switch
 Pneumatic or hydraulic actuator position
- End motion detection for linear drive Indication and end travel limit switch
- Machine industry
 End motion detection and door/flap control

DESCRIPTION

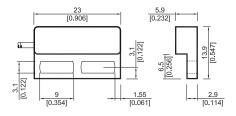
MK13 sensors are magnetically operated Reed proximity switches in a case with an interconnect cable. The sensor should be mounted on a fixed surface with the actuating magnet on the moving surface. Introduction or removal of the magnetic field determines the closing and opening of the Reed Switch

FEATURES

- · Form A, B, and C available
- · High power switches available
- · Other cables, connectors and colors available
- · Various case sizes available
- Five operate sensitivities available
- A choice of cable terminations and lengths are available

DIMENSIONS

All dimensions in mm [inches]



ORDER INFORMATION

| Series | Contact Form | Switch Model | Magnetic Sensitivity | Cable length (mm) | Termination | | |
|---------------------------------|----------------------|-----------------|-------------------------|-------------------------|-------------|--|--|
| MK13 - | xx | xx | X - | xxx | х | | |
| Options | 1 Form A | 66 | B, C, D, E | | w | | |
| | | 84 | | 500 * | | | |
| | 1 Form B 1 Form C | 90 | C, D, E | | | | |
| * Other cable lengths available | | | | | | | |

^{*} Other cable lengths available

Part Number Example

MK13 - 1A66 C - 500 W

1A is the contact form 66 is the switch model C is the magnetic sensitivity 500 is the cable length (mm) W is the termination

MAGNETIC SENSITIVITY

| Sensitivity Class | Pull-in At Range |
|----------------------|---------------------|
| В | 10 - 15 |
| С | 15 - 20 |
| D | 20 - 25 |
| E | 25 - 30 |

TERMINATION

For wire and termination details please consult factory. Form C version requires 3 conductors.

| W | } | The cable cut length includes: | |
|---|---|----------------------------------|--|
| | | 5 mm of wire stripped and tinned | |

CONTACT DATA

| All Data at 20° C | Switch Model → Contact Form → | Switch 66 Form A | | | Switch 84 Form A | | | |
|---------------------------------------|--|---------------------|------|------|---------------------|------|------|-------|
| Contact Ratings | Conditions | Min. | Тур. | Max. | Min. | Тур. | Max. | Units |
| Switching Power | Any DC combination of V & A not to exceed their individual max. 's | | | 10 | | | 10 | W |
| Switching Voltage | DC or peak AC | | | 200 | | | 400 | V |
| Switching Current | DC or peak AC | | | 0.5 | | | 0.5 | А |
| Carry Current | DC or peak AC | | | 1.25 | | | 1.0 | А |
| Static Contact Resistance | w/ 0.5 V & 10mA | | | 150 | | | 150 | mΩ |
| Dynamic Contact Resistance | Measured w/ 0.5 V & 50mA , 1.5 ms after closure | | | 200 | | | 200 | mΩ |
| Insulation Resistance across Contacts | 100 volts applied | 1010 * | | | 10 ¹¹ | | | Ω |
| Breakdown Voltage across Contact | Voltage applied for 60 sec. min. | 225 * | | | 700 | | | VDC |
| Operation Time incl. Bounce | Measured w/ 100 % overdrive | | | 0.5 | | | 2.0 | ms |
| Release Time | Measured w/ no coil suppression | | | 0.1 | | | 0.1 | ms |
| Capacitance | at 10 kHz cross contact | | 0.2 | | | 0.7 | | pF |
| Contact Operation ** | | | | | | | | |
| Must Operate Condition | Steady state field | 10 | | 30 | 15 | | 30 | AT |
| Must Release Condition | Steady state field | 4 | | 27 | 6 | | 27 | AT |
| Environmental Data | | | | | | | | |
| Shock Resistance | 1/2 sinus wave duration 11 ms | | | 50 | | | 50 | g |
| Vibration Resistance | From 10 - 2000 Hz | | | 20 | | | 20 | g |
| Ambient Temperature | 10°C/ minute max. allowable | -20 | | 85 | -20 | | 85 | °C |
| Stock Temperature | 10°C/ minute max. allowable | -35 | | 85 | -35 | | 85 | °C |
| Soldering Temperature | 5 sec. dwell | | | 260 | | | 260 | °C |

Please note: The indicated electrical data are maximum values and can vary downwards when using a more sensitive switch.

* Insulation resistance of 10¹² and breakdown voltage of 480 VDC is available.

^{**} These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required.

CONTACT DATA

| All Data at 20° C | Switch Model → Contact Form → | Switch 90 Form B / C | | | | |
|---------------------------------------|---|-------------------------|-----|------|-------|--|
| Contact Ratings | Conditions | Min. Typ. | | Max. | Units | |
| Switching Power | Any DC combination of V & A not to exceed their individual max.'s | | | 3 | W | |
| Switching Voltage | DC or peak AC | | | 175 | V | |
| Switching Current | DC or peak AC | | | 0.25 | Α | |
| Carry Current | DC or peak AC | | | 1.2 | Α | |
| Static Contact Resistance | w/ 0.5 V & 10mA | | | 150 | mΩ | |
| Dynamic Contact Resistance | Measured w/ 0.5 V & 50mA , 1.5 ms after closure | | | 250 | mΩ | |
| Insulation Resistance across Contacts | 100 volts applied | 10 ⁹ | | | Ω | |
| Breakdown Voltage across Contact | Voltage applied for 60 sec. min. | 200 | | | VDC | |
| Operation Time incl. Bounce | Measured w/ 100 % overdrive | | | 0.7 | ms | |
| Release Time | Measured w/ no coil suppression | | | 1.5 | ms | |
| Capacitance | at 10 kHz cross contact | | 1.0 | | pF | |
| Contact Operation ** | | | | | | |
| Must Operate Condition | Steady state field | 10 | | 35 | AT | |
| Must Release Condition | Steady state field | 4 | | 30 | AT | |
| Environmental Data | | | | | | |
| Shock Resistance | 1/2 sinus wave duration 11 ms | | | 50 | g | |
| Vibration Resistance | From 10 - 2000 Hz | | | 20 | g | |
| Ambient Temperature | 10°C/ minute max. allowable | -20 | | 85 | °C | |
| Stock Temperature | 10°C/ minute max. allowable | -35 | | 85 | °C | |
| Soldering Temperature | 5 sec. dwell | | | 260 | ∘c | |

Please note: The indicated electrical data are maximum values and can vary downwards when using a more sensitive switch.

^{**} These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required.