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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation, and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


## Contact us

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## DESCRIPTION

MK21 sensors are magnetically operated Reed proximity switches designed for screw mounting. 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. Leads are teflon coated.

## FEATURES

- High power switches available
- Other cables, connectors and colors available
- Various case sizes available
- Four operate sensitivities available
- A choice of cable terminations and lengths are available



## 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

## DIMENSIONS

All dimensions in mm [inches]


## Reed Sensors with Mounting

 Holes for Screw Fastening
## ORDER INFORMATION

| SERIES | CONTACT <br> FORM | SWITCH <br> MODEL | MAGNETIC <br> SENSITIVITY | CABLE <br> LENGTH <br> $(\mathrm{mm})$ | TERMINATION |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MK21 - | 1A | XX | $\mathrm{X}-$ | XXX | w |
| OPTIONS |  | 71 | B, C, D,E | $500 *$ |  |
| * Other cable length available. |  |  |  |  |  |

## Part Number Example

MK21-1A71 C - 500 W

71 is the switch model
C is the magnetic sensitivity
500 is the cable length ( mm )

## MAGNETIC SENSITIVITY

| SENSITIVITY <br> CLASS | PULL IN <br> AT RANGE |
| :---: | :---: |
| B | $10-15$ |
| C | $15-20$ |
| D | $20-25$ |
| E | $25-30$ |

## TERMINATION

For wire and termination details please contact factory.

| $\mathbf{W}$ |  | The cable cut length includes: <br> 5 mm of wire stripped and tinned |
| :--- | :--- | :--- |

## CONTACT DATA

| All data at $20{ }^{\circ} \mathrm{C}$ | Switch Model --> Contact Form --> | $\text { Contact } 71$Form A |  |  | Contact 84 Form A |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Contact Ratings | Conditions | Min. | Typ. | Max. | Min. | Typ. | Max. | Units |
| Contact Rating | 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 | A |
| Carry Current | DC or peak AC |  |  | 1.25 |  |  | 1.0 | A |
| Static Contact Resistance | $\mathrm{w} / 0.5 \mathrm{~V}$ \& 10 mA |  |  | 150 |  |  | 150 | $\mathrm{m} \Omega$ |
| Dynamic Contact Resistance | Measured $\mathrm{w} / 0.5 \mathrm{~V} \& 50 \mathrm{~mA}$ 1.5 ms after closure |  |  | 200 |  |  | 200 | $\mathrm{m} \Omega$ |
| Insulation Resistance across Contacts | 100 Volts applied | $10^{10 *}$ |  |  | $10^{11}$ |  |  | $\Omega$ |
| Breakdown Voltage across Contacts | Voltage applied for 60 sec . min. | 225 * |  |  | 700 |  |  | VDC |
| Operate Time, incl. Bounce | Measured w/ $50 \%$ overdrive |  |  | 0.5 |  |  | 2.0 | ms |
| Release Time | Measured w/ no coil suppression |  |  | 0.1 |  |  | 0.1 | ms |
| Capacitance | @ 10kHz across 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 | $1 / 2$ sine wave duration 11 ms |  |  | 50 |  |  | 50 | 9 |
| Vibration Resistance | From $10-2000 \mathrm{~Hz}$ |  |  | 20 |  |  | 20 | 9 |
| Ambient Temperature | $10^{\circ} \mathrm{C} /$ minute max. allowable | -20 |  | 85 | -20 |  | 85 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature | $10^{\circ} \mathrm{C} /$ minute max. allowable | -35 |  | 85 | -35 |  | 85 | ${ }^{\circ} \mathrm{C}$ |
| Soldering Temperature | 5 sec . dwell |  |  | 260 |  |  | 260 | ${ }^{\circ} \mathrm{C}$ |

Please note: The indicated electrical data are maximum values and can vary downwards when using a more sensitive switch. * Insulation resistance of $10^{12}$ and breakdown voltage of 480VDC is available.
** These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required.

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