## DESCRIPTION

MK11 sensors are magnetically operated Reed Sensors with screw thread enclosure supplied with 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.


## APPLICATIONS

- Piston end travel and position detection
- End motion detection for linear drives
- Machine industry


## FEATURES

- High power switches available
- Other cables, connectors and colors available
- Various case sizes available
- Five operate sensitivities available
- A choice of switch terminations and cable lengths (mm) are available


## DIMENSIONS

All dimensions in mm [inches]


## Reed Sensor with

Screw Thread Enclosure

## ORDER INFORMATION

| SERIES | $\begin{aligned} & \text { CONTACT } \\ & \text { FORM } \end{aligned}$ | $\begin{aligned} & \text { SWITCH } \\ & \text { MODEL } \end{aligned}$ | MAGNETIC SENSITIVITY | CABLE <br> LENGTH (mm) | TERMINATION |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MK11 - | 1A | xx | X - | Xxx | X |
|  |  | 71 | B, C, D, E |  |  |
|  |  | 81 | A |  |  |
| * Other cable lengths available. |  |  |  |  |  |

Part Number Example
MK11-1A71 C-500 W
71 is the switch model $\mathbf{C}$ is the magnetic sensitivity 500 is the cable length ( mm ) W is the termination

## MAGNETIC SENSITIVITY

| SENSITIVITY <br> CLASS | PULL IN <br> AT RANGE |
| :---: | :---: |
| A | $5-10$ |
| B | $10-15$ |
| C | $15-20$ |
| D | $20-25$ |
| E | $25-30$ |

## TERMINATION

For wire and termination details please consult factory.

| W | The cable cut length includes: <br> 5 mm of wire stripped and tinned |
| :--- | :--- | :--- |
| Y | The cable cut length includes: <br> individual crimped terminals |

## CONTACT DATA

| All data at $20{ }^{\circ} \mathrm{C}$ | Switch Model --> Contact Form --> | $\begin{gathered} \text { Contact } 71 \\ \text { Form A } \end{gathered}$ |  |  | $\begin{gathered} \text { Contact } 81 \\ \text { Form A } \end{gathered}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |  |  | 5 | W |
| Switching Voltage | DC or peak AC |  |  | 200 |  |  | 90 | 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 |  |  | 200 | $\mathrm{m} \Omega$ |
| 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 | $10^{10}$ * |  |  | $10^{9}$ |  |  | $\Omega$ |
| Breakdown Voltage across Contacts | Voltage applied for 60 sec . min. | 225 * |  |  | 100 |  |  | VDC |
| Operate Time, incl. Bounce | Measured w/ 100\% overdrive |  |  | 0.5 |  |  | 0.5 | ms |
| Release Time | Measured w/ no coil suppression |  |  | 0.1 |  |  | 0.1 | ms |
| Capacitance | @ 10kHz across contact |  | 0.2 |  |  | 0.2 |  | pF |
| Contact Operation ** |  |  |  |  |  |  |  |  |
| Must Operate Condition | Steady state field | 10 |  | 30 | 5 |  | 10 | AT |
| Must Release Condition | Steady state field | 4 |  | 27 | 2 |  | 9 | AT |
| Environmental Data |  |  |  |  |  |  |  |  |
| Shock Resistance | $1 / 2$ sine wave duration 11 ms |  |  | 50 |  |  | 30 | g |
| Vibration Resistance | From $10-2000 \mathrm{~Hz}$ |  |  | 20 |  |  | 10 | g |
| 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 | $5 \mathrm{sec} . \mathrm{dwell}$ |  |  | 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 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.

