## **MK04 Series**

#### **Reed Sensors** for Screw Fastening

## **MEDER** electronic



#### **DESCRIPTION**

MK04 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.

### **APPLICATIONS**

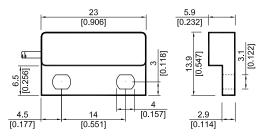
- **Position and limit switch** Pneumatic or hydraulic actuator position indication and end travel limit switch
- **Door and window contacts** Security system applications
- Level sensor Use with magnetic floats for water level detection in coffee makers, washing machines or dishwashers

## **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
- · High voltage versions upon request

#### DIMENSIONS

All dimensions in mm [inch]



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### **ORDER INFORMATION**

#### **Part Number Example**

MK04 - 1A66 C - 500 W

1A is the contact form66 is the switch modelC is the magnetic sensitivity500 is the cable length (mm)W is the termination

Series	Contact form	Switch- model	Magnetic Sensitivity	Cable Length (mm)	Termina- tion	
MK4 -	ХХ	ХХ	<b>X</b> -	ххх	x	
Options	1 Form A	66	B, C, D, E		w	
	1 Form B 1 Form C	90		500*		
* Other cable length available.						

## **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.

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## **CONTACT DATA**

All Data at 20° C	Switch Model $\rightarrow$ Contact Form $\rightarrow$	Switch 66 Form A			
<b>Contact Ratings</b>	Conditions	Min.	Тур.	Max.	Units
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			10	w
Switching Voltage	DC or peak AC			200	V
Switching Current	DC or peak AC			0.5	А
Carry Current	DC or peak AC			1.25	А
Static Contact Resistance	w/ 0.5 V & 10mA			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50mA , 1.5 ms after closure			200	mΩ
Insulation Resistance across Contacts	100 volts applied	10 <sup>10</sup> *			Ω
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	225 *			VDC
Operate Time incl. Bounce	Measured w/ 100 % overdrive			0.5	ms
Release Time	Measured w/ no coil suppression			0.1	ms
Capacitance	at 10 kHz cross contact		0.2		pF
Contact Operation **					
Must Operate Condition	Steady state field	10		60	AT
Must Release Condition	Steady state field	4		54	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.			260	°C
<ul> <li>Please note: The indicated electrical data are maximum values and can vary downwards when using a more sensitive switch.</li> <li>* Insulation resistance of 10<sup>12</sup> and breakdown voltage of 480 VDC is available.</li> <li>** These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch applied.</li> </ul>					

section. Consult factory if more detail is required.

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**MK04 Series** 

#### **Reed Sensors** for Screw Fastening

### **CONTACT DATA**

All Data at 20° C	Switch Model $\rightarrow$ Contact Form $\rightarrow$	Switch 90 Form B / C				
Contact Ratings	Conditions	Min.	Тур.	Max.	Units	
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			20	w	
Switching Voltage	DC or peak AC			175	V	
Switching Current	DC or peak AC			0.5	А	
Carry Current	DC or peak AC			1.0	А	
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 <sup>9</sup>			Ω	
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	200			VDC	
Operate 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	15		40	AT	
Must Release Condition	Steady state field				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.			260	°C	
Please note: The indicated electrical data are maximum values and can vary downwards when using a more sensitive switch. * Insulation resistance of 10 <sup>12</sup> and breakdown voltage of 480 VDC is available.						

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