#### ESTER Mectronic 传感与控制 http://www.sensor-ic.com/ TEL:0755-83376549 FAX:0755

## **Reed Sensors** with Screw Fastening Slot



### **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

### **DESCRIPTION**

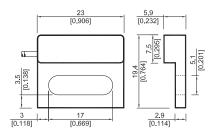
MK5 sensors are magnetically operated Reed proximity switches designed for screw mounting. The sensor should be mounted on a fixed surface with the actuating magnet on the moving surface. Introduction or removal of the magnetic field determines the closing and opening of the Reed Switch.

### **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]



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### **ORDER INFORMATION**

#### **Part Number Example**

MK5 - 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

Series	Contact form	Switch- model	Magnetic Sensitivity	Cable Length (mm)	Termina- tion	
MK4 -	хх	хх	х-	ххх	х	
Options	1 Form A	66	B, C, D, E			
	TFOIIIA	84	C, D, E	500*	W	
	1 Form B 1 Form C	90				
* 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 → Contact Form →		witch ( Form <i>F</i>		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 <sup>10</sup>			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.			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 10<sup>12</sup> 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.

# **Reed Sensors** with Screw Fastening Slot

## **CONTACT DATA**

All Data at 20° C	Switch Model → Contact Form →	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			3	W
Switching Voltage	DC or peak AC			175	V
Switching Current	DC or peak AC			0.25	А
Carry Current	DC or peak AC			1.2	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
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		0.2		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.			260	°C

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

Insulation resistance of  $10^{12}$  and breakdown voltage of 480 VDC is available.

<sup>\*\*</sup> These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required.