Reed Sensor with Screw Thread Enclosure

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

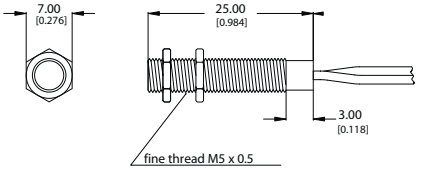
FEATURES

- Stainless steel and plastics designs with thread for space adjustment
- 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

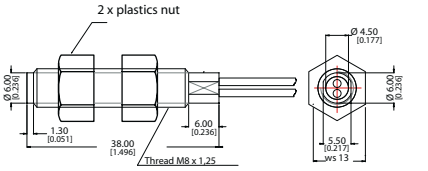
DIMENSIONS

All dimensions in mm [inch]

MK11 (Stainless Steel)



MK11/M8 (Plastics)



ORDER INFORMATION

Part Number Example

MK11 - 1A66 C - 500 W
MK11/M8 - 1A66 C - 500 W

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)	Termination
MK11 -	**1A**	**XX**	**X**	**XXX**	**X**
Options	1A	66	B, C, D, E	500*	W
		52, 85	C, D, E		
	1C	90**	C, D, E		

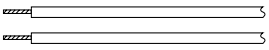
* Other cable lengths available.
** Only for MK11/M8 (plastics).

MAGNETIC SENSITIVITY

Sensitivity Class	Pull In AT Range
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: 5 mm of wire stripped and tinned.

Reed Sensor with
Screw Thread Enclosure

CONTACT DATA (Stainless Steel + Plastics)

All Data at 20° C	Switch Model → Contact Form →	Switch 52 Form A			Switch 66 Form A			
Contact Ratings	**Conditions**	**Min.**	**Typ.**	**Max.**	**Min.**	**Typ.**	**Max.**	**Units**
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			50 70 (VA)			10	W
Switching Voltage	DC or peak AC			250			200	V
Switching Current	DC or peak AC			0.5			0.5	A
Carry Current	DC or peak AC			2.5			1.25	A
Static Contact Resistance	w/ 0.5 V & 10 mA			200			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50 mA , 1.5 ms after closure						200	mΩ
Insulation Resistance across Contacts	100 volts applied	10^{10}			10^{10} *			Ω
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	600			225*			VDC
Operate Time incl. Bounce	Measured w/ 100 % overdrive			1.0			0.5	ms
Release Time	Measured w/ no coil suppression			0.1			0.1	ms
Capacitance	at 10 kHz cross contact		0.2			0.2		pF
Contact Operation **								
Must Operate Condition	Steady state field	10		30	10		60	AT
Must Release condition	Steady state field	4		27	4		54	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^{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.

CONTACT DATA (only Plastics)

All Data at 20° C	Switch Model → Contact Form →	Switch 85 Form A			Switch 90 Form B/C			
Contact Ratings	**Conditions**	**Min.**	**Typ.**	**Max.**	**Min.**	**Typ.**	**Max.**	**Units**
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			100			20	W
Switching Voltage	DC or peak AC			400			175	V
Switching Current	DC or peak AC			1.0			0.5	A
Carry Current	DC or peak AC			2.5			1.0	A
Static Contact Resistance	w/ 0.5 V & 10 mA			150			250	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50 mA , 1.5 ms after closure			200				mΩ
Insulation Resistance across Contacts	100 volts applied	10^{10}			10^{9}			Ω
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	4000			200			VDC
Operate Time incl. Bounce	Measured w/ 100 % overdrive			1.0			0.7	ms
Release Time	Measured w/ no coil suppression			0.1			1.5	ms
Capacitance	at 10 kHz cross contact		0.2			1.0		pF
Contact Operation **								
Must Operate Condition	Steady state field	20		60	15		40	AT
Must Release condition	Steady state field	12		54	6			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.
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