

Reed Sensors with Screw Fastening Mounting Holes



DESCRIPTION

MK12 sensors are magnetically operated Reed Sensors designed for screw mounting. The larger casing permits the use of higher rated switches. 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

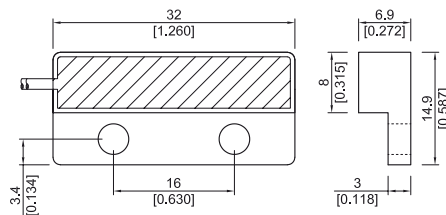
- **Position and limit switch**
Pneumatic or hydraulic actuator position
- **End motion detection for linear drive**
Indication and end travel limit switch
- **Machine industry**
End motion detection and door/flap control

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 [inch]



ORDER INFORMATION

Part Number Example

MK12 - 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)	Termination
MK12 -	XX	XX	X -	XXX	X
Options	1 Form A	66	B, C, D, E	500 *	W
		84			
	1 Form B 1 Form C	90	C, D, E		
* Other cable lengths available					

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.

Form C version requires 3 conductors.

W		The cable cut length includes: 5mm of wire stripped and tinned
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CONTACT DATA

All Data at 20° C	Switch Model → Contact Form →	Switch 66 Form A			Switch 84 Form A			Units
		Min.	Typ.	Max.	Min.	Typ.	Max.	
Contact Ratings	Conditions							
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	A
Carry Current	DC or peak AC			1.25			1.0	A
Static Contact Resistance	w/ 0.5 V & 10mA			150			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50 mA , 1.5 ms after closure			200			200	mΩ
Insulation Resistance across Contacts	100 volts applied	10 ¹⁰ *			10 ¹¹			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. dwell			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

All Data at 20° C	Switch Model → Contact Form →	Switch 90 Form B / C			
Contact Ratings	Conditions	Min.	Typ.	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	A
Carry Current	DC or peak AC			1.2	A
Static Contact Resistance	w/ 0.5 V & 10 mA			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50 mA , 1.5 ms after closure			250	mΩ
Insulation Resistance across Contacts	100 volts applied	10 ⁹			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		1.0		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. dwell			260	°C
Please note: The indicated electrical data are maximum values and can vary downwards when using a more sensitive switch. * These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required.					