Cylindrical Reed Sensors with M8 Thread

DESCRIPTION

MK07 sensors are magnetically operated Reed proximity switches in a cylindrical form with an 8 mm x 0.75 thread and connecting cable or coupler. The sensor can be screwed directly onto a fixed surface with the actuating magnet on the moving surface. The widespread termination “T” or “U” makes the MK7 series compatible with several inductive and magnetic proximity sensors.

APPLICATIONS

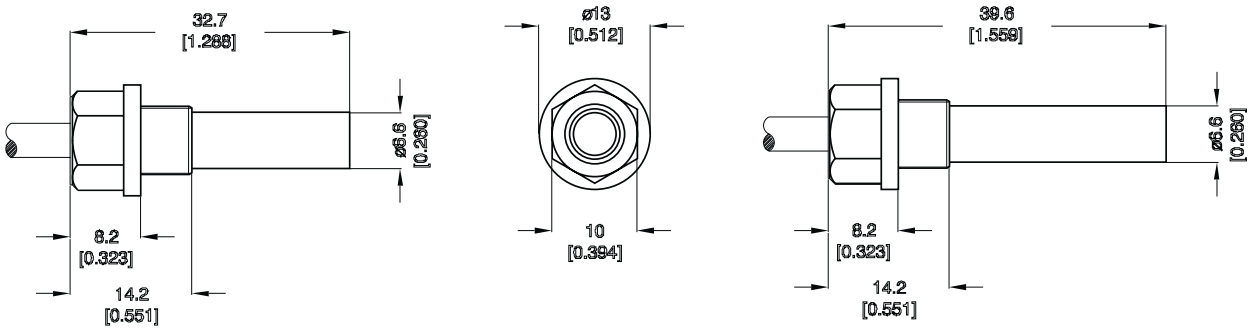
- **Position and limit switch**
  Pneumatic or hydraulic actuator position Indication and end travel limit switch
- **Door and window contacts**
  Security system applications
- **Level sensor**
  Use with magnetic floats for water level detection in coffee makers, washing machines or dishwashers

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

DIMENSIONS

All dimensions in mm [inch]



ORDER INFORMATION

Part Number Example

MK07 - 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
MK07 - MK07/1 -	**XX**	**XX**	**X -**	**XXX**	**X**
Options	1 Form A	66	B, C, D, E	500*	W
		51**	C, D, E		
	1 Form B 1 Form C	90			

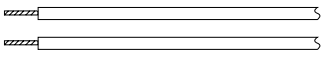
* Other cable length available.
** Not available in combination with MK7/1 Series.

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: 5 mm of wire stripped and tinned

CONTACT DATA

All Data at 20° C	Switch Model → Contact Form →	Switch 51 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			12			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			1.5			1.25	A
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 Contact	100 volts applied	10^{11}			10^{10}*			Ω
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	350			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	15		30	10		30	AT
Must Release Condition	Steady state field	6		27	4		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			20	W
Switching Voltage	DC or peak AC			175	V
Switching Current	DC or peak AC			0.5	A
Carry Current	DC or peak AC			1.0	A
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	10^9			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. 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.