Cylindrical Reed Sensors

#### **DESCRIPTION**

MK20 sensors are magnetically operated Reed proximity switches in a cylindrical module, fitted 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**

- Position and limit switch
  Pneumatic or hydraulic actuator position
  Indication and end travel limit switch
- Door and window contacts
  Security system applications
- Level sensor

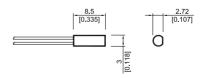
Use with magnetic floats for water level detection in coffee makers, washing machines or dishwashers

#### **FEATURES**

- · Flat side indicates maximum sensitivity
- Small size
- Other cables, connectors and colors available
- · Various case sizes available
- Three operate sensitivities available
- A choice of cable terminations and lengths are available

# **DIMENSIONS**

All dimensions in mm [inches]



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### **ORDER INFORMATION**

SERIES	MAGNETIC SENSITIVITY	CABLE LENGTH (mm)	TERMINATION			
MK20 -	X -	xxx	Х			
OPTIONS	B, C, D	100 *	W, X, Y			
* Other cable lengths available						

Part Number Example

MK20 - C - 100 W

C is the magnetic sensitivity 100 is the cable length (mm) W is the termination

# **MAGNETIC SENSITIVITY**

SENSITIVITY CLASS	PULL IN AT RANGE		
В	10 - 15		
С	15 - 20		
D	20 - 25		

# **TERMINATION**

For wire and termination details please consult factory.

W		The cable cut length includes: 5mm of wire stripped and tinned
X	==E	The cable cut length includes: individual crimped terminals
Υ		The cable cut length includes: individual spade terminals

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### **CONTACT DATA**

All data at 20 °C	Contact Form>	Form A			
Contact Ratings	Conditions	Min.	Тур.	Max.	Units
Contact Rating	Any DC combination of V & A not to exceed their individual max.'s			5	W
Switching Voltage	DC or peak AC			175	٧
Switching Current	DC or peak AC			0.25	Α
Carry Current	DC or peak AC			0.5	Α
Static Contact Resistance	w/ 0.5V & 10mA			300	mΩ
Dynamic Contact Resistance	Measured w/ 0.5V & 50mA 1.5 ms after closure			400	mΩ
Insulation Resistance across Contacts	100 Volts applied	10 <sup>9</sup>			Ω
Breakdown Voltage across Contacts	Voltage applied for 60 sec. min.	200			VDC
Operate Time, incl. Bounce	Measured w/ 50% overdrive			0.4	ms
Release Time	Measured w/ no coil suppression			0.1	ms
Capacitance	@ 10kHz across contact		0.3		pF
Contact Operation *					
Must Operate Condition	Steady state field	10		25	AT
Must Release Condition	Steady state field	4		22	AT
Environmental Data					
Shock Resistance	1/2 sine wave duration 11ms			30	g
Vibration Resistance	From 10 - 2000 Hz			20	g
Ambient Temperature	10 °C/ minute max. allowable	-20		70	°C
Storage Temperature	10 °C/ minute max. allowable	-20		70	°C
Soldering Temperature	5 sec. dwell			260	٥C

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

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