

Cylindrical Reed Sensors

DESCRIPTION

MK20 (also MK20/1) 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

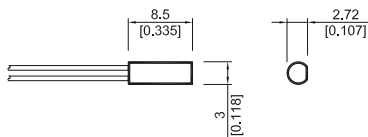
- **Position and limit switch**
Pneumatic or hydraulic actuator position
Indication and end travel limit switch
- **Door and window contacts**
Security system applications
- **Level sensor**
Use with magnetic floats for water level detection in coffee makers, washing machines or dishwashers

FEATURES

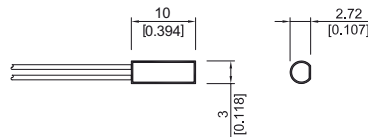
- Flat side indicates maximum sensitivity
- Small size
- Other cables, connectors and colors available
- Three operate sensitivities available
- A choice of cable terminations and lengths are available

DIMENSIONS

All dimensions in mm [inches]



MK20



MK20/1

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Reed Sensors**

ORDER INFORMATION

Part Number Example

MK20 - C - 100 W

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

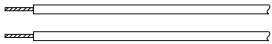
| Series | Magnetic Sensitivity | Cable Length (mm) | Termination |
|---------------------------------|----------------------|-------------------|-------------|
| MK20 - MK20/1 - | X - | XXX | X |
| Options | B, C, D | 100 * | W |
| * Other cable length available. | | | |

MAGNETIC SENSITIVITY

| Sensitivity class | Pull In At Range |
|-------------------|------------------|
| B | 10 - 15 |
| C | 15 - 20 |
| D | 20 - 25 |

TERMINATION

For wire and termination details please consult factory.

| | | |
|----------|---|--|
| W |  | The cable cut length includes: 5 mm of wire stripped and tinned |
|----------|---|--|

CONTACT DATA

| All Data at 20° C | Contact Form → | Form A | | | Units |
|--|---|-----------------|------|------|-------|
| | | Min. | Typ. | Max. | |
| Contact Ratings | Conditions | | | | |
| Switching Power | Any DC combination of V & A not to exceed their individual max.'s | | | 5 | W |
| Switching Voltage | DC or peak AC | | | 175 | V |
| Switching Current | DC or peak AC | | | 0.25 | A |
| Carry Current | DC or peak AC | | | 0.5 | 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 | | | 300 | 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 | | | 0.4 | ms |
| Release Time | Measured w/ no coil suppression | | | 0.1 | ms |
| Capacitance | at 10 kHz cross 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 sinus wave duration 11 ms | | | 50 | g |
| Vibration Resistance | From 10 - 2000 Hz | | | 20 | g |
| Ambient Temperature | 10°C/ minute max. allowable | -20 | | 70 | °C |
| Stock Temperature | 10°C/ minute max. allowable | -20 | | 70 | °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. | | | | | |