

MK38 Recessed Reed Sensor



Key Features:

- ✔ Noncontact activation between sensor and actuator
- ✔ Designed to press into a $\varnothing 9.5\text{mm}$ [0.375"] hole
- ✔ Adapter Options Available for Installation in Steel

Key Markets/Applications:

- ✔ Industrial Equipment, Building Security and Monitor, Appliance
- ✔ Door and Access control, Window Monitoring, Equipment Door Detection, Appliance Door Detection



Electrical Specifications:

Contact Data	Switch Model			Unit
	1A66B	1A85C	1B90C/ 1C90C	
Rated Power (max.) <small>Any DC combo of V&A not to exceed individual max.'s</small>	10	100	3	W
Switching Voltage (max.) <small>DC or peak AC</small>	180	300	30	V
Switching Current (max.) <small>DC or peak AC</small>	0.5	1.0	0.2	A
Carry Current (max.) <small>DC or peak AC</small>	1.25	2.5	0.5	A
Contact Resistance (max.) <small>@ 0.5V & 50mA</small>	200	200	200	mOhm
Breakdown Voltage (min.) <small>According to EN60255-5</small>	0.25	1.5	0.15	kVDC
Operating Time (max.) <small>Incl. Bounce; Measured with w/ Nominal Voltage</small>	0.7	1.1	1.0	ms
Release Time (max.) <small>Measured with no Coil Excitation</small>	0.05	0.05	0.5	ms
Insulation Resistance (typ.) <small>Rh<45%, 100V Test Voltage</small>	10^{10}	10^{10}	10^9	Ohm
Capacitance (typ.) <small>@ 10kHz across open Switch</small>	0.3	0.5	1.5	pF
Typical Lifetime <small>Resistive Load 12V at 5mA</small>	10^8	10^8	10^7	Operatin g Cycles

***Load increase reduces life expectancy of Reed Switches**

Customer Options:



Part Number Example:

M K 3 8 / 0 - 1 A 6 6 B - 3 0 0 W - W H T

SERIES	1	2	3	4	5
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CUSTOMER OPTIONS

1. ADAPTER OPTIONS [0, 1, 2]
 1. 0 = No Adapter
 2. 1 = Adapter 1
 3. 2 = Adapter 2
2. CONTACT QUANTITY AND SWITCH MODEL [1A,1B,1C]
 1. 1A = Normally Open
 2. 1B = Normally Closed
 3. 1C = Single Pole - Double Throw
3. SWITCH and SENSITIVITY OPTIONS [66, 85, 90]
 1. 66 SWITCH with B SENSITIVITY
 2. 90 SWITCH with B SENSITIVITY
 3. 85 Switch with C SENSITIVITY
4. CABLE LENGTH and Type [300W = 300mm UL1569]
5. HOUSING COLOR [BLK, WHT]

Additional Options

- + UL Cable Version comes as sensor and magnet pair
- + VdS Cable Version sensor and magnet sold separately
- + Adapter options are optional for steel installation
- + Custom cable lengths available on request

Contact Form Glossary :

Form A

NO = Normally Open Contacts
SPST = Single Pole Single Throw



Form B

NC = Normally Closed Contacts
SPST = Single Pole Single Throw



Form C

Changeover
SPDT = Single Pole Double Throw



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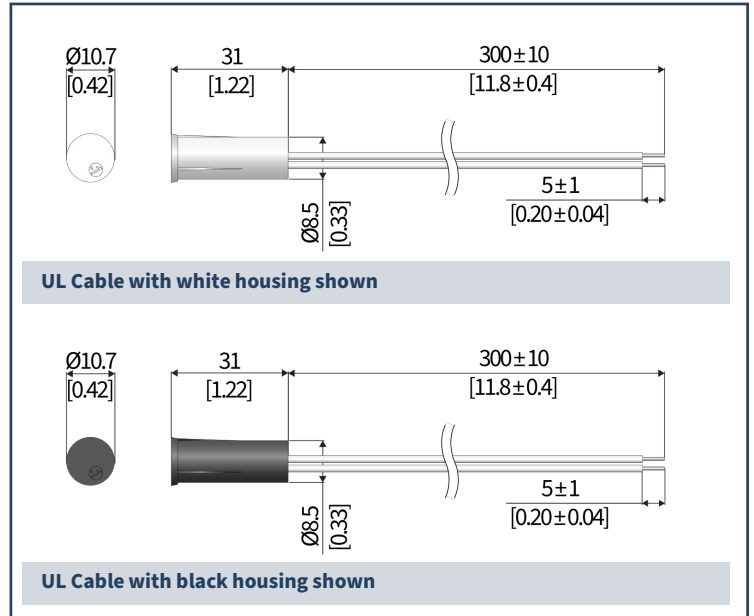
Mechanical/Environmental Specifications:

Housing	PBT	
Case Color	White or Black	
Sealing Compound	Polyurethane	
Cable Type	UL1569	
Cable Material	PVC	
Wire Awg	22 awg	
Normally Open / Normally Closed	White	
SPDT	NO: Black NC: Brown Com: White	
	Unit	
Shock Resistance <small>½ sine wave duration 11ms</small>	50	g
Vibration Resistance (max.)	20	g
Operating Temperature <small>Cable not moved</small>	-40 to 75	°C

*Higher temperature rated magnets available upon request

Dimensions (mm):

Tolerances acc. to DIN ISO 2768-m



Activation Distances

Switch	Actuator	Min Activation	Max Release
1A66B	M38-N42	21mm [0.83"]	36mm [1.47"]
1A85C	M38-N42	20mm [0.79"]	36mm [1.47"]
1B90C 1C90C	M38-N42	17mm [0.67"]	28mm [1.10"]

- Distances are guidelines and can change by environment
- M36 and M37 magnets can be used to decrease switching distance

Adapter Options – Available in White and Black

Adapter 1	Snap in Holders	
Hole Size	19mm [0.75"]	
Material Thickness	3mm [0.13"] or less	
Adapter 2	Rib Holders	
Hole Size	19mm [0.75"]	
Material Thickness	3mm [0.13"] or more	

Handling/ Assembly Instructions:

- Crushed ribs good for single installation
- Holes under 9.53mm [0.375"] will prevent installation
- Cable bending-radius is diameter x 15
- Min. bending distance to housing is 5mm
- Series resistor recommended for > 5m cable length
- Cable length will affect sensor contact resistance

