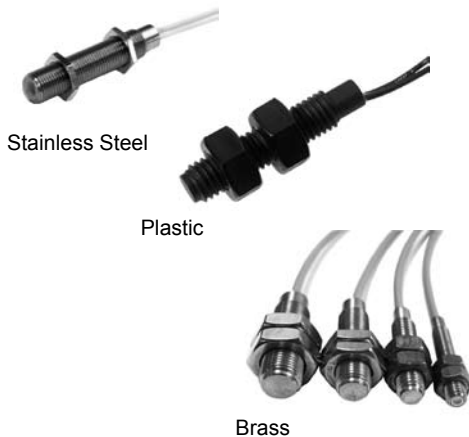


Reed Sensor with Screw Thread Enclosure

DESCRIPTION



MK11 sensors are magnetically operated Reed Sensors with screw thread enclosure supplied 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.

FEATURES

- **Stainless steel, plastic and brass** designs with thread for space adjustment
- 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

MAGNETIC SENSITIVITY

Sensitivity Class	Pull In AT Range
B	10 - 15
C	15 - 20
D	20 - 25
E	25 - 30

APPLICATIONS

- Piston end travel and position detection
- End motion detection for linear drives
- Machine industry

ORDER INFORMATION

Part Number Example

MK11 - 1A66 C - 500 W
 MK11/M8 - 1A66 C - 500 W
 MK11/B6 - 1A66 C - 500 W

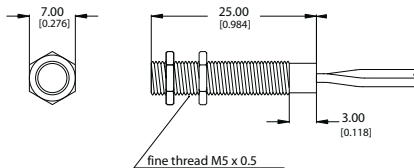
M8 is the thread
B6 is the brass with M6 thread
66 is the switch model
C is the magnetic sensitivity
500 is the cable length (mm)
W is the termination

Series	Contact-form	Switch-model	Magnetic Sensitivity	Cable Length (mm)	Termination
MK11 -	1A	XX	X	XXX	X
Options	1A	66	B, C, D, E	500*	W
		52, 85	C, D, E		
	1C	90**	C, D, E		
	1A, 1B 1C, 1E	MK11 (brass)	B, C, D, E		
* Other cable lengths available. ** Only for MK11/M8 (plastic).					

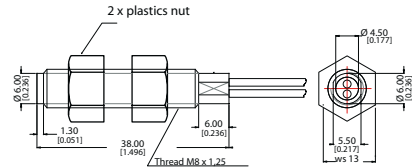
DIMENSIONS

All dimensions in mm [inch]

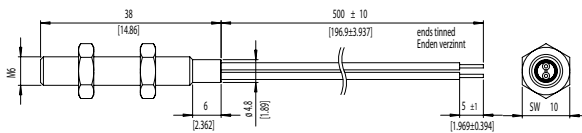
MK11 (Stainless Steel)



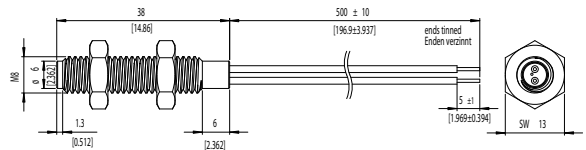
MK11/M8 (Plastic)



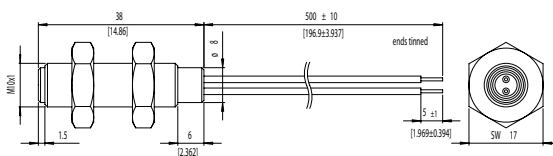
MK11/B6 (Brass)



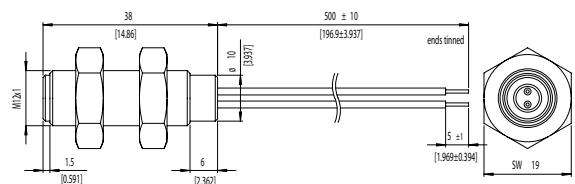
MK11/B8 (Brass)



MK11/B10 (Brass)



MK11/B12 (Brass)



TERMINATION

For wire and termination details please consult factory.

W		The cable cut length includes: 5 mm of wire stripped and tinned.
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**Reed Sensor with
Screw Thread Enclosure**
CONTACT DATA (Stainless Steel + Plastic)

All Data at 20° C	Switch Model → Contact Form →	Switch 52 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			50 70 (VA)			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			2.5			1.25	A
Static Contact Resistance	w/ 0.5 V & 10 mA			200			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50 mA , 1.5 ms after closure						200	mΩ
Insulation Resistance across Contacts	100 volts applied	10 ¹⁰			10 ¹⁰ *			Ω
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	600			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	10		30	10		60	AT
Must Release condition	Steady state field	4		27	4		54	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.			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 (Plastic only)

All Data at 20° C	Switch Model → Contact Form →	Switch 85 Form A			Switch 90 Form B/C			
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			100			20	W
Switching Voltage	DC or peak AC			400			175	V
Switching Current	DC or peak AC			1.0			0.5	A
Carry Current	DC or peak AC			2.5			1.0	A
Static Contact Resistance	w/ 0.5 V & 10 mA			150			250	mΩ
Dynamic Contact Resistance	Measured w/ 0.5 V & 50 mA , 1.5 ms after closure			200				mΩ
Insulation Resistance across Contacts	100 volts applied	10 ¹⁰			10 ⁹			Ω
Breakdown Voltage across Contact	Voltage applied for 60 sec. min.	4000			200			VDC
Operate Time incl. Bounce	Measured w/ 100 % overdrive			1.0			0.7	ms
Release Time	Measured w/ no coil suppression			0.1			1.5	ms
Capacitance	at 10 kHz cross contact		0.2			1.0		pF
Contact Operation **								
Must Operate Condition	Steady state field	20		60	15		40	AT
Must Release condition	Steady state field	12		54	6			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.			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.								

**Reed Sensor with
Screw Thread Enclosure**
CONTACT DATA (Brass)

All Data at 20° C	Contact Form →	Form A/E							B/C	
Contact Ratings	Conditions	35	46	52	66	80	85	87	90	Ein.
Switching Power (Max.)	Any DC combination of V & A not to exceed their individual max.'s	20*	10*	50*	10*	10*	100*	10*	10*	W
Switching Voltage (Max.)	DC or peak AC	200	200	250	200	170	1000	200	175	V
Switching Current (Max.)	DC or peak AC	1.0	0.5	0.5	0.5	0.25	1.0	0.5	0.5	A
Carry Current (Max.)	DC or peak AC	1.25	1.0	2.5	1.25	0.5	2.5	0.5	1.0	A
Static Contact Resistance (Max.)	w/ 0.5 V & 10 mA	150	150	150	150	200	150	150	150	mΩ
Insulation Resistance across Contacts (Max.)	RH 45%	10 ¹²	10 ¹²	10 ¹⁰	10 ¹⁰	10 ⁹	10 ¹⁰	10 ⁹	10 ⁹	Ω
Breakdown Voltage across Contact (Min.)	Voltage applied for 60 sec. min.	320	225	600	225	210	2000	230	200	VDC
Operate Time incl. Bounce (Max.)	Measured w/ 100 % overdrive	0.5	0.7	1.0	0.5	0.6	1.1	0.6	0.7	ms
Release Time (Max.)	Measured w/ no coil suppression	0.1	0.1	0.2	0.1	0.1	0.1	0.1	1.5	ms
Capacitance (Typ.)	at 10 kHz cross contact	0.2	0.2	0.2	0.2	0.2	0.5	0.2	1.0	pF
Contact Operation **										
Pull-in		10-30	10-40	15-70	10-30	10-70	15-70	7-37	10-30	AT
Environmental Data										
Shock Resistance	1/2 sinus wave duration 11 ms	30	50							g
Vibration Resistance	From 10 - 2000 Hz	20								g
Ambient Temperature	10°C/ minute max. allowable	-40 up to +130								°C
Stock Temperature	10°C/ minute max. allowable	-55 up to +130								°C
Soldering Temperature	5 sec.	260								°C
* 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.										

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