

## 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.

### APPLICATIONS

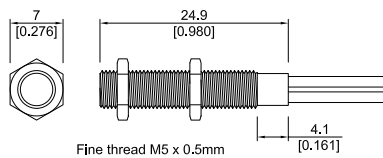
- Piston end travel and position detection
- End motion detection for linear drives
- Machine industry

### FEATURES

- 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 [inches]



**ORDER INFORMATION**

**Part Number Example**

MK11 - 1A66 C - 500 W

66 is the switch model  
C is the magnetic sensitivity  
500 is the cable length (mm)  
W is the termination

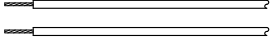
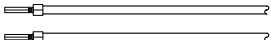
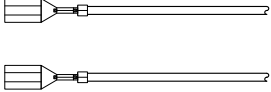
SERIES	CONTACT FORM	SWITCH MODEL	MAGNETIC SENSITIVITY	CABLE LENGTH (mm)	TERMINATION
MK11 -	1A	XX	X -	XXX	X
OPTIONS		66	B, C, D, E	500 *	W, X, Y
		81	A		
* Other cable lengths available.					

**MAGNETIC SENSITIVITY**

SENSITIVITY CLASS	PULL IN AT RANGE
A	5 - 10
B	10 - 15
C	15 - 20
D	20 - 25
E	25 - 30

**TERMINATION**

For wire and termination details please consult factory.

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

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### CONTACT DATA

All data at 20 °C	Switch Model → Contact Form →	Switch 66 Form A			Switch 81 Form A			Units
		Min.	Typ.	Max.	Min.	Typ.	Max.	
Contact Ratings	Conditions							
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			10			5	W
Switching Voltage	DC or peak AC			200			90	V
Switching Current	DC or peak AC			0.5			0.5	A
Carry Current	DC or peak AC			1.25			1.0	A
Static Contact Resistance	w/ 0.5V & 10mA			150			200	mΩ
Dynamic Contact Resistance	Measured w/ 0.5V & 50mA 1.5 ms after closure			200			200	mΩ
Insulation Resistance across Contacts	100 Volts applied	10 <sup>10</sup> *			10 <sup>9</sup>			Ω
Breakdown Voltage across Contacts	Voltage applied for 60 sec. min.	225 *			100			VDC
Operate Time, incl. Bounce	Measured w/ 100% overdrive			0.5			0.5	ms
Release Time	Measured w/ no coil suppression			0.1			0.1	ms
Capacitance	@ 10kHz across contact		0.2			0.2		pF
<b>Contact Operation **</b>								
Must Operate Condition	Steady state field	10		30	5		10	AT
Must Release Condition	Steady state field	4		27	2		9	AT
<b>Environmental Data</b>								
Shock Resistance	1/2 sine wave duration 11ms			50			30	g
Vibration Resistance	From 10 - 2000 Hz			20			10	g
Ambient Temperature	10 °C/ minute max. allowable	-20		85	-20		85	°C
Storage 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 <sup>12</sup> 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.								



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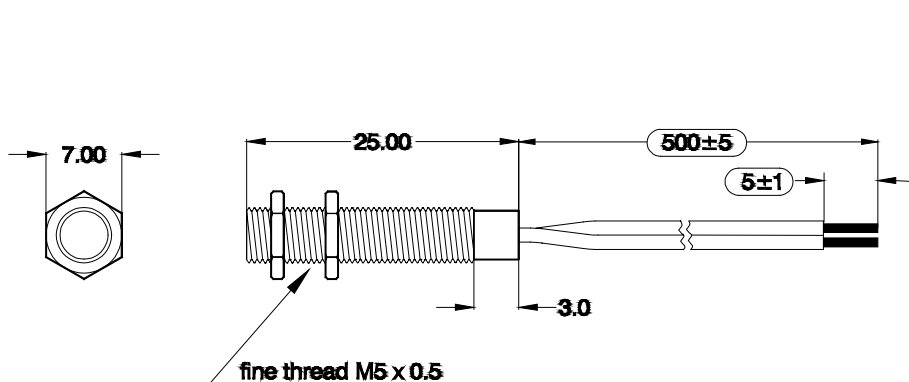
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Reed Sensor: MK11-1A71B-500W

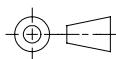
Part Number: 9112711054

**Dimensions (mm)**(unspecified tolerances according to DIN ISO 2768-m)

**Marking**



Production-Code-EN60062/Factory Code



= parameter to define the function

Magnetic Characteristics	Conditions at 20°C	Min.	Typ.	Max.	Units
Pull-In Switch unmodified	Testcoil KMS-01	10		15	AT
Pull-In Switch modified	Testcoil KMS-13	22		38,5	AT

Contact Data 71/7 (Form A/Dry)					
Contact Rating	Any combination of the switching voltage and current must not exceed the given rated power			10	W
Switching Voltage	DC or Peak AC			180	V
Switching Current	DC or Peak AC			0,5	A
Carry Current	DC or Peak AC			1,5	A
Static Contact Resistance (initial)	Measured with 40% overdrive			150	mΩ
Insulation Resistance	RH 45%	10 <sup>12</sup>			Ω
Breakdown Voltage		200			VDC
Operate Time, including Bounce	Measured with 40% overdrive			0,5	ms
Release Time				0,1	ms
Capacitance			0,3		pF

Environmental Data					
Shock	½ sine wave, duration 11ms			150	g
Vibration	from 10 - 2000 Hz			10	g
Operating Temperature	10°C/min max. allowable	-20		85	°C
Storage Temperature	10°C/min max. allowable	-35		85	°C
Soldering Temperature	5 sec. at			260	°C
Contact Resistance with Cable	Measured with 40% overdrive			280	mΩ
Cleaning				fully sealed	
Material of Case		machining steel 1.4305			
Sealing Compound		Epoxy resin			
Cable		Flat cable LIYZ 2 x 0,14 mm <sup>2</sup> , white ends of cable with 5± 1mm tinned leads			
Remarks					