

## MK7 Series

MEDER electronic

Cylindrical Reed Sensors  
with M8 Thread



### 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

### DESCRIPTION

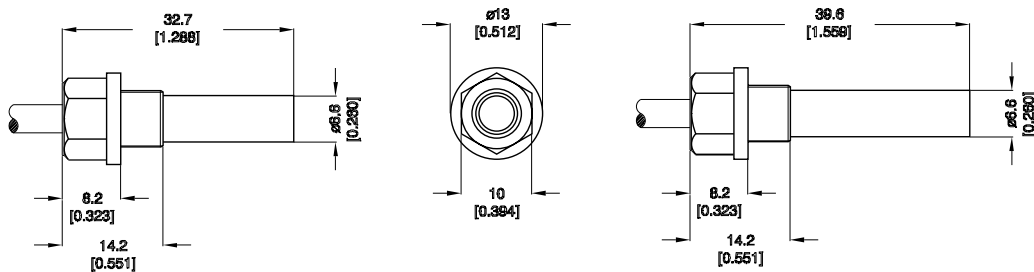
MK7 sensors are magnetically operated Reed proximity switches in a cylindrical form with an 8 mm x 0.75 thread and connecting cable or coupler. The sensor can be screwed directly onto a fixed surface with the actuating magnet on the moving surface. The widespread termination "T" or "U" makes the MK7 series compatible with several inductive and magnetic proximity sensors.

### FEATURES

- Form A, B, and C available
- 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]



[www.meder.com](http://www.meder.com)

**ORDER INFORMATION**

Part Number Example

MK7 - 1A66 C - 500 W

**1A** is the contact form  
**66** is the switch model  
**C** is the magnetic sensitivity  
**500** is the cable length (mm)  
**W** is the termination

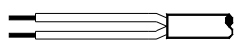
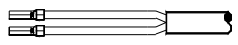
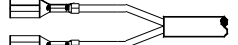


SERIES	CONTACT FORM	SWITCH MODEL	MAGNETIC SENSITIVITY	CABLE LENGTH (mm)	TERMINATION
MK7 - MK7/1 -	XX	XX	X -	XXX	X
Optionen	1 Form A	66	B, C, D, E	500*	W, X, Y, T, U
		81	A		
		51**			
	1 Form B 1 Form C	90	C, D, E		
* Other cable length available. ** Not available in combination with MK7/1 serie.					

**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.  
Form C version requires 3 conductors.

<b>W</b>		The cable cut length includes: 30 mm of separated wire with 5 mm of wire stripped and tinned
<b>X</b>		The cable cut length includes: 30 mm of separated wire with individual crimped terminals
<b>Y</b>		The cable cut length includes: 30 mm of separated wire with individual crimped terminals
<b>T</b>		Standard click sensor-connector (3 pole, M8) mounted directly in casing
<b>U</b>		Cable with click sensor-connector (3 pole, M8)

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## CONTACT DATA

All data at 20° C	Switch Model --> Contact Form -->	Switch 51 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.			12			10	W
Switching Voltage	DC oder peak AC			250			200	V
Switching Current	DC oder peak AC			0.5			0.5	A
Carry Current	DC oder peak AC			1.5			1.25	A
Static Contact Resistance	w / 0.5 V & 10 mA			150			150	mΩ
Dynamic Contact Resistance	Measured w / 0.5 V & 50 mA 1.5 ms after cloure			200			200	mΩ
Insulation Resistance across Contacts	100 Volt applied	10 <sup>11</sup>			10 <sup>10</sup> *			Ω
Breakdown Voltage across Contacts	Voltage applied for 60 sec	350			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	@ 10 kHz across contact		0.2			0.2		pF
Contact Operation **								
Must Operate Condition	Steady state field	15		30	10		30	AT
Must Release Conditon	Steady state field	6		27	4		27	AT
Environmental Data								
Shock Resistance	½ sine 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
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 sectio. Consult factory if more detail is required.

CONTACT DATA

All data at 20 °C	Switch Model --> Contact Form -->	Switch 81 Form A			Switch 90 Form B / C			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			5			3	W
Switching Voltage	DC or peak AC			90			175	V
Switching Current	DC or peak AC			0.5			0.25	A
Carry Current	DC or peak AC			1.0			1.2	A
Static Contact Resistance	w/ 0.5V & 10mA			200			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5V & 50mA 1.5 ms after closure			200			250	mΩ
Insulation Resistance across Contacts	100 Volts applied	10 <sup>9</sup>			10 <sup>9</sup>			Ω
Breakdown Voltage across Contacts	Voltage applied for 60 sec. min.	100			200			VDC
Operate Time, incl. Bounce	Measured w/ 100% overdrive			0.5			0.7	ms
Reset Time	Measured w/ no coil suppression			0.1			1.5	ms
Capacitance	@ 10kHz across contact		0.2			1.0		pF
Contact Operation **								
Must Operate Condition	Steady state field	5		10	15		30	AT
Must Reset Condition	Steady state field	2		9	6		27	AT
Environmental Data								
Shock Resistance	1/2 sine wave duration 11ms			30			50	g
Vibration Resistance	From 10 - 2000 Hz			10			20	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.  
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