

## FLEX-14 14mm Reed Switch





## **Description**

The FLEX-14 reed switch is a sub-miniature, normally open switch with a 14.00mm long x 2.28mm diameter (0.551" x 0.090") glass envelope, flexible, easily formed leads, capable of switching 200Vdc at 10W. It has high insulation resistance of  $10^{10}$  ohms minimum and low contact resistance of less than 100 milliohms.

#### **Features**

- Sub-miniature, normally open switch
- Longer leads are flexible for easy forming
- Capable of switching up to 200Vdc or 0.5A at up to 10W
- Available sensitivity range 10-30 AT

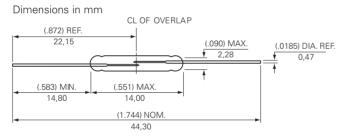
### **Agency Approvals**

Agency	Agency File Number	Ampere-Turns Range
c <b>FU</b> °us	E47258 E471070	10-30 AT
⟨£x⟩	DEMKO 14 ATEX 1393U	10-30 AT

#### **Benefits**

- Hermetically sealed switch contacts are not effected by and have no effect on their external environment
- Soft leads enable reliable hand forming
- Zero operating power required for contact closure
- Excellent for switching micro-controller logic level loads

## **Dimensions**



## **Applications**

- · Reed relays
- Security
- · Limit switching
- Office equipment
- Industrial Control

## **Switch Type**

Contact Form	A (SPST-NO)
Materials	Body: Glass Leads: Tin-plated Ni-Fe wire

Note: SPST-NO = Single-pole, single-throw, normally open

## **Electrical Ratings**

Contact Rating <sup>1</sup>		W/VA - max.	10
Voltage <sup>3</sup>	Switching <sup>2</sup> Breakdown <sup>4</sup>	Vdc - max. Vac - max. Vdc - min.	200 140 250
Current <sup>3</sup>	Switching <sup>2</sup> Carry	Adc - max. Aac - max. Adc - max.	0.50 0.35 1.00
Resistance	Contact, Initial Insulation	$\Omega$ - max. $\Omega$ - min.	0.100 10 <sup>10</sup>
Capacitance	Contact	pF - typ.	0.2
Temperature	Operating Storage <sup>5</sup>	°C °C	-40 to +125 -65 to +125

#### Notes:

- 1. Contact rating Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
- 2. When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application Notes AN108A and AN107 for details.
- 3. Electrical Load Life Expectancy Contact Littelfuse with voltage, current values along with type of load.
- 4. Breakdown Voltage per MIL-STD-202, Method 301.
- 5. Storage Temperature Long time exposure at elevated temperature may degrade solderability of the leads.



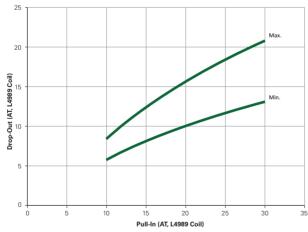
## FLEX-14 14mm Reed Switch

#### **Product Characteristics**

Operating Characteristics						
Operate Time <sup>1</sup>		0.55ms - max.				
Release Time <sup>1</sup>		0.20ms - max.				
Shock <sup>2</sup>	11ms 1/2 sine wave	100G - max.				
Vibration <sup>2</sup>	50-2000 Hertz	30G - max.				
Resonant Frequency		5.2kHz - typ.				
Magnetic Characteristics						
Pull-In Range <sup>3</sup>	Ampere Turns	10-30				
Rating Sensitivity <sup>4</sup>	Ampere Turns	20				
Test Coil		L4989				

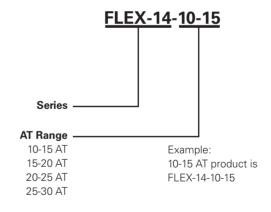
- 1. Operate (including bounce)/Release Time per EIA/NARM RS-421-A, diode suppressed coil (Coil II).
- 2. Shock and Vibration per EIA/NARM RS-421-A and MIL-STD-202.
- 3. Pull-In Range Contact Littelfuse for narrower AT ranges available.
- 4. Rating Sensitivity The value at which contact ratings and operating characteristics are determined. Derating may be required below this value.
- 5. Custom modifications of forming and/or cutting of reed switches are available. Please contact Littelfuse.

## **Drop-Out vs. Pull-In Chart**



# Note: Chart represents the range of Drop-Out, min to max for a given Pull-In value.

## **Part Numbering System**



Note: These AT values are the before-modification values of the bare reed switch.

#### **Packaging**

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Bulk	Bulk	3000	N/A	N/A

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Littelfuse:

<u>FLEX-14 10-15</u> <u>FLEX-14 15-20</u> <u>FLEX-14-10-15</u> <u>FLEX-14-15-20</u> <u>FLEX-14-20-25</u> <u>FLEX-14-25-30</u> <u>FLEX-14-30-35</u> FLEX-14-7-10 FLEX-14-35-40