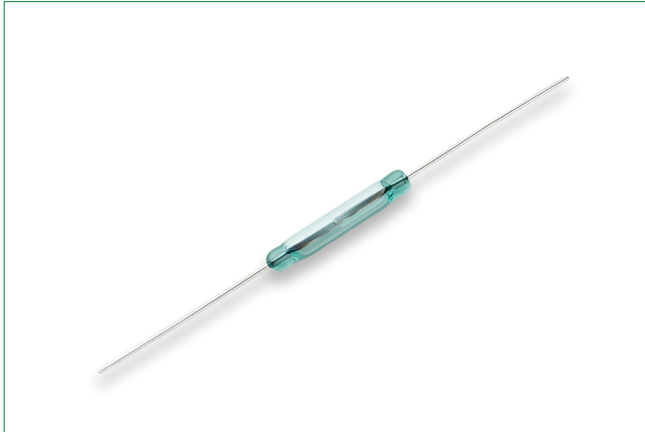


# FLEX-14

## 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 1010 ohms minimum and low contact resistance of less than 100 milliohms.

### Features & Benefits

- 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
- 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

### Additional Information



Resources



Accessories



Samples

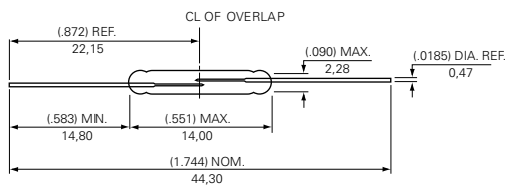
### Agency Approvals

Agency	Agency File Number	Ampere-Turns Range
	E47258 E471070	10-30 AT

**Note:** Contact Littelfuse for specific agency approval ratings.

### Dimensions

Dimensions in mm



### Applications

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

### Switch Type

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

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

### Electrical Ratings

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

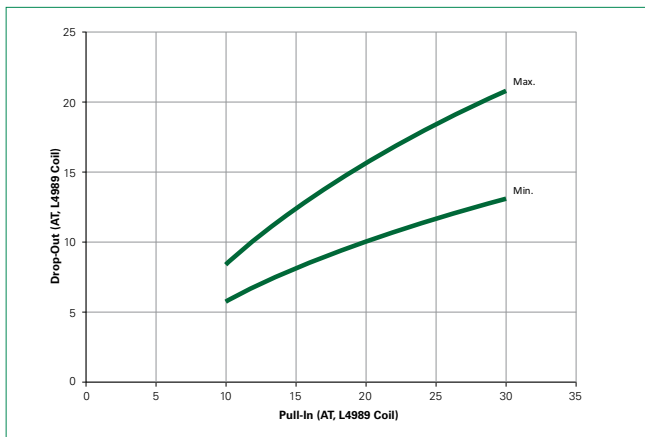
### Product Characteristics

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

**Notes:**

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

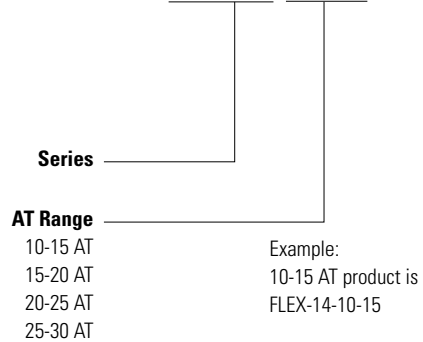
### Drop-Out vs. Pull-In Chart



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

### Part Numbering System

**FLEX-14-10-15**



**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	-	-

**Disclaimer Notice** - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at: [www.littelfuse.com/disclaimer-electronics](http://www.littelfuse.com/disclaimer-electronics).