

# **Additional Information**







Resources

Accessories

Samples

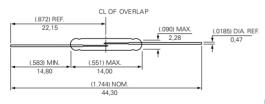
#### **Agency Approvals**

Agency	Agency File Number	Ampere-Turns Range
c <b>FL</b> °us	E47258 E471070	10-30 AT

Note: Contact Littelfuse for specific agency approval ratings.

# **Dimensions**

#### Dimensions in mm



# **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

# **Applications**

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

## **Switch Type**

Contact Form	A (SPST-NO)	
Materials	Body: Glass	
Waterials	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
Current <sup>3</sup>	Switching <sup>2</sup> Carry	Adc - max.	0.50
		Aac - max.	0.35
		Adc - max.	1.00
Resistance	Contact, Initial Insulation	$\Omega$ - max. $\Omega$ - min.	0.100 10 <sup>10</sup>
Capacitance	Contact	pF - typ.	0.2
Temperature	Operating	°C	-40 to +125
	Storage <sup>5</sup>	C	-65 to +125

#### Notes:

- Contact rating Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
- 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



#### **Product Characteristics**

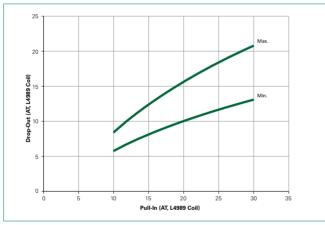
Operating Characteristics			
Operate Time <sup>1</sup>	-	0.55ms - max.	
Release Time <sup>1</sup>	-	0.20ms - max.	
Shock <sup>2</sup>	11ms 1/2 sine wave	100G - max.	
Vibration <sup>2</sup>	50-2000 Hertz	30G - max.	
Resonant Frequency	-	5.2kHz - typ.	

Magnetic Characteristics			
Pull-In Range <sup>3</sup>	Ampere Turns	10-30	
Rating Sensitivity <sup>4</sup>	Ampere Turns	20	
Test Coil	-	L4989	

#### Notes

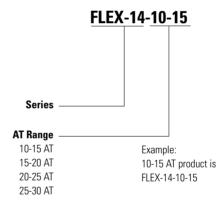
- 1. Operate (including bounce)/Release Time per EIA/NARM RS-421-A,diode suppressed coil (Coil II).
- 2. Shock and Vibration per EIA/NARM RS-421-A and MIL-STD-202.
- 3. Pull-In Range Contact Littelfuse for narrower AT ranges available.
- 4. Rating Sensitivity The value at which contact ratings and operating 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	<b>Quantity &amp; Packaging Code</b>	Taping Width
Bulk	Bulk	3000	-	-

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