

# 59021 Aluminium Miniature Firecracker Reed Sensor + 57020 Actuator

RoHS



## **Description**

The 59021 Firecracker Reed Sensor is a miniature cylindrical reed sensor with a robust aluminium body 15.24mm x 5.10mm (0.600" x 0.201") with a normally open contact. It is capable of switching up to 170Vdc at 10W. It has a variety of cable lengths and connector options. It functions best with the 57020-000 actuator.

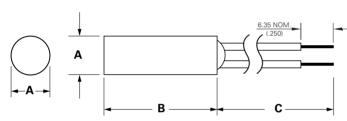
Note: The 57020 Actuator is sold separately.

### **Features**

- Two-part magnetically operated proximity sensor
- Aluminium body
- Normally open contact
- Customer defined sensitivity option
- Choice of cable length and connector

## **Dimensions**

Dimensions in mm (inch)



	A Max.	B Max.	C Nom.
57020 Actuator	5.10 (.201)	15.24 (.600)	
59021 Sensor	5.10 (.201)	15.24 (.600)	300±10.00 (11.81±.393)

### **Benefits**

- Hermetically sealed, magnetically operated contacts continue to operate long after optical and other technologies fail due to contamination
- Quick and easy to install
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium

# **Applications**

- Position and Limit Sensing
- Security Systems
- Level Sensing
- Linear Actuators



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## **Electrical Ratings**

Contact Type			Normally Open		
Switch Type			1		
Contact Rating <sup>1</sup>		VA/Watt - max.	10		
Voltage <sup>4</sup>	Switching <sup>2</sup> Breakdown <sup>3</sup>	Vdc - max. Vdc - min.	170 175		
Current <sup>4</sup>	Switching <sup>2</sup> Carry	Adc - max. Adc - max.	0.25 0.5		
Resistance <sup>5</sup>	Contact, Initial Insulation	$\Omega$ - max. $\Omega$ - min.	0.2 10 <sup>10</sup>		
Capacitance	Contact	pF - typ.	0.2		
Temperature	Operating	°C	-40 to +105		
Product Characteristics					
Operate Time <sup>6</sup>		ms - max.	1.0		
Release Time <sup>6</sup>		ms - max.	1.0		
Shock <sup>7</sup>	11ms ½ sine	G - max.	100		
Vibration <sup>7</sup>	50-2000 Hz	G - max.	30		

#### 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. Breakdown Voltage per MIL-STD-202, Method 301.
- 4. Electrical Load Life Expectancy Contact Littelfuse with voltage, current values along with type of load.
- 5. This resistance value is for 11.81mm wire length. Resistance changes when wire lengthens.
- 6. Operate (including bounce)/Release Time per EIA/NARM RS-421-A, diode suppressed coil (Coil II).
- 7. Shock and Vibration per EIA/NARM RS-421-A and MIL-STD-202.
- 8. For custom modifications to the wire length or size, or adding a special connector, please contact Littelfuse.

# **Sensitivity Options (Using 57020 Actuator)**

Select Option		S	
Switch Type		Pull-In AT Range	Activate Distance – D mm (inch) Average
1	Normally Open	6-10	6.0 (.236)

#### Note:

- 1. Pull-In AT Range: These AT values are the bare reed switch AT before modification.
- 2. The activation distance is average value on the final sensor assembly.

