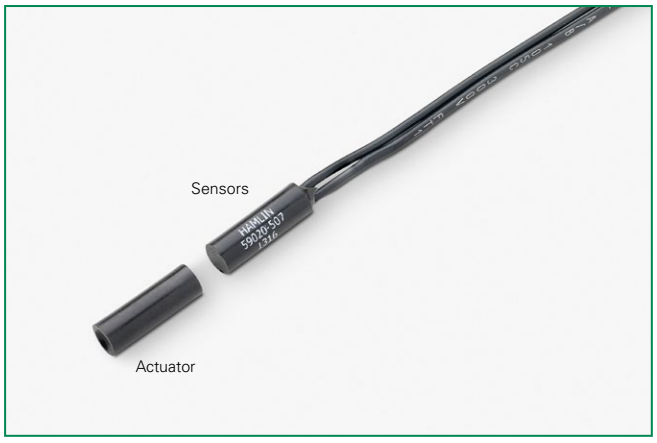
59020 Miniature Firecracker Reed Sensor + 57020 Actuator

RoHS



Description

The 59020 Firecracker Reed Sensor is a miniature cylindrical reed sensor 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

- Magnetically operated proximity sensor
- Normally open contact
- Customer defined sensitivity option
- Choice of cable length and connector

Benefits

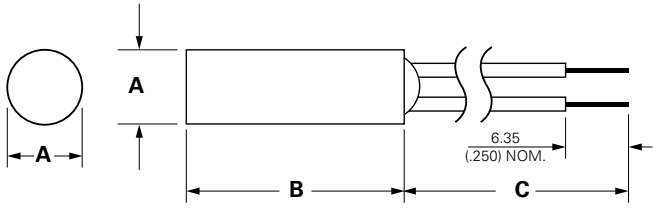
- Hermetically sealed, magnetically operated contacts continue to operate long after optical and other technologies fail due to contamination
- Quick and easy to install
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium

Applications

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

Dimensions

Dimensions in mm (inch)



	A Nom.	B Nom.	C Nom.
57020 Actuator	5.10 (.201)	15.24 (.600)	–
59020 Sensor	5.10 (.201)	15.24 (.600)	300 (11.81)± 10.00 (.393)

 Revised: 02/08/19

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Electrical Ratings

Contact Type			Normally Open
Switch Type			1
Contact Rating [1]		VA/Watt - max.	10
Voltage [4]	Switching [2] Breakdown [3]	Vdc - max. Vdc - min.	170 175
Current [4]	Switching [2] Carry	Adc - max. Adc - max.	0.25 0.5
Resistance [5]	Contact, Initial Insulation	Ω - max. Ω - min.	0.2 10^{10}
Capacitance	Contact	pF - typ.	0.2
Temperature	Operating	°C	-40 to +105
Product Characteristics			
Operate Time [6]		ms - max.	1.0
Release Time [6]		ms - max.	1.0
Shock [7]	11ms ½ sine	G - max.	100
Vibration [7]	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.