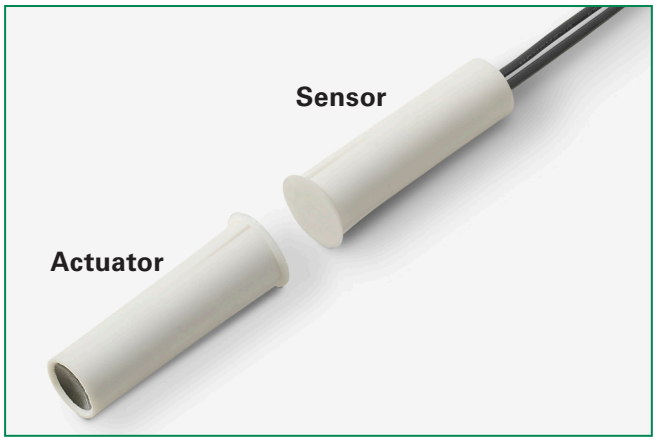
EN: This Datasheet/Document is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

59040 Press-Fit Firecracker Reed Sensor + 57040 Actuator



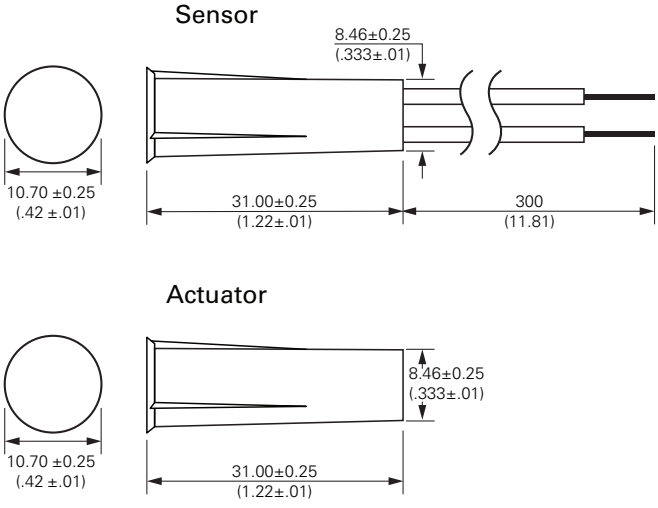
Agency Approvals

Agency	Agency File Number
c UL us	E61760

Note: Contact Littelfuse for specific agency approval ratings.

Dimensions

Dimensions in mm (inch)



Notes:

1. The 59040 Sensor and 57040 Actuator are designed to fit into a drill size hole of 9.5mm (0.375") diameter.
2. Not recommended to be mounted within ferrous metal materials. The activate distance will decrease significantly.

Description

The 59040 Press-Fit Firecracker Reed Sensor is a small, cylindrical reed sensor 31.0mm (1.22") long that presses into a 9.5mm (.375") diameter hole with a choice of normally open, normally closed or change-over contacts. It is capable of switching up to 200Vdc at 10W and is available with a range of sensitivity, cable length, plastic housing color (white, black, and wooden brown), and connector options. It has three crush ribs along the length of the capsule that allow a firm and fixed press-fit. It is well suited for position and limit sensing, security, level sensing applications. It functions best with the 57040 actuator.

Note: The 57040 Actuator is sold separately.

Features

- Magnetically-operated press-fit proximity sensor
- Cylindrical capsule with retaining ribs
- Operates and mounts through non-ferrous materials such as wood, plastic or aluminum
- Hermetically sealed contacts
- Customer-defined sensitivity options available
- Custom cable length and connector options available
- Press-fits into a standard drill size hole of 9.5mm (.375") diameter

Benefits

- Ribs on capsule compress when inserted into a mounting hole and provide retaining force, allowing simple and secure press-fit installation
- Quick and easy press-fit installation that requires no screws, brackets, nor glue.
- Well suited for usage in high-moisture and contaminated environments
- Non-contact solution, aesthetically more appealing than push-button or lever mechanical-type switches
- Ideal for battery-powered applications as the contacts do not draw power when in the non-activated state
- Reed contacts last for millions of operating cycles under micro-controller voltage and current logic-level loads

Applications

- Position and limit sensing
- Security
- Appliances
- Industrial

© 2016 Littelfuse

59040 Press-Fit Firecracker Reed Sensor + 57040 Actuator

Electrical Ratings

Contact Type			Normally Open	Change Over	Normally Closed
Switch Type			1	3	4
Contact Rating [1]		VA/Watt - max.	10	5	5
Voltage [4]	Switching [2] Breakdown [3]	Vdc - max. Vac - max. Vdc - min.	200 140 250	175 120 200	175 120 200
Current [4]	Switching [2] Carry	Adc - max. Aac - max. Adc - max.	0.5 0.35 1.2	0.25 0.18 1.5	0.25 0.18 1.5
Resistance [5]	Contact, Initial Insulation	Ω - max. Ω - min.	0.2 10^{10}	0.2 10^{9}	0.2 10^{9}
Capacitance	Contact	pF - typ.	0.3	1.0	1.0
Temperature	Operating	°C	-40 to +105	-40 to +105	-40 to +105

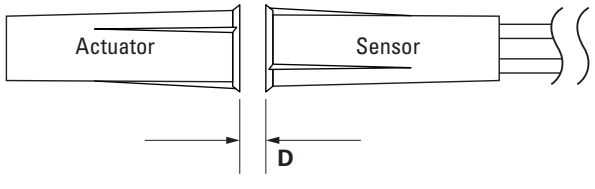
Product Characteristics					
Operate Time [6]		ms - max.	1.0	3.0	3.0
Release Time [6]		ms - max.	1.0	3.0	3.0
Shock [7]	11ms ½ sine	G - max.	100	50	50
Vibration [7]	50-2000 Hz	G - max.	30	30	30

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. Leakage current is less than 0.1mA for 60 seconds.
4. Electrical Load Life Expectancy - Contact Littelfuse with voltage, current values along with type of load.
5. This resistance value is for 11.81in 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, adding a special connector, or plastic housing color options, please contact Littelfuse.
9. Custom sensitivity options and a normally open high-voltage switch option are available.

Sensitivity Options (Using 57040 Actuator)

Select Option		S		T		U	
Switch Type		Pull-In AT Range	Activate Distance, D mm (inch) Average	Pull-In AT Range	Activate Distance, D mm (inch) Average	Pull-In AT Range	Activate Distance, D mm (inch) Average
1	Normally Open	12-18	25.0 (.984)	17-23	21.2 (.834)	22-28	17.9 (.705)
3	Change Over	15-20	21.0 (.836)	20-25	18.4 (.725)	25-30	17.0 (.670)
4	Normally Closed	15-20	21.0 (.836)	20-25	18.4 (.725)	25-30	17.0 (.670)

Note:
1. Pull-In AT Range: These AT values are the bare reed switch AT before modification.
2. The activate distance is an average value for the final sensor assembly.
3. Not recommended to be mounted within/near ferrous metal materials; if doing so, these activate distances will decrease significantly.



Schematics	Switch Type
Black Black	1
Black Blue White	3
Black Black	4

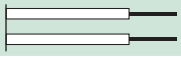
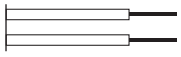
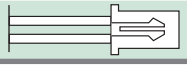
© 2016 Littelfuse Revised: 03/02/16
Specifications are subject to change without notice.

59040 Press-Fit Firecracker Reed Sensor + 57040 Actuator

Cable Length Specification

Cable Type: 24 AWG PVC 105°C UL1430/UL1569	
Select Option	**Cable Length mm (inch)**
02	300 (11.81)

Termination Specification

Termination Options		
Select Option	**Description (Two-wire versions illustrated)**	
A	Tinned leads (6.4±0.76)mm	
F	Untinned leads (6.4±0.76)mm	
E	JST type XHP 2.5mm pitch	

Part Numbering System

Sensor: 59040 - X - X - XX - X

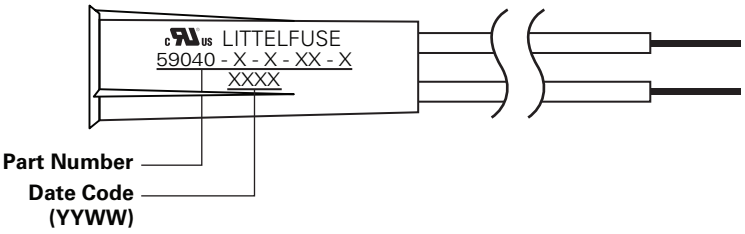
- **Series**
- **Switch Type** 1, 3, or 4
- **Sensitivity** S, T, or U
- **Cable Length** 02
- **Termination** A, F, or E

Actuator: 57040 - 000

- **Series**
- **Standard Actuator** 000

Note: The 57040 Actuator is sold separately.

Product Marking



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity and Packaging Code	Taping Width
Bulk	Bulk	500	N/A	N/A

© 2016 Littelfuse Revised: 03/02/16
Specifications are subject to change without notice.