

# 59251 Seating Occupancy Reed Switch Sensor

RoHS



## Description

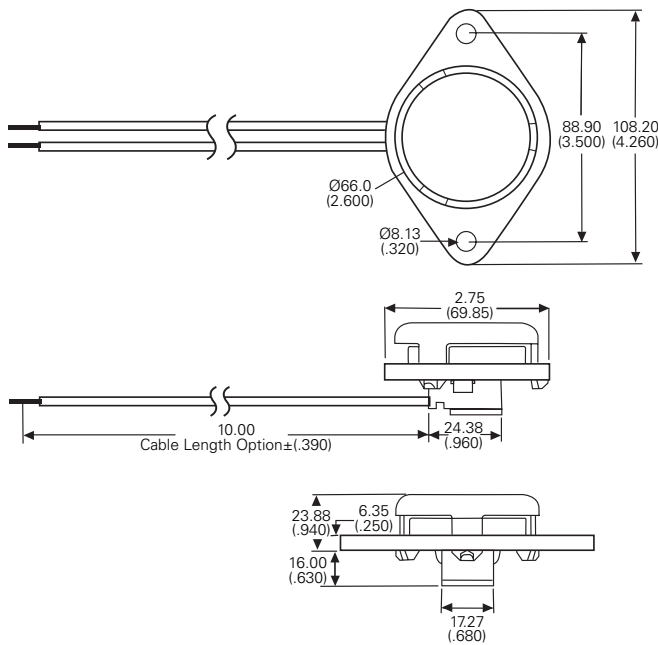
The 59251 is a magnetically operated push button sensor with simple push fit clip mounting. It has a large integral dome and it's normally open contacts actuate when the dome is depressed. It can switch up to 140Vac/200Vdc at 10W. The 59251 has a large integral dome for load distribution and neoprene boot for environmental protection. It has choice of various cable lengths and connector options.

## Features

- Magnetically operated position sensor
- Simple push fit mounting
- Operates when plunger is depressed
- Choice of cable length
- Choice of connector
- Large integral dome
- zRoHS compliant

## Dimensions

Dimensions in mm (inch)



## Benefits

- Robust construction makes this sensor well suited to harsh environments
- Integral neoprene boot provides protection from severe environments
- No standby power required
- Hermetically sealed, magnetically operated contacts give excellent life and reliability

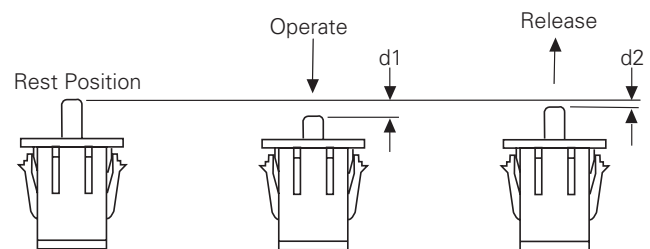
## Applications

- Seat occupancy sensing
- Position and limit sensing

## Activation (without boot)

Operate Distance d1 5.5mm (0.217) max.

Release Distance d2 1.5mm (0.059) min.



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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>      | Vdc - max.     | 200              |
|                             | Breakdown <sup>3</sup>      | Vac - max.     | 140              |
| Current <sup>4</sup>        | Switching <sup>2</sup>      | Vdc - min.     | 250              |
|                             |                             | Adc - max.     | 0.5              |
|                             | Carry                       | Aac - max.     | 0.35             |
| Resistance <sup>5</sup>     | Contact, Initial Insulation | Adc - max.     | 0.5              |
|                             |                             | Ω - max.       | 0.2              |
| Capacitance                 | Contact                     | Ω - min.       | 10 <sup>10</sup> |
|                             |                             | pF - typ.      | 0.2              |
| Temperature                 | Operating                   | °C             | -40 to +85       |

## 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:

- 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.
- Breakdown Voltage - per MIL-STD-202, Method 301.
- Electrical Load Life Expectancy - Contact Littelfuse with voltage, current values along with type of load.
- This resistance value is for 11.81mm wire length. Resistance changes when wire lengthens.
- 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.
- For custom modifications to the wire length or size, or adding a special connector, please contact Littelfuse.