

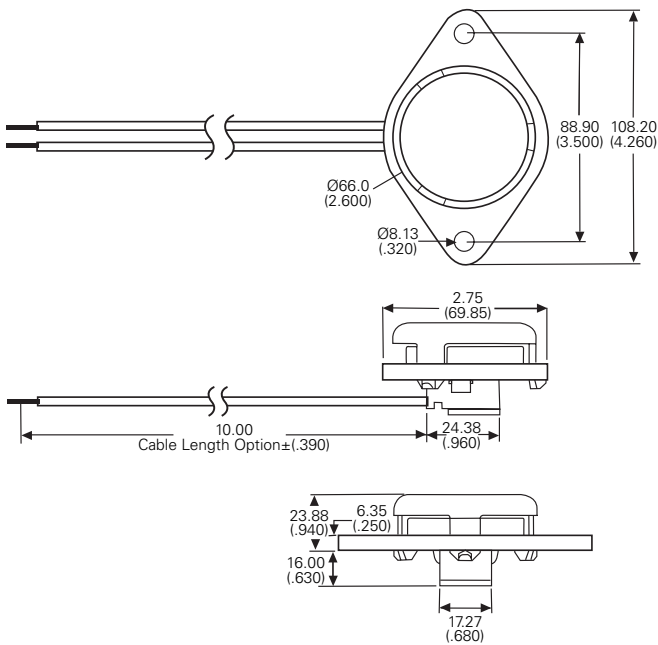
# 59251 Seating Occupancy Reed Switch Sensor

RoHS



## Dimensions

Dimensions in mm (inch)



## 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

## 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

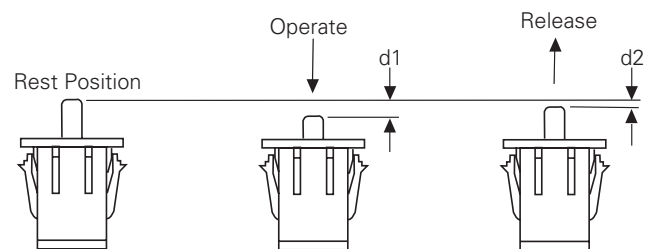
## Applications

- 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.



# 59251 Seating Occupancy Reed Switch Sensor

## 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              |
|                             |                             | Vdc - min.     | 250              |
| Current <sup>4</sup>        | Switching <sup>2</sup>      | Adc - max.     | 0.5              |
|                             | Carry                       | Aac - max.     | 0.35             |
|                             |                             | Adc - max.     | 0.5              |
| Resistance <sup>5</sup>     | Contact, Initial Insulation | Ω - max.       | 0.2              |
|                             |                             | Ω - min.       | 10 <sup>10</sup> |
| Capacitance                 | Contact                     | 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:

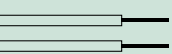
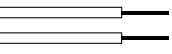
1. Contact rating - Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
2. When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application 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.

# 59251 Seating Occupancy Reed Switch Sensor

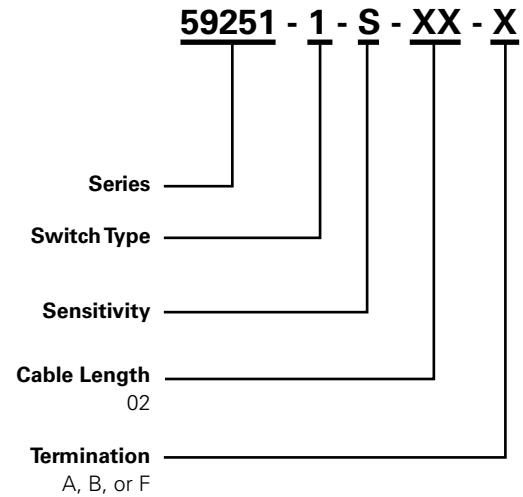
## Cable Length Specification

| Cable Type: 18 AWG 19/30 XLP Polyethylene |                           |
|-------------------------------------------|---------------------------|
| Select Option                             | Cable Length<br>mm (inch) |
| 02                                        | 300 (11.81)               |

## Termination Specification

| Termination Options |                                                |                                                                                    |
|---------------------|------------------------------------------------|------------------------------------------------------------------------------------|
| Select Option       | Description<br>(Two-wire versions illustrated) |                                                                                    |
| A                   | Tinned leads (6.4±0.76)mm                      |   |
| F                   | Untinned leads (6.4±0.76)mm                    |   |
| B                   | Deutsch DTM04-2P                               |  |

## Part Numbering System



## Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|------------------|-------------------------|----------|---------------------------|--------------|
| Bulk             | Bulk                    | 500      | N/A                       | N/A          |

**Disclaimer Notice** - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <http://www.littelfuse.com/disclaimer-electronics>.