59065 5/16” Plastic Threaded Barrel Sensor + 57065 Actuator

Description
The 59065 is a small plastic barrel sensor with a 5/16” x 24 thread, 38.1mm (1.500”) long with a choice of normally open, normally open high voltage, normally closed or change over contacts. It is capable of switching up to 265Vac/300Vdc at 10VA. It functions best with the 57065 actuator.

Note: The 57065 Actuator is sold separately.

Features
- Two-part magnetically operated proximity sensor
- Threaded barrel with retaining nuts
- Available as M8 (57070/59070) or 5/16 (57065/59065) size options
- Customer defined sensitivity option
- Choice of cable length and connector

Benefits
- Simple installation and adjustment using supplied retaining nuts
- Operates through non-ferrous materials such as wood, plastic or aluminium
- Excellent for switching micro-controller logic level loads
- No standby power requirement

Applications
- Position and Limit Sensing
- Security System Switch
- Industrial Process Control
- Linear Actuators

Agency Approvals
<table>
<thead>
<tr>
<th>Agency</th>
<th>Agency File Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL</td>
<td>E61760</td>
</tr>
</tbody>
</table>

Note: Contact Littelfuse for specific agency approval ratings.

Dimensions
Dimensions in mm (inch)

Actuator

Sensor

Note: Different cable options available.

Firecracker > 59065

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Revised: 02/12/17
 Specifications are subject to change without notice.
## Electrical Ratings

<table>
<thead>
<tr>
<th>Contact Type</th>
<th>Normally Open</th>
<th>Normally Open High Voltage</th>
<th>Change Over</th>
<th>Normally Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact Rating</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Voltage</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Current</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Resistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacitance</td>
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<td></td>
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<tr>
<td>Temperature</td>
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</tbody>
</table>

### 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.
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).
8. For custom modifications to the wire length or size, or adding a special connector, please contact Littelfuse.

## Sensitivity Options (Using 57065 Actuator)

### Select Option

<table>
<thead>
<tr>
<th>Switch Type</th>
<th>Pull-In AT Range</th>
<th>Activate Distance-D mm (inch)</th>
<th>Average</th>
<th>Pull-In AT Range</th>
<th>Activate Distance-D mm (inch)</th>
<th>Average</th>
<th>Pull-In AT Range</th>
<th>Activate Distance-D mm (inch)</th>
<th>Average</th>
<th>Pull-In AT Range</th>
<th>Activate Distance-D mm (inch)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12-18</td>
<td>8.4 (.330)</td>
<td>17-23</td>
<td>6.6 (.260)</td>
<td>22-28</td>
<td>5.1 (.200)</td>
<td>27-33</td>
<td>4.0 (.157)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>15-20</td>
<td>6.5 (.255)</td>
<td>20-25</td>
<td>4.9 (.193)</td>
<td>25-30</td>
<td>3.7 (.146)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>15-20</td>
<td>6.5 (.255)</td>
<td>20-25</td>
<td>4.9 (.193)</td>
<td>25-30</td>
<td>3.7 (.146)</td>
<td></td>
<td></td>
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</tbody>
</table>

### Notes:
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.
### Part Numbering System

**Sensor:**

59065 - X - X - XX - X

- **Series**
- **Switch Type**
  - 1, 2, 3, or 4
- **Sensitivity**
  - S, T, U, or V
- **Cable Length**
  - 02
- **Termination**
  - A, F, or E

**Actuator:**

57065 - 000

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

*Note: The 57065 Actuator is sold separately.*

### Cable Length Specification

<table>
<thead>
<tr>
<th>Select Option</th>
<th>Cable Length mm (inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>300 (11.81)</td>
</tr>
</tbody>
</table>

### Termination Specification

**Termination Options**

<table>
<thead>
<tr>
<th>Select Option</th>
<th>Description (Two-wire versions illustrated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Tinned leads (6.4±0.76)mm</td>
</tr>
<tr>
<td>F</td>
<td>Untinned leads (6.4±0.76)mm</td>
</tr>
<tr>
<td>E</td>
<td>JST type XHP 2.5mm pitch</td>
</tr>
</tbody>
</table>

### Packaging

<table>
<thead>
<tr>
<th>Packaging Option</th>
<th>Packaging Specification</th>
<th>Quantity</th>
<th>Quantity &amp; Packaging Code</th>
<th>Taping Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk</td>
<td>Bulk</td>
<td>500</td>
<td>N/A</td>
<td>N/A</td>
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</tbody>
</table>