

59630 Sensor with Integral Float Actuator

RoHS



Description

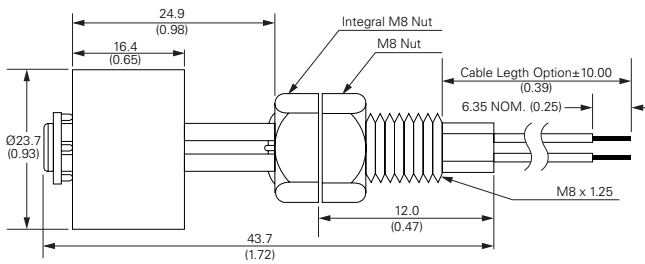
The 59630 is a reed level sensor with integral float actuator and an M8 x 1.25mm pitch thread with a choice of normally open, normally open high voltage, normally closed or change over contacts. It is capable of switching up to 265Vac/300Vdc at 10VA. It is ideally suited to liquid and air conditioning condensate and industrial process control applications.

Features

- Sensor with integral blown polypropylene float, with integral magnet
- Sensor operates when float rises from end stop position
- Choice of contacts
- Choice of connector and cable length options
- RoHS Compliant

Dimensions

Dimensions in mm (inch)



Benefits

- Hermetically sealed, magnetically operated contacts continue to operate long after optical and other technologies fail due to contamination
- No standby power required
- Simple installation with M8 thread and nut

Applications

- Liquid level control
- Air conditioning systems
- Industrial Process Control

| Schematics | Switch Type |
|----------------------|-------------|
| Red Red | 1 and 2 |
| Red Blue White | 3 |
| Red Red | 4 |

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Electrical Ratings

| Contact Type | | | Normally Open | Normally Open High Voltage | Change Over | Normally Closed |
|-----------------------------|-----------------------------|-----------------|------------------|----------------------------|-----------------|------------------|
| Switch Type | | | 1 | 2 | 3 | 4 |
| Contact Rating ¹ | | VA/Watt - max. | 10 | 10 | 5 | 10 |
| Voltage ⁴ | Switching ² | Vdc - max. | 200 | 300 | 175 | 200 |
| | Breakdown ³ | Vac - max. | 140 | 265 | 120 | 120 |
| | | Vdc - min. | 250 | 400 | 200 | 250 |
| Current ⁴ | Switching ² | Adc - max. | 0.5 | 0.4 | 0.25 | 0.5 |
| | Carry | Aac - max. | 0.35 | 0.30 | 0.18 | 0.18 |
| | | Adc - max. | 1.2 | 1.4 | 1.5 | 1.2 |
| Resistance ⁵ | Contact, Initial Insulation | Ω - max. | 0.2 | 0.2 | 0.2 | 0.2 |
| | | Ω - min. | 10 ¹⁰ | 10 ¹⁰ | 10 ⁹ | 10 ¹⁰ |
| Capacitance | Contact | pF - typ. | 0.3 | 0.2 | 0.3 | 0.3 |
| Temperature | Operating | °C | -40 to +105 | -20 to +105 | -40 to +105 | -40 to +105 |

Product Characteristics

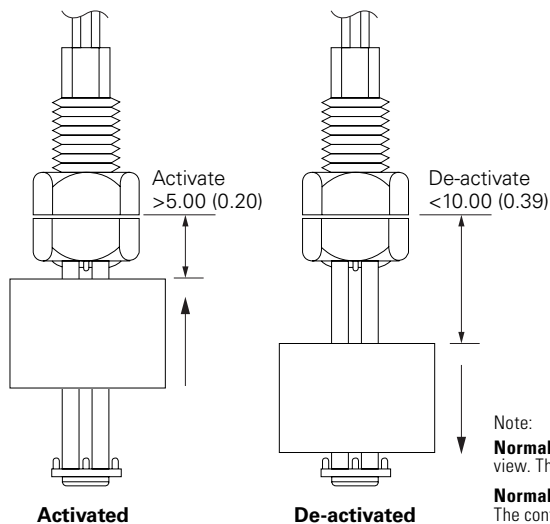
| | | | | | | |
|---------------------------|-------------|-----------|-----|-----|-----|-----|
| Operate Time ⁶ | | ms - max. | 1.0 | 1.0 | 3.0 | 3.0 |
| Release Time ⁶ | | ms - max. | 1.0 | 1.0 | 3.0 | 3.0 |
| Shock ⁷ | 11ms ½ sine | G - max. | 100 | 100 | 50 | 50 |
| Vibration ⁷ | 50-2000 Hz | G - max. | 30 | 30 | 30 | 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 300mm wire length. Resistance varies based on wire length.
- 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.

Activation

Using sensor with float magnet orientated is illustrated



Note:

Normally Open: contacts are open when float is down as shown in the De-activate view. The contacts close when float is in upward position as shown on the left view.

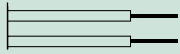
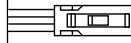
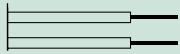
Normally Closed: Contacts are closed when the float is in the down position. The contacts open when float is in the upward position as shown in the left view.

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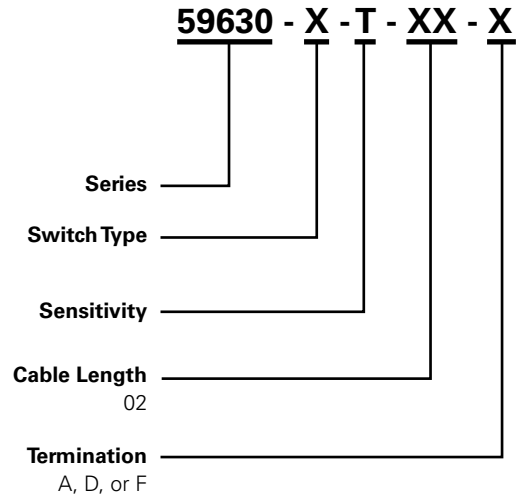
Cable Length Specification

| Cable Type: 24 AWG 7/32 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 |  |
| D | AMP MTE Connector 2.5mm pitch, 104257-1 |  |
| F | Untinned leads (6.4±0.76)mm |  |

Part Numbering System



Packaging

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