

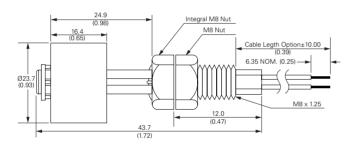
59630 Sensor with Integral Float Actuator

RoHS



Dimensions

Dimensions in mm (inch)



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

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

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



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Electrical Ratings

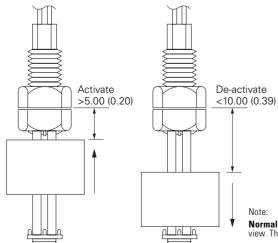
Contact Type		Normally Open	Normally Open High Voltage	Change Over	Normally Closed	
Switch Type		1	2	3	4	
Contact Rating ¹	Contact Rating ¹ VA/V		10	10	5	10
Voltage ⁴	Switching ² Breakdown ³	Vdc - max. Vac - max. Vdc - min.	200 140 250	300 265 400	175 120 200	200 120 250
Current ⁴	Switching ² Carry	Adc - max. Aac - max. Adc - max.	0.5 0.35 1.2	0.4 0.30 1.4	0.25 0.18 1.5	0.5 0.18 1.2
Resistance ⁵	Contact, Initial Insulation	Ω - max. Ω - min.	0.2 10 ¹⁰	0.2 10 ¹⁰	0.2 10 ⁹	0.2 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	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:

- 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 300mm wire length. Resistance varies based on wire length.
- 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.

Activation

Using sensor with float magnet orientated is illustrated



De-activated

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.

Activated



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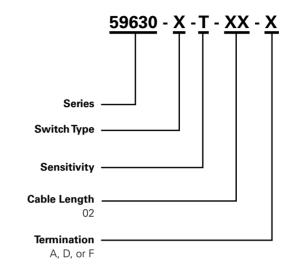
Cable Length Specification

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)		
А	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