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

Benefits

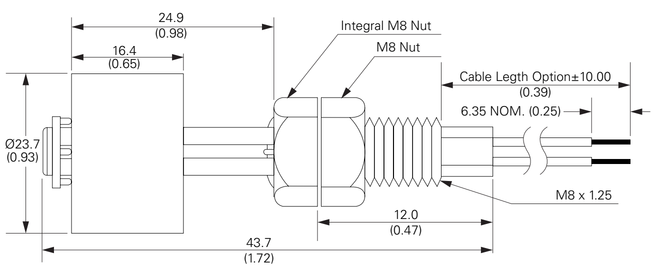
- Hermetically sealed, magnetically operated contacts continue to operate long after optical and other technologies fail due to contamination
- No standby power required
- Simple installation with M8 thread and nut

Applications

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

Dimensions

Dimensions in mm (inch)



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

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Electrical Ratings

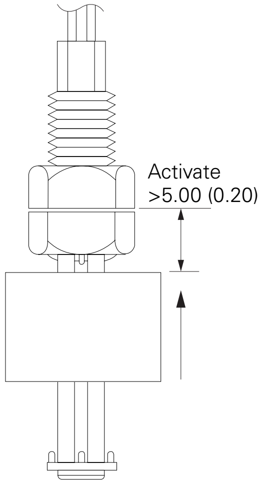
Contact Type			Normally Open	Normally Open High Voltage	Change Over	Normally Closed
Switch Type			1	2	3	4
Contact Rating [1]		VA/Watt - max.	10	10	5	10
Voltage [4]	Switching [2]	Vdc - max. Vac - max.	200 140	300 265	175 120	200 120
	Breakdown [3]	Vdc - min.	250	400	200	250
Current [4]	Switching [2]	Adc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

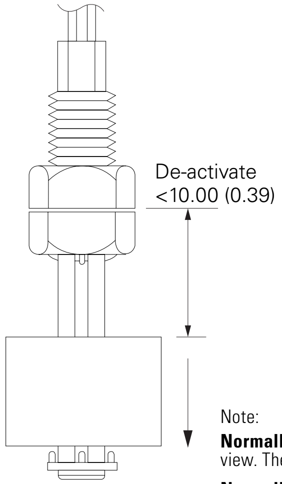
Product Characteristics						
Operate Time [6]		ms - max.	1.0	1.0	3.0	3.0
Release Time [6]		ms - max.	1.0	1.0	3.0	3.0
Shock [7]	11ms ½ sine	G - max.	100	100	50	50
Vibration [7]	50-2000 Hz	G - max.	30	30	30	30

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





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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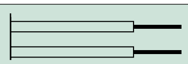
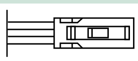
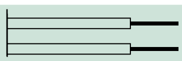
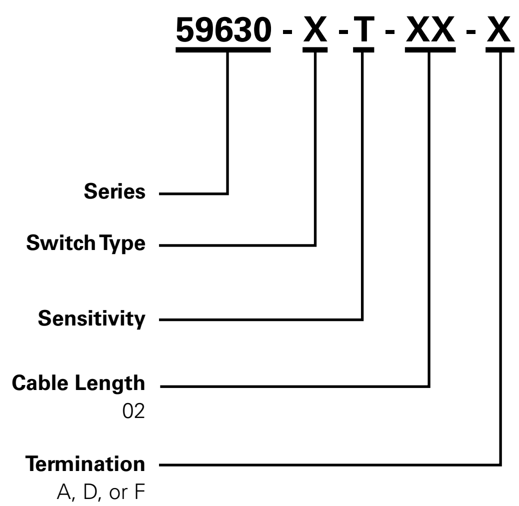
Cable Length Specification

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