

59060 Stainless Steel M8 Threaded Barrel Sensor + 57060 Actuator

RoHS



Dimensions

Dimensions in mm (inch)



Description

The 59060 is a small stainless steel barrel sensor with an M8 x 1.25mm pitch thread, 36mm (1.420") 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 has a variety range of sensitivity, cable length and connector options. It functions best with the 57060 actuator.

Note: The 57060 Actuator is sold separately.

Features

- Two-part magnetically operated proximity sensor
- Stainless steel threaded barrel with retaining nuts
- M8 thread

Benefits

- Robust construction makes this sensor well suited to harsh industrial environments
- Simple installation and adjustment using supplied retaining nuts

Applications

- Position and Limit Sensing
- Security Systems

- Choice of normally open or normal open high voltage contacts
- Customer defined sensitivity options
- Choice of cable length and
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium
- Industrial Process Control
 Linear Actuators



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Electrical Ratings

Switch TypeImage: Contact Rating 1VA/Watt - max.1234Contact Rating 1VA/Watt - max.101055Voltage 4Switching 2Vdc - max. Vac - max.200 Vdc - min.300 265175 120 200120 200Current 4Switching 2Adc - max. Vdc - min.0.5 2500.5 0.350.25 0.350.25 1.0 1.0Current 4CarryAdc - max. Adc - max.0.5 0.350.5 0.350.25 0.250.25 0.25Resistance 5Contact, Initial Insulation Ω - max. Ω - min.0.2 10100.2 10100.2 1090.2CapacitanceContactpF - typ.0.30.20.30.3TemperatureOperating Storage°C °C-40 to +105 -65 to +105-40 to +105 -65 to +105-40 to +105 -65 to +105-40 to +105 -65 to +105-40 to +105 -65 to +105	Contact Type			Normally Open	Normally Open HighVoltage	Change Over	Normally Closed
Voltage 4Switching 2 Breakdown 3Vdc - max. Vac - max. Vac - min.200 	Switch Type			1	2	3	4
Voltage 4Vac - max. Breakdown 3Vac - max. Vdc - min.140 250265 450120 200120 200Current 4Switching 2 CarryAdc - max. Adc - max.0.5 0.350.5 0.350.25 1.00.25 1.0Resistance 5Contact, Initial Insulation Ω - max. Ω - min.0.2 1.00.2 1.50.2 0.350.25 1.0Resistance 5Contact, Initial Insulation Ω - max. Ω - min.0.2 10100.2 10100.2 1090.2 109CapacitanceContactpF - typ.0.3 0.30.20.3 -20 to +105-40 to +105-40 to +105	Contact Rating ¹		VA/Watt - max.	10	10	5	5
Current 4Aac - max. Carry0.35 Adc - max.0.35 1.21.0 1.51.0 1.5Resistance 5Contact, Initial Insulation Ω - max. Ω - min.0.2 10100.2 10100.2 10100.2 1090.2 109CapacitanceContactpF - typ.0.30.20.30.3TemperatureOperating°C-40 to +105-20 to +105-40 to +105-40 to +105	Voltage ⁴		Vac - max.	140	265	120	120
Resistance * Insulation Ω - min. 10 ¹⁰ 10 ¹⁰ 10 ⁹ 10 ⁹ 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	Current ⁴		Aac - max.	0.35	0.35	1.0	1.0
Temperature Operating °C -40 to +105 -20 to +105 -40 to +105 -40 to +105	Resistance ⁵		-				
lemperature provide state and state	Capacitance	Contact	pF - typ.	0.3	0.2	0.3	0.3
	Temperature		-				

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 Littlefuse 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

Sensitivity Options (Using 57060 Actuator)

Select Option		S		т		U		v	
	Switch Type	Pull-In AT Range	Activate Distance - D mm (inch) Minimum						
1	Normally Open	12-18	12.0 (.472)	17-23	9.0 (.354)	22-28	7.0 (.276)	27-33	5.5 (.217)
2	High Voltage			17-23	9.0 (.354)	22-28	7.0 (.276)	27-33	5.5 (.217)
3	Change Over	15-20	12.0 (.472)	20-25	7.5 (.295)	25-30	6.0 (.236)		
4	Normally Closed	15-20	12.0 (.472)	20-25	7.5 (.295)	25-30	6.0 (.236)		

Note:

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.







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Cable Length Options

Cable Type: 24 AWG 7/32 PVC 105°C DOUBLE INSULATED				
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						
F	Untinned leads (6.4±0.76)mm						
E	JST type XHP 2.5mm pitch						

Part Numbering System





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Note: The 57060 Actuator is sold separately.

Packaging

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