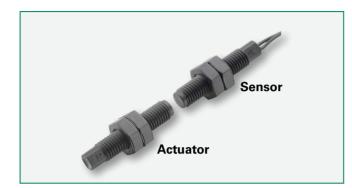
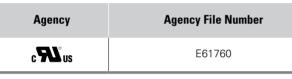


# 59070 M8 Plastic Threaded Barrel Sensor + 57070 Actuator





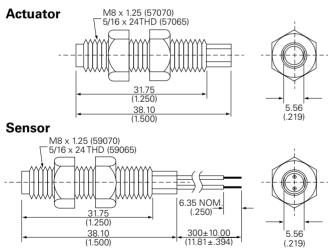
## **Agency Approvals**



Note: Contact Littelfuse for specific agency approval ratings.

## Dimensions

Dimensions in mm (inch)



#### Different cable options available.

## Description

The 59070 is a small plastic barrel sensor with a M8 x 1.25 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 57070 actuator.

#### Note: The 57070 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

## **Benefits**

- Simple installation and adjustment using supplied retaining nuts
- Operates through non-ferrous materials such as wood, plastic or aluminium

## **Applications**

- Position and Limit Sensing
- Security System Switch

- Customer defined sensitivity option
- Choice of cable length and connector
- Excellent for switching microcontroller logic level loads.
- No standby power requirement
- Industrial Process Control
- Linear Actuators

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# **Electrical Ratings**

Contact Type			Normally Open	Normally Open HighVoltage	Change Over	Normally Closed
Switch Type			1	2	3	4
Contact Rating <sup>1</sup>		VA/Watt - max.	10	10	5	5
Voltage <sup>4</sup>	Switching <sup>2</sup> Breakdown <sup>3</sup>	Vdc - max. Vac - max. Vdc - min.	200 140 250	300 265 400	175 120 200	175 120 200
Current <sup>4</sup>	Switching <sup>2</sup> 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	0.25 0.18 1.5
Resistance ⁵	Contact, Initial Insulation	Ω - max. Ω - min.	0.2 10 <sup>10</sup>	0.2 10 <sup>10</sup>	0.2 10 <sup>9</sup>	0.2 10 <sup>9</sup>
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 <sup>6</sup>		ms - max.	1.0	1.0	3.0	3.0
Release Time <sup>6</sup>		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.

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 57070 Actuator)

Select Option		S		т		U		v	
	Switch Type	Pull-In AT Range	Activate Distance–D mm (inch) Average						
1	Normally Open	12-18	8.4 (.330)	17-23	6.6 (.260)	22-28	5.1 (.200)	27-33	4.0 (.157)
2	High Voltage			17-23	6.6 (.260)	22-28	5.1 (.200)	27-33	4.0 (.157)
3	Change Over	15-20	6.5 (.255)	20-25	4.9 (.193)	25-30	3.7 (.146)		-
4	Normally Closed	15-20	6.5 (.255)	20-25	4.9 (.193)	25-30	3.7 (.146)		

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.

