

# 59065 5/16" Plastic Threaded Barrel Sensor + 57065 Actuator







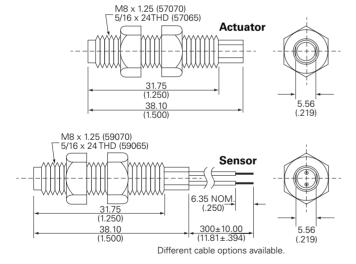
## **Agency Approvals**

Agency	Agency File Number
c <b>FL</b> °us	E61760

Note: Contact Littelfuse for specific agency approval ratings.

### **Dimensions**

Dimensions in mm (inch)



### **Description**

The 59065 is a small plastic barrel sensor with a 5/16" x 24 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 57065 actuator.

Note: The 57065 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
- Customer defined sensitivity option
- Choice of cable length and connector

#### **Benefits**

- Simple installation and adjustment using supplied retaining nuts
- Operates through non-ferrous materials such as wood, plastic or aluminium
- Excellent for switching microcontroller logic level loads
- No standby power requirement

## **Applications**

- Position and Limit Sensing
- Security System Switch
- 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 <sup>5</sup>	Contact, Initial Insulation	$\Omega$ - max. $\Omega$ - 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 <sup>7</sup>	50-2000 Hz	G - max.	30	30	30	30

#### Notes

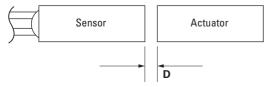
- 1. Contact rating Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
- 2. When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application 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 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 57065 Actuator)**

Select Option		S		т		U		v	
	Switch Type	Pull-In AT Range	Activate Distance–D mm (inch) Average	Pull-In AT Range	Activate Distance–D mm (inch) Average	Pull-In AT Range	Activate Distance–D mm (inch) Average	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.
- ${\hbox{\bf 2. The activation distance is average value on the final sensor assembly.}\\$



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