

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









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







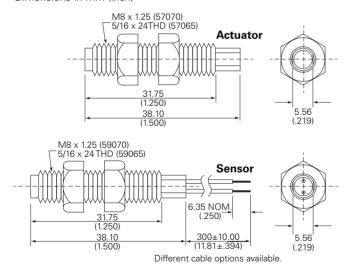
### **Agency Approvals**

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



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

### **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

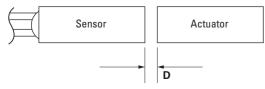
- 1. Contact rating Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
- 2. When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application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



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

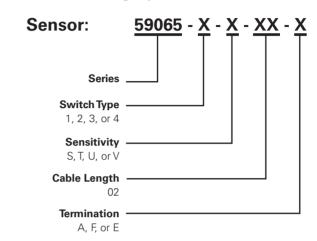
## **Cable Length Specification**

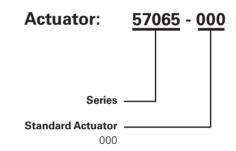
Cable Type: 24 AWG 7/32 PVC 105°C UL1430/UL1569				
Select Option Cable Length mm (inch)				
02	300 (11.81)			

## **Termination Specification**

Termination Options						
Select Option	Description (Two-wire versions illustrated)					
А	Tinned leads (6.4±0.76)mm					
F	Untinned leads (6.4±0.76)mm					
Е	JST type XHP 2.5mm pitch					

## **Part Numbering System**





Note: The 57065 Actuator is sold separately.

## **Packaging**

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