

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



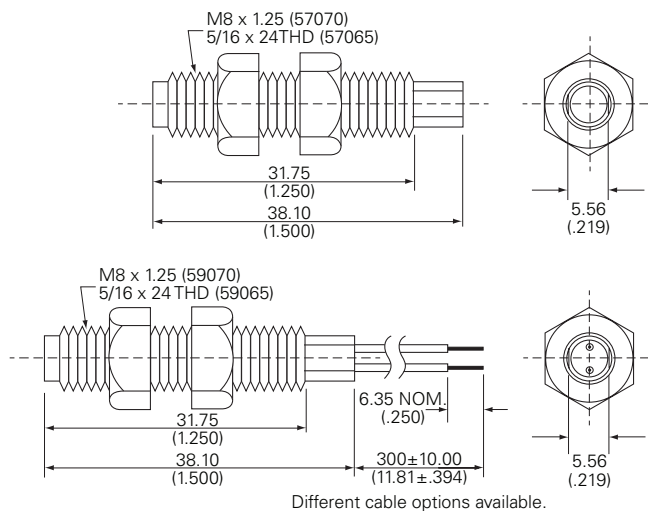
Agency Approvals

Agency	Agency File Number
	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 micro-controller 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 High Voltage	Change Over	Normally Closed
Switch Type			1	2	3	4
Contact Rating ¹		VA/Watt - max.	10	10	5	5
Voltage ⁴	Switching ²	Vdc - max.	200	300	175	175
		Vac - max.	140	265	120	120
	Breakdown ³	Vdc - min.	250	400	200	200
Current ⁴	Switching ²	Adc - max.	0.5	0.4	0.25	0.25
		Aac - max.	0.35	0.30	0.18	0.18
	Carry	Adc - max.	1.2	1.4	1.5	1.5
Resistance ⁵	Contact, Initial Insulation	Ω - max. Ω - min.	0.2 10 ¹⁰	0.2 10 ¹⁰	0.2 10 ⁹	0.2 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

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:

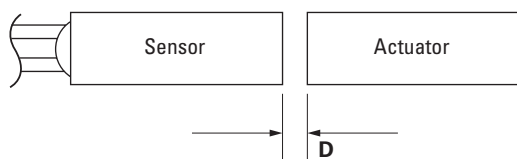
- Contact rating - Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
- When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application Notes AN108A and AN107 for details.
- Breakdown Voltage - per MIL-STD-202, Method 301.
- Electrical Load Life Expectancy - Contact Littelfuse with voltage, current values along with type of load.
- This resistance value is for 11.81mm wire length. Resistance changes when wire lengthens.
- Operate (including bounce)/Release Time - per EIA/NARM RS-421-A, diode suppressed coil (Coil II).
- Shock and Vibration - per EIA/NARM RS-421-A and MIL-STD-202.
- 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		T		U			
Switch Type		Pull-In AT Range	Activate Distance mm (inch) Average	Pull-In AT Range	Activate Distance mm (inch) Average	Pull-In AT Range	Activate Distance mm (inch) Average	Pull-In AT Range	Activate Distance 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:

- Pull-In AT Range: These AT values are the bare reed switch AT before modification.
- The activation distance is average value on the final sensor assembly.



Schematics	Switch Type
	1 and 2
	3
	4

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

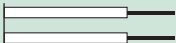
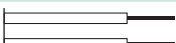
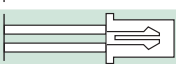
Cable Length Specification

Cable Type: 24 AWG 7/32 PVC 105°C UL1430/UL1569

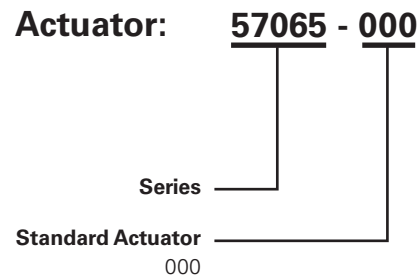
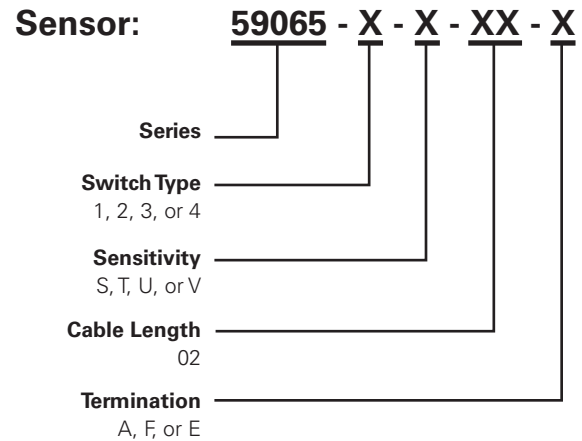
Select Option	Cable Length mm (inch)
02	300 (11.81)

Termination Specification

Termination Options

Select Option	Description (Two-wire versions illustrated)	
A	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



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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

[59065-010](#) [59065-030](#) [59065-020](#) [59065-040](#) [59065-4-T-02-A](#) [59065-2-V-02-A](#) [59065-1-U-02-F](#) [59065-3-S-02-F](#)
[59065-4-U-02-F](#) [59065-1-V-02-A](#) [59065-3-T-02-A](#) [59065-1-V-02-F](#) [59065-4-S-02-F](#) [59065-3-U-02-A](#) [59065-4-S-02-A](#)
[59065-1-S-02-F](#) [59065-4-T-02-F](#) [59065-2-T-02-F](#) [59065-1-T-02-A](#) [59065-3-U-02-F](#) [59065-3-T-02-F](#) [59065-2-U-02-](#)
[A](#) [59065-2-T-02-A](#) [59065-2-U-02-F](#) [59065-1-U-02-A](#) [59065-2-V-02-F](#) [59065-1-T-02-F](#) [59065-1-S-02-A](#) [59065-3-S-](#)
[02-A](#) [59065-4-U-02-A](#) [59065-1-T-04-A](#) [59065-1-V-01-A](#) [59065-1-S-02-D](#) [59065-1-V-01-D](#) [59065-1-S-02-E](#) [59065-1-](#)
[T-02-E](#) [59065-1-S-04-E](#) [59065-1-S-01-F](#) [59065-4-U-03-C](#) [59065-4-U-05-A](#) [59065-4-U-05-D](#) [59065-4-U-02-D](#) [59065-](#)
[4-U-01-E](#) [59065-4-U-02-C](#) [59065-4-T-04-F](#) [59065-4-T-05-C](#) [59065-4-U-01-F](#) [59065-4-S-05-E](#) [59065-4-T-03-E](#)
[59065-4-U-02-E](#) [59065-4-T-05-F](#) [59065-4-U-04-C](#) [59065-4-T-03-F](#) [59065-4-T-03-D](#) [59065-4-S-03-D](#) [59065-4-S-04-C](#)
[59065-4-S-04-F](#) [59065-4-T-04-A](#) [59065-4-U-01-A](#) [59065-4-U-03-F](#) [59065-4-S-05-C](#) [59065-4-S-01-C](#) [59065-4-S-03-](#)
[F](#) [59065-4-U-03-E](#) [59065-4-U-05-F](#) [59065-4-T-01-C](#) [59065-4-T-04-C](#) [59065-4-T-05-A](#) [59065-4-S-02-D](#) [59065-4-T-](#)
[05-D](#) [59065-4-T-05-E](#) [59065-4-U-05-C](#) [59065-4-U-05-E](#) [59065-4-S-03-A](#) [59065-4-S-04-E](#) [59065-4-T-02-C](#) [59065-4-](#)
[T-02-E](#) [59065-4-U-01-C](#) [59065-4-S-05-F](#) [59065-4-U-04-E](#) [59065-4-U-04-D](#) [59065-4-T-01-F](#) [59065-4-T-02-D](#) [59065-](#)
[4-T-04-D](#) [59065-4-T-01-D](#) [59065-4-S-01-F](#) [59065-4-S-04-A](#) [59065-4-S-05-D](#) [59065-4-T-01-E](#) [59065-4-U-03-D](#)
[59065-4-U-04-A](#) [59065-4-U-04-F](#) [59065-4-S-02-E](#) [59065-4-S-03-C](#) [59065-4-S-04-D](#) [59065-4-S-03-E](#) [59065-4-S-01-](#)
[D](#) [59065-4-T-03-C](#) [59065-4-S-01-E](#) [59065-4-S-02-C](#)