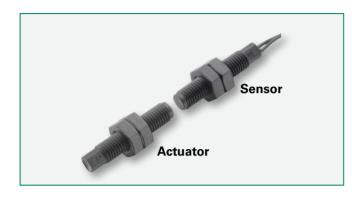


59070 M8 Plastic Threaded Barrel Sensor + 57070 Actuator







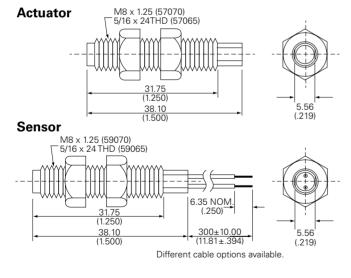
Agency Approvals

Agency	Agency File Number
c 'RL 'us	E61760

Note: Contact Littelfuse for specific agency approval ratings.

Dimensions

Dimensions in mm (inch)



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
- 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



59070 M8 Plastic Threaded Barrel Sensor + 57070 Actuator

Electrical Ratings

Contact Type			Normally Open	Normally Open HighVoltage	Change Over	Normally Closed
Switch Type			1	2	3	4
Contact Rating ¹		VA/Watt - max.	10	10	5	5
Voltage ⁴	Switching ² Breakdown ³	Vdc - max. Vac - max. Vdc - min.	200 140 250	300 265 400	175 120 200	175 120 200
Current ⁴	Switching ² 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 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	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

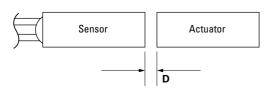
- 1. Contact rating Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
- 2. When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application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



Schematics	Switch Type
Black Black	1 and 2
Black Blue Red	3
Black Black	4
	,



59070 M8 Plastic Threaded Barrel Sensor + 57070 Actuator

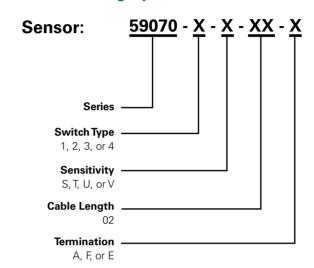
Cable Length Specification

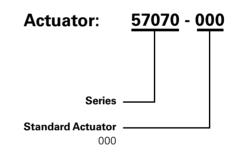
Cable Type: 24 AWG 7/32 PVC 105°C UL1430/UL1569			
Select Option Cable Length mm (inch)			
02	300 (11.81)		

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 57070 Actuator is sold separately.

Packaging

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

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