

59060 Stainless Steel M8 Threaded Barrel Sensor + 57060 Actuator

RoHS



Dimensions

Dimensions in mm (inch)



Description

The 59060 is a small stainless steel barrel sensor with an M8 x 1.25mm pitch thread, 36mm (1.420") 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 has a variety range of sensitivity, cable length and connector options. It functions best with the 57060 actuator.

Note: The 57060 Actuator is sold separately.

Features

- Two-part magnetically operated proximity sensor
- Stainless steel threaded barrel with retaining nuts
- M8 thread
- Choice of normally open or normal open high voltage contacts
- Customer defined sensitivity options
- Choice of cable length and

Benefits

- Robust construction makes this sensor well suited to harsh industrial environments
- Simple installation and adjustment using supplied retaining nuts
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium

Applications

- Position and Limit Sensing
- Security Systems
- Industrial Process Control
- Linear Actuators

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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	450	200	200
Current ⁴	Switching ²	Adc - max.	0.5	0.5	0.25	0.25
		Aac - max.	0.35	0.35	1.0	1.0
	Carry	Adc - max.	1.2	1.5	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 Storage	$^{\circ}\text{C}$	-40 to +105	-20 to +105	-40 to +105	-40 to +105
		$^{\circ}\text{C}$	-65 to +105	-65 to +105	-65 to +105	-65 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:

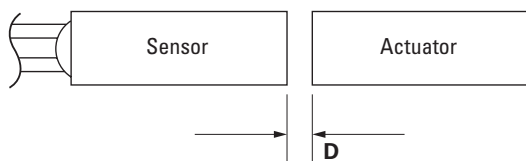
- Contact rating - Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
- When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application 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 57060 Actuator)

Select Option		S		T		U		V	
Switch Type	Pull-In AT Range	Activate Distance - D mm (inch) Minimum	Pull-In AT Range	Activate Distance - D mm (inch) Minimum	Pull-In AT Range	Activate Distance - D mm (inch) Minimum	Pull-In AT Range	Activate Distance - D mm (inch) Minimum	
1 Normally Open	12-18	12.0 (.472)	17-23	9.0 (.354)	22-28	7.0 (.276)	27-33	5.5 (.217)	
2 High Voltage	--	--	17-23	9.0 (.354)	22-28	7.0 (.276)	27-33	5.5 (.217)	
3 Change Over	15-20	12.0 (.472)	20-25	7.5 (.295)	25-30	6.0 (.236)	--	--	
4 Normally Closed	15-20	12.0 (.472)	20-25	7.5 (.295)	25-30	6.0 (.236)	--	--	

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.



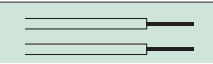


Schematics	Switch Type
	1 and 2
	3
	4

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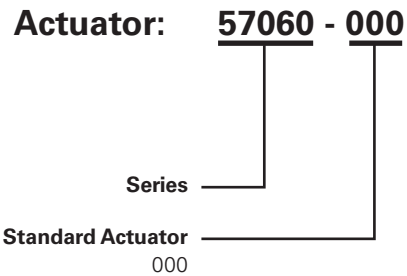
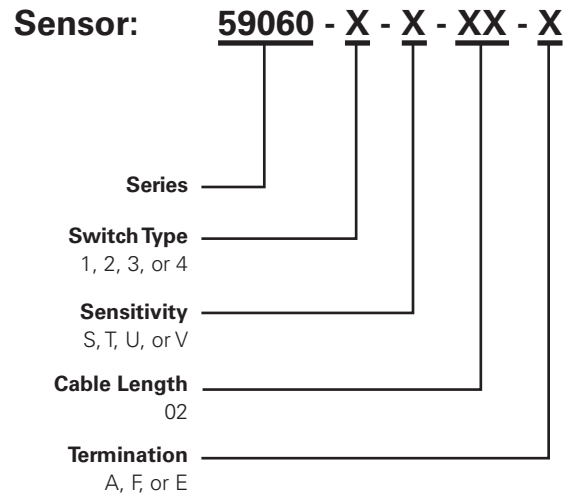
Cable Length Options

Cable Type: 24 AWG 7/32 PVC 105°C DOUBLE INSULATED	
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 57060 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:

[59060-3-T-02-F](#) [59060-1-S-05-F](#) [59060-1-S-02-A](#) [59060-2-V-05-F](#) [59060-4-S-05-F](#) [59060-4-T-05-A](#) [59060-4-S-05-A](#) [59060-2-V-05-A](#) [59060-2-V-02-F](#) [59060-4-U-02-A](#) [59060-1-U-05-F](#) [59060-2-T-02-A](#) [59060-1-T-02-A](#) [59060-3-U-02-A](#) [59060-1-V-02-F](#) [59060-2-T-05-A](#) [59060-3-T-05-F](#) [59060-3-S-02-F](#) [59060-4-S-02-A](#) [59060-4-T-02-A](#) [59060-4-T-02-F](#) [59060-1-T-05-A](#) [59060-1-V-05-A](#) [59060-1-V-02-A](#) [59060-3-U-05-A](#) [59060-4-T-05-F](#) [59060-1-V-05-F](#) [59060-1-T-05-F](#) [59060-1-U-05-A](#) [59060-3-S-05-A](#) [59060-1-S-02-F](#) [59060-3-S-05-F](#) [59060-3-U-05-F](#) [59060-4-U-05-A](#) [59060-1-T-02-F](#) [59060-2-U-02-F](#) [59060-3-S-02-A](#) [59060-3-U-02-F](#) [59060-4-U-02-F](#) [59060-1-U-02-F](#) [59060-2-U-05-A](#) [59060-2-U-05-F](#) [59060-2-V-02-A](#) [59060-1-S-05-A](#) [59060-2-T-05-F](#) [59060-3-T-05-A](#) [59060-2-T-02-F](#) [59060-2-U-02-A](#) [59060-4-S-02-F](#) [59060-4-U-05-F](#) [59060-1-U-02-A](#) [59060-010](#) [59060-030](#) [59060-040](#) [59060-020](#) [59060-1-T-03-A](#) [59060-4-S-01-F](#) [59060-3-U-04-C](#) [59060-3-U-04-A](#) [59060-2-S-04-F](#) [59060-2-T-01-C](#) [59060-3-S-04-C](#) [59060-2-T-01-A](#) [59060-2-T-03-A](#) [59060-3-T-04-C](#) [59060-3-T-03-F](#) [59060-3-U-02-C](#) [59060-3-U-03-F](#) [59060-3-U-04-F](#) [59060-3-U-05-C](#) [59060-3-S-02-C](#) [59060-3-U-03-C](#) [59060-2-S-05-C](#) [59060-2-S-01-C](#) [59060-2-S-05-F](#) [59060-3-U-03-A](#) [59060-3-S-04-A](#) [59060-3-T-04-F](#) [59060-1-T-05-C](#) [59060-1-V-05-C](#) [59060-3-U-01-F](#) [59060-2-V-02-C](#) [59060-1-V-04-A](#) [59060-2-T-04-C](#) [59060-2-U-01-F](#) [59060-3-T-05-C](#) [59060-2-V-04-A](#) [59060-2-V-05-C](#) [59060-2-T-03-F](#) [59060-2-U-02-C](#) [59060-2-U-03-F](#) [59060-2-V-01-F](#) [59060-2-V-04-F](#) [59060-3-T-01-A](#) [59060-2-S-04-A](#) [59060-2-T-04-A](#) [59060-2-U-05-C](#) [59060-2-V-03-C](#) [59060-3-S-05-C](#) [59060-2-T-05-C](#)