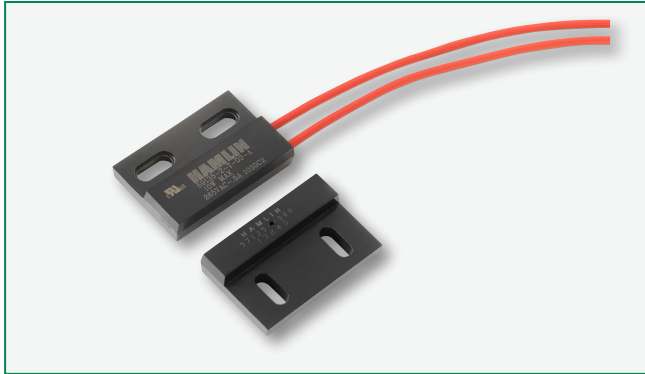


59135 High Temperature Flange Mount Sensor + 57135 Actuator



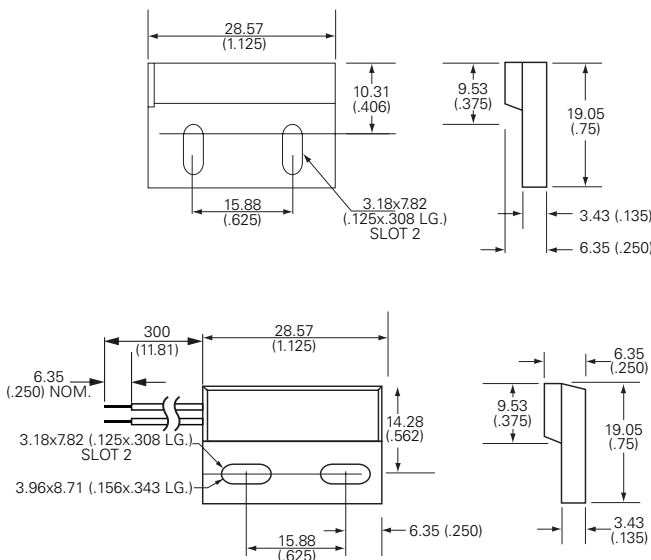
Agency Approvals

Agency	Agency File Number
	E61760

Note: Contact Littelfuse for specific agency approval ratings.

Dimensions

Dimensions in mm (inch)



Description

The 59135 is a high temperature flange mounting reed sensor 28.57mm x 19.05mm x 6.35mm (1.125" x 0.750" x 0.250") with a choice of normally open, normally open high voltage, normally closed or changeover contacts. It's case design enables screw or adhesive mounting. It is rated for operation up to 150°C. It is capable of switching up to 265Vac/300Vdc at 10VA. The 59135 functions best with the matching actuator 57135-000.

Note: The 57135 Actuator is sold separately.

Features

- Two-part magnetically operated proximity sensor
- High temperature rated
- Cross-slotted mounting holes for optimum adjustability
- Customer defined sensitivity option
- Choice of cable length and connector
- Thermoset overmold material
- Teflon insulated wires

Benefits

- Hermetically sealed, magnetically operated contacts continue to operate long after optical and other technologies fail due to contamination
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium

Applications

- Position and limit sensing
- Security system switch
- Linear actuators
- Door switch

Schematics	Switch Type
	1 and 2
	3
	4

59135 High Temperature Flange Mount Sensor + 57135 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 +150	-20 to +150	-40 to +150	-40 to +150

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:

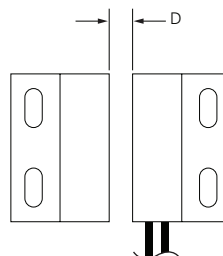
- Contact rating - Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
- When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application 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 57135 Actuator)

Select Option		S		T		U		V	
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	18.5 (.729)	17-23	17.1 (.673)	22-28	15.8 (.622)	27-33	15.1 (.595)
2	High Voltage	--	--	17-23	17.1 (.673)	22-28	15.8 (.622)	27-33	15.1 (.595)
3	Change Over	15-20	16.7 (.657)	20-25	14.7 (.579)	25-30	13.4 (.528)	--	--
4	Normally Closed	15-20	16.7 (.657)	20-25	14.7 (.579)	25-30	13.4 (.528)	--	--

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

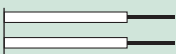
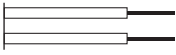
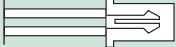


59135 High Temperature Flange Mount Sensor + 57135 Actuator

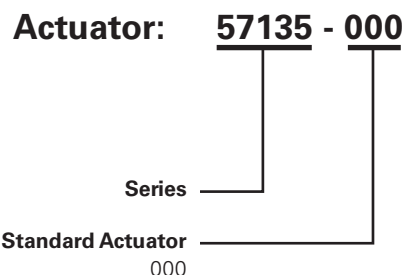
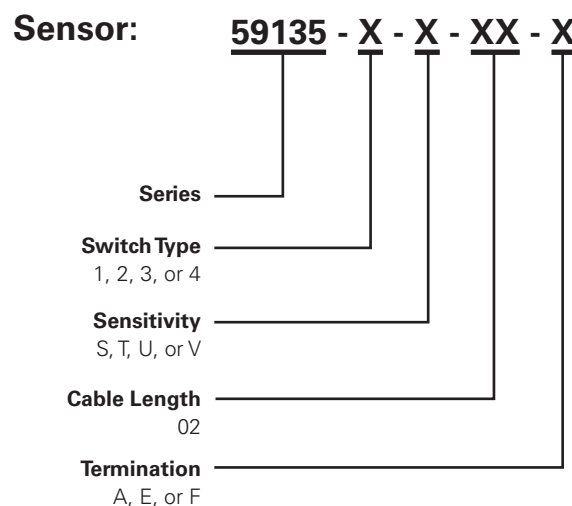
Cable Length Specification

Cable Type: 20 AWG 19/32 FEP UL1130/UL1332	
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 57135 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:

[59135-010](#) [59135-020](#) [59135-1-U-02-A](#) [59135-3-S-02-A](#) [59135-1-S-02-F](#) [59135-4-U-02-A](#) [59135-3-T-02-F](#) [59135-1-U-02-F](#) [59135-4-U-02-F](#) [59135-3-U-02-A](#) [59135-2-U-02-F](#) [59135-2-T-02-F](#) [59135-4-S-02-A](#) [59135-4-T-02-A](#) [59135-2-U-02-A](#) [59135-1-V-02-A](#) [59135-1-T-02-F](#) [59135-1-S-02-A](#) [59135-2-V-02-F](#) [59135-3-S-02-F](#) [59135-030](#) [59135-2-T-02-A](#) [59135-1-T-02-A](#) [59135-4-T-02-F](#) [59135-1-V-02-F](#) [59135-4-S-02-F](#) [59135-3-U-02-F](#) [59135-2-V-02-A](#) [59135-3-T-02-A](#) [59135-040](#) [59135-1-S-03-A](#) [59135-2-U-04-F](#) [59135-2-T-03-A](#) [59135-4-S-05-F](#) [59135-1-S-05-A](#) [59135-1-S-04-A](#) [59135-1-U-01-A](#) [59135-2-U-05-F](#) [59135-3-S-03-A](#) [59135-3-T-02-E](#) [59135-2-V-03-E](#) [59135-3-T-01-E](#) [59135-3-T-01-F](#) [59135-2-V-05-A](#) [59135-3-S-05-D](#) [59135-3-S-05-E](#) [59135-3-S-01-D](#) [59135-3-S-02-E](#) [59135-3-S-04-F](#) [59135-3-S-01-F](#) [59135-3-T-01-D](#) [59135-2-V-03-C](#) [59135-3-S-02-D](#) [59135-2-V-02-E](#) [59135-2-V-03-D](#) [59135-3-S-04-C](#) [59135-3-S-03-C](#) [59135-3-T-03-A](#) [59135-3-T-02-C](#) [59135-2-V-04-D](#) [59135-3-S-01-E](#) [59135-2-V-04-A](#) [59135-3-S-04-A](#) [59135-2-V-05-C](#) [59135-2-V-05-D](#) [59135-2-V-05-E](#) [59135-3-S-01-C](#) [59135-1-T-01-A](#) [59135-1-T-04-E](#) [59135-2-S-02-E](#) [59135-2-T-05-F](#) [59135-2-U-03-A](#) [59135-2-U-01-E](#) [59135-3-S-03-F](#) [59135-3-S-05-C](#) [59135-3-S-04-E](#) [59135-3-T-01-C](#) [59135-2-S-03-E](#) [59135-2-T-04-F](#) [59135-2-U-02-C](#) [59135-2-U-05-E](#) [59135-2-V-01-C](#) [59135-2-V-05-F](#) [59135-2-V-02-C](#) [59135-2-U-03-F](#) [59135-2-S-04-C](#) [59135-1-U-04-F](#) [59135-2-T-03-F](#) [59135-2-U-01-D](#) [59135-2-S-03-D](#) [59135-2-S-05-F](#) [59135-2-U-05-A](#) [59135-1-V-02-D](#) [59135-1-V-05-E](#) [59135-2-S-05-D](#) [59135-2-U-01-A](#) [59135-2-S-04-A](#) [59135-3-S-05-A](#) [59135-1-U-04-E](#) [59135-1-U-05-D](#)