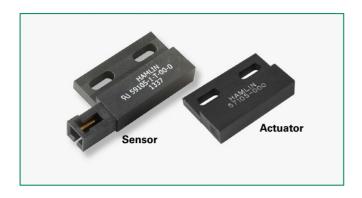


59105 Terminal Flange Sensor + 57105 Actuator







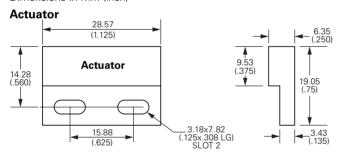
Agency Approvals

Agency	Agency File Number			
c FL °us	E61760			

Note: Contact Littelfuse for specific agency approval ratings.

Dimensions

Dimensions in mm (inch)



Description

The 59105 is a flange mounting reed sensor 28.57mm x 19.05mm x 6.35mm (1.125" x 0.750" x 0.250") with an integral two-pin connector. It has choices of normally open, normally open high voltage or normally closed contacts and it's case design enables screw or adhesive mounting. It is capable of switching up to 265Vac/300Vdc at 10VA. The 59105 functions best with the matching actuator 57105-000.

Note: The 57105 Actuator is sold separately.

Features

- Two-part magnetically operated proximity sensor
- · Shrouded terminals accept Molex SL series connector
- · Case design allows screw down or adhesive mounting
- Customer-defined sensitvity option
- RoHS compliant

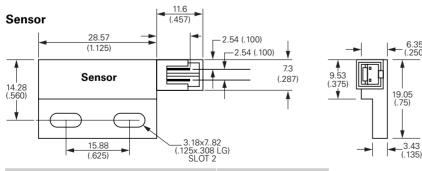
Benefits

· 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
- · Industrial process control



Schematics	Switch Type			
Black Black	1 and 2			
Black Blue White	3			
Black Black	4			



59105 Terminal Flange Sensor + 57105 Actuator

Electrical Ratings

Contact Type			Normally Open	Normally Open High Voltage	Normally Closed		
Switch Type			1	2	4		
Contact Rating ¹		VA/Watt - max.	10	10	5		
Voltage ⁴	Switching ² Breakdown ³	Vdc - max. Vac - max. Vdc - min.	200 140 250	300 265 400	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		
Resistance ⁵	Contact, Initial Insulation	Ω - max. Ω - min.	0.2 10 ¹⁰	0.2 10 ¹⁰	0.2 10 ⁹		
Capacitance	Contact pF - typ.	pF - typ.	0.3	0.2	0.3		
Temperature	Operating	°C	-40 to +105	-20 to +105	-40 to +105		
Product Characteristics							
Operate Time ⁶		ms - max.	1.0	1.0	3.0		
Release Time ⁶		ms - max.	1.0	1.0	3.0		
Shock 7	11ms 1/2 sine	G - max.	100	100	50		
Vibration ⁷	50-2000 Hz	G - max.	30	30	30		

Notes

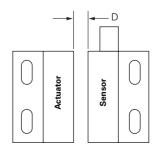
- 1. Contact rating Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/life information.
- 2. When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application 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 57105 Actuator)

Select Option		S		Т		U		V	
Ī	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
	Normally Open	12-18	12.5 (.492)	17-23	11.3 (.445)	22-28	9.8 (.385)	27-33	8.9 (.350)
:	High Voltage			17-23	11.3 (.445)	22-28	9.8 (.385)	27-33	8.9 (.350)
4	Normally Closed	15-20	8.0 (.315)	20-25	7.2 (.283)	25-30	5.9 (.233)		-

Note:

1. Pull-In AT Range: These AT values are the bare reed switch AT before modification.

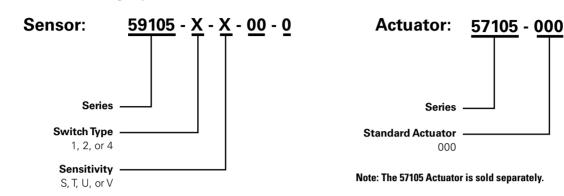


^{2.} The activation distance is average value on the final sensor assembly



59105 Terminal Flange Sensor + 57105 Actuator

Part Numbering System



Packaging

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

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