# 59125 Pinned Flange Sensor + 57125 Actuator





## **Agency Approvals**



Note: Contact Littelfuse for specific agency approval ratings

# **Dimensions**

Dimensions in mm (inch)

#### Actuator



Sensor



# **Description**

The 59125 is a flange mounting reed sensor 28.57mm x 19.05mm x 6.35mm (1.125" x 0.750" x 0.259") with integral terminal pins with a choice of normally open, normally open high voltage or normally closed contacts. It's case design enables screw or adhesive mounting. It is capable of switching up to 265Vac/300Vdc at 10VA. The 59125 functions best with the matching actuator 57125-000.

#### Note: The 57125 Actuator is sold separately.

### **Features**

- Two-part magnetically operated proximity sensor
- · Moulded in terminal pins accept push on connector or wire wrap

### **Benefits**

• Hermetically sealed, magnetically operated contacts continue to operate long after optical and other technologies fail due to contamination

# **Applications**

- · Position and limit sensing
- · Security system switch

adhesive mounting · Customer defined sensitivity option

· Case design allows screw down or

- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium
- Linear actuators
- Industrial process control

© 2017 Littelfuse Revised: 12/20/17 Specifications are subject to change without notice.

# 59125 Pinned Flange Sensor + 57125 Actuator

# **Electrical Ratings**

Contact Type			Normally Open	Normally Open High Voltage	Normally Closed
Switch Type			1	2	4
Contact Rating <sup>1</sup>		VA/Watt - max.	10	10	5
Voltage <sup>4</sup>	Switching <sup>2</sup> Breakdown <sup>3</sup>	Vdc - max. Vac - max. Vdc - min.	200 140 250	300 265 400	175 120 200
Current <sup>4</sup>	Switching <sup>2</sup> 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 <sup>5</sup>	Contact, Initial Insulation	Ω - max. Ω - min.	0.2 10 <sup>10</sup>	0.2 10 <sup>10</sup>	0.2 10 <sup>9</sup>
Capacitance	Contact	pF - typ.	0.3	0.2	0.3
Temperature	Operating	°C	-40 to +105	-20 to +105	-40 to +105

#### **Product Characteristics**

Operate Time <sup>6</sup>		ms - max.	1.0	1.0	3.0
Release Time <sup>6</sup>		ms - max.	1.0	1.0	3.0
Shock 7	11ms ½ sine	G - max.	100	100	50
Vibration <sup>7</sup>	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 57125 Actuator)

Select Option		S		т		U		v	
	Switch Type	Pull-In AT Range	Activate Distance–D mm (inch) Average						
1	Normally Open	12-18	12.5 (.492	17-23	11.3 (.445)	22-28	9.8 (.385)	27-33	8.9 (.350)
2	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





# 59125 Pinned Flange Sensor + 57125 Actuator

### Part Numbering System



### Packaging

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

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <u>www.littelfuse.com/disclaimier-electronics</u>.