**File E61760(N)**

57145, 57150 Actuator

59145, 59150 Sensor

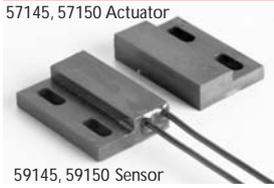## 59145 and 59150 Flange Mount Features and Benefits

### Features
- 2 part magnetically operated proximity sensor
- Flying leads can exit either left or right hand side of the housing
- Case design allows screw down or adhesive mounting
- Customer defined sensitivity
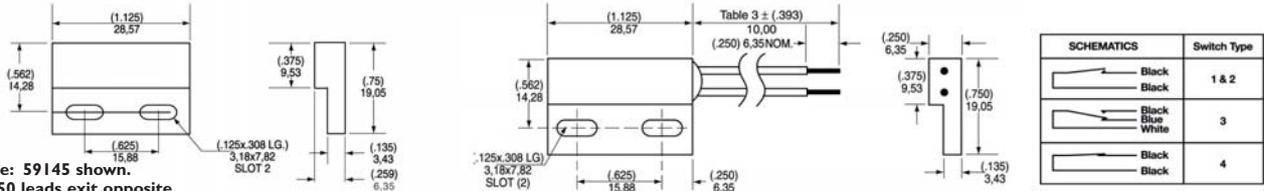- Choice of cable length and connector

### Benefits
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium
- 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
- Linear actuators
- Door switch

## DIMENSIONS (in) mm

Note: 59145 shown.
59150 leads exit opposite.

| SCHEMATICS | | Switch Type |
|---|---|---|
| | Black / Black | 1 & 2 |
| | Black / Blue / White | 3 |
| | Black / Black | 4 |

## CUSTOMER OPTIONS - Switching Specifications

### TABLE 1

| Contact Type | | | Normally Open | Normally Open High Voltage | Change Over | Normally Closed |
|---|---|---|---|---|---|---|
| Switch Type | | | 1 | 2 | 3 | 4 |
| | Power | Watt - max. | 10 | 10 | 5 | 5 |
| Voltage | Switching | Vdc - max. | 200 | 300 | 175 | 175 |
| | Breakdown | Vdc - min. | 250 | 450 | 200 | 200 |
| Current | Switching | A - max. | 0.5 | 0.5 | 0.25 | 0.25 |
| | Carry | A - max. | 1.2 | 1.5 | 1.5 | 1.5 |
| Resistance | Contact, Initial | Ω - max. | 0.2 | 0.2 | 0.2 | 0.2 |
| | Insulation | Ω - min. | $10^{10}$ | $10^{10}$ | $10^{9}$ | $10^{9}$ |
| 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 |
| | Storage | °C | -65 to +105 | -65 to +105 | -65 to +105 | -65 to +105 |
| Time | Operate | ms - max. | 1.0 | 1.0 | 3.0 | 3.0 |
| | Release | ms - max. | 1.0 | 1.0 | 3.0 | 3.0 |
| Shock | 11ms 1/2 sine | G - max. | 100 | 100 | 50 | 50 |
| Vibration | 50-2000 Hz | G - max. | 30 | 30 | 30 | 30 |

## CUSTOMER OPTIONS - Sensitivity, Cable Length and Termination Specification

### TABLE 2

**Sensitivity Options:-**
Activate Distances are approximate using Hamlin 57145/57150 actuator as illustrated
Switch AT before modification

| Select Option | | S | | T | | U | | V | |
|---|---|---|---|---|---|---|---|---|---|
| Switch Type | | Pull In AT Range | Activate Distance d (in) mm | Pull In AT Range | Activate Distance d (in) mm | Pull In AT Range | Activate Distance d (in) mm | Pull In AT Range | Activate Distance d (in) mm |
| 1 | Normally Open | 12-18 | (.531) 13,5 | 17-23 | (.453) 11,5 | 22-28 | (.394) 10,0 | 27-33 | (.354) 9,0 |
| 2 | High Voltage | | | | | | | | |
| 3 | Change Over | 15-20 | (.433) 11,0 | 20-25 | (.354) 9,0 | 25-30 | (.335) 8,5 | | |
| 4 | Normally Closed | | | | | | | | |

### TABLE 3

**Cable Type:-**
24 AWG 7/32 PVC 105°C
UL1430/UL1569

Standard Lengths

| SELECT OPTION | CABLE LENGTH (in) mm |
|---|---|
| 02 | (11,81) 300 |
| 05 | (39,37) 1,000 |
| 03 | (19,69) 500 |
| 04 | (29,53) 750 |
| 05 | (39,37) 1000 |

### TABLE 4

**Termination Options:-**

| SELECT OPTION | DESCRIPTION (2 WIRE VERSIONS ILLUSTRATED) | |
|---|---|---|
| A or F | Tinned or untinned leads | |
| C | 6.35mm fastons | |
| D | AMP MTE 2.54mm pitch | |
| E | JST XHP 2.5mm pitch | |

## ORDERING INFORMATION

N.B. 57145/57150 actuator sold separately

**59145/59150** – **X** – **X** – **XX** – **X**

- Series 59145/59150
- Switch Type — Table 1
- Sensitivity — Table 2
- Cable Length — Table 3
- Termination — Table 4

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