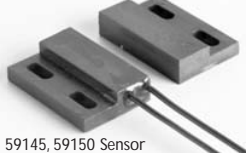


File E61760(N)

59145 and 59150 Flange Mount Features and Benefits

57145, 57150 Actuator



59145, 59150 Sensor

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

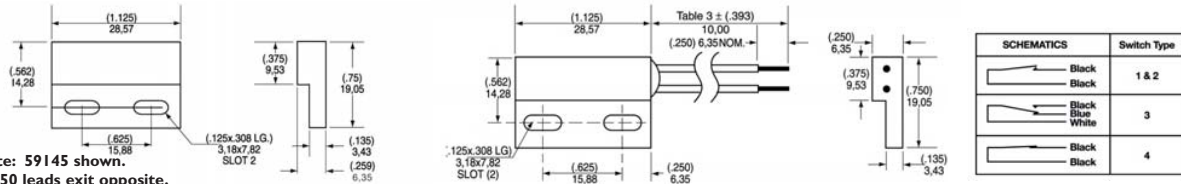
Benefits

- 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.

CUSTOMER OPTIONS - Switching Specifications

| TABLE I Contact Type | | | Normally Open | Normally Open High Voltage | Change Over | Normally Closed |
|-------------------------|------------------|-------------|------------------|----------------------------|-----------------|-----------------|
| Switch Type | | | 1 | 2 | 3 | 4 |
| Voltage | Power | Watt - max. | 10 | 10 | 5 | 5 |
| | Switching | Vdc - max. | 200 | 300 | 175 | 175 |
| Current | Breakdown | Vdc - min. | 250 | 450 | 200 | 200 |
| | Switching | A - max. | 0.5 | 0.5 | 0.25 | 0.25 |
| Resistance | Carry | A - max. | 1.2 | 1.5 | 1.5 | 1.5 |
| | Contact, Initial | Ω - max. | 0.2 | 0.2 | 0.2 | 0.2 |
| Capacitance | Insulation | Ω - min. | 10 ¹⁰ | 10 ¹⁰ | 10 ⁹ | 10 ⁹ |
| | 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 | | TABLE 3 | | TABLE 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------------|---|-------|-------------------------------|---|-----------------|-------|--------|-------|--------|----------------|------|------|-------|--------|---------------|-------|--------|------|------|-------------------|------|-----|-------|--------|--|--|---------------|----------------------|----|------------|----|--------------|----|-------------|----|-------------|----|--------------|--|--|---------------|-------------|--------|--------------------------|---|----------------|---|----------------------|---|---------------------|
| Sensitivity Options:- Activate Distances are approximate using Hamlin 57145/57150 actuator as illustrated Switch AT before modification | | Cable Type:- 24 AWG 7/32 PVC 105°C UL1430/UL1569 | | Termination Options:- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Standard Lengths | | (2 WIRE VERSIONS ILLUSTRATED) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Select Option</th> <th>S</th> <th>T</th> <th>U</th> <th>V</th> </tr> </thead> <tbody> <tr> <td>1 Normally Open</td> <td>12-18</td> <td>(.531)</td> <td>17-23</td> <td>(.453)</td> </tr> <tr> <td>2 High Voltage</td> <td>13.5</td> <td>11.5</td> <td>22-28</td> <td>(.394)</td> </tr> <tr> <td>3 Change Over</td> <td>15-20</td> <td>(.433)</td> <td>11.5</td> <td>10.0</td> </tr> <tr> <td>4 Normally Closed</td> <td>11.0</td> <td>9.0</td> <td>25-30</td> <td>(.335)</td> </tr> </tbody> </table> | Select Option | S | T | U | V | 1 Normally Open | 12-18 | (.531) | 17-23 | (.453) | 2 High Voltage | 13.5 | 11.5 | 22-28 | (.394) | 3 Change Over | 15-20 | (.433) | 11.5 | 10.0 | 4 Normally Closed | 11.0 | 9.0 | 25-30 | (.335) | <table border="1"> <thead> <tr> <th>SELECT OPTION</th> <th>CABLE LENGTH (in) mm</th> </tr> </thead> <tbody> <tr> <td>02</td> <td>(11,81)300</td> </tr> <tr> <td>05</td> <td>(39,37)1,000</td> </tr> <tr> <td>03</td> <td>(19,69) 500</td> </tr> <tr> <td>04</td> <td>(29,53) 750</td> </tr> <tr> <td>05</td> <td>(39,37) 1000</td> </tr> </tbody> </table> | | 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 border="1"> <thead> <tr> <th>SELECT OPTION</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>A or F</td> <td>Tinned or untinned leads</td> </tr> <tr> <td>C</td> <td>6.35mm fastons</td> </tr> <tr> <td>D</td> <td>AMP MTE 2.54mm pitch</td> </tr> <tr> <td>E</td> <td>JST XHP 2.5mm pitch</td> </tr> </tbody> </table> | | SELECT OPTION | DESCRIPTION | A or F | Tinned or untinned leads | C | 6.35mm fastons | D | AMP MTE 2.54mm pitch | E | JST XHP 2.5mm pitch |
| Select Option | S | T | U | V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 Normally Open | 12-18 | (.531) | 17-23 | (.453) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 High Voltage | 13.5 | 11.5 | 22-28 | (.394) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 Change Over | 15-20 | (.433) | 11.5 | 10.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 Normally Closed | 11.0 | 9.0 | 25-30 | (.335) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SELECT OPTION | DESCRIPTION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 I

Sensitivity — Table 2

Cable Length — Table 3

Termination — Table 4

Hamlin USA Tel: +1 920 648 3000 • Fax: +1 920 648 3001 • Email: sales.us@hamlin.com
 Hamlin UK Tel: +44 (0)1379 649700 • Fax: +44 (0)1379 649702 • Email: sales.uk@hamlin.com
 Hamlin Germany Tel: +49 (0)6142 923920 • Fax: +49 (0) 6142 923921 • Email: sales.de@hamlin.com
 Hametrol France Tel: +33 (0) 1 6047 3000 • Fax: +33 (0) 1 6015 9136 • Email: sales.fr@hamlin.com

ISSUE No: 4 DATE: 1/5/3

DETAILS PROVIDED ON THIS DATA SHEET ARE PROVIDED FOR INFORMATION PURPOSES ONLY AND SHOULD NOT BE RELIED UPON AS BEING ACCURATE FOR ANY PARTICULAR PURPOSE. Product performance may be affected by the application to which the product is put. Upon request, HAMLIN will assist purchasers by providing information specific to any particular application. HAMLIN disclaims any and all liability whatsoever for any purchaser's reliance upon the information contained on this data sheet without further consultation with authorised representatives of HAMLIN.