

File E61760(N)

59145 and 59150 Flange Mount Features and Benefits



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.

| SCHEMATICS | Switch Type |
|------------|-------------|
| | 1 & 2 |
| | 3 |
| | 4 |

CUSTOMER OPTIONS - Switching Specifications

| TABLE 1 | | | Normally Open | Normally Open High Voltage | Change Over | Normally Closed |
|--------------|------------------|-------------|------------------|----------------------------|-----------------|-----------------|
| Contact Type | | | 1 | 2 | 3 | 4 |
| Switch Type | 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 ⁷ | 10 ⁷ |
| Capacitance | Contact | pF - typ. | 0.3 | 0.2 | 0.3 | 0.3 |
| | Temperature | Operating | °C | -40 to +105 | -20 to +105 | -40 to +105 |
| Time | Storage | °C | -65 to +105 | -65 to +105 | -65 to +105 | -65 to +105 |
| | Operate | ms - max. | 1.0 | 1.0 | 3.0 | 3.0 |
| Shock | Release | ms - max. | 1.0 | 1.0 | 3.0 | 3.0 |
| | 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 ULI1430/UL1569 | | Termination Options:- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | Standard Lengths | | SELECT OPTION DESCRIPTION (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> <tr> <th>Switch Type</th> <th>Pull In AT Range</th> <th>Activate Distance d (in) mm</th> <th>Pull In AT Range</th> <th>Activate Distance d (in) mm</th> <th>Pull In AT Range</th> <th>Activate Distance d (in) mm</th> <th>Pull In AT Range</th> <th>Activate Distance d (in) mm</th> </tr> </thead> <tbody> <tr> <td>1 Normally Open</td> <td>12-18</td> <td>(.531)</td> <td>17-23</td> <td>(.453)</td> <td>22-28</td> <td>(.394)</td> <td>27-33</td> <td>(.354)</td> </tr> <tr> <td>2 High Voltage</td> <td></td> <td>13.5</td> <td></td> <td>11.5</td> <td></td> <td>10.0</td> <td></td> <td>9.0</td> </tr> <tr> <td>3 Change Over</td> <td></td> <td>(.433)</td> <td></td> <td>(.354)</td> <td></td> <td>(.335)</td> <td></td> <td></td> </tr> <tr> <td>4 Normally Closed</td> <td>15-20</td> <td>11.0</td> <td>20-25</td> <td>9.0</td> <td>25-30</td> <td>8.5</td> <td></td> <td></td> </tr> </tbody> </table> | | | | | | | | 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) | 17-23 | (.453) | 22-28 | (.394) | 27-33 | (.354) | 2 High Voltage | | 13.5 | | 11.5 | | 10.0 | | 9.0 | 3 Change Over | | (.433) | | (.354) | | (.335) | | | 4 Normally Closed | 15-20 | 11.0 | 20-25 | 9.0 | 25-30 | 8.5 | | | <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"> <tbody> <tr> <td>A or F</td> <td>Tinned or untinned leads</td> <td></td> </tr> <tr> <td>C</td> <td>6.35mm fastons</td> <td></td> </tr> <tr> <td>D</td> <td>AMP MTE 2.54mm pitch</td> <td></td> </tr> <tr> <td>E</td> <td>JST XHP 2.5mm pitch</td> <td></td> </tr> </tbody> </table> | | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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) | 17-23 | (.453) | 22-28 | (.394) | 27-33 | (.354) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 High Voltage | | 13.5 | | 11.5 | | 10.0 | | 9.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 Change Over | | (.433) | | (.354) | | (.335) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 Normally Closed | 15-20 | 11.0 | 20-25 | 9.0 | 25-30 | 8.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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

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
Hamectrol 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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.