

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 ULI430/UL1569 | | Termination Options:- | | | |
| | | | | | | | | Standard Lengths | | SELECT OPTION | DESCRIPTION (2 WIRE VERSIONS ILLUSTRATED) | | |
| Switch Type | S Pull In AT Range | T Pull In AT Range | U Pull In AT Range | V Pull In AT Range | Activate Distance d (in) mm | Activate Distance d (in) mm | Activate Distance d (in) mm | 01 | (3,94) 100 | A or F | Tinned or untinned leads | | |
| 1 Normally Open | 12-18 | (.531) | 17-23 | (.453) | 11,5 | 22-28 | (.394) | 02 | (11,81) 300 | C | 6.35mm fastons | | |
| 2 High Voltage | | | | | 10,0 | 27-33 | (.354) | 03 | (19,69) 500 | | | | |
| 3 Change Over | 15-20 | (.433) | 20-25 | (.354) | 8,5 | | | 04 | (29,53) 750 | D | AMP MTE 2.54mm pitch | | |
| 4 Normally Closed | | | | | | | | 05 | (39,37) 1000 | | | | |
| Termination Option 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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