

## File E61760(N)

## 59065 & 59070 Threaded Barrel Features and Benefits



### Features

- 2 part magnetically operated proximity sensor
- Threaded barrel with retaining nuts
- Available as M8 (57070/59070) or 5/16 (57065/59065) size options
- Customer defined sensitivity
- Choice of cable length and connector

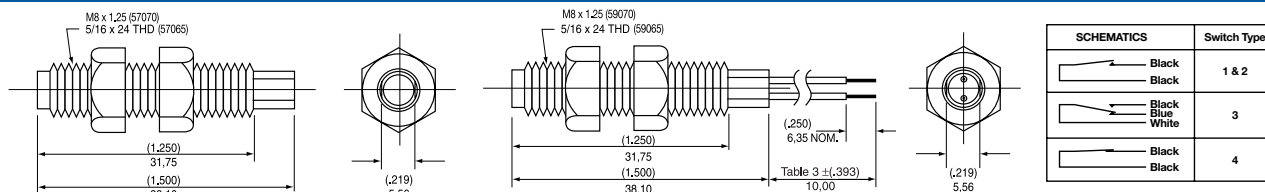
### Benefits

- Simple installation and adjustment using supplied retaining nuts
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium
- Simple installation and adjustment

### Applications

- Position and limit sensing
- Security system switch
- Linear actuators
- Industrial process control

## DIMENSIONS (in) mm



## CUSTOMER OPTIONS - Switching Specifications

| TABLE 1      |                  |                    | Normally Open | Normally Open High Voltage | Change Over | Normally Closed |
|--------------|------------------|--------------------|---------------|----------------------------|-------------|-----------------|
| Contact Type |                  |                    | 1             | 2                          | 3           | 4               |
| Switch Type  |                  |                    | 1             | 2                          | 3           | 4               |
| Power        | Power            | Watt - max.        | 10            | 10                         | 5           | 5               |
|              | Switching        | Vdc - max.         | 200           | 300                        | 175         | 175             |
| Voltage      | Breakdown        | Vdc - min.         | 250           | 450                        | 200         | 200             |
|              | Switching        | A - max.           | 0.5           | 0.5                        | 0.25        | 0.25            |
| Current      | Carry            | A - max.           | 1.2           | 1.5                        | 1.5         | 1.5             |
|              | Contact, Initial | $\Omega$ - max.    | 0.2           | 0.2                        | 0.2         | 0.2             |
| Resistance   | Insulation       | $\Omega$ - min.    | $10^{10}$     | $10^{10}$                  | $10^9$      | $10^9$          |
|              | Contact          | pF - typ.          | 0.3           | 0.2                        | 0.3         | 0.3             |
| Capacitance  | Operating        | $^{\circ}\text{C}$ | -40 to +105   | -20 to +105                | -40 to +105 | -40 to +105     |
|              | Storage          | $^{\circ}\text{C}$ | -65 to +105   | -65 to +105                | -65 to +105 | -65 to +105     |
| Temperature  | 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                                                                                                                                              |                  |                             |                  |                             |                  |                             |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------|------------------|-----------------------------|------------------|-----------------------------|------------------|
| <b>Sensitivity Options:-</b><br>Activate Distances are approximate using Hamlin 57065/57070 actuator as illustrated<br>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 |
| 1 Normally Open                                                                                                                                      | 12-18            | (354)                       | 17-23            | (276)                       | 22-28            | (236)                       | 27-33            |
| 2 High Voltage                                                                                                                                       |                  | 9.0                         | 7.0              | 7.0                         | 6.0              | (177)                       | 4.5              |
| 3 Change Over                                                                                                                                        | 15-20            | (295)                       | 20-25            | (236)                       | 25-30            | (197)                       |                  |
| 4 Normally Closed                                                                                                                                    |                  | 7.5                         | 6.0              | 6.0                         | 5.0              |                             |                  |

| TABLE 3                                                                        |                      | TABLE 4                      |                                           |
|--------------------------------------------------------------------------------|----------------------|------------------------------|-------------------------------------------|
| <b>Cable Type:-</b><br>24 AWG 7/32 PVC 105 $^{\circ}\text{C}$<br>UL1430/UL1569 |                      | <b>Termination Options:-</b> |                                           |
| Standard Lengths                                                               |                      | SELECT OPTION                | DESCRIPTION (2 WIRE VERSIONS ILLUSTRATED) |
| SELECT OPTION                                                                  | CABLE LENGTH (in) mm | A or F                       | Tinned or untinned leads                  |
| 01                                                                             | (3,94) 100           |                              |                                           |
| 02                                                                             | (11,81) 300          | C                            | 6.35mm fastons                            |
| 03                                                                             | (19,69) 500          | D                            | AMP MTE 2.54mm pitch                      |
| 04                                                                             | (29,53) 750          | E                            | JST XHP 2.5mm pitch                       |
| 05                                                                             | (39,37) 1000         |                              |                                           |

## ORDERING INFORMATION

N.B. 57065/57070 actuator sold separately

59065/59070 - X - X - XX - X

Series 59065/59070

Switch Type Table 1

Sensitivity Table 2

Cable Length Table 3

Termination Table 4

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