



Proximity switch, inductive, 1N/O,  $S_n=5\text{mm}$ , 3L, 6-48VDC, NPN, M18, metal, M12

**EATON**

Powering Business Worldwide™

Part no. **E57RAL18T110SD**  
 Article no. **136073**  
 Catalog No. **E57RAL18T110SD**

## Delivery programme

|                           |       |    |                            |
|---------------------------|-------|----|----------------------------|
| Basic function            |       |    | Inductive Sensors          |
| Product range             |       |    | E57 Premium+ Series        |
| Connection                |       |    | 3-wire                     |
| Design (outer dimensions) |       | mm | M18 x 1                    |
| Rated operational voltage | $U_e$ |    | 6 - 48 V DC                |
| Rated switching distance  | $S_n$ | mm | 5                          |
| Type of mounting          |       |    | Flush                      |
| Switching type            |       |    | NPN                        |
| For connection of:        |       |    | Plug-in connection M12 x 1 |
| <b>Contacts</b>           |       |    |                            |
| N/O = Normally open       |       |    | 1 N/O                      |
| Material                  |       |    | Stainless steel            |
| Degree of Protection      |       |    | IP67                       |

## Technical data

### General

|                             |  |   |                            |
|-----------------------------|--|---|----------------------------|
| Standards                   |  |   | IEC/EN 60947-5-2           |
| Ambient temperature         |  |   | -25 - +70                  |
| Mechanical shock resistance |  | g | 30<br>Shock duration 11 ms |
| Degree of Protection        |  |   | IP67                       |

### Characteristics

|  |       |     |                            |
|--|-------|-----|----------------------------|
| Rated switching distance   |       |     |                            |
| Rated switching distance   | $S_n$ | mm  | 5                          |
| Repetition accuracy of $S_n$   |       | %   | 1                          |
| Temperature drift of $S_n$   |       | %   | 10                         |
| Switching hysteresis of $S_n$  |       | %   | 15                         |
| Rated operational voltage  | $U_e$ |     | 6 - 48 V DC                |
| Maximum load current   | $I_e$ | mA  | < 5                        |
| Maximum load current   | $I_e$ | mA  | < 500 (6 - 30 V DC)        |
| Voltage drop at $I_e$  | $U_d$ | V   | 7                          |
| Switching Frequency  |       | Hz  | 500                        |
| Min. load current  | $I_e$ | mA  | 5                          |
| Residual current through the load in the blocked state at 230 V AC and 24 V DC | $I_r$ | mA  | 1.7                        |
| Switching state display  |       | LED | Red                        |
| Connection   |       |     | 3-wire                     |
| Contacts   |       |     |                            |
| N/O = Normally open  |       |     | 1 N/O                      |
| Style  |       |     |                            |
| Design (outer dimensions)  |       | mm  | M18 x 1                    |
| For connection of:   |       |     | Plug-in connection M12 x 1 |
| Material   |       |     | Stainless steel            |

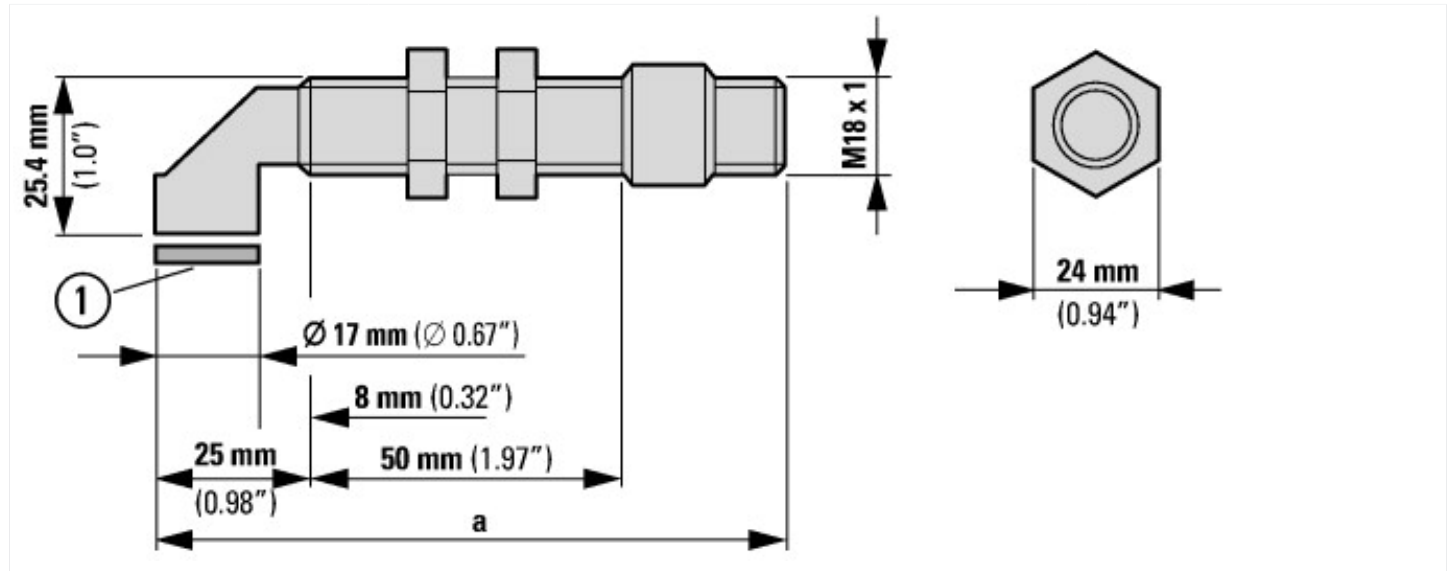
## Design verification as per IEC/EN 61439

|  |  |    |     |
|--|--|----|-----|
| Technical data for design verification |  |    |     |
| Operating ambient temperature min.     |  | °C | -25 |
| Operating ambient temperature max.     |  | °C | 70  |

## Approvals

|                             |  |   |
|-----------------------------|--|---|
| Product Standards           |  | UL 508; IEC60947-5-2; CE marking                    |
| UL File No.                 |  | E166051   |
| UL Category Control No.     |  | NRKH, NRKH7   |
| North America Certification |  | UL listed   |
| Max. Voltage Rating         |  | 48 V DC   |
| Degree of Protection        |  | IEC: IP67, IP69K; UL/CSA Type: 4, 4x, 6, 6P, 12, 13 |

## Dimensions



① Sensor surface

## Additional product information (links)

### IL05301003Z Premium Plus Series Inductive Sensors +Short, +Miniature

IL05301003Z Premium Plus Series Inductive Sensors +Short, +Miniature [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL05301003Z2013\\_02.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05301003Z2013_02.pdf)