



Proximity switch, E57 Premium+ Series, 1 NC, 3-wire, 6 - 48 V DC, M18 x 1 mm, S<sub>n</sub>= 12 mm, Semi-shielded, PNP, Stainless steel, 2 m connection cable

**Part no.** E57-18LE12-B1  
**Catalog No.** 135942  
**Alternate Catalog No.** E57-18LE12-B1

### Delivery program

|                           |                |    |                      |
|---------------------------|----------------|----|----------------------|
| Basic function            |                |    | Inductive Sensors    |
| Product range             |                |    | E57 Premium+ Series  |
| Connection                |                |    | 3-wire               |
| Design (outer dimensions) |                | mm | M18 x 1              |
| Rated operational voltage | U <sub>e</sub> |    | 6 - 48 V DC          |
| Rated switching distance  | S <sub>n</sub> | mm | 12                   |
| Type of mounting          |                |    | Semi-shielded        |
| Switching type            |                |    | PNP                  |
| For connection of:        |                |    | 2 m connection cable |
| <b>Contacts</b>           |                |    |                      |
| N/C = Normally closed     |                |    | 1 NC                 |
| 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 <sub>n</sub> | mm  | 12                   |
| Repetition accuracy of S <sub>n</sub>                                          |                | %   | 3                    |
| Temperature drift of S <sub>n</sub>                                            |                | %   | 10                   |
| Switching hysteresis of S <sub>n</sub>                                         |                | %   | 15                   |
| Rated operational voltage                                                      | U <sub>e</sub> |     | 6 - 48 V DC          |
| Operating current in the switched state at 24 V DC                             | I <sub>b</sub> | mA  | 10                   |
| Maximum load current                                                           | I <sub>e</sub> | mA  | < 500 (6 - 30 V DC)  |
| Voltage drop at I <sub>e</sub>                                                 | U <sub>d</sub> | V   | 2.5                  |
| Switching Frequency                                                            |                | Hz  | 500                  |
| Residual current through the load in the blocked state at 230 V AC and 24 V DC | I <sub>r</sub> | mA  | 0.1                  |
| Switching state display                                                        |                | LED | Red                  |
| Connection                                                                     |                |     | 3-wire               |
| Contacts                                                                       |                |     |                      |
| N/C = Normally closed                                                          |                |     | 1 NC                 |
| Style                                                                          |                |     |                      |
| Design (outer dimensions)                                                      |                | mm  | M18 x 1              |
| For connection of:                                                             |                |     | 2 m connection cable |
| 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  |

## Technical data ETIM 7.0

Sensors (EG000026) / Inductive proximity switch (EC002714)

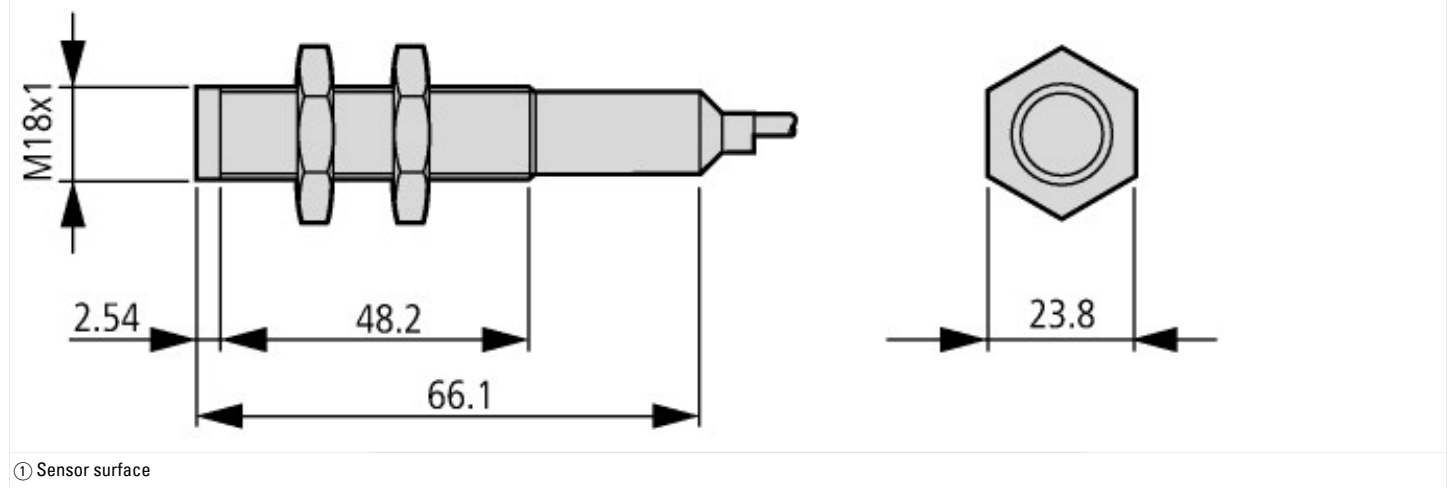
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Inductive proximity switch (ec@ss10.0.1-27-27-01-01 [AGZ376015])

|                                                              |    |                        |
|--------------------------------------------------------------|----|------------------------|
| Width sensor                                                 | mm | 0                      |
| Height of sensor                                             | mm | 0                      |
| Length of sensor                                             | mm | 66.1                   |
| Diameter sensor                                              | mm | 18                     |
| Mechanical mounting condition for sensor                     |    | Concise                |
| Switching distance                                           | mm | 12                     |
| Suitable for safety functions                                |    | No                     |
| Type of switch function                                      |    | Breaker contact        |
| Type of switching output                                     |    | PNP                    |
| Type of electric connection                                  |    | Cable                  |
| Number of semiconductor outputs with signalling function     |    | 1                      |
| Number of contact energized outputs with signalling function |    | 0                      |
| Number of protected semiconductor outputs                    |    | 0                      |
| Number of protected contact energized outputs                |    | 0                      |
| Type of actuation                                            |    | Metallic Target        |
| Type of interface                                            |    | None                   |
| Type of interface for safety communication                   |    | None                   |
| Construction type housing                                    |    | Cylinder, screw-thread |
| Coating housing                                              |    | Other                  |
| Cascadable                                                   |    | No                     |
| Category according to EN 954-1                               |    | B                      |
| SIL according to IEC 61508                                   |    | None                   |
| Performance level acc. EN ISO 13849-1                        |    | None                   |
| Max. output current at protected output                      | mA | 0                      |
| Supply voltage                                               | V  | 6 - 48                 |
| Rated control supply voltage Us at AC 50HZ                   | V  | 0 - 0                  |
| Rated control supply voltage Us at AC 60HZ                   | V  | 0 - 0                  |
| Rated control supply voltage Us at DC                        | V  | 6 - 48                 |
| Voltage type                                                 |    | DC                     |
| Switching frequency                                          | Hz | 800                    |
| With monitoring function downstream switching devices        |    | No                     |
| Material housing                                             |    | Metal                  |
| Compression-resistant                                        |    | No                     |
| Explosion safety category for gas                            |    | None                   |
| Explosion safety category for dust                           |    | None                   |
| Interference resistance to magnetic fields                   |    |                        |

## Approvals

|                      |  |                                                     |
|----------------------|--|-----------------------------------------------------|
| Product Standards    |  | none                                                |
| CSA File No.         |  | none                                                |
| CSA Class No.        |  | none                                                |
| Max. Voltage Rating  |  | 48 V DC                                             |
| Degree of Protection |  | IEC: IP67, IP69K; UL/CSA Type: 4, 4x, 6, 6P, 12, 13 |

## Dimensions



## Assets (links)

### Declaration of CE Conformity

00003158

### Instruction Leaflets

IL05301003Z2018\_05

## 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/IL05301003Z2018\\_05.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05301003Z2018_05.pdf)