



Proximity switch, inductive, 1N/O, Sn=8mm, 3L, 10-30VDC, NPN, M18, metal, M12

**Part no.** E57-18GU08-CDB  
**Catalog No.** 135936  
**Eaton Catalog No.** E57-18GU08-CDB

## Delivery program

|                           |       |    |                            |
|---------------------------|-------|----|----------------------------|
| Basic function            |       |    | Inductive Sensors          |
| Product range             |       |    | E57 Global Series          |
| Connection                |       |    | 3-wire                     |
| Design (outer dimensions) |       | mm | M18 x 1                    |
| Rated operational voltage | $U_e$ |    | 10 - 30 V DC               |
| Rated switching distance  | $S_n$ | mm | 8                          |
| Type of mounting          |       |    | Non-flush                  |
| Switching type            |       |    | NPN                        |
| For connection of:        |       |    | Plug-in connection M12 x 1 |
| <b>Contacts</b>           |       |    |                            |
| N/O = Normally open       |       |    | 1 N/O                      |
| Material                  |       |    | Metal                      |
| Degree of Protection      |       |    | IP67, IP69K                |

## 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, IP69K                |

### Characteristics

|  |       |     |   |
|--|-------|-----|---|
| Rated switching distance   |       |     |   |
| Rated switching distance   | $S_n$ | mm  | 8   |
| Repetition accuracy of $S_n$   |       | %   | 1   |
| Temperature drift of $S_n$   |       | %   | 10  |
| Switching hysteresis of $S_n$  |       | %   | 15  |
| Rated operational voltage  | $U_e$ |     | 10 - 30 V DC  |
| Residual ripple of $U_e$   |       | %   | 10  |
| Maximum load current   | $I_e$ | mA  | < 100   |
| Operating current in the switched state at 24 V DC                             | $I_b$ | mA  | 20  |
| Voltage drop at $I_e$  | $U_d$ | V   | 1.5   |
| Switching Frequency  |       | Hz  | 500   |
| Residual current through the load in the blocked state at 230 V AC and 24 V DC | $I_r$ | mA  | 0.01  |
| Switching state display  |       | LED | Red   |
| Protective functions   |       |     | Short-circuit protective device<br>Protection against polarity reversal<br>Protection against wire breakage |
| 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   |       |     | Metal   |

## 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 (ecl@ss10.0.1-27-27-01-01 [AGZ376015]) |  |    |                        |
| Width sensor  |  | mm | 0                      |
| Height of sensor  |  | mm | 0                      |
| Length of sensor  |  | mm | 76                     |
| Diameter sensor   |  | mm | 18                     |
| Mechanical mounting condition for sensor  |  |    | Not flat               |
| Switching distance  |  | mm | 8                      |
| Suitable for safety functions   |  |    | No                     |
| Type of switch function   |  |    | Normally open contact  |
| Type of switching output  |  |    | NPN                    |
| Type of electric connection   |  |    | Connector M12          |
| Type of electric connection   |  |    | Plug-in connection M12 |
| 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  | 10 - 30                |
| 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  | 10 - 30                |
| Voltage type  |  |    | DC                     |
| Voltage type  |  |    | DC                     |
| Switching frequency   |  | Hz | 500                    |
| 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           |  |  | UL 508; CSA-C22.2 No. 14; IEC60947-5-2; CE marking |
| UL File No.                 |  |  | CSA report applies to both Canada and US           |
| UL Category Control No.     |  |  | -  |
| CSA File No.                |  |  | 224447   |
| CSA Class No.               |  |  | 4652-04 / 4652-84                                  |
| North America Certification |  |  | CSA certified, certified by CSA for use in the US  |

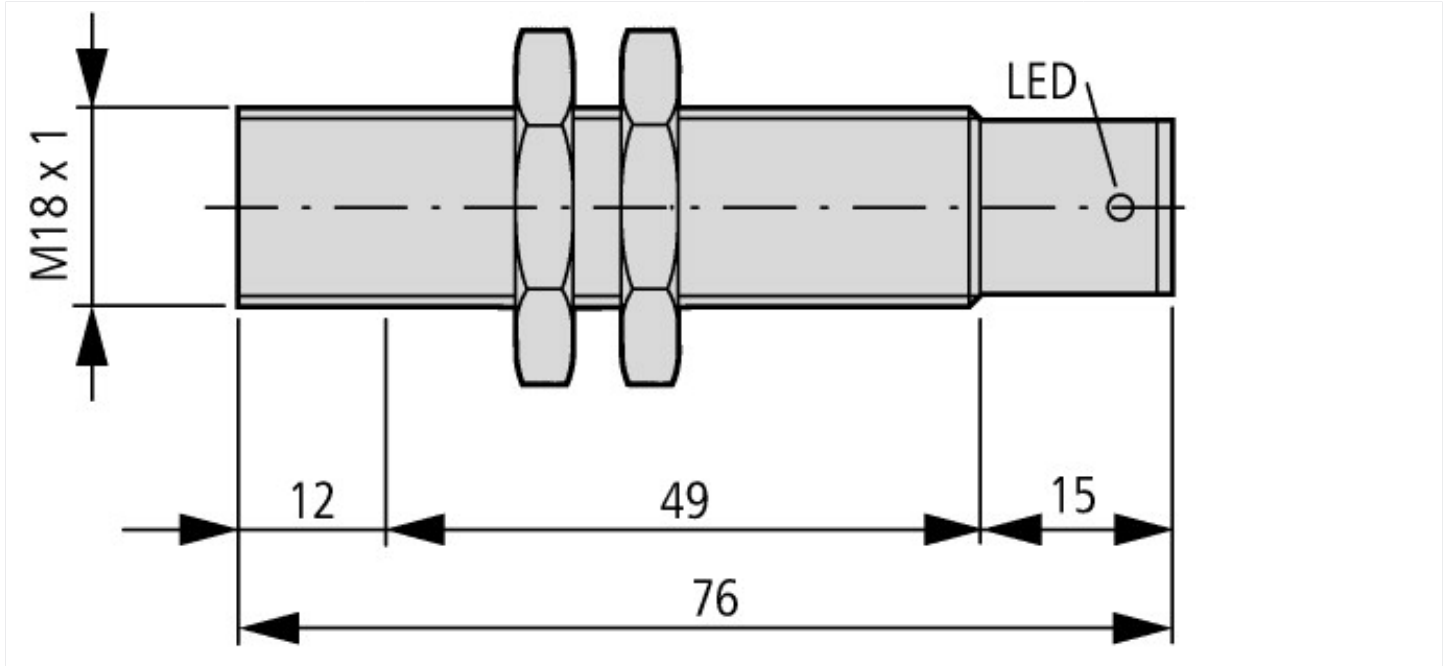
Max. Voltage Rating

30 V DC

Degree of Protection

IEC: IP67, IP69K; UL/CSA Type: -

## Dimensions



## Additional product information (links)

IL05301002Z Global Series Inductive Sensors

IL05301002Z Global Series Inductive Sensors [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL05301002Z2018\\_05.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05301002Z2018_05.pdf)