



Proximity switch, inductive, 1N/O, Sn=2mm, 3L, 10-30VDC, PNP, M12, insulated material, line 2m

**Part no.** E55CAL12T111  
**Catalog No.** 135820  
**Alternate Catalog No.** E55CAL12T111

## Delivery program

|                           |       |    |                               |
|---------------------------|-------|----|-------------------------------|
| Basic function            |       |    | Inductive Sensors             |
| Product range             |       |    | E55 Limit Switch Style Series |
| Connection                |       |    | 3-wire                        |
| Design (outer dimensions) |       | mm | M12 x 1                       |
| Rated operational voltage | $U_e$ |    | 10 - 30 V DC                  |
| Rated switching distance  | $S_n$ | mm | 2                             |
| Type of mounting          |       |    | Flush                         |
| Switching type            |       |    | PNP                           |
| For connection of:        |       |    | 2 m connection cable          |
| <b>Contacts</b>           |       |    |                               |
| N/O = Normally open       |       |    | 1 N/O                         |
| Material                  |       |    | Insulated material            |
| Degree of Protection      |       |    | IP66                          |

## 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        |  |   | IP66                       |

### Characteristics

|  |       |     |   |
|--|-------|-----|---|
| Rated switching distance                           |       |     |   |
| Rated switching distance                           | $S_n$ | mm  | 2   |
| Repetition accuracy of $S_n$                       |       | %   | 10  |
| Temperature drift of $S_n$                         |       | %   | 10  |
| Switching hysteresis of $S_n$                      |       | %   | 20  |
| Rated operational voltage                          | $U_e$ |     | 10 - 30 V DC  |
| Supply frequency                                   |       |     | 50 - 60   |
| Residual ripple of $U_e$                           |       | %   | 10  |
| Maximum load current                               | $I_e$ | mA  | < 200   |
| Operating current in the switched state at 24 V DC | $I_b$ | mA  | 3   |
| Voltage drop at $I_e$                              | $U_d$ | V   | 8   |
| Switching Frequency                                |       | Hz  | 2000  |
| Switching state display                            |       | LED | Red   |
| Protective functions                               |       |     | Short-circuit protective device<br>Protection against polarity reversal |
| Connection   |       |     | 3-wire  |
| Contacts   |       |     |   |
| N/O = Normally open                                |       |     | 1 N/O   |
| Style  |       |     |   |
| Design (outer dimensions)                          |       | mm  | M12 x 1   |
| For connection of:                                 |       |     | 2 m connection cable  |
| Material   |       |     | Insulated material  |

## Design verification as per IEC/EN 61439

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

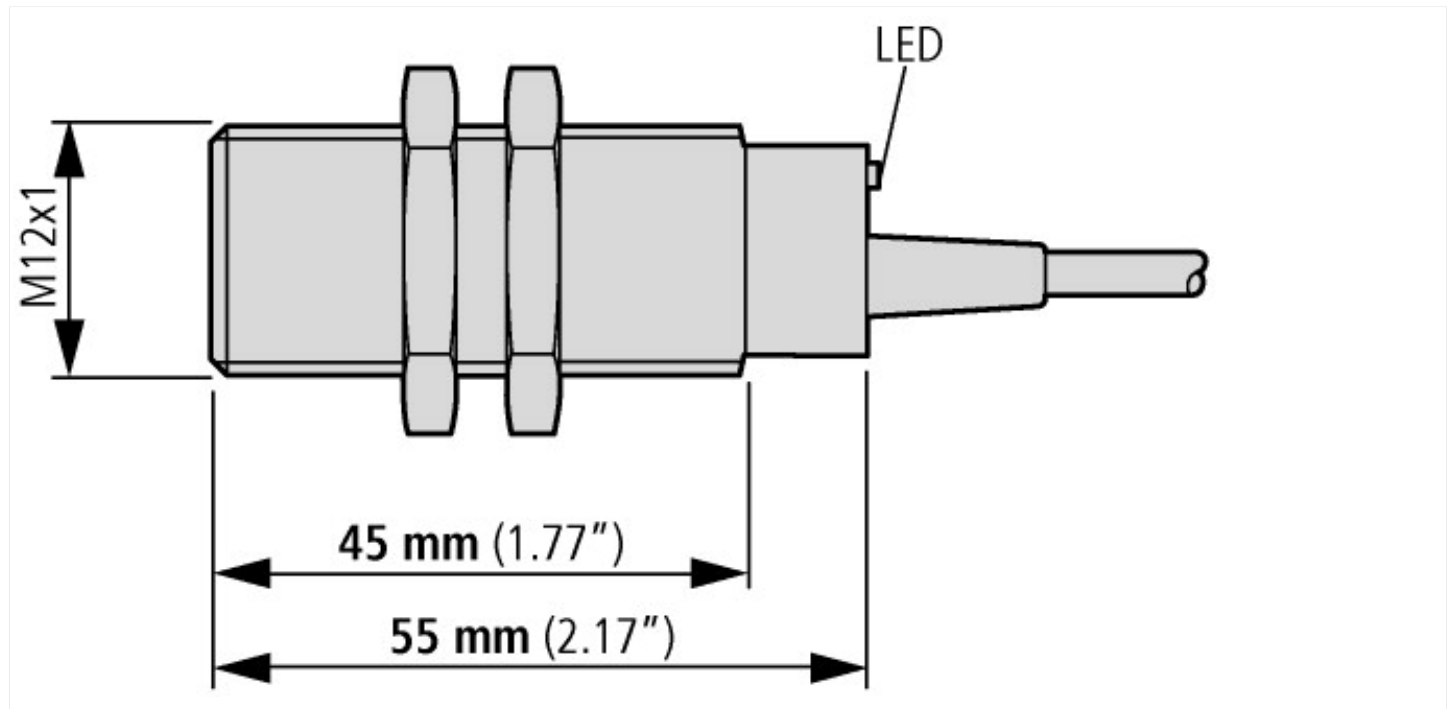
## Technical data ETIM 7.0

|   |    |                        |
|---|----|------------------------|
| 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 | 55                     |
| Diameter sensor   | mm | 12                     |
| Mechanical mounting condition for sensor  |    | Concise                |
| Switching distance  | mm | 2                      |
| Suitable for safety functions   |    | No                     |
| Type of switch function   |    | Normally open 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  | 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                     |
| Switching frequency   | Hz | 2000                   |
| With monitoring function downstream switching devices   |    | No                     |
| Material housing  |    | Plastic                |
| Compression-resistant   |    | No                     |
| Explosion safety category for gas   |    | None                   |
| Explosion safety category for dust  |    | None                   |
| Interference resistance to magnetic fields  |    |                        |

## Approvals

|                      |  |                                   |
|----------------------|--|-----------------------------------|
| Product Standards    |  | CE marking                        |
| Max. Voltage Rating  |  | 30 V DC                           |
| Degree of Protection |  | IEC: IP66; UL/CSA: NEMA 4, 4X, 13 |

## Dimensions



## Assets (links)

### Declaration of CE Conformity

00003158

### Instruction Leaflets

IL05301005Z2018\_05

## Additional product information (links)

### IL05301005Z E55 Series Barrel-Style Inductive Sensors

IL05301005Z E55 Series Barrel-Style Inductive Sensors [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL05301005Z2018\\_05.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05301005Z2018_05.pdf)