#### **DATASHEET - E55CBL12A2E**



Proximity switch, inductive, 1 N/C, Sn=4mm, 2L, 20-250VAC, M12, insulated material, line 2m



Part no. E55CBL12A2E Catalog No. 135835 Alternate Catalog E55CBL12A2E

|  | gram |
|--|------|
|  |      |
|  |      |
|  |      |

| Basic function            |                |    | Inductive Sensors             |
|---------------------------|----------------|----|-------------------------------|
| Product range             |                |    | E55 Limit Switch Style Series |
| Connection                |                |    | 2-wire                        |
| Design (outer dimensions) |                | mm | M12 x 1                       |
| Rated operational voltage | U <sub>e</sub> |    | 20 - 250 V AC                 |
| Rated switching distance  | S <sub>n</sub> | mm | 4                             |
| Type of mounting          |                |    | Non-flush                     |
| For connection of:        |                |    | 2 m connection cable          |
| Contacts                  |                |    |                               |
| N/C = Normally closed     |                |    | 1 NC                          |
| Material                  |                |    | Insulated material            |
| Degree of Protection      |                |    | IP66                          |

IEC/EN 60947-5-2

#### **Technical data**

#### **General** Standards

| 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  | 4   |
| Repetition accuracy of S <sub>n</sub>              |                | %   | 10  |
| Temperature drift of $S_n$                         |                | %   | 10  |
| Switching hysteresis of $S_n$                      |                | %   | 20  |
| Rated operational voltage                          | U <sub>e</sub> |     | 20 - 250 V AC   |
| Supply frequency                                   |                |     | 50 - 60   |
| Residual ripple of $U_{\rm e}$                     |                | %   | 10  |
| Maximum load current                               | l <sub>e</sub> | mA  | < 150   |
| Operating current in the switched state at 24 V DC | Ib             | mA  | 3   |
| Voltage drop at I <sub>e</sub>                     | $U_{d}$        | V   | 10  |
| Switching Frequency                                |                | Hz  | 25  |
| Switching state display                            |                | LED | Red   |
| Protective functions                               |                |     | Short-circuit protective device<br>Protection against polarity reversal |
| Connection   |                |     | 2-wire  |
| Contacts   |                |     |   |
| N/C = Normally closed                              |                |     | 1 NC  |
| Style  |                |     |   |
| Design (outer dimensions)                          |                | mm  | M12 x 1   |
| For connection of:                                 |                |     | 2 m connection cable  |
|  |                |     |   |

# Design verification as per IEC/EN 61439

Material

Insulated material

| Operating ambient temperature min. | °C | -25 |
|------------------------------------|----|-----|
| Operating ambient temperature max. | °C | 70  |

# **Technical data ETIM 7.0**

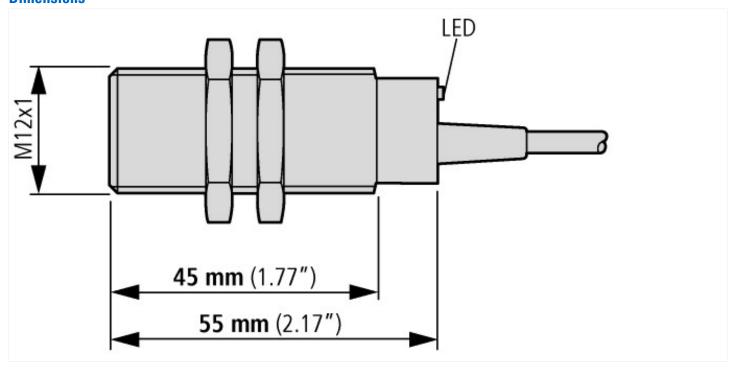
| Sensors (EG000026) / Inductive proximity switch (EC002714)   |
|--|
| Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Inductive proximity switch |

| Electric engineering, automation, process control engineering / Binary sensor tech (ecl@ss10.0.1-27-27-01-01 [AGZ376015]) | nology, safety- | related se | ensor technology / Proximity switch / Inductive proximity switch |
|---|-----------------|------------|--|
| Width sensor  |                 | mm         | 0  |
| Height of sensor  |                 | mm         | 0  |
| Length of sensor  |                 | mm         | 55   |
| Diameter sensor   |                 | mm         | 12   |
| Mechanical mounting condition for sensor  |                 |            | Not flat   |
| Switching distance  |                 | mm         | 4  |
| Suitable for safety functions   |                 |            | No   |
| Type of switch function   |                 |            | Breaker contact  |
| Type of switching output  |                 |            | Two-wire   |
| 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  |                 |            | В  |
| SIL according to IEC 61508  |                 |            | None   |
| Performance level acc. EN ISO 13849-1   |                 |            | None   |
| Max. output current at protected output   |                 | mA         | 0  |
| Supply voltage  |                 | ٧          | 20 - 250   |
| Rated control supply voltage Us at AC 50HZ  |                 | V          | 20 - 250   |
| Rated control supply voltage Us at AC 60HZ  |                 | V          | 20 - 250   |
| Rated control supply voltage Us at DC   |                 | V          | 0 - 0  |
| Voltage type  |                 |            | AC   |
| Switching frequency   |                 | Hz         | 25   |
| 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  | 250 V AC                          |
| 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

Sensors

 $IL05301005Z\ E55\ Series\ Barrel-Style\ Inductive \\ tfp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL05301005Z2018\_05.pdf$