#### **DATASHEET - E53KBL34T110**



Proximity switch, capacitive, Sn=25mm, 1 N/C, 3L, NPN, M34, insulated material, line 2m



Part no. E53KBL34T110
Catalog No. 134817
Alternate Catalog No. E53KBL34T110
No.

| livery |  |
|--------|--|
|        |  |

| Basic function            |                |    | Capacitive sensors    |
|---------------------------|----------------|----|-----------------------|
| Product range             |                |    | E53 Capacitive Series |
| Connection                |                |    | 3-wire                |
| Design (outer dimensions) |                | mm | 34 Ø                  |
| Rated operational voltage | U <sub>e</sub> |    | 10 - 30 V DC          |
| Rated switching distance  | $S_n$          | mm | 25                    |
| Type of mounting          |                |    | Flush                 |
| Switching type            |                |    | NPN                   |
| For connection of:        |                |    | 2 m connection cable  |
| Contacts                  |                |    |                       |
| N/C = Normally closed     |                |    | 1 NC                  |
| Material                  |                |    | Insulated material    |
| Degree of Protection      |                |    | IP65                  |

# **Technical data**

#### General

| Standards                   |   | IEC/EN 60947-5-2-EMC       |
|-----------------------------|---|----------------------------|
| Ambient temperature         |   | -25 - +70                  |
| Mechanical shock resistance | g | 30<br>Shock duration 11 ms |
| Degree of Protection        |   | IP65                       |

|                                |                |     | Snock duration 11 ms |
|--------------------------------|----------------|-----|----------------------|
| Degree of Protection           |                |     | IP65                 |
| Characteristics                |                |     |                      |
| Rated switching distance       |                |     |                      |
| Rated switching distance       | $S_n$          | mm  | 25                   |
| Repetition accuracy of $S_n$   |                | %   | 10                   |
| Temperature drift of $S_n$     |                | %   | 10                   |
| Switching hysteresis of $S_n$  |                | %   | 20                   |
| Rated operational voltage      | U <sub>e</sub> |     | 10 - 30 V DC         |
| Residual ripple of $U_{\rm e}$ |                | %   | 10                   |
| Maximum load current           | le             | mA  | < 300                |
| Switching Frequency            |                | Hz  | 250                  |
| Switching state display        |                | LED | Red                  |
| Connection                     |                |     | 3-wire               |
| Contacts                       |                |     |                      |
| N/C = Normally closed          |                |     | 1 NC                 |
| Style                          |                |     |                      |
| Design (outer dimensions)      |                | mm  | 34 Ø                 |
| 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**

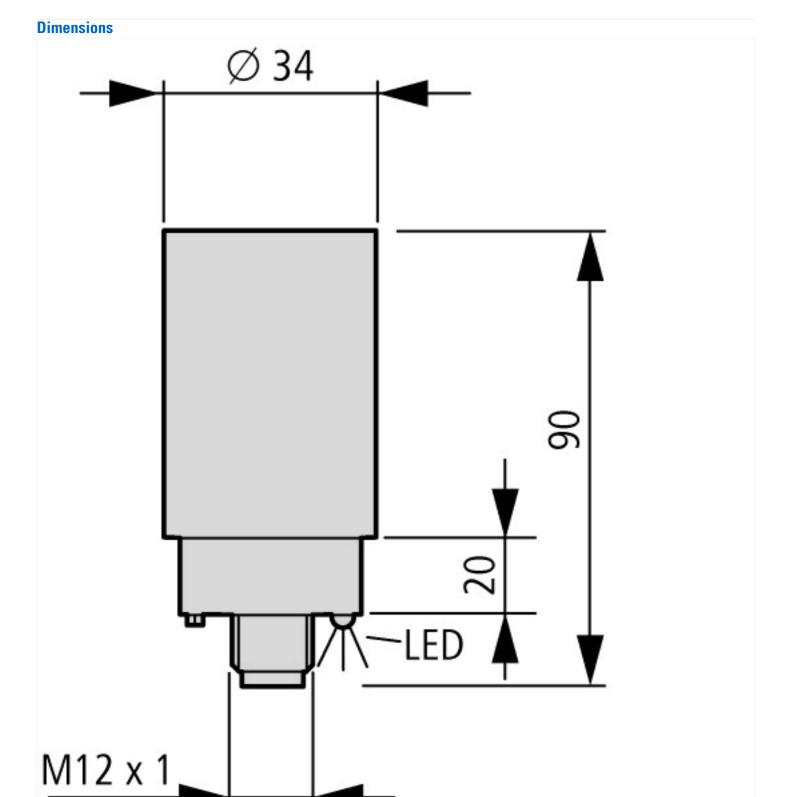
Sensors (EG000026) / Capacitive proximity switch (EC002715)

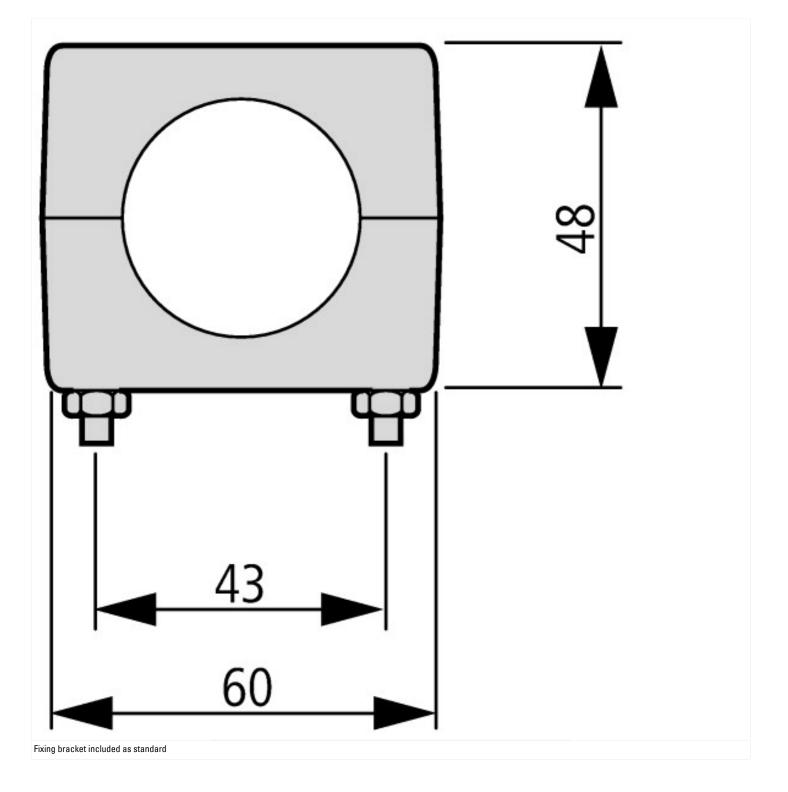
Electric engineering, automation, process control engineering / Binary sensor technology, safety-related sensor technology / Proximity switch / Capacitive proximity switch

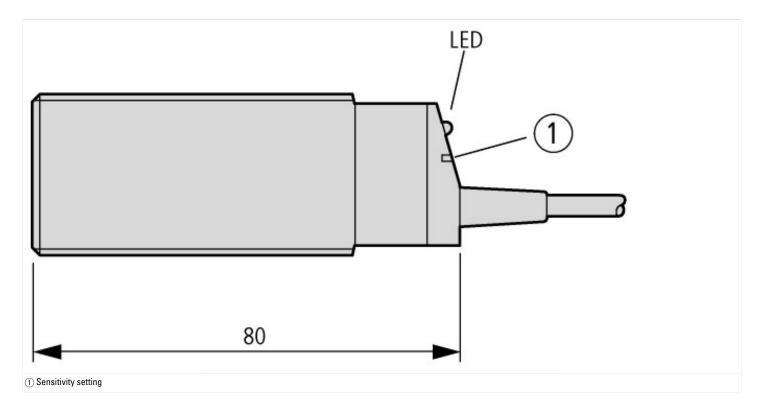
| Electric engineering, automation, process control engineering / Binary sensor techn (ecl@ss10.0.1-27-27-01-02 [AGZ377015]) | nology, safety-relat | ited sen | ssor technology / Proximity switch / Capacitive proximity switch |
|--|----------------------|----------|--|
| Width sensor   | mm                   | n        | 0  |
| Height of sensor   | mm                   | m I      | 0  |
| Length of sensor   | mm                   | m :      | 80   |
| Diameter sensor  | mm                   | m :      | 34   |
| Mechanical mounting condition for sensor   |                      |          | Concise  |
| Switching distance   | mm                   | m :      | 25   |
| Suitable for safety functions  |                      |          | No   |
| Type of switch function  |                      |          | Breaker contact  |
| Type of switching output   |                      |          | NPN  |
| 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  |                      |          | Other  |
| Type of interface  |                      |          | None   |
| Type of interface for safety communication   |                      |          | None   |
| Construction type housing  |                      |          | Cylinder plain   |
| 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                   | 4        | 0  |
| Supply voltage   | V                    |          | 10 - 30  |
| Rated control supply voltage Us at AC 50HZ   | V                    | ı        | 0 - 0  |
| Rated control supply voltage Us at AC 60HZ   | V                    | ı        | 0 - 0  |
| Rated control supply voltage Us at DC  | V                    |          | 10 - 30  |
| Voltage type   |                      |          | DC   |
| Switching frequency  | Hz                   | : :      | 250  |
| With monitoring function downstream switching devices  |                      |          | No   |
| With status indication   |                      | ,        | Yes  |
| Material housing   |                      |          | Plastic  |
| Compression-resistant  |                      |          | No   |
| Explosion safety category for gas  |                      |          | None   |
| Explosion safety category for dust   |                      |          | None   |

# Approvals

| Product Standards    | ( | CE marking                        |
|----------------------|---|-----------------------------------|
| Max. Voltage Rating  | 2 | 250 V AC, 30 V DC                 |
| Degree of Protection | I | IEC: IP65; UL/CSA: NEMA 4, 12, 13 |







### **Assets (links)**

**Declaration of CE Conformity** 

00003141

**Instruction Leaflets** 

IL05307002Z2018\_05

### **Additional product information (links)**

IL05307002Z E53 Series Capacitive Sensors

IL05307002Z E53 Series Capacitive Sensors

ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL05307002Z2018\_05.pdf