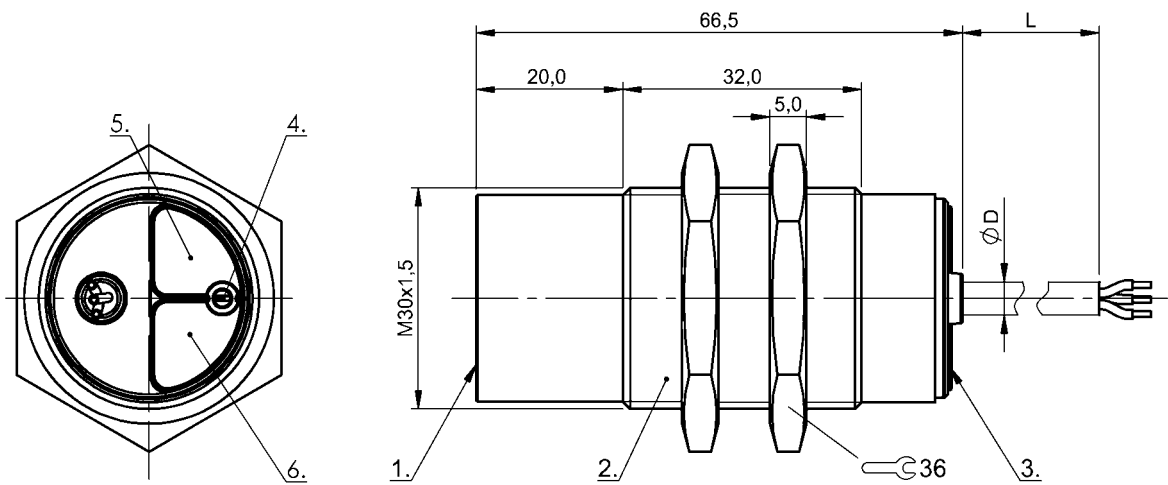


Capacitive Sensors  
BCS M30BBE1-PSC25H-EP02  
Order Code: BCS00NT



1) Sensing surface, 2) Housing, 3) Cover, 4) Potentiometer, 5) LED Power, 6) LED function indicator



Basic features

|                     |                               |
|---------------------|-------------------------------|
| Approval/Conformity | CE<br>UKCA<br>cULus<br>WEEE   |
| Basic standard      | IEC 60947-5-2                 |
| Scope of delivery   | Nut (2x)                      |
| Sensitivity         | Switching distance adjustable |
| Series              | M30                           |
| Trademark           | Global                        |

Display/Operation

|                    |     |
|--------------------|-----|
| Function indicator | yes |
| Power indicator    | yes |

Electrical connection

|                                   |          |
|-----------------------------------|----------|
| Cable diameter D                  | 4.60 mm  |
| Cable length L                    | 2 m      |
| Conductor cross-section           | 0.34 mm² |
| Number of conductors              | 3        |
| Polarity reversal protected       | yes      |
| Protection against device mix-ups | no       |
| Short-circuit protection          | yes      |

Electrical data

|   |             |
|---|-------------|
| No-load current I <sub>0</sub> max. at U <sub>e</sub> | 20 mA       |
| Operating voltage U <sub>b</sub>                      | 10...30 VDC |
| Protection class                                      | II          |
| Rated insulation voltage U <sub>i</sub>               | 75 V DC     |
| Rated operating current I <sub>e</sub>                | 100 mA      |
| Rated operating voltage U <sub>e</sub> DC             | 24 V        |
| Ready delay t <sub>v</sub> max.                       | 300 ms      |
| Ripple max. (% of U <sub>e</sub> )                    | 10 %        |
| Switching frequency                                   | 100 Hz      |
| Utilization category                                  | DC -13      |
| Voltage drop static max.                              | 1.5 V       |

Environmental conditions

|                     |             |
|---------------------|-------------|
| Ambient temperature | -25...85 °C |
| IP rating           | IP67        |

Functional safety

|              |       |
|--------------|-------|
| MTTF (40 °C) | 226 a |
|--------------|-------|

Interface

|                  |                        |
|------------------|------------------------|
| Switching output | PNP normally open (NO) |
|------------------|------------------------|

| Material                 |     |
|--------------------------|-----|
| Cover material           | PBT |
|                          | PA  |
| Housing material         | PBT |
| Material jacket          | PUR |
| Material sensing surface | PBT |

| Range/Distance                   |                   |
|----------------------------------|-------------------|
| Hysteresis H max. (% of Sr)      | 15.0 %            |
| Measuring range                  | 1...25 mm         |
| Rated operating distance Sn      | 25 mm             |
| Repeat accuracy max. (% of Sr)   | 2.0 %             |
| Temperature drift max. (% of Sr) | 20 % [-5...55 °C] |

| Mechanical data   |                |
|-------------------|----------------|
| Dimension         | Ø 30 x 65.5 mm |
| Installation      | non-flush      |
| Size              | M30x1.5        |
| Thread (A)        | M30x1.5        |
| Tightening torque | 6 Nm           |

**Remarks**

The potentiometer does not have a fixed stop, but can be turned endlessly without destroying anything.  
If no change in the switching signal is detected, the potentiometer should be turned forwards or backwards until a signal change occurs at the output.  
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Wiring Diagrams

