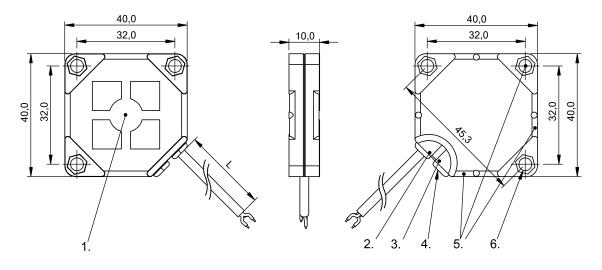
## Capacitive Sensors BCS Q40BBAA-GPCFHC-EP02 Order Code: BCS0133





1) Sensing surface, 2) Power indicator green, 3) Function indicator yellow, 4) Potentiometer, 5) Fastening: Cable tie, 6) Fastening: screw 3xM3

**Electrical data** 

# 

## **Basic features**

| Eddlo lottelloo                   |                                   |                               |                         |
|-----------------------------------|-----------------------------------|-------------------------------|-------------------------|
| Additional features               | Electrically conductive media     | Load capacitance max. at Ue   | 10 µF                   |
|                                   | Foam and residue compensation     | No-load current lo max. at Ue | 11.0 mA                 |
| Approval/Conformity               | CE                                | Operating voltage Ub          | 1030 VDC                |
|                                   | cULus                             | Rated insulation voltage Ui   | 75 V DC                 |
|                                   | EAC                               | Rated operating current le    | 100 mA                  |
|                                   | WEEE                              | Rated operating voltage Ue DC | 24 V                    |
| Basic standard                    | IEC 60947-5-2                     | Ready delay tv max.           | 200 ms                  |
| Scope of delivery                 | Installation guide<br>Screwdriver | Ripple max. (% of Ue)         | 10 %                    |
| Sensitivity                       | media-dependent, adjustable       | Switching frequency           | 10 Hz                   |
| Series                            | O40                               | Utilization category          | DC -13                  |
| Selles                            | Q40                               | Voltage drop static max.      | 2.5 V                   |
| Display/Operation                 |                                   | Environmental conditior       |                         |
| Function indicator                | ves                               | Environmental condition       | 15                      |
| Power indicator                   | ves                               | Ambient temperature           | -585 °C                 |
|                                   | 2                                 | Contamination scale           | 3                       |
| Electrical connection             |                                   | IP rating                     | IP67                    |
| Cable diameter D                  | 3.00 mm                           | Functional safety             |                         |
| Cable length L                    | 2 m                               |                               |                         |
| Conductor cross-section           | 0.14 mm <sup>2</sup>              | MTTF (40 °C)                  | 441 a                   |
| Number of conductors              | 3                                 |                               |                         |
| Polarity reversal protected       | yes                               | Interface                     |                         |
| Protection against device mix-ups | yes                               | Switching output              | PNP/NPN/push-pull NO/NC |
|                                   |                                   |                               |                         |

Programmable

Short-circuit protection

yes

## Capacitive Sensors BCS Q40BBAA-GPCFHC-EP02 Order Code: BCS0133



#### Material

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

#### **Mechanical data**

| Dimension                        | 40 x 40 x 10 mm                 |
|----------------------------------|---------------------------------|
| Installation                     | flush with container outer wall |
| Size                             | Block style                     |
|                                  |                                 |
| Range/Distance                   |                                 |
| Temperature drift max. (% of Sr) | 20 % [-555 °C]                  |
|                                  |                                 |

### Remarks

Note for using in standard applications with aqueous media: The Smart Level sensors are factory adjusted for standard applications. With this setting the Smart Level sensors can be used without further adjustment for detecting aqueous media through glass or plastic walls. The factory setting can automatically mask glass or plastic walls (approx. 0.5 mm to 6 mm) and compensate for foam, moisture and dirt buildup inside and outside the container. Special applications: The Smart Level sensors can also be used with aqueous media in previously unsolvable and critical applications such as through glass or plastic walls thicker than 6 mm. Here the user can change the factory setting.

The push-pull switching outputs must not be connected in parallel.

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.

