



## Electrical data

|                                           |             |
|-------------------------------------------|-------------|
| Load capacitance max. at Ue               | 10 µF       |
| No-load current I <sub>o</sub> max. at Ue | 12 mA       |
| Operating voltage U <sub>b</sub>          | 10...30 VDC |
| Rated insulation voltage U <sub>i</sub>   | 75 V DC     |
| Rated operating current I <sub>e</sub>    | 50 mA       |
| Rated operating voltage U <sub>e</sub> DC | 24 V        |
| Ready delay t <sub>v</sub> max.           | 100 ms      |
| Ripple max. (% of U <sub>e</sub> )        | 10 %        |
| Switching frequency                       | 5 Hz        |
| Utilization category                      | DC -13      |
| Voltage drop static max.                  | 2 V         |

## Environmental conditions

|                     |                                            |
|---------------------|--------------------------------------------|
| Ambient temperature | -5...105 °C, UL approval valid up to 85 °C |
| Contamination scale | 3                                          |
| IP rating           | IP67, sensing surface: IP68 10 bar         |

## Functional safety

MTTF (40 °C) 135 a

Switching output PNP/NPN NO/NC codable

Capacitive Sensors  
BCS S44KK01-GPCFAG-EP02  
Order Code: BCS010L



Material

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

Mechanical data

|                   |                |
|-------------------|----------------|
| Dimension         | Ø 12 x 62.5 mm |
| Installation      | non-flush      |
| Size              | M12x1          |
| Thread (A)        | M12x1          |
| Tightening torque | 1.5 Nm         |

Remarks

NO/NC function depends on the polarity.

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. The factory setting can compensate for foam, moisture and dirt buildup. Special applications: The sensors with Smart Level FSA technology can also be used with aqueous media in previously unsolvable and critical applications. Here the user can change the factory setting .

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

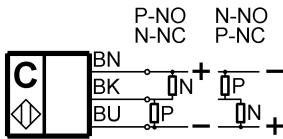
The potentiometer does not have a fixed stop, but can be turned endlessly without destroying anything.

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.

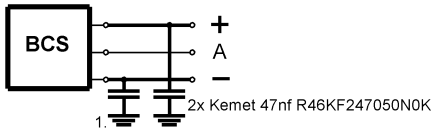
For more information about MTTF and B10d see MTTF / B10d Certificate

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.

Wiring Diagrams (Schematic)



Installation remarks



1) Machine GND