

1) Sensing surface, 2) Housing, 3) Cover



**Basic features**

|                            |                                   |
|----------------------------|-----------------------------------|
| <b>Approval/Conformity</b> | CE<br>UKCA<br>WEEE<br>FCM         |
| <b>Basic standard</b>      | IEC 60947-5-2                     |
| <b>Scope of delivery</b>   | Nut<br>Screwdriver<br>Short guide |
| <b>Sensitivity</b>         | media-dependent, adjustable       |
| <b>Series</b>              | S01                               |

**Display/Operation**

|                           |     |
|---------------------------|-----|
| <b>Function indicator</b> | yes |
| <b>Power indicator</b>    | no  |

**Electrical connection**

|  |     |
|--|-----|
| <b>Polarity reversal protected</b>       | yes |
| <b>Protection against device mix-ups</b> | yes |
| <b>Short-circuit protection</b>          | yes |

**Electrical data**

|   |             |
|---|-------------|
| <b>Load capacitance max. at Ue</b>              | 10 µF       |
| <b>No-load current I<sub>o</sub> max. at Ue</b> | 15 mA       |
| <b>Operating voltage U<sub>b</sub></b>          | 10...35 VDC |
| <b>Rated insulation voltage U<sub>i</sub></b>   | 75 V DC     |
| <b>Rated operating current I<sub>e</sub></b>    | 100 mA      |
| <b>Rated operating voltage U<sub>e</sub> DC</b> | 24 V        |
| <b>Ready delay t<sub>v</sub> max.</b>           | 300 ms      |
| <b>Residual current I<sub>r</sub> max.</b>      | 200 µA      |
| <b>Ripple max. (% of U<sub>e</sub>)</b>         | 10 %        |
| <b>Switching frequency</b>                      | 5 Hz        |
| <b>Utilization category</b>                     | DC -13      |
| <b>Voltage drop static max.</b>                 | 2.7 V       |

**Environmental conditions**

|                            |                                    |
|----------------------------|------------------------------------|
| <b>Ambient temperature</b> | -30...125 °C                       |
| <b>Contamination scale</b> | 2                                  |
| <b>IP rating</b>           | IP67, sensing surface: IP68 10 bar |

**Functional safety**

|                     |       |
|---------------------|-------|
| <b>MTTF (40 °C)</b> | 873 a |
|---------------------|-------|

**Interface**

|                         |                        |
|-------------------------|------------------------|
| <b>Switching output</b> | PNP normally open (NO) |
|-------------------------|------------------------|

Capacitive Sensors  
**BCS S01T401-PSCFNG-KM16-T02**  
Order Code: BCS006H

**BALLUFF**

**Material**

|                          |  |
|--------------------------|--|
| Cover material           | Aluminium, Die casting                       |
| Housing material         | 1.4305 stainless steel,<br>Connection thread |
| Material sensing surface | PTFE   |

**Mechanical data**

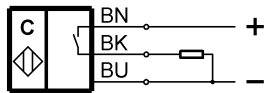
|                      |                      |
|----------------------|----------------------|
| Dimension            | 54.8 x 48.5 x 106 mm |
| Installation         | non-flush            |
| Pressure rating max. | 10 bar               |
| Thread (A)           | M18x1                |
| Tightening torque    | 1.5 Nm               |

**Remarks**

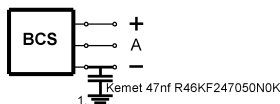
The potentiometer does not have a fixed stop, but can be turned endlessly without destroying anything.  
If no change in the switching signal is detected, the potentiometer should be turned forwards or backwards until a signal change occurs at the output.  
For more information about MTTF and B10d see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



**Installation remarks**



1) Machine GND