

1) Housing, 2) Sensing surface, 3) Cover, 4) Potentiometer, 5) Function indicator yellow, 6) Power indicator green



### Basic features

Additional features	Electrically conductive media Foam and residue compensation
Approval/Conformity	CE UKCA WEEE cULus
Basic standard	IEC 60947-5-2
Scope of delivery	Screwdriver Short guide
Sensitivity	media-dependent, adjustable
Series	S44

### 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 mm <sup>2</sup>
Number of conductors	3
Polarity reversal protected	no
Protection against device mix-ups	no
Short-circuit protection	yes

### Electrical data

Load capacitance max. at U <sub>e</sub>	10 µF
No-load current I <sub>o</sub> max. at U <sub>e</sub>	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
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### Interface

Switching output	PNP/NPN NO/NC codable
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Capacitive Sensors  
**BCS S44KK03-GPCFAG-EP02**  
**Order Code: BCS010N**

**BALLUFF**

#### Material

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

#### Mechanical data

Dimension	Ø 13.7 x 62.5 mm
Installation	non-flush
Size	NPT 1/4"
Thread (A)	NPT 1/4"
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.

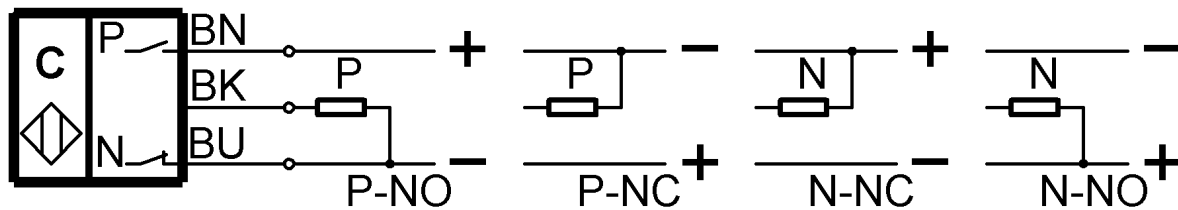
The potentiometer does not have a fixed stop, but can be turned endlessly without destroying anything.

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.

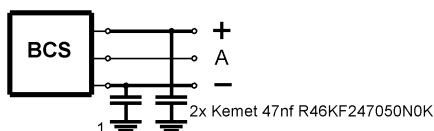
For more information about MTTF and B10d see MTTF / B10d Certificate

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



#### Installation remarks



1) Machine GND