

1) Sensing surface, 2) Housing, 3) Cover, 4) Potentiometer, 5) NO or NC selectable, 6) LED function indicator



Basic features

| | |
|---------------------|--|
| Approval/Conformity | CE cULus WEEE |
| Basic standard | IEC 60947-5-2 |
| Scope of delivery | Nut (2x) Short guide Screwdriver |
| Sensitivity | Switching distance adjustable |
| Series | M30 |

Display/Operation

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

Electrical connection

| | |
|-----------------------------------|----------------------|
| Cable length L | 2 m |
| Conductor cross-section | 0.34 mm ² |
| Number of conductors | 3 |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|-------------------------------------|-------------|
| No-load current I_0 max. at U_e | 18 mA |
| Operating voltage U_b | 10...35 VDC |
| Rated insulation voltage U_i | 75 V DC |
| Rated operating current I_e | 300 mA |
| Ripple max. (% of U_e) | 10 % |
| Switching frequency | 100 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 1.8 V |

Environmental conditions

| | |
|---------------------|--------------------------|
| Ambient temperature | -30...70 °C |
| Contamination scale | 1 |
| IP rating | IP66, IP64 at cable exit |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 455 a |
|--------------|-------|

Interface

| | |
|------------------|------------------------|
| Switching output | PNP NO/NC programmable |
|------------------|------------------------|

Material

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

Capacitive Sensors
BCS M30BBM3-PPC20C-EP02
Order Code: BCS004K



Mechanical data

| | |
|-------------------|--------------------|
| Dimension | Ø 30 x 82 mm |
| Installation | for flush mounting |
| Size | M30x1.5 |
| Thread (A) | M30x1.5 |
| Tightening torque | 4 Nm |

Range/Distance

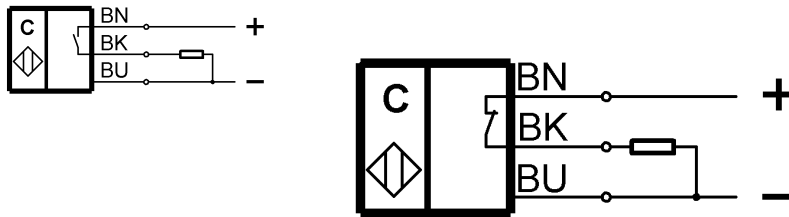
| | |
|---|-----------|
| Hysteresis H max. (% of Sr) | 15.0 % |
| Measuring range | 1...20 mm |
| Rated operating distance S _n | 20 mm |
| Repeat accuracy max. (% of Sr) | 5.0 % |
| Temperature drift max. (% of Sr) | 20 % |

Remarks

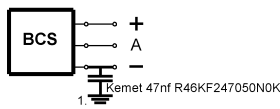
The potentiometer does not have a fixed stop, but can be turned endlessly without destroying anything.
 If no change in the switching signal is detected, the potentiometer should be turned forwards or backwards until a signal change occurs at the output.
 For more information about MTTF and B10d see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