



1) Sensing surface, 2) Housing, 3) Cover, 4) Potentiometer, 5) LED Power, 6) LED function indicator



Basic features

| | |
|---------------------|-------------------------------|
| Approval/Conformity | CE cULus EAC WEEE |
| Basic standard | IEC 60947-5-2 |
| Scope of delivery | Nut (2x) |
| Sensitivity | Switching distance adjustable |
| Series | M18 |
| Trademark | Global |

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 ² |
| Number of conductors | 3 |
| Polarity reversal protected | yes |
| Protection against device mix-ups | no |
| Short-circuit protection | yes |

Electrical data

| | |
|--------------------------------------|-------------|
| No-load current I_0 max., undamped | 13 mA |
| Operating voltage U_b | 10...30 VDC |
| Protection class | II |
| Rated insulation voltage U_i | 75 V DC |
| Rated operating current I_e | 100 mA |
| Rated operating voltage U_e DC | 24 V |
| Ready delay t_v max. | 300 ms |
| Ripple max. (% of U_e) | 10 % |
| Switching frequency | 100 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 1.5 V |

Environmental conditions

| | |
|---------------------|-------------|
| Ambient temperature | -25...85 °C |
| IP rating | IP67 |
| Storage temperature | -25...85 °C |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 226 a |
|--------------|-------|

Material

| | |
|--------------------------|-----|
| Cover material | PA |
| Housing material | PBT |
| Jacket material | PUR |
| Material sensing surface | PBT |

Capacitive Sensors
BCS M18BBH1-NSC15H-EP02
Order Code: BCS00LZ

BALLUFF

Mechanical data

| | |
|-------------------|----------------|
| Dimension | Ø 18 x 75.5 mm |
| Installation | non-flush |
| Size | M18x1 |
| Thread (A) | M18x1 |
| Tightening torque | 2 Nm |

Range/Distance

| | |
|-----------------------------------------|-------------------|
| Hysteresis H max. (% of Sr) | 15.0 % |
| Measuring range | 2...15 mm |
| Rated operating distance S _n | 15 mm |
| Repeat accuracy max. (% of Sr) | 2.0 % |
| Temperature drift max. (% of Sr) | 20 % [-5...55 °C] |

Output/Interface

| | |
|------------------|------------------------|
| Switching output | NPN normally open (NO) |
|------------------|------------------------|

Wiring Diagrams

