



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



### Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Scope of delivery	Nut (2x)
Sensitivity	Switching distance adjustable
Series	M12
Trademark	Global

### Display/Operation

Function indicator	yes
Power indicator	yes

### Electrical connection

Connection	M12x1-Male, 3-pin, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	no
Short-circuit protection	yes

### Electrical data

No-load current $I_0$ max. at $U_e$	20 mA
Operating voltage $U_b$	10...30 VDC
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
Contamination scale	2
IP rating	IP67

### Functional safety

MTTF (40 °C)	226 a
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### Interface

Switching output	PNP normally open (NO)
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### Material

Cover material	PBT PA
Housing material	1.4305 stainless steel
Material sensing surface	PBT

Capacitive Sensors  
**BCS M12B4E2-PSC80H-S04K**  
Order Code: BCS00P4

**BALLUFF**

**Mechanical data**

Dimension	Ø 12 x 75 mm
Installation	non-flush
Size	M12x1
Thread (A)	M12x1
Tightening torque	8 Nm

**Range/Distance**

Hysteresis H max. (% of Sr)	15.0 %
Measuring range	1...8 mm
Rated operating distance S <sub>n</sub>	8 mm
Repeat accuracy max. (% of Sr)	2.0 %
Temperature drift max. (% of Sr)	20 % [-5...55 °C]

**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.

**Connector Drawings**



**Wiring Diagrams**

