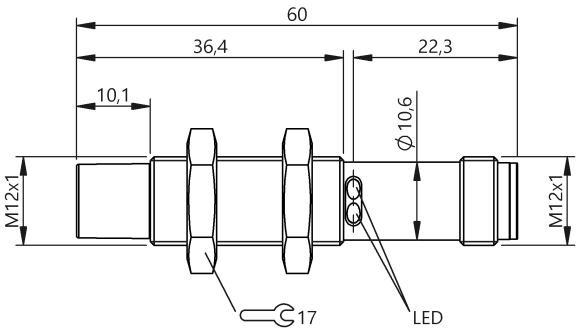
Capacitive Sensors

BCS M12K4D2-GOM80G-S04G
Order Code: BCS017A



Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2
Scope of delivery	2x nut M12x1 Installation guide
Sensitivity	Switching distance teachable
Series	M12

Display/Operation

Function indicator	yes
Power indicator	yes

Electrical connection

Connection	M12x1-Male, 4-pin, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	220 nF
No-load current Io max. at Ue	15 mA
Operating voltage Ub	12...30 VDC
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	100 mA
Rated operating voltage Ue DC	24 V
Ready delay tv max.	50 ms
Ripple max. (% of Ue)	10 %
Switching frequency	100 Hz
Utilization category	DC -13
Voltage drop static max.	2 V

Environmental conditions

Ambient temperature	-10...80 °C
Contamination scale	2
IP rating	IP67
Storage temperature	-25...80 °C

Functional safety

MTTF (40 °C)	96.6 a

Material

Cover material	PA 12
Housing material	Stainless steel (1.4404)
Material sensing surface	PEEK

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Mechanical data

Dimension	Ø 12 x 60 mm
Installation	non-flush
Size	M12x1
Thread (A)	M12x1
Tightening torque	8 Nm

Range/Distance

Hysteresis H max. (% of Sr)	15 %
Measuring range	0.5...8 mm
Rated operating distance Sn	8 mm
Repeat accuracy max. (% of Sr)	2 %
Temperature drift max. (% of Sr)	20 %

Output/Interface

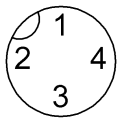
Switching output	Push-pull Normally closed (NC)

Remarks

For full calibration connect input DI to L+ for 2...7 seconds. For empty calibration connect to L+ for 7..12 seconds.
Input DI can be used for teaching the switching point. In normal operation input DI should be connected continuously to L-.
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