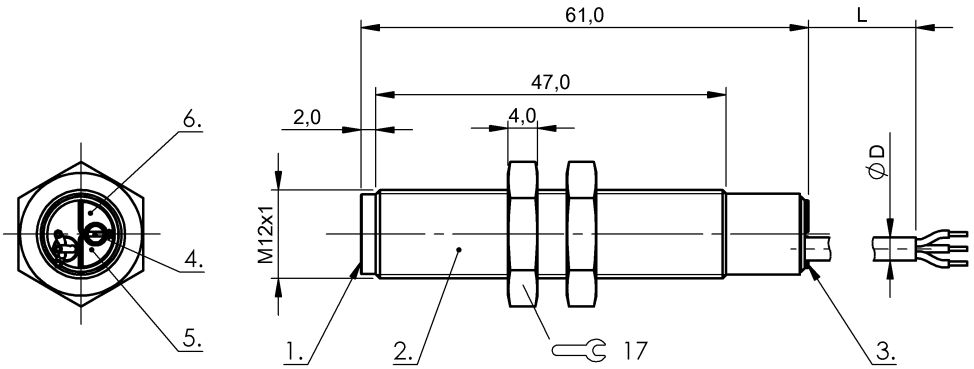
Capacitive Sensors

BCS M12BBI1-NSC40D-EP02
Order Code: BCS00PY



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

Cable diameter D	3.50 mm
Cable length L	2 m
Conductor cross-section	0.14 mm²
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	no
Short-circuit protection	yes

Electrical data

No-load current Io max. at Ue	20 mA
Operating voltage Ub	10...30 VDC
Protection class	II
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	100 mA
Rated operating voltage Ue DC	24 V
Ready delay tv max.	100 ms
Ripple max. (% of Ue)	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	1
IP rating	IP67

Functional safety

MTTF (40 °C)	343 a

Interface

Switching output	NPN normally open (NO)

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Material

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

Mechanical data

Dimension	Ø 12 x 61 mm
Installation	for flush mounting
Size	M12x1
Thread (A)	M12x1
Tightening torque	1 Nm

Range/Distance

Hysteresis H max. (% of Sr)	15.0 %
Measuring range	1...4 mm
Rated operating distance Sn	4 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.

Wiring Diagrams