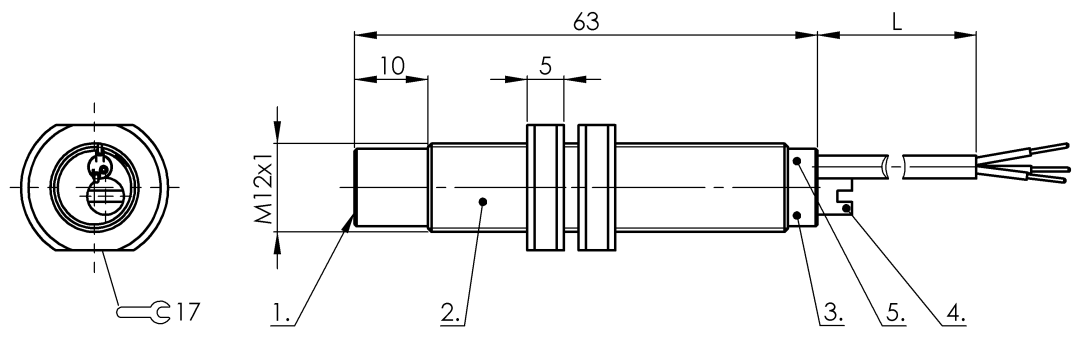


Capacitive Sensors  
BCS M12TTI1-POM60G-ET02-E  
Order Code: BCS009K

BALLUFF



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



Basic features

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

Electrical data

No-load current $I_o$ max. at $U_e$	15 mA
Operating voltage $U_b$	12...35 VDC
Rated insulation voltage $U_i$	75 V DC
Rated operating current $I_e$	200 mA
Rated operating voltage $U_e$ DC	24 V
Ripple max. (% of $U_e$ )	10 %
Switching frequency	25 Hz
Utilization category	DC -13
Voltage drop static max.	0.8 V

Display/Operation

Function indicator	yes
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Electrical connection

Cable diameter D	3.3 mm
Cable length L	2 m
Conductor cross-section	0.24 mm <sup>2</sup>
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Environmental conditions

Ambient temperature	-30...60 °C
Contamination scale	1
IP rating	IP65

Functional safety

MTTF (40 °C)	595 a
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Interface

Switching output	PNP normally closed (NC)
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Material

Cover material	PTFE
Housing material	PTFE
Material jacket	PTFE
Material sensing surface	PTFE

Mechanical data

Dimension	Ø 12 x 63 mm
Installation	non-flush
Size	M12x1
Thread (A)	M12x1
Tightening torque	0.5 Nm

Range/Distance

Hysteresis H max. (% of Sr)	15.0 %
Measuring range	1...6 mm
Rated operating distance Sn	6 mm
Repeat accuracy max. (% of Sr)	2.0 %
Temperature drift max. (% of Sr)	15 %

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

