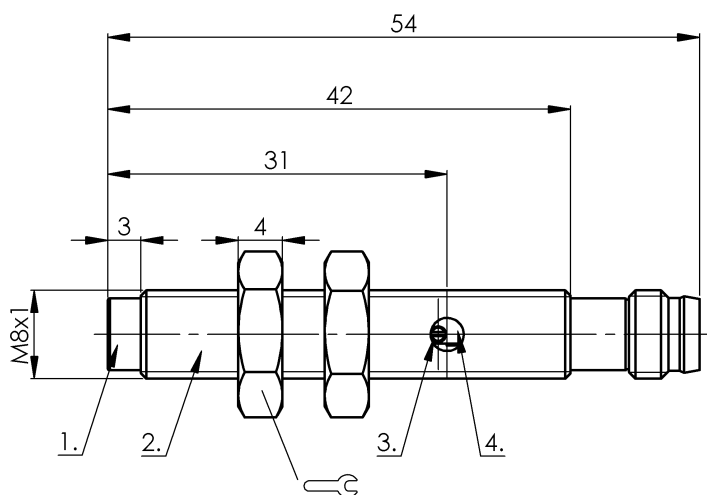


Capacitive Sensors  
BCS M08T4E2-NSM30G-S49G  
Order Code: BCS002P

BALLUFF



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



Basic features

Approval/Conformity	CE cULus WEEE UKCA
Basic standard	IEC 60947-5-2
Scope of delivery	Nut (2x) Screwdriver Short guide
Sensitivity	Switching distance adjustable
Series	M08

Display/Operation

Function indicator	yes
--------------------	-----

Electrical connection

Connection	M8x1-Male, 3-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

No-load current I <sub>o</sub> max. at U <sub>e</sub>	10 mA
Operating voltage U <sub>b</sub>	11...30 VDC
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	50 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Ripple max. (% of U <sub>e</sub> )	10 %
Switching frequency	100 Hz
Utilization category	DC -13
Voltage drop static max.	2 V

Environmental conditions

Ambient temperature	-10...70 °C
Contamination scale	2
IP rating	IP65

Functional safety

MTTF (40 °C)	444 a
--------------	-------

Interface

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

Material

Housing material	1.4301 stainless steel
Material sensing surface	PTFE

## Mechanical data

Dimension	Ø 8 x 54 mm
Installation	non-flush
Size	M8x1
Thread (A)	M8x1
Tightening torque	6 Nm

## Range/Distance

Hysteresis H max. (% of Sr)	15.0 %
Measuring range	0.1...3 mm
Rated operating distance Sn	3 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.

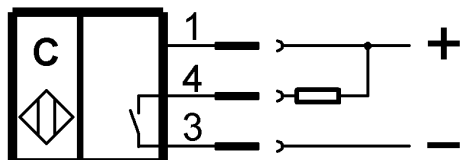
For more information about MTTF and B10d see MTTF / B10d Certificate

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.

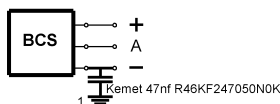
## Connector Drawings



## Wiring Diagrams



## Installation remarks



1) Machine GND