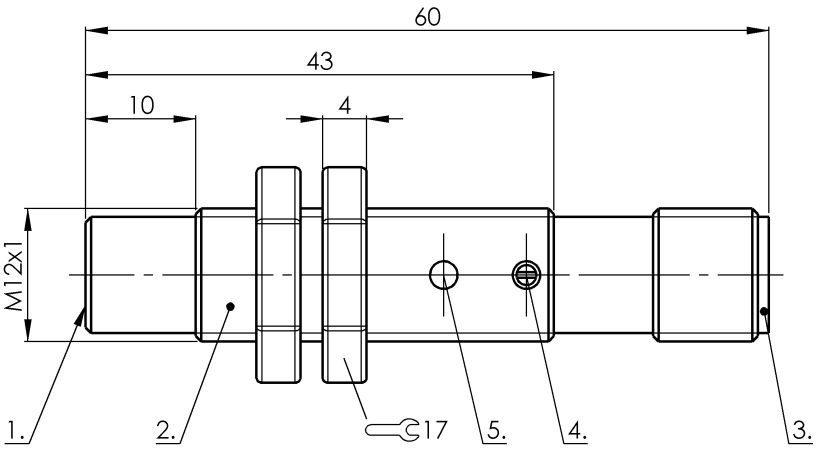
Capacitive Sensors

BCS M12T4D2-PSM80G-S04G
Order Code: BCS0062



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

Basic features

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

Display/Operation

Function indicator	yes

Electrical connection

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

Electrical data

No-load current Io max. at Ue	15 mA
Operating voltage Ub	12...35 VDC
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	10 %
Switching frequency	100 Hz
Utilization category	DC -13
Voltage drop static max.	1.5 V

Environmental conditions

Ambient temperature	-30...70 °C
Contamination scale	2
IP rating	IP65

Functional safety

MTTF (40 °C)	584 a

Interface

Switching output	PNP normally open (NO)

Material

Cover material	PA
Housing material	1.4301 stainless steel
Material sensing surface	PTFE

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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

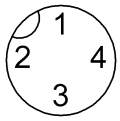
Hysteresis H max. (% of Sr)	15.0 %
Measuring range	1...8 mm
Rated operating distance Sn	8 mm
Repeat accuracy max. (% of Sr)	2.0 %
Temperature drift max. (% of Sr)	15 %

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 (Schematic)