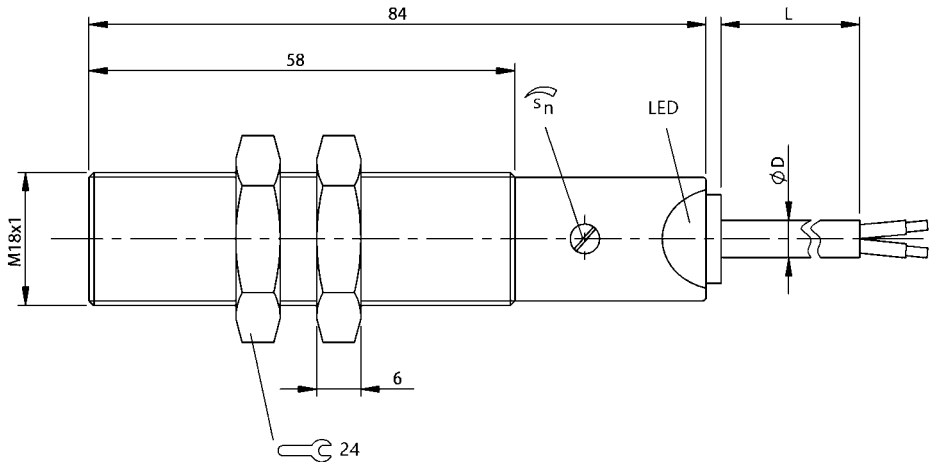


Capacitive Sensors  
BCS M18KM3-UST80G-BV02  
Order Code: BCS000K



Basic features

Approval/Conformity	WEEE UKCA cULus CE
Scope of delivery	Screwdriver 2x nut M18x1
Sensitivity	Switching distance adjustable
Series	M18

Display/Operation

Function indicator	yes
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Electrical connection

Cable diameter D	4.90 mm
Cable length L	2 m
Conductor cross-section	0.34 mm <sup>2</sup>
Number of conductors	2
Short-circuit protection	no

Electrical data

Operating voltage U <sub>b</sub>	20...250 VDC/20...250 VAC
Protection class	II
Rated insulation voltage U <sub>i</sub>	250 V AC
Rated operating current I <sub>e</sub>	100 mA
Rated operating current I <sub>e</sub> AC	150 mA
Rated operating voltage U <sub>e</sub> AC	110 V
Recommended K-type SCP	Miniature fuse in accordance with IEC60127-2 Sheet 1, ≤ 2 A (fast-acting).
Residual current max. at 110 V DC	1.7 mA
Residual current max. at 24 V DC	1.5 mA
Residual current max. at 250 V DC	2.5 mA
Switching frequency	50 Hz
Switching frequency (AC)	25 Hz
Utilization category	AC-140 DC -13
Voltage drop static max.	6 V

Environmental conditions

Ambient temperature	-25...80 °C
Contamination scale	3
IP rating	IP67

Functional safety

MTTF (40 °C)	334 a
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Interface

Switching output	normally open (NO)
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Material

Housing material	PBT
Material jacket	PVC
Material sensing surface	PBT

Mechanical data

Dimension	Ø 18 x 84 mm
Installation	non-flush
Size	M18x1

Range/Distance

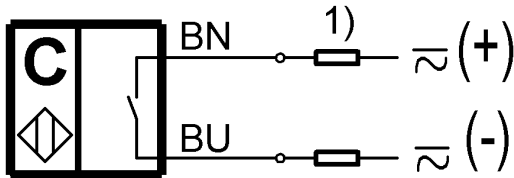
Hysteresis H max. (% of Sr)	15.0 %
Measuring range	0...6.5 mm
Rated operating distance Sn	8 mm
Real switching distance sr	8 mm
Temperature drift max. from end value	±15.0 %
Tolerance Sr	±10 %

Remarks

Recommendation: After a short circuit check the device for proper function.  
Ta 50°C...80°C: Ie= 350 - 6.7x(Ta-50)  
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



1) For SCP see electrical data