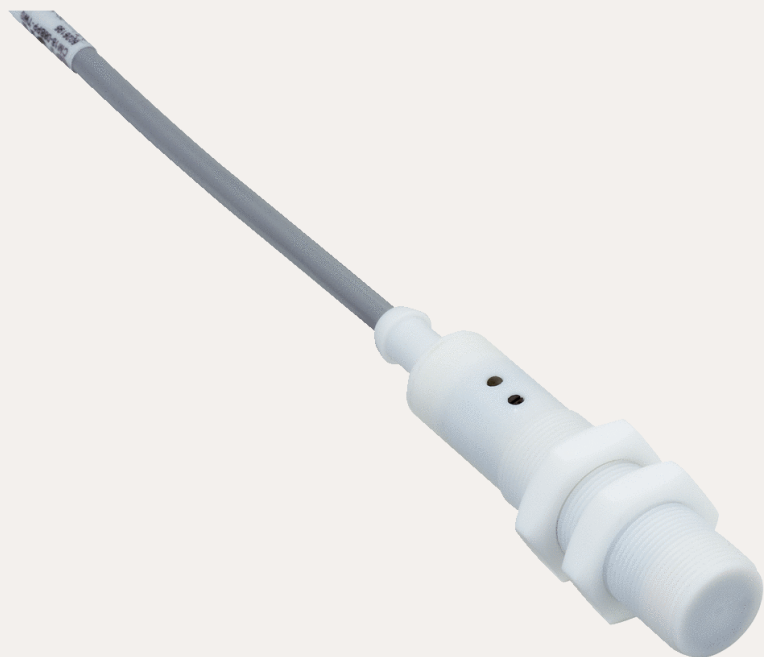




DATA SHEET

CM18-08BPP-TW0

CM
Capacitive proximity sensors

SICK Sensor Intelligence



Illustration may differ

CAPACITIVE PROXIMITY SENSORS

CM18-08BPP-TW0

ORDERING INFORMATION

Type	part no.
CM18-08BPP-TW0	6026195

Further device versions and accessories at www.sick.com/CM



DETAILED TECHNICAL DATA

FEATURES

Housing	Metric
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S _n	3 mm ... 8 mm
Safe sensing range S _a	5.76 mm
Installation type	Flush
Switching frequency	30 Hz
Connection type	Cable, 4-wire, 2 m ¹⁾
Switching output	PNP
Switching output detail	PNP
Output function	Complementary
Electrical wiring	DC 4-wire
Adjustment	Potentiometer
	Sensitivity (270°)
Enclosure rating	IP67 ²⁾
Items supplied	Mounting nut, PTFE plastic (2x) Screwdriver for potentiometer adjustment (1 x)

¹⁾ Do not bend below 0 °C.

²⁾ According to EN 60529.

MECHANICS/ELECTRONICS

Supply voltage	10 V DC ... 36 V DC
Ripple	$\leq 10\%$ ¹⁾
Voltage drop	$\leq 2.5\text{ V DC}$ ²⁾
Current consumption	10 mA ³⁾
Time delay before availability	$\leq 100\text{ ms}$
Hysteresis	4 % ... 20 %
Reproducibility	$\leq 5\%$ ⁴⁾ ⁵⁾
Temperature drift (of S _r)	$\pm 10\%$
EMC	According to EN 60947-5-2 ⁶⁾
Continuous current I _a	$\leq 200\text{ mA}$
Cable material	PVC
Conductor size	0.34 mm ²
Short-circuit protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-25 °C ... +60 °C
Housing material	PTFE coating, PTFE
Housing length	71.5 mm
Thread length	46.5 mm
Tightening torque, max.	$\leq 2.6\text{ Nm}$

¹⁾ Of Ub.²⁾ At I_a max.³⁾ Without load.⁴⁾ Of Sr.⁵⁾ Supply voltage U_s and constant ambient temperature Ta.⁶⁾ In EMC critical applications, conducted interference levels may lie within the frequency range of the oscillator. This can cause changes to the output signal. (See operating instructions.).**SAFETY-RELATED PARAMETERS**

MTTF _D	897 years
DC _{avg}	0 %
T _M (mission time)	20 years

REDUCTION FACTORS

Note	The values are reference values which may vary
Metal	1
Water	1
PVC	Approx. 0.4
Oil	Approx. 0.25
Glass	0.6
Ceramics	0.5
Alcohol	0.7
Wood	0.2 ... 0.7

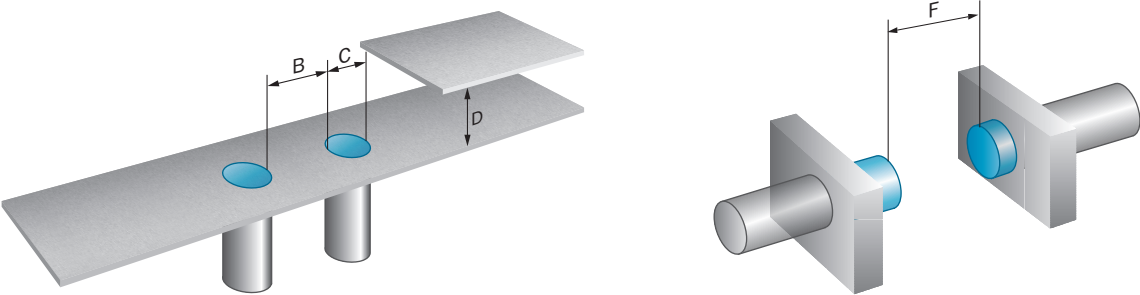
INSTALLATION NOTE

Remark	Associated graphic see "Installation"
B	18 mm
C	18 mm
D	24 mm

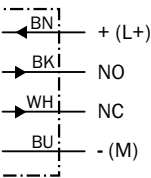
CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) ex-empt	✓

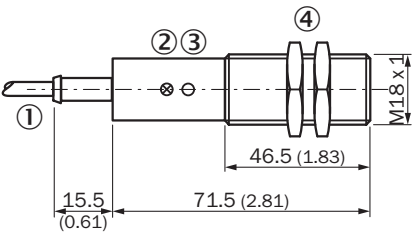
INSTALLATION NOTE FLUSH INSTALLATION



CONNECTION DIAGRAM CD-005



DIMENSIONAL DRAWING CM18 PTFE, FLUSH, CABLE



- Dimensions in mm (inch)
- ① Connection
 - ② Display LED
 - ③ Potentiometer
 - ④ fastening nuts (2 x); 34 mm hex, plastic

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6026195



SICK AG
WALDKIRCH
GERMANY
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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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