Product data sheet

CME30-10BPS-KW1

CME

CAPACITIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.

Ordering information

Type	Part no.
CME30-10BPS-KW1	6071158

Other models and accessories ➜ www.sick.com/CME

Detailed technical data

Features

Housing	Metric
Thread size	M30 x 1.5
Diameter	Ø 30 mm
Sensing range S_n	2 mm ... 10 mm
Safe sensing range S_a	7.2 mm
Installation type	Flush
Switching frequency	50 Hz
Connection type	Cable, 3-wire, 2 m [1]
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Adjustment	
Potentiometer	Sensitivity
Enclosure rating	IP67
Items supplied	Mounting nut, PA12 plastic (2x) Screwdriver for potentiometer adjustment (1 x)

[1] Do not bend below 0 °C.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % [1]
Voltage drop	≤ 2.5 V [2]
Current consumption	10 mA [3]

[1] Of Ub.
[2] With I max.
[3] Without load.
[4] Of Sr.
[5] Supply voltage U_B and constant ambient temperature Ta.
[6] In EMC critical applications, conducted interference levels may lie within the frequency range of the oscillator (0.6 MHz - 1.8 MHz). This can cause changes to the output signal.

Time delay before availability	≤ 200 ms
Hysteresis	4 % ... 20 %
Reproducibility	≤ 5 % [4) 5)]
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2 [6)]
Continuous current I_a	≤ 100 mA
Cable material	PVC
Conductor size	0.34 mm²
Cable diameter	Ø 5.2 mm
Short-circuit protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 3 pos., 3 neg. per axis, 10 ... 150 Hz, 1.0 mm / 15 g
Ambient operating temperature	–20 °C ... +80 °C
Ambient temperature, storage	–40 °C ... +80 °C
Housing material	Plastic, PBT
Housing length	79 mm
Thread length	50 mm
Tightening torque, max.	≤ 7.5 Nm
UL File No.	NRKH.E191603

[1)] Of Ub.
[2)] With I max.
[3)] Without load.
[4)] Of Sr.
[5)] Supply voltage U_B and constant ambient temperature Ta.
[6)] In EMC critical applications, conducted interference levels may lie within the frequency range of the oscillator (0.6 MHz - 1.8 MHz). This can cause changes to the output signal.

Safety-related parameters

$MTTF_D$	1,041 years
DC_{avg}	0 %
T_M (mission time)	20 years

Reduction factors

Note	The values are reference values which may vary
Metal	1
Water	0.95
PVC	Approx. 0.4
Oil	Approx. 0.25
Glass	0.5
Ceramics	0.5
Alcohol	0.85
Wood	0.2 ... 0.7

Installation note

Remark	Associated graphic see "Installation"

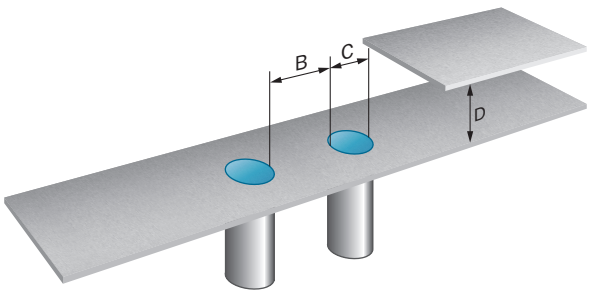
B	30 mm
C	30 mm
D	30 mm
F	60 mm

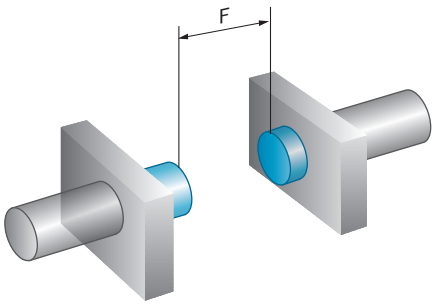
Classifications

ECLASS 5.0	27270102
ECLASS 5.1.4	27270102
ECLASS 6.0	27270102
ECLASS 6.2	27270102
ECLASS 7.0	27270102
ECLASS 8.0	27270102
ECLASS 8.1	27270102
ECLASS 9.0	27270102
ECLASS 10.0	27270102
ECLASS 11.0	27270102
ECLASS 12.0	27274201
ETIM 5.0	EC002715
ETIM 6.0	EC002715
ETIM 7.0	EC002715
ETIM 8.0	EC002715
UNSPSC 16.0901	39122230

Installation note

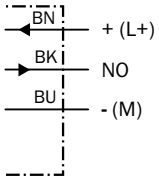
Flush installation





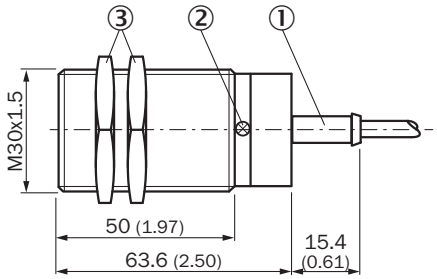
Connection diagram

Cd-001



Dimensional drawing (Dimensions in mm (inch))

CME30, flush, cable



① Connection
② LED yellow: status indicator
③ Fastening nuts (2 x); 36 mm hex, plastic

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com