



## CMB

Smart and rugged capacitive sensors

**SICK**  
Sensor Intelligence.

## Advantages



## Rugged, cost-efficient sensors for more complex applications as well

The CMB capacitive proximity sensors detect objects and levels regardless of color, reflectance and gloss of the surfaces. In the process, they detect powdery, granulated, liquid and solid materials – even through non-metallic walls made of plastic or glass, for example. On the one hand, the proven and resistant sensor technology supports high plant availability; on the other hand, the sensors are so flexible and provide such extensive measurement data that they can also be used in more complex applications.



Whether powdery, granulated, liquid or solid: All materials can be reliably detected.



The CMB proximity sensors detect objects regardless of reflectance and gloss of the surfaces.



Thanks to IO-Link, practical adjustment options and Smart Sensor functions, the CMB devices are also suitable for more complex applications.



**Resistant and suitable for countless applications: With an IO-Link interface, CMB capacitive proximity sensors offer many application options.**



## Smart Sensor technology

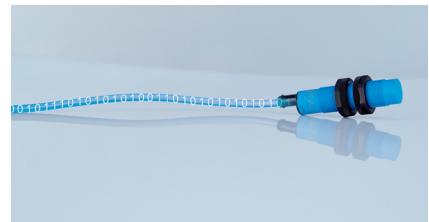
Thanks to IO-Link, the CMB capacitive proximity sensors can be configured and commissioned even faster. Their extended diagnostic options increase plant availability, and thanks to the IO-Link interface and Smart Sensor functions, the cost-efficient sensors also reliably solve complex tasks.



More applications, more data, more diagnostics: CMB devices clearly detect a wide variety of materials.



Rugged, reliable and easy to install: The sensor save money due to less machine downtime and quicker commissioning.



More extensive and easier diagnostics thanks to IO-Link interface.



**Attractive price-performance ratio, flexible and quick to commission: The CMB capacitive proximity sensors with IO-Link facilitate diagnostics and make it possible to reduce costs at many levels.**



## Very high machine availability, easy installation, easy replacement

The rugged CMB capacitive proximity sensors can be configured quickly and easily via potentiometer, cable or IO-Link. Their universal mounting systems and optical adjustment indicator also save time during commissioning and replacement. The sensors ensure high machine availability thanks to their very good electromagnetic compatibility (EMC).



High machine availability: The very good EMC of the rugged sensors prevents switching errors and reduces downtime.



Flexible use: The compact housing and universal mounting systems enable use in countless applications.



With potentiometer, cable or IO-Link: The CMB proximity sensors are quick and easy to set.



**Smart and fast: The CMB capacitive proximity sensor offer intuitive configuration. With potentiometer, cable or IO-Link**



## Technical data overview

<b>Housing</b>	Metric
<b>Thread size</b>	M18 x 1 M30 x 1.5
<b>Sensing range <math>S_n</math></b>	8 mm ... 25 mm (depending on type)
<b>Housing material</b>	Plastic
<b>Enclosure rating</b>	IP67, IP68, IP69K
<b>Connection</b>	Cable / male connector (depending on type)
<b>Electrical wiring</b>	DC 4-wire
<b>Communication interface</b>	IO-Link

## Product description

The CMB capacitive proximity sensors detect objects and levels regardless of color, reflectance and gloss of the surfaces. In the process, they detect powdery, granulated, liquid and solid materials – even through non-metallic walls made of plastic or glass, for example. The proven and rugged sensors are cost efficient and feature extremely high electromagnetic compatibility (EMC), which prevents switching errors and reduces downtime. Thanks to the IO-Link interface, different parameterizations can be performed and detailed data read out. This makes the CMB devices suitable for more complex applications and enables predictive maintenance.

## At a glance

- Cylindrical housing in M18 and M30 models
- Sensing ranges of up to 25 mm
- Enclosure rating: IP67, IP68, IP69K
- Temperature: -30 °C to +85 °C
- Visual adjustment indicator
- Available Smart Sensor: Enhanced Sensing, IO-Link, Diagnostics, Smart Tasks
- Adjustment of the switching point via potentiometer, cable or IO-Link
- Ecolab certified

## Your benefits

- Cost-effective sensors for classic and more complex applications
- Less machine downtime thanks to high shock and vibration resistance and numerous diagnostic options
- Stable processes thanks to very good EMC and precise switching point settings
- Quick installation thanks to visual adjustment indicator and universal mounting systems
- Optimization of stock thanks to diverse application options and various setting options via IO-Link
- Smart Sensors make machine processes quicker, more efficient and transparent and enable predictive maintenance as well as Industry 4.0 applications

## Fields of application

- Plastics industry: Detection of rubber and plastic granulates
- Beverage industry: Detection of bottle caps
- Packaging industry: Level measurement in primary packaging
- Wood-processing industry: Detection of wood on processing machines
- Solar and electronics industry: Detection of solar wafers

## Ordering information

Other models and accessories → [www.sick.com/CMB](http://www.sick.com/CMB)

- **Sensing range  $S_n$ :** 0 mm ... 8 mm
- **Installation type:** flush
- **Electrical wiring:** DC 4-wire
- **Switching output:** PNP
- **Output function:** Complementary
- **Smart Sensor:** Enhanced Sensing, efficient communication, diagnosis, Smart Task base logics

Connection type	Type	Part no.
Cable, 4-wire	CMB18-08BPPEW2SA00	6080637
Male connector M12, 4-pin	CMB18-08BPPECOSA00	6080638

- **Sensing range  $S_n$ :** 0 mm ... 12 mm
- **Installation type:** non-flush
- **Electrical wiring:** DC 4-wire
- **Switching output:** PNP
- **Output function:** Complementary
- **Smart Sensor:** Enhanced Sensing, efficient communication, diagnosis, Smart Task base logics

Connection type	Type	Part no.
Cable, 4-wire	CMB18-12NPPEW2SA00	6080639
Male connector M12, 4-pin	CMB18-12NPPECOSA00	6080640

- **Sensing range  $S_n$ :** 0 mm ... 16 mm
- **Installation type:** flush
- **Electrical wiring:** DC 4-wire
- **Switching output:** PNP
- **Output function:** Complementary
- **Smart Sensor:** Enhanced Sensing, efficient communication, diagnosis, Smart Task base logics

Connection type	Type	Part no.
Cable, 4-wire	CMB30-16BPPEW2SA00	6080641
Male connector M12, 4-pin	CMB30-16BPPECOSA00	6080642

- **Sensing range  $S_n$ :** 0 mm ... 25 mm
- **Installation type:** non-flush
- **Electrical wiring:** DC 4-wire
- **Switching output:** PNP
- **Output function:** Complementary
- **Smart Sensor:** Enhanced Sensing, efficient communication, diagnosis, Smart Task base logics

Connection type	Type	Part no.
Cable, 4-wire	CMB30-25NPPEW2SA00	6080643
Male connector M12, 4-pin	CMB30-25NPPECOSA00	6080644

## 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](http://www.sick.com)