

ENGLISH

Capacitive proximity sensor Operating instructions

Safety notes

- Read the operating instructions before commissioning.
Connection, mounting, and programming may only be performed by trained specialists.
When commissioning, protect the device from moisture and contamination.
Not a safety component in accordance with the EU Machinery Directive.

Correct use

Capacitive proximity sensors are suitable for detecting solid and liquid materials. This includes all metals and non-metallic substances.

Commissioning

A capacitive proximity sensor can detect metallic and non-metallic objects / media. The sensing range given for capacitive proximity sensors relates to a measuring plate of standardized steel (ST37). The required correction factor must be considered when using different objects.

Mount the proximity sensor on an appropriate bracket (such as a SICK mounting adapter). Apply the proximity sensor to operating voltage.

For the connector versions only:

Insert the female cable connector with the power off and fasten in place.

For the connecting cable versions only:

For connection in B, the following applies: bn = brown, bu = blue, bk = black, wh = white.

Connect the cables.

1) Pay attention to application conditions such as switching distance and mutual interference.

2) Configuration:

Configuring to the object / media:

- 1.) Position the object / media in front of the sensor.
2.) Turn the potentiometer clockwise until the yellow and green LEDs light up without flashing.
3.) You have successfully configured the constantly ON state.
Background subtraction
("Background" here covers any and all ambient conditions which are not directly related to the object / media)
1.) Place the sensor in the application location. The area in front of the sensor must be clear of objects / media.
2.) Turn the potentiometer clockwise until the yellow LED lights up, then turn it counterclockwise until the yellow LED goes out and the green LED lights up without flashing.
3.) You have successfully configured the constantly OFF state.

LED indication table with columns for Green LED, Yellow LED, ON, OFF, and description of sensor status.

Maintenance

SICK sensors do not require maintenance. We do, however, recommend that the following activities are undertaken regularly:

- Cleaning the external surfaces.
Checking screw connections and plug connectors.

DEUTSCH

Kapazitiver Nahrungssensor Betriebsanleitung

Sicherheitshinweise

- Vor der Inbetriebnahme die Betriebsanleitung lesen.
Anschluss, Montage und Einstellung nur durch Fachpersonal.
Gerat bei Inbetriebnahme vor Feuchte und Verunreinigung schutzen.
Kein Sicherheitsbauteil gema EU-Maschinenrichtlinie.

Bestimmungsgemae Verwendung

Kapazitive Nahrungssensoren eignen sich zum Erfassen von Materialien in fester und flussiger Form. Dazu gehoren alle Metalle und nicht-metallische Stoffe.

Inbetriebnahme

Ein kapazitiver Nahrungssensor erfasst metallische und nichtmetallische Objekte / Medien. Der angegebene Schaltabstand (S\_e) fur kapazitive Nahrungssensoren bezieht sich auf eine genormte Messplatte aus Stahl (ST37). Bei der Verwendung anderer Objekte ist der jeweilige Korrekturfaktor zu berucksichtigen.

Nur bei den Steckerversionen:
Leitungsdose spannungsfrei aufstecken und festschrauben.

Nur bei den Versionen mit Anschlussleitung:
Fur Anschluss in B gilt: bn = braun, bu = blau, bk = schwarz, wh = wei.

Leitungen anschlieen.
Einsatzbedingungen wie Schaltabstand und gegenseitige Beeinflussung beachten.

Einstellung:
Einstellung auf das Objekt / Medium:

- 1.) Platzieren Sie das Objekt / Medium vor dem Sensor.



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Czech Republic Phone +420 2 57 91 18 50
China Phone +86 4000 121 000
Denmark Phone +45 45 82 84 00
Finland Phone +358 9 2515 800
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Norway Phone +47 67 81 50 00
Poland Phone +48 22 837 40 50
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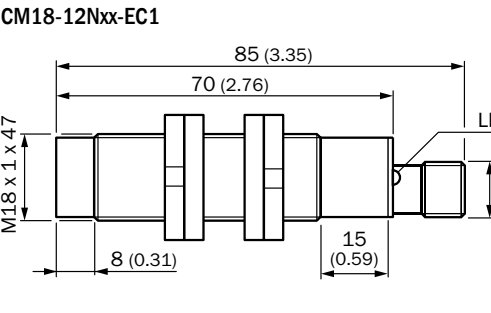
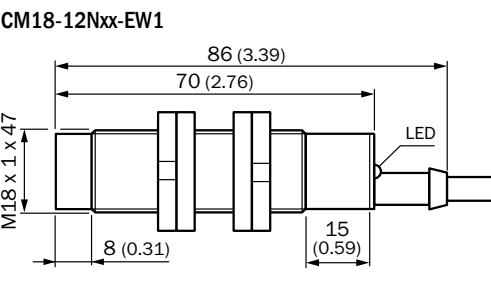
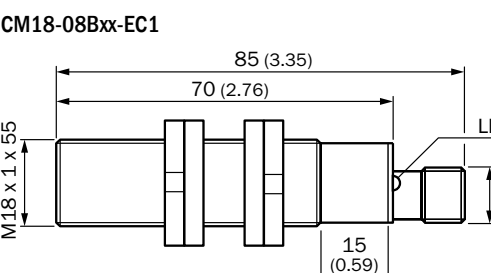
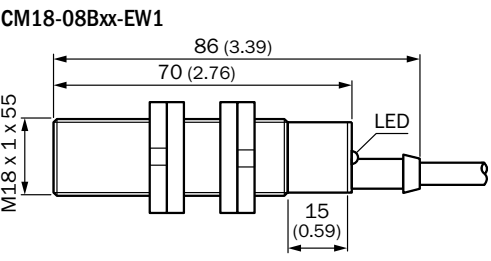
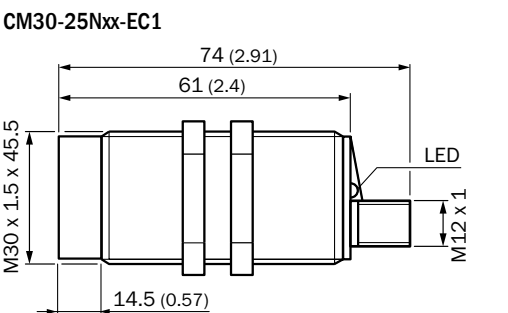
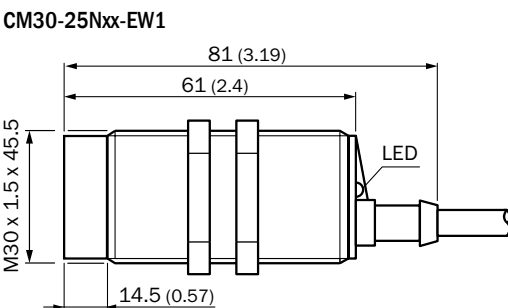
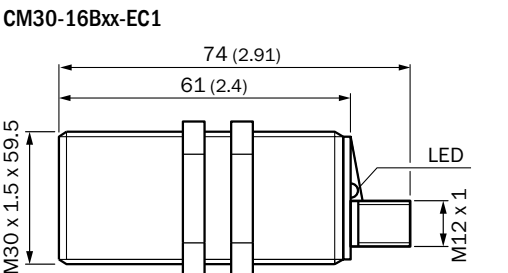
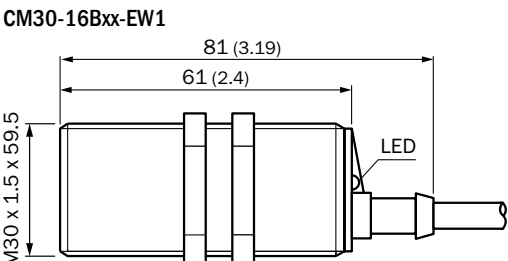
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 其他的经营所是 www.sick.com  另行通知  对给出的产品特性和技术参数 的准确性不保证。

A



B

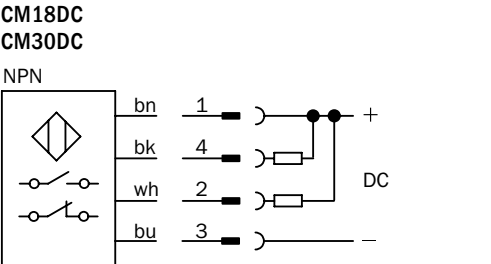
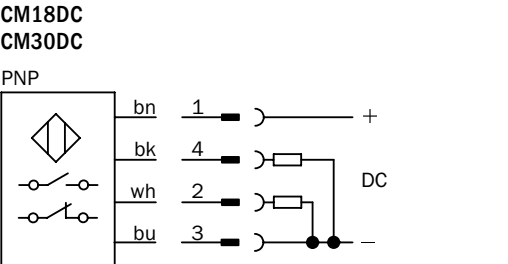
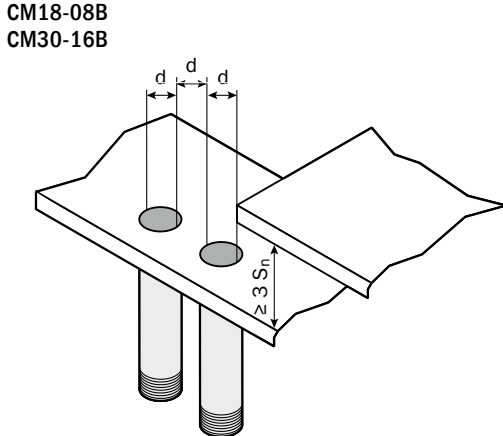


Table with columns for sensor model (CM 18-08B, CM 30-16B), force (-12N, -25N), and max. S\_n [mm] (8, 12, 16, 25).

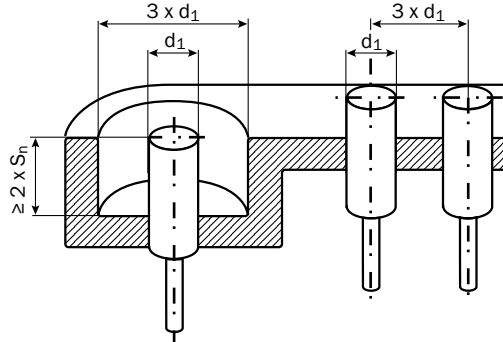
For flush type sensor flush mounted in conductive material, the usable sensing range (S\_e) is less than shown in the table above for temperatures exceeding 0 ... 60 ° C (32 ... 140 ° F).

Bundige Sensoren, die bundig in leitfahigen Materialien eingebaut werden, haben einen etwas geringeren nutzbaren Schaltabstand (S\_e) fur Einsatztemperaturen die auerhalb 0 ... +60 ° C (32 ... 140 ° F) liegen.

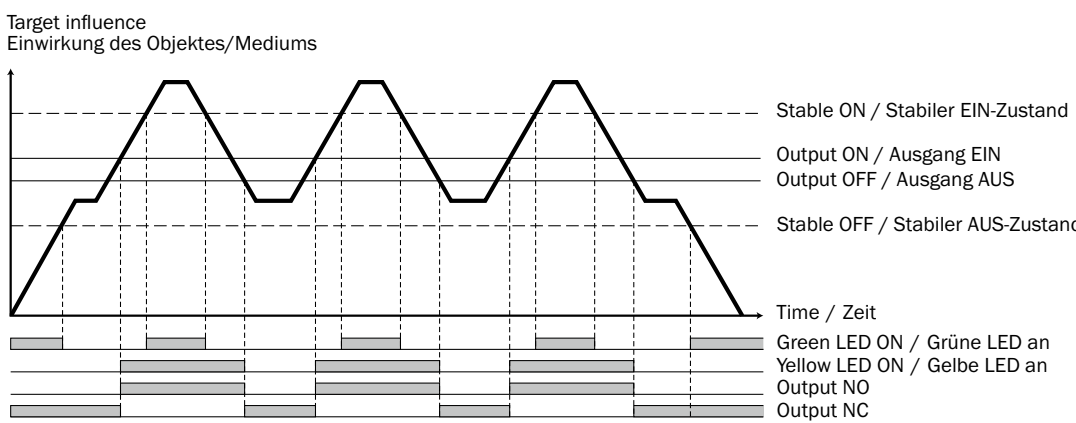
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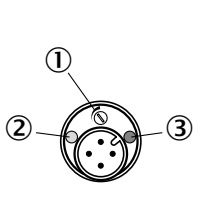
CM18-12N CM30-25N



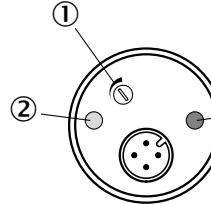
2



CM18



CM30



- 1 Sensitivity ajustment / Empfindlichkeitseinsteller
2 Yellow LED/Output / Gelbe LED/Ausgang
3 Green LED/Stable ON/OFF / Gune LED/Stabiler Ein-/Aus-Zustand

Comparison table between CM18DC and CM30DC across various parameters: Supply voltage, Output current, Signal sequence, Standby delay, Enclosure rating, Circuit protection, Tightening torque, Ambient operating temperature, Ambient storage temperature, Limits, etc.

Comparison table between CM18DC and CM30DC across various parameters: Tensione di alimentazione, Corrente di uscita, Sequenza segnali, Ritardo di disponibilita, Tipo di protezione, Commutazioni di protezione, Coppia di serraggio, Temperatura ambiente, Temperatura ambiente magazzino, Valori limite, etc.

Comparison table between CM18DC and CM30DC across various parameters: Tension de alimentacin, Corriente de salida, Secuencia de seales, Retardo de disponibilidad, Tipo de proteccin, Circuitos de proteccin, Par de giro, Temperatura ambiente de servicio, Temperatura ambiente almacn, Valores lmite, etc.

