



Capacitive Proximity Sensors Cylindrical threaded housing, CM18

CM18-08BPP-KW1



Model Name > [CM18-08BPP-KW1](#)
Part No. > [6020136](#)



At a glance

- M18 - Cylindrical housing
- Adjustable sensing range of 1 to 8 mm flush and 1 to 12 mm non-flush installation
- Best-in-class electromagnetic compatibility
- Short-circuit reverse polarity and power-up pulse suppression protection
- LED status indicator
- Sensitivity control with potentiometer
- IP 67 enclosure rating
- Complementary output function

Your benefits

- Space saving installation with M18 cylindrical mounting
- Quick and easy adjustment via potentiometer saves installation and setup time
- Simple and save detection alternative to photoelectric and inductive sensors in applications such as detecting product in a sealed box, container or tank
- High EMC immunity prevents false switching, which reduces material loss and increases throughput
- High shock and vibration resistance increases sensor life and reduces maintenance costs



Features

| | |
|---------------------------|-----------------------------------|
| Design: | Cylindrical |
| Thread size: | M18 x 1 |
| Sensing range Sn: | 8 mm |
| Assured sensing range Sa: | 5.76 mm |
| Installation type: | Flush |
| Switching frequency: | 30 Hz |
| Output type: | PNP |
| Output function: | Complementary |
| Electrical wiring: | DC 4-wire |
| Enclosure rating: | IP 67 ¹⁾ |
| Electrical connection: | Cable, 4-wire, 2 m ²⁾ |
| Adjustment: | Potentiometer, 270 °, Sensitivity |

¹⁾ According to EN 60529 ²⁾ Do not bend below 0 °C

Mechanics/electronics

| | |
|---------------------------------|---|
| Housing material: | Plastic |
| Supply voltage: | 10 V DC ... 36 V |
| Residual ripple: | $\leq 10\%$ ¹⁾ |
| Voltage drop: | $\leq 2.5\text{ V DC}$ ²⁾ |
| Power consumption: | $\leq 10\text{ mA}$ ³⁾ |
| Time delay before availability: | $\leq 100\text{ ms}$ |
| Hysteresis: | 4 % ... 20 % |
| Repeatability:: | $\leq 5\%$ ^{4) 5)} |
| Temperature drift (of Sr): | $\pm 10\%$ |
| EMC: | According to EN 60947-5-2 ⁶⁾ |
| Output current I _a : | $\leq 200\text{ mA}$ |
| Cable material: | PVC |
| Conductor cross-section: | 0.34 mm ² |
| Short-circuit protection: | ✓ |
| Reverse polarity protection: | ✓ |
| Power-up pulse protection: | ✓ |
| Shock and vibration resistance: | 30 g, 11 ms/10 ... 55 Hz, 1 mm |
| Ambient temperature operation: | -25 °C ... +80 °C |
| Housing cap material: | PBT |
| Housing length: | 71.5 mm |
| Thread length: | 46.5 mm |
| Tightening torque, max.: | 2.6 Nm |

¹⁾ Of U_b ²⁾ At I_a max ³⁾ Without load ⁴⁾ Of Sr ⁵⁾ U_b and T_a constant ⁶⁾ In EMC critical applications, conducted interference levels may lie in the frequency range of the oscillator. This can cause changes to the output signal.(see operating instructions)

Reduction factors

| | |
|--------|--|
| Note: | The values are reference values which may vary |
| Metal: | 1 |
| Water: | 1 |
| PVC: | Ca. 0.4 |
| Oil: | Ca. 0.25 |

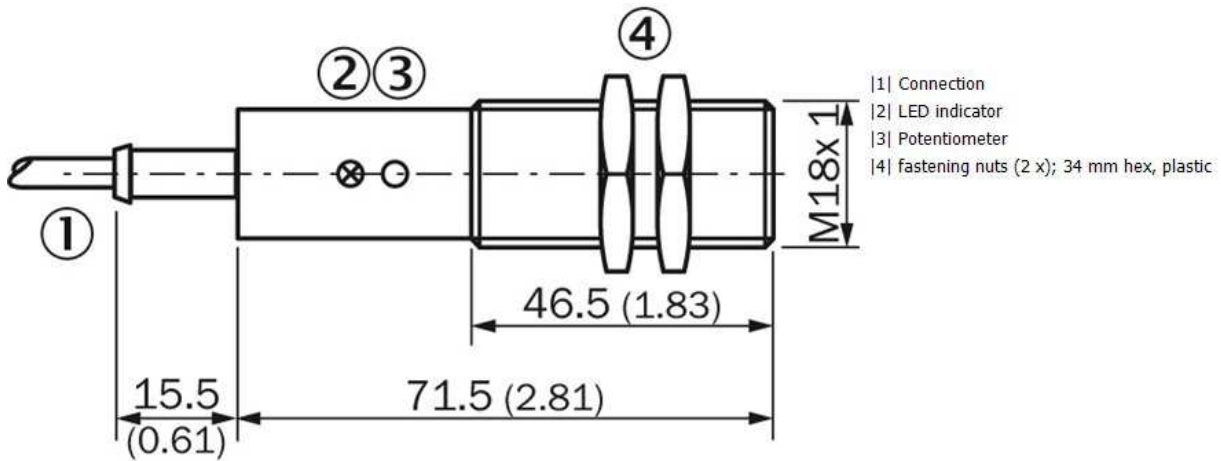
Installation note

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

Installation note

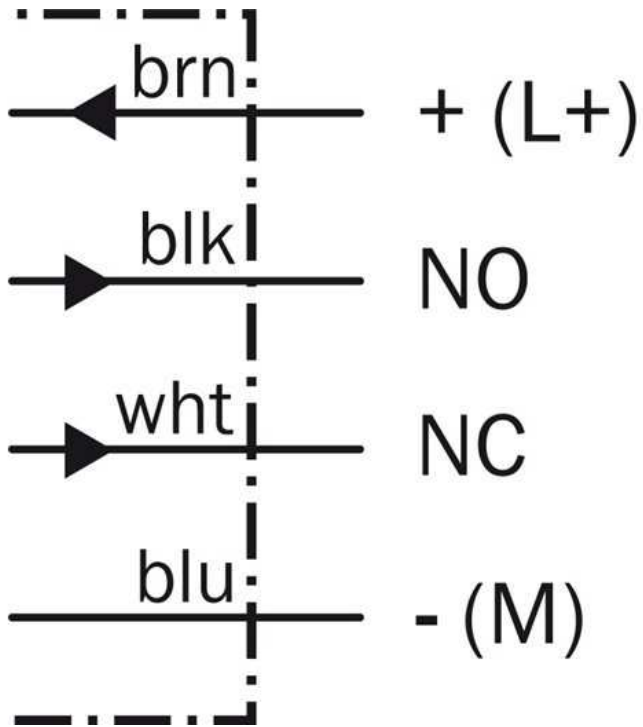


Dimensional drawing

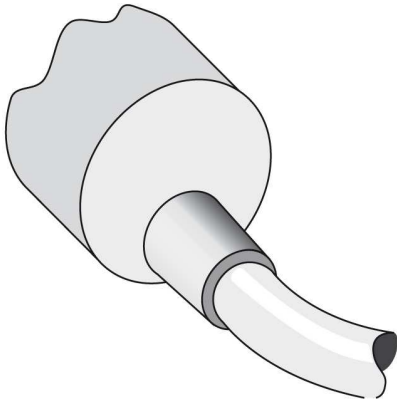


All dimensions in mm (inch)

Connection diagram



Connection type



Australia

Phone +61 3 9457 0600
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail marketing@sick.com.br

Canada

Phone +1 905 771 14 44
E-Mail information@sick.com

Česká republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail info@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-6881000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 5309 2112
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederland

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail sick@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail sales.gsg@sick.com

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886 2 2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 (0) 4 88 65 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 (800) 325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com