



## Capacitive Proximity Sensors Cylindrical threaded housing, CM18 PTFE

CM18-08BNP-TW0



**Model Name** > [CM18-08BNP-TWO](#)  
**Part No.** > [6026194](#)



#### At a glance

- M18 - Cylindrical housing
- Operating distance up to 8 mm
- Best-in-class electromagnetic compatibility
- Short-circuit, reverse polarity, and power-up pulse suppression protection
- LED status indicator
- IP 67 enclosure rating
- Complementary output function
- PTFE housing with M18 x 1 mm

#### Your benefits

- Fewer maintenance costs due to a durable PTFE (Teflon®) housing that withstands harsh industrial applications
- Quick and easy adjustment via potentiometer saves installation and setup time
- Simple, cost-saving 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

Housing:	Cylindrical
Thread size:	M18 x 1
Sensing range Sn:	8 mm
Assured sensing range Sa:	5.76 mm
Installation type:	Flush
Sensitivity adjustment:	Potentiometer, 270°
Switching frequency:	± 30 Hz
Output type:	NPN
Output function:	Complementary
Electrical wiring:	DC 4-wire
Enclosure rating:	IP 67 <sup>1)</sup>
Connection type:	Cable, 4-wire, 2 m <sup>2)</sup>

<sup>1)</sup> According to EN 60529 <sup>2)</sup> Do not bend below 0 °C

## Mechanics/electronics

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Supply voltage:	10 V DC ... 40 V DC
Ripple:	$\leq 10\%$ <sup>1)</sup>
Voltage drop:	$\leq 2.5\text{ V DC}$ <sup>2)</sup>
Power consumption:	$\leq 10\text{ mA}$ <sup>3)</sup>
Time delay before availability:	$\leq 100\text{ ms}$
Hysteresis:	4 % ... 20 %
Repeatability:	$\leq 5\%$ <sup>4) 5)</sup>
Temperature drift (% of Sr):	$\pm 10\%$
EMC:	According to EN 60947-5-2 <sup>6)</sup>
Output current I <sub>a</sub> :	$\leq 200\text{ mA}$
Cable material:	PVC
Conductor cross-section:	0.34 mm <sup>2</sup>
Short-circuit protection:	✓
Reverse polarity protection:	✓
Power-up pulse protection:	✓
Shock/vibration:	30 g, 11 ms/10 ... 55 Hz, 1 mm
Ambient operating temperature:	-25 °C ... 60 °C
Housing material:	PTFE
Housing length:	71.5 mm
Thread length:	46.5 mm
Tightening torque, max.:	$\leq 2.6\text{ Nm}$

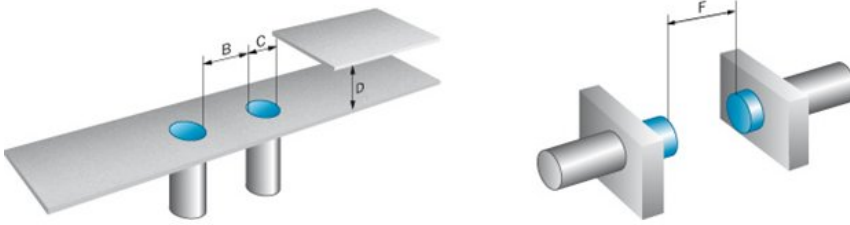
<sup>1)</sup> Of U<sub>b</sub> <sup>2)</sup> At I<sub>a</sub> max <sup>3)</sup> Without load <sup>4)</sup> Of Sr <sup>5)</sup> U<sub>b</sub> and T<sub>a</sub> constant <sup>6)</sup> In EMC critical applications, conducted interference levels may lie in the frequency range of the oscillator. This can cause changes to the output signal.(see operating instructions)

## Reduction factors

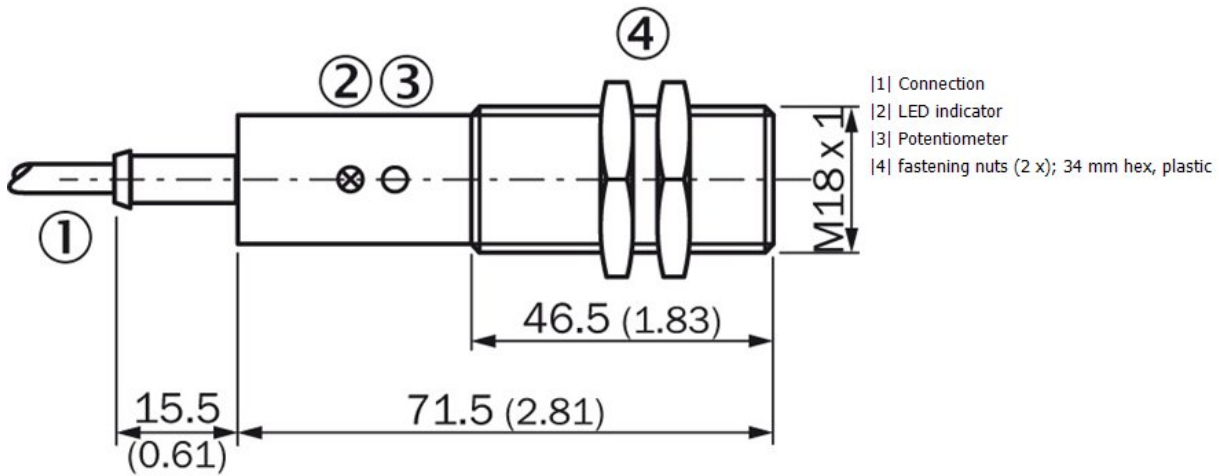
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Note:	The values are reference values which may vary
Metal:	1
Water:	1
PVC:	Ca. 0.4
Oil:	Ca. 0.25

## Installation note

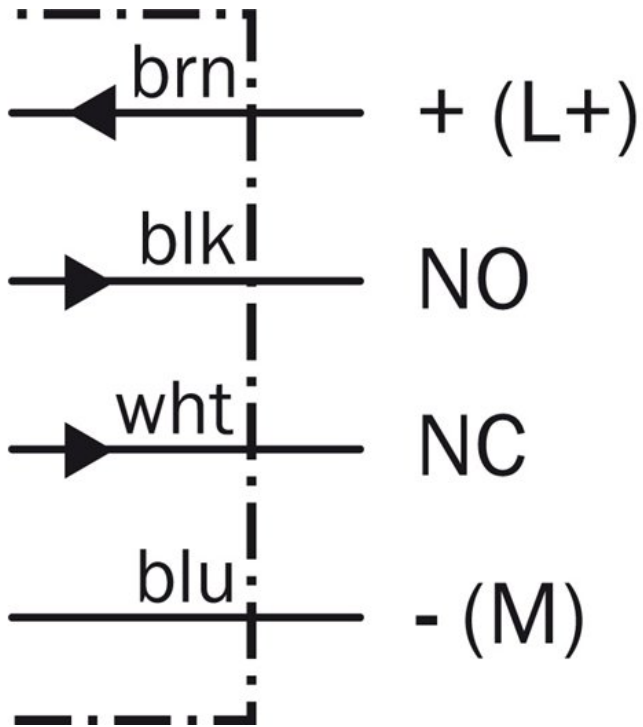


## Dimensional drawing

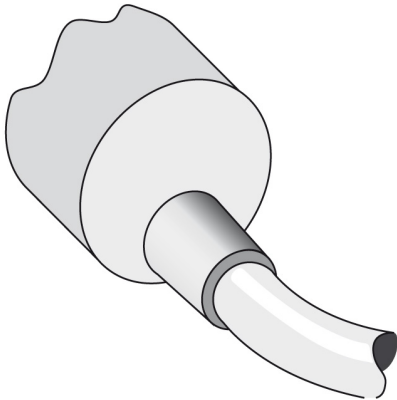


All dimensions in mm (inch)

Connection diagram



Connection type



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