

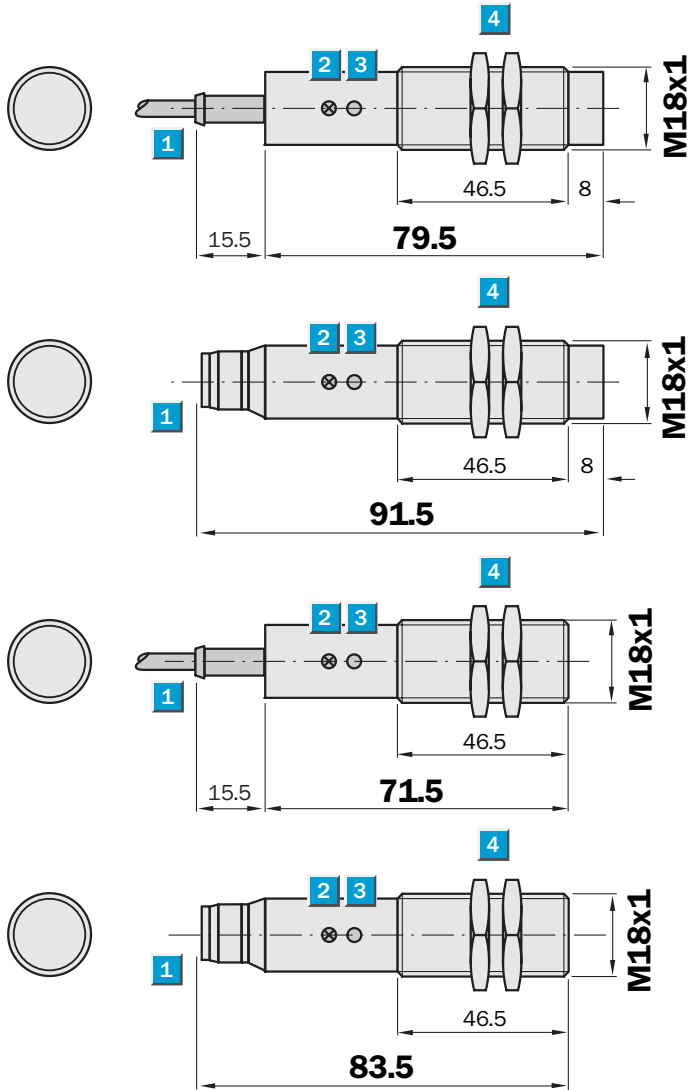
**Sensing range**  
8 / 12 mm

Capacitive sensor

- High EMC immunity
- Short-circuit protection (pulsed)
- Complementary output function
- Enclosure rating IP 67
- LED status indicator



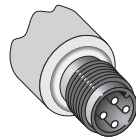
### Dimensional drawing



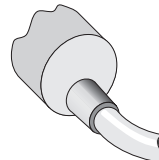
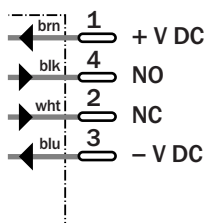
- 1 Connection
- 2 Display LED
- 3 Potentiometer
- 4 Fastening nuts (2 x); width across 24, Plastic

### Connection type

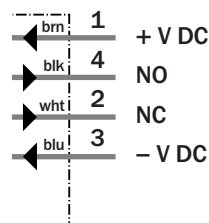
CM18-08BNP-KC1	CM18-08BNP-KW1
CM18-08BPP-KC1	CM18-08BPP-KW1
CM18-12NPP-KC1	CM18-12NPP-KW1
CM18-12NPP-KC1	CM18-12NPP-KW1



M12, 4-pin



4 x 0.34 mm<sup>2</sup>



### See chapter Accessories

Connector, M12, 4-pin  
Mounting systems

Technical specifications		CM18-	08BNP-KC1	08BNP-KW1	08BPP-KC1	08BPP-KW1	12NNP-KC1	12NNP-KW1	12NPP-KC1	12NPP-KW1		
<b>Sensing range S<sub>n</sub></b>	8 mm											
	12 mm											
<b>Electrical configuration</b>	DC 4-wire											
<b>Supply voltage V<sub>s</sub></b>	DC 10 ... 40 V											
Ripple U <sub>pp</sub>	≤ 10 % <sup>1)</sup>											
Voltage drop U <sub>d</sub>	≤ 2.5 V <sup>2)</sup>											
Power consumption	≤ 10 mA <sup>3)</sup>											
<b>Continuous current I<sub>a</sub></b>	≤ 200 mA											
Time delay before availability t <sub>v</sub>	≤ 100 ms											
Hysteresis H, of s <sub>r</sub>	4 ... 20 %											
Repeatability R	≤ 5 % (U <sub>b</sub> and T <sub>a</sub> constant) <sup>4)</sup>											
Temperature drift, of s <sub>r</sub>	± 10 %											
EMC	According to EN 60947-5-2											
<b>Switching output</b>	NPN											
	PNP											
<b>Output function</b>	Complementary											
<b>Installation</b>	Flush											
	Non-flush											
<b>Connection type</b>	Connector, M12, 4-pin											
	Cable, PVC, 2 m											
<b>Enclosure rating</b>	IP 67 <sup>5)</sup>											
Max. switching frequency	30 Hz											
Dimensions	M18 x 1 <sup>6)</sup>											
<b>Short-circuit protection</b>	✓ <sup>7)</sup>											
<b>Reverse polarity protection</b>	✓											
<b>Power-up pulse suppression</b>	✓											
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm											
<b>Ambient temperature operation</b>	-25 °C ... +80 °C											
<b>Housing material</b>	Plastic											
Tightening torque	2.6 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 s<sub>r</sub>

<sup>5)</sup> according to EN 60529  
<sup>6)</sup> Thread diameter x pitch (mm)

<sup>7)</sup> (pulsed)

Order information	
Type	Order no.
CM18-08BNP-KC1	6 021 456
CM18-08BNP-KW1	6 021 455
CM18-08BPP-KC1	6 020 388
CM18-08BPP-KW1	6 020 136
CM18-12NNP-KC1	6 021 458
CM18-12NNP-KW1	6 021 457
CM18-12NPP-KC1	6 020 410
CM18-12NPP-KW1	6 020 389