

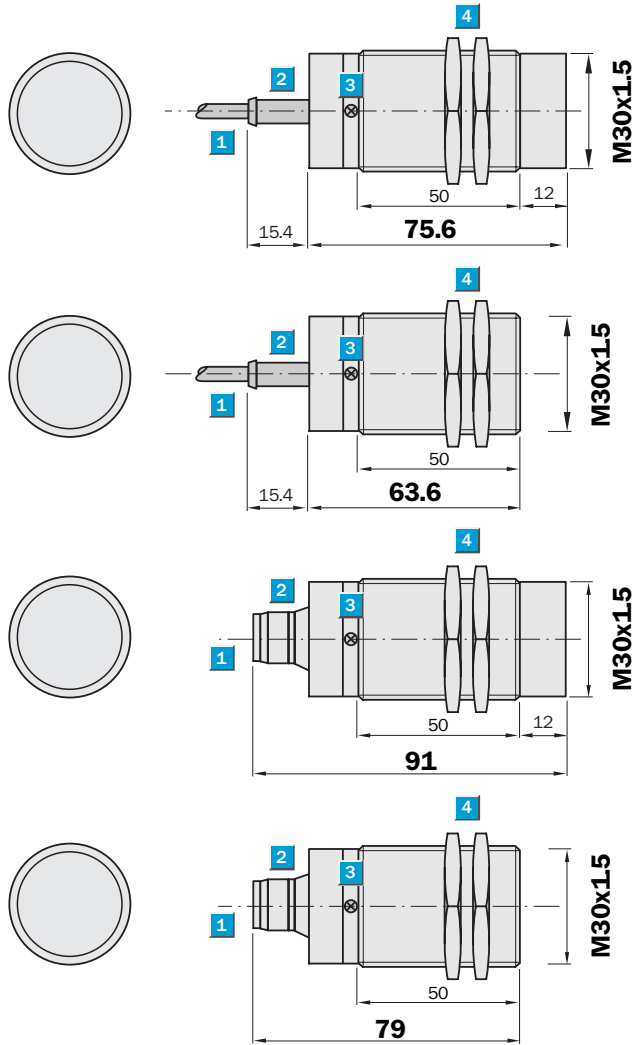
**Sensing range**  
16 / 25 mm

Capacitive sensor

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



### Dimensional drawing

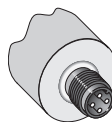


- 1 Connection
- 2 Potentiometer
- 3 Display LED
- 4 Fastening nuts (2 x); width across 36, Plastic

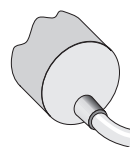
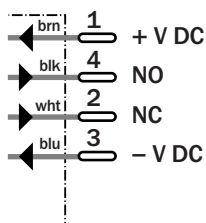


### Connection type

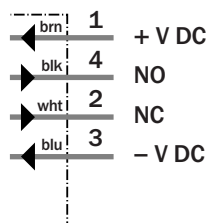
CM30-16BNP-KC1	CM30-16BNP-KW1
CM30-16BPP-KC1	CM30-16BPP-KW1
CM30-25NPP-KC1	CM30-25NPP-KW1
CM30-25NPP-KC1	CM30-25NPP-KW1



M12, 4-pin



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



**See chapter Accessories**  
 Connector, M12, 4-pin  
 Mounting systems

Technical specifications		CM30-	16BNP-KC1	16BNP-KW1	16BPP-KC1	16BPP-KW1	25NNP-KC1	25NNP-KW1	25NPP-KC1	25NPP-KW1		
<b>Sensing range <math>S_n</math></b>	16 mm											
	25 mm											
<b>Electrical configuration</b>	DC 4-wire											
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 40 V											
Ripple $U_{pp}$	$\leq 10\%$ <sup>1)</sup>											
Voltage drop $U_d$	$\leq 2.5\text{ V}$ <sup>2)</sup>											
Power consumption	$\leq 10\text{ mA}$ <sup>3)</sup>											
<b>Continuous current <math>I_a</math></b>	$\leq 200\text{ mA}$											
Time delay before availability $t_v$	$\leq 100\text{ ms}$											
Hysteresis H, of $s_r$	4 ... 20 %											
Repeatability R	$\leq 5\%$ ( $U_b$ and $T_a$ constant) <sup>4)</sup>											
Temperature drift, of $s_r$	$\pm 10\%$											
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	50 Hz											
Dimensions	M30 x 1.5 <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	7.5 Nm											

<sup>1)</sup> of  $U_b$   
<sup>2)</sup> at  $I_a$  max

<sup>3)</sup> without load  
<sup>4)</sup> of  $s_r$

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

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

#### Order information

Type	Order no.
CM30-16BNP-KC1	6 021 460
CM30-16BNP-KW1	6 021 459
CM30-16BPP-KC1	6 020 475
CM30-16BPP-KW1	6 020 473
CM30-25NNP-KC1	6 021 462
CM30-25NNP-KW1	6 021 461
CM30-25NPP-KC1	6 020 477
CM30-25NPP-KW1	6 020 476