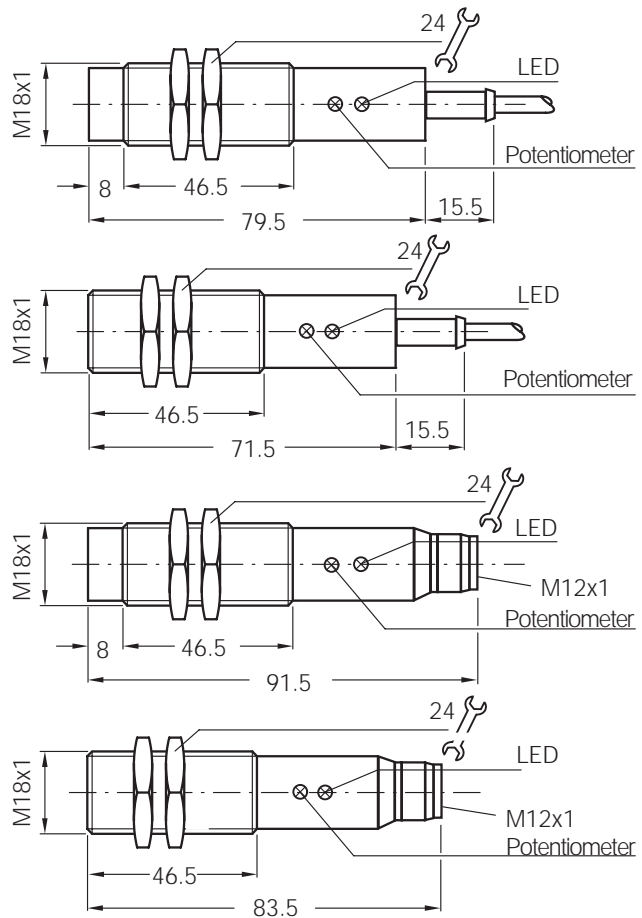


Capacitive proximity sensors

CM18 series, sensing range 8 / 12 mm

DC 4-wire, plastic housing



Features

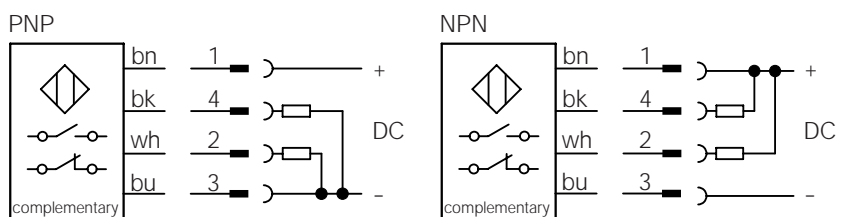


- ▶ High EMC-immunity
- ▶ Can be installed flush or non-flush
- ▶ PNP output
- ▶ Adjustable sensing range: 3 to 8 mm (flush), 3 to 12 mm (non flush)
- ▶ Complementary output function
- ▶ Short-circuit protection (pulsed)
- ▶ Plastic housing with fine thread M18 x 1 mm
- ▶ Cable or connector
- ▶ Enclosure rating IP 67
- ▶ LED-status indicator
- ▶

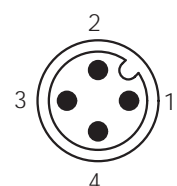
Accessories

- Round connector
- Mounting bracket

Connection diagram



















Wire colour	Contact	Assignment
bn brown	1	+ V DC
bk black	4	Schließer
wh white	2	Öffner
bu blue	3	- V DC



Electrical and mechanical data

Operating voltage U_b	10 ... 40 V DC	Short circuit protection (pulsed)	yes
Ripple U_{pp}	$\leq 10\%$ of U_b	Reverse polarity protection	yes
Voltage drop U_d	$\leq 2,5$ V	Power-up pulse suppression	yes
Power consumption (without load)	≤ 10 mA	Enclosure rating to EN 60529	IP 67
Continuous current I_a	≤ 200 mA	Shock und vibration stress	30 g, 11 ms 10 to 55 Hz, 1 mm
Time delay before availability t_v	≤ 100 ms	Ambient temperature T_a	- 25 ... + 80 °C
Hysteresis H	4% ... 20% of s_r	Housing material	Plastic
Repeatability R (U_b and T_a constant)	$\leq 5\%$ of s_r	Tightening torque	2,6 Nm
Temperature drift	$\pm 10\%$ of s_r	Connection cable	PVC, 4 x 0.34 mm ²
EMV	to EN 60 947-5-2		

Selection table

Sensing range s_n mm	Installation	Switching output	Output function	Switching frequency f in Hz	Connection	Type	Order number
8		PNP	 complementary	30	cable 2 m	CM18-08BPP-KW1	6020136
8		NPN	 complementary	30	cable 2 m	CM18-08BNP-KW1	6021455
8		PNP	 complementary	30	connector M12 x 1 mm	CM18-08BPP-KC1	6020388
8		NPN	 complementary	30	connector M12 x 1 mm	CM18-08BNP-KC1	6021456
12		PNP	 complementary	30	cable 2 m	CM18-12NPP-KW1	6020389
12		NPN	 complementary	30	cable 2 m	CM18-12NNP-KW1	6021457
12		PNP	 complementary	30	connector M12 x 1 mm	CM18-12NPP-KC1	6020410
12		NPN	 complementary	30	connector M12 x 1 mm	CM18-12NNP-KC1	6021458