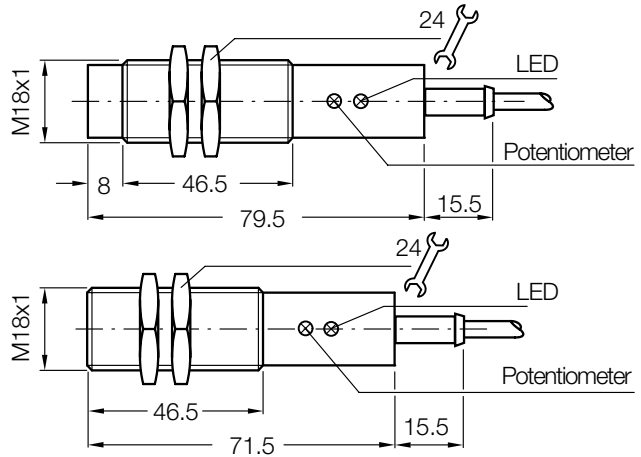


Capacitive proximity sensors

CM18 (PTFE) series, sensing range 8 mm

DC 4-wire, PTFE housing



Features

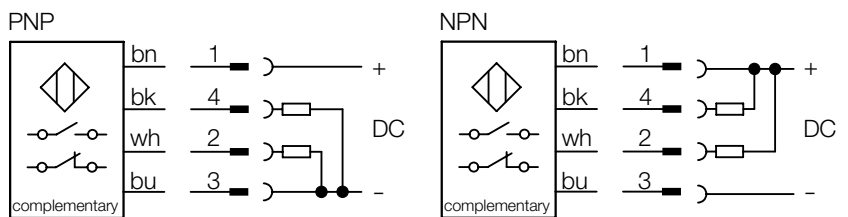


- ▶ High EMC-immunity
- ▶ Can be installed flush
- ▶ PNP output/NPN output
- ▶ Adjustable sensing range: 3 to 8 mm (flush)
- ▶ Complementary output function
- ▶ Short-circuit protection (pulsed)
- ▶ PTFE housing with M18 x 1 mm
- ▶ Cable PVC;
- ▶ Enclosure rating IP 67
- ▶ LED-status indicator

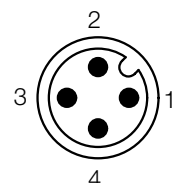
Accessories

Round connector
Mounting bracket

Connection diagram







Wire colour	Contact	Assignment
bn brown	1	+ V DC
bk black	4	NO
wh white	2	NC
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 ... + 60 °C
Hysteresis H	4% ... 20% of s_r	Housing material	PTFE
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-TWO	6026195
8		NPN	 complementary	30	cable 2 m	CM18-08BNP-TWO	6026194