

Capacitive proximity sensors

CQ35 series, sensing range 25 mm

DC 4-wire, plastic housing



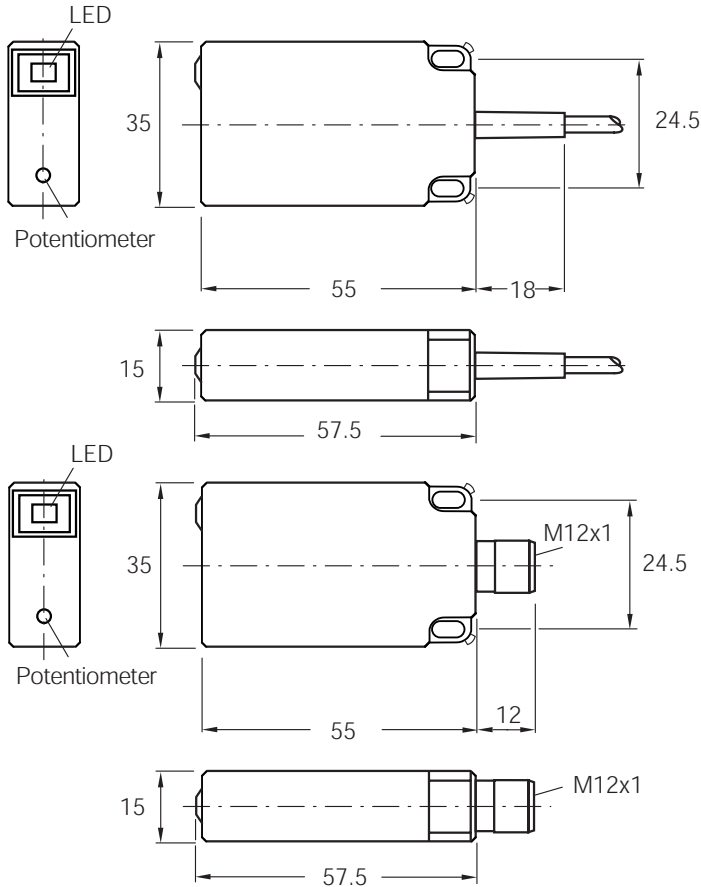
Features



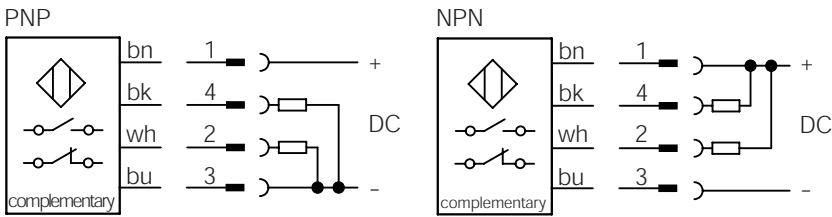
- ▶ High EMC-immunity
- ▶ Can be installed flush or non-flush
- ▶ PNP output
- ▶ Adjustable sensing range: 4 to 25 mm (non flush)
- ▶ Device can be flush mounted, sensing range: 16 mm
- ▶ Complementary output function
- ▶ Short-circuit protection (pulsed)
- ▶ Plastic housing
- ▶ Cable or connector
- ▶ Enclosure rating IP 67
- ▶ LED-status indicator
- ▶

Accessories

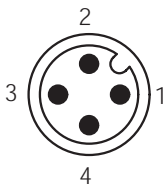
Round connector



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 and 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 ... + 75 °C
Hysteresis H	4% ... 20% of s_r	Housing material	Plastic
Repeatability R (U_b und T_a constant)	$\leq 5\%$ of s_r	Connection cable	PVC, 4 x 0.34 mm ²
Temperature drift EMV	$\pm 10\%$ of s_r 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
25		PNP	 complementary	50	cable 2 m	CQ35-25NPP-KW1	6020478
25		NPN	 complementary	50	cable 2 m	CQ35-25NNP-KW1	6021463
25		PNP	 complementary	50	connector M12 x 1 mm	CQ35-25NPP-KC1	6020479
25		NPN	 complementary	50	connector M12 x 1 mm	CQ35-25NNP-KC1	6021464