Photoelectrics

Type PC50CND10RP



Product Description

The PC50CND. is a general purpose diffuse-reflective sensor in a compact squared $17 \times 50 \times 50$ mm reinforced PC/ABS-housing. It is useful in applications where basic sensors provide adequate

sensing performance. The long sensing range in addition to sensitivity adjustment gives a very flexible sensor. Light and dark operation is switch selectable. Range: 1 m

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- Adjustable sensitivity
- Modulated, infrared light
- Supply voltage:
- 12 to 240 VDC and 24 to 240 VAC, 50/60 Hz Output: Relay 3 A, 30 VDC, 240 VAC

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PC50CND10RP

- Make and break switching function
- LED-indication for output ON, signal stability and supply ON
- Protection: reverse polarity, transients
- High degree of EMC



Ordering Key

Type ______ Housing style ______ Housing size ______ Housing material ______ Housing length ______ Detection principle ______ Sensing distance ______ Output type _____ Output configuration ______

Type Selection

Housing	Range	Ordering no.
W x H x D	(S₀)	Make and break switching
17 x 50 x 50 mm	1 m	PC 50 CND 10 RP

Specifications

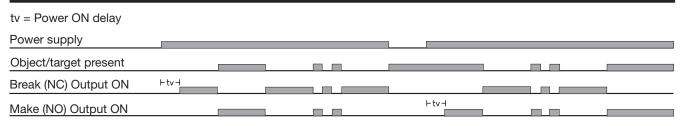
Rated operating distance (S _n)	Up to 1 m, reference target Kodak test card R 27, white, 90% reflectivity, 200 x 200 mm
Blind zone	Max. 10 cm
Sensitivity	Adj. by single-turn pot. meter
Temperature drift	≤ 0.5%/°C
Hysteresis (H) Differential travel	3-20%
Rated operational volt. (U _B)	12 to 240 VDC 24 to 240 VAC, 50 to 60 Hz
Rated operational power	≤ 2.0 VA (relay ON)
Output Contact ratings Resistive loads AC 1 DC 1 Mechanical life (typical) Electrical life (typical)	3 A/250 VAC 3 A/30 VDC (> 10 mA/5 VDC) ≥ 15 x 10 ⁶ operations ≥ 1 x 10 ⁵ operations at 3 A/240 VAC
Protection	Reverse polarity, transients
Light source Light type Sensing angle Ambient light	GaAlAs, LED, 880 nm Infrared, modulated ± 2° at 1/2 range Max. 5'000 lux
Operating frequency	20 Hz
Response time OFF-ON (t _{ON}) ON-OFF (t _{OFF})	≤ 25 ms ≤ 25 ms

Power ON delay (t_v) ≤ 300 ms **Output function** Light and dark operation is switch selectable Indication function Output ON LED, yellow Supply ON, signal stability LED, green Environment II (IEC 60664/60664A; 60947-1) Overvoltage category Pollution degree 3 (IEC 60664/60664A; 60947-1) IP 67 (IEC 60529; 60947-1) Degree of protection Temperature Operating -20° to +60°C (-4° to +140°F) -25° to +80°C (-13° to +176°F) Storage Vibration 10 to 150 Hz, 0.5 mm/7.5 g (IEC 68-2-6) Shock 2 x 1 m & 100 x 0.5 m (IEC 68-2-32) **Rated insulation voltage** 250 VAC (rms) Housing material Body PC/ABS, grey, reinforced Front glass PC black Mounting bracket Steel, galvanized Connection Cable PVC, grey, 2 m, 5 x 0.34 mm² Weight 130 g UL, CSA Approvals **CE-marking** Yes

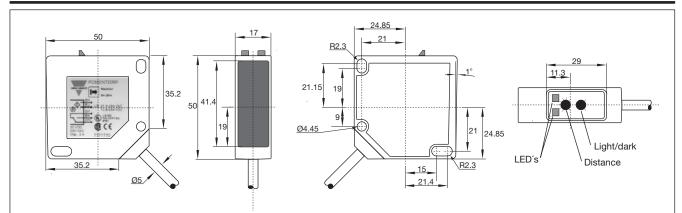
Specifications are subject to change without notice (28.02.2006)



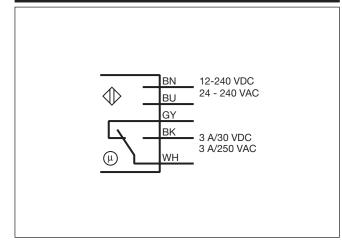
Operation Diagram



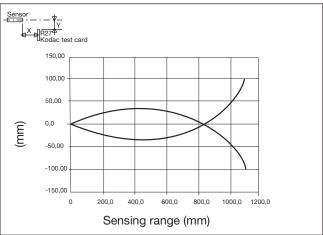
Dimensions



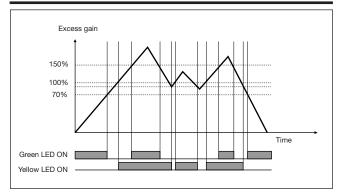
Wiring Diagram



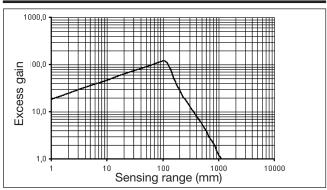
Detection Diagram



Signal Stability

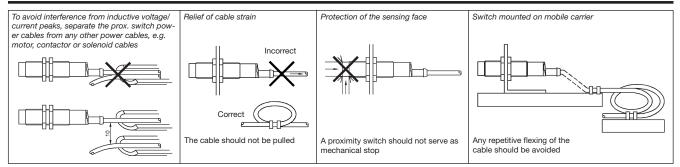


Excess Gain



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Installation Hints



Delivery Contents

- Photoelectric switch: PC50CND..
- Installation instruction
- Mounting bracket APC50-1
- Packaging: Cardboard box

Mounting bracket APC50-1

Accessories

• Screwdriver for adjustment: 77-001

For further information refer to "Accessories"