



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

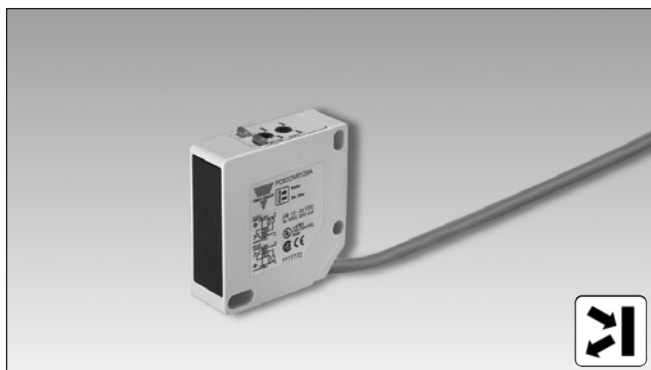
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Type PC50CND10RP



- Range: 1 m
- 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
- Make and break switching function
- LED-indication for output ON, signal stability and supply ON
- Protection: reverse polarity, transients
- High degree of EMC



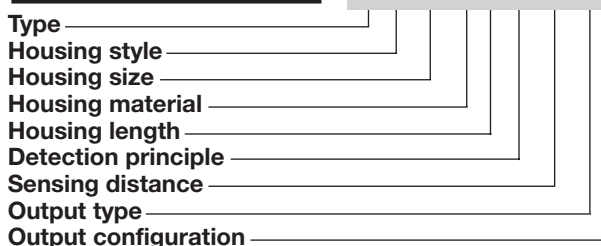
Product Description

The PC50CND. is a general purpose diffuse-reflective sensor in a compact squared 17 x 50 x 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.

Ordering Key

PC50CND10RP



Type Selection

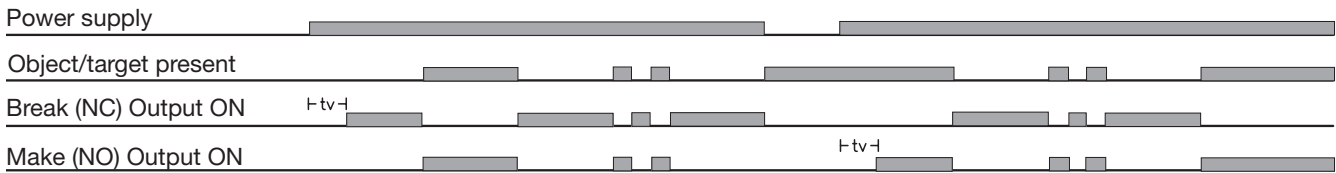
Housing W x H x D	Range (S _n)	Ordering no. Make and break switching
17 x 50 x 50 mm	1 m	PC 50 CND 10 RP

Specifications

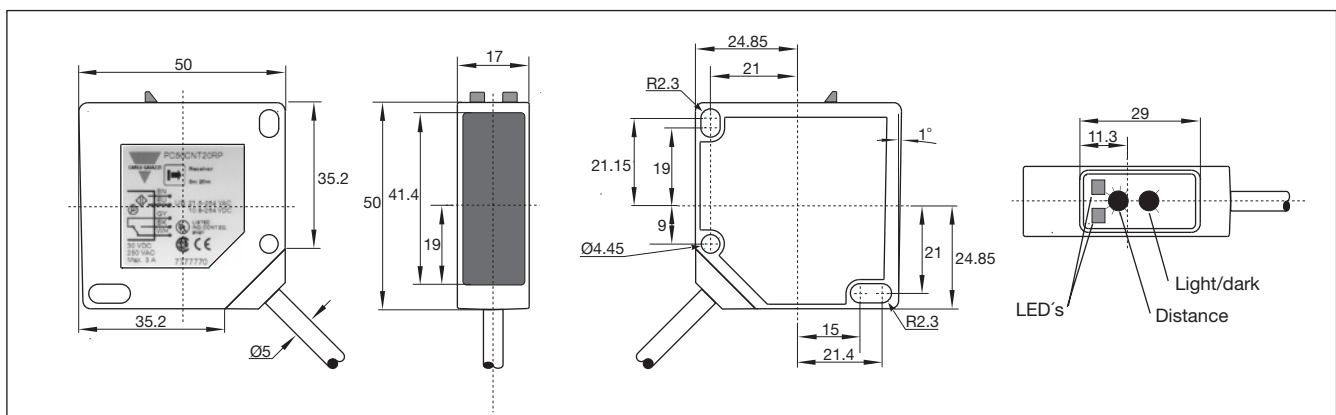
Rated operating distance (S_n)	Up to 1 m, reference target Kodak test card R 27, white, 90% reflectivity, 200 x 200 mm	Power ON delay (t_v)	≤ 300 ms
Blind zone	Max. 10 cm	Output function	Light and dark operation is switch selectable
Sensitivity	Adj. by single-turn pot. meter	Indication function	Output ON Supply ON, signal stability
Temperature drift	≤ 0.5%/°C		LED, yellow LED, green
Hysteresis (H)		Environment	
Differential travel	3-20%	Overvoltage category	II (IEC 60664/60664A; 60947-1)
Rated operational volt. (U_B)	12 to 240 VDC 24 to 240 VAC, 50 to 60 Hz	Pollution degree	3 (IEC 60664/60664A; 60947-1)
Rated operational power	≤ 2.0 VA (relay ON)	Degree of protection	IP 67 (IEC 60529; 60947-1)
Output		Temperature	
Contact ratings		Operating	-20° to +60°C (-4° to +140°F)
Resistive loads	AC 1 3 A/250 VAC DC 1 3 A/30 VDC (> 10 mA/5 VDC)	Storage	-25° to +80°C (-13° to +176°F)
Mechanical life (typical)	≥ 15 x 10 ⁶ operations	Vibration	10 to 150 Hz, 0.5 mm/7.5 g (IEC 68-2-6)
Electrical life (typical)	≥ 1 x 10 ⁵ operations at 3 A/240 VAC	Shock	2 x 1 m & 100 x 0.5 m (IEC 68-2-32)
Protection	Reverse polarity, transients	Rated insulation voltage	250 VAC (rms)
Light source	GaAlAs, LED, 880 nm	Housing material	
Light type	Infrared, modulated	Body	PC/ABS, grey, reinforced
Sensing angle	± 2° at 1/2 range	Front glass	PC black
Ambient light	Max. 5'000 lux	Mounting bracket	Steel, galvanized
Operating frequency	20 Hz	Connection	
Response time		Cable	PVC, grey, 2 m, 5 x 0.34 mm ²
OFF-ON (t _{ON})	≤ 25 ms	Weight	130 g
ON-OFF (t _{OFF})	≤ 25 ms	Approvals	UL, CSA
		CE-marking	Yes

Operation Diagram

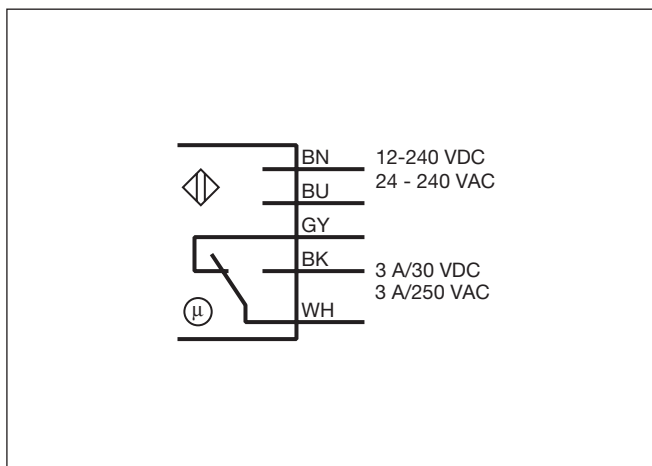
tv = Power ON delay



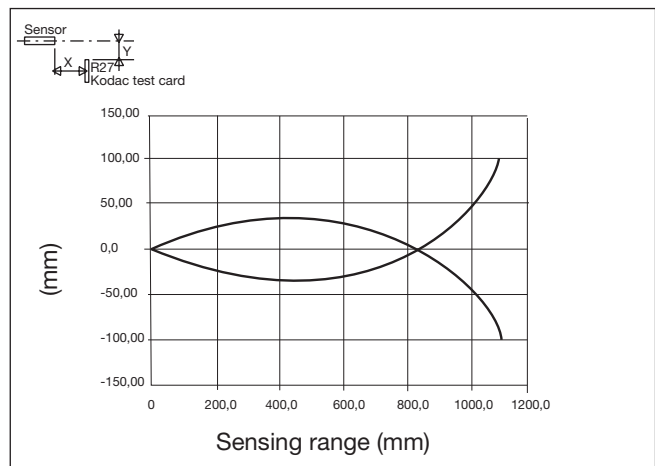
Dimensions



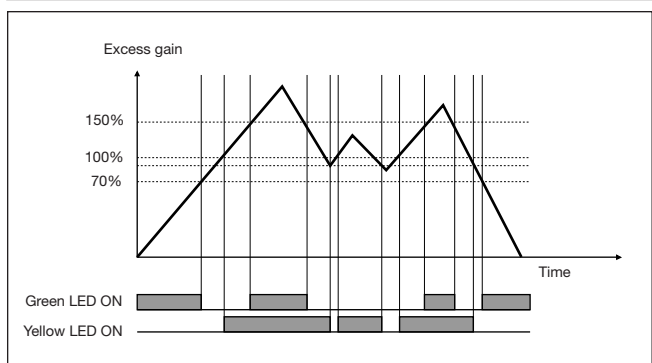
Wiring Diagram



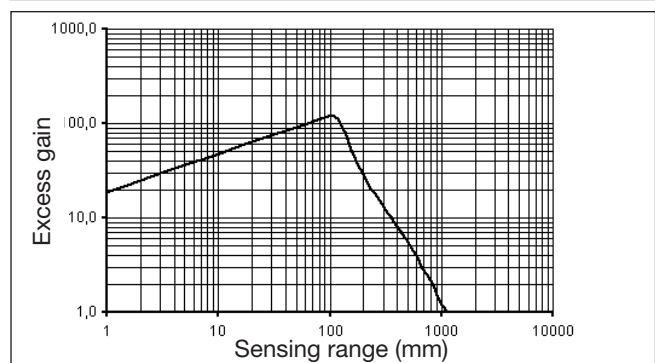
Detection Diagram



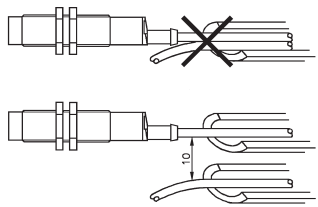
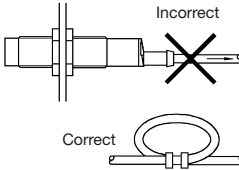
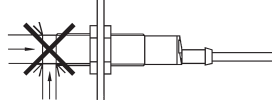
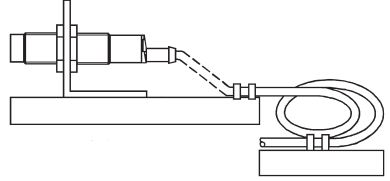
Signal Stability



Excess Gain



Installation Hints

<p>To avoid interference from inductive voltage/current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables</p> 	<p>Relief of cable strain</p>  <p>The cable should not be pulled</p>	<p>Protection of the sensing face</p>  <p>A proximity switch should not serve as mechanical stop</p>	<p>Switch mounted on mobile carrier</p>  <p>Any repetitive flexing of the cable should be avoided</p>
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Delivery Contents

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

Accessories

- Screwdriver for adjustment: 77-001

For further information refer to "Accessories"

