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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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

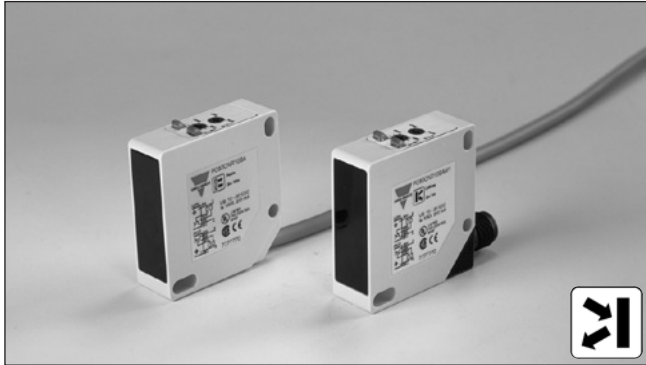


Photoelectrics

Diffuse-reflective, Transistor Output

Type PC50CND10BA

CARLO GAVAZZI



- Range: 1 m
- Adjustable sensitivity
- Modulated, infrared light
- Supply voltage: 10 to 30 VDC
- Output: 200 mA, NPN or PNP
- Make and break switching function selectable
- LED for output indication, signal stability and power ON
- Protection: reverse polarity, short circuit, transients
- Cable and plug version
- High EMC immunity



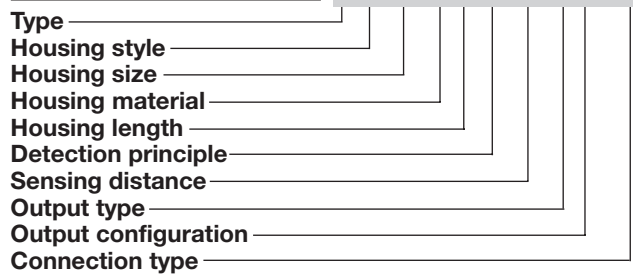
Product Description

The PC50CND. is a family of general purpose diffuse-reflective sensors in a compact square 17 x 50 x 50 mm reinforced PC/ABS-housing. They are useful in applications where basic sensors provide adequate sensing

performance. The long sensing range together with sensitivity adjustment gives a very flexible sensor. The DC types are with a transistor output and the configuration is fully programmable (NPN, PNP, NO and NC).

Ordering Key

PC50CND10BAM1



Type Selection

Housing W x H x D	Range S _n	Ordering no. NPN & PNP cable Make & break switching	Ordering no. NPN & PNP plug Make & break switching
17 x 50 x 50 mm	1 m	PC 50 CND 10 BA	PC 50 CND 10 BAM1

Specifications

Rated operating distance (S_n)	Up to 1 m, reference target Kodak test card R 27, white, 90% reflectivity, 200 x 200 mm	Light source	GaAIAs, LED, 880 nm
Blind zone	Max. 10 cm	Light type	infrared, modulated
Sensitivity	Adjustable by single-turn potentiometer	Sensing angle	± 2° at 1/2 range
Temperature drift	≤ 0.5%/°C	Ambient light	Max. 5'000 lux
Hysteresis (H) Differential travel	3 - 20%	Operating frequency	500 Hz
Rated operational volt. (U_B)	10 to 30 VDC (ripple included)	Response time OFF-ON (t _{ON}) ON-OFF (t _{OFF})	≤ 1 ms ≤ 1 ms
Ripple (U_{rpp})	≤ 10%	Power ON delay (t_v)	< 300 ms
Output current Continuous (I _a) Short-time (I)	≤ 200 mA ≤ 200 mA (max. load capacity 100 nF)	Output function NPN and PNP Complementary function	Switch selectable Make and break (NO + NC)
No load supply current (I_o)	≤ 40 mA	Indication function Output ON Signal stability ON and power ON	LED, yellow LED, green
Minimum operational current (I_m)	0.5 mA	Environment Installation category	II (IEC 60664/60664A; 60947-1)
OFF-state current (I_r)	≤ 100 μA	Pollution degree	3 (IEC 60664/60664A; 60947-1)
Voltage drop (U_d)	≤ 2.5 VDC @ 200 mA	Degree of protection	IP 67 (IEC 60529; 60947-1)
Protection	Short-circuit, reverse polarity, transients	Temperature Operating Storage	-20° to +60°C (-4° to +140°F) -25° to +80°C (-13° to +176°F)

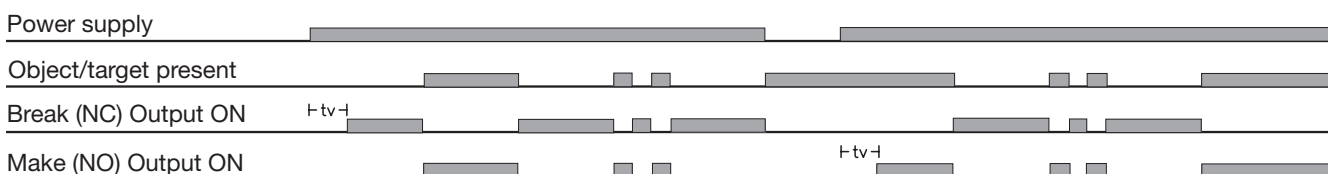


Specifications (cont.)

Vibration	10 to 150 Hz, 0.5 mm/7.5 g (IEC 60068-2-6)	Connection	PVC, grey, 2 m, 4 x 0.34 mm ²
Shock	2 x 1 m & 100 x 0.5 m (IEC 60068-2-6, 60068-2-32)	Cable	PBTP, M12 x 1
Rated insulation voltage	50 VAC (rms)	Plug	CON.1A-series
Housing material		Cables for plug (M1)	
Body	PC/ABS, grey	Weight	110 g
Front glass	PC black	Approvals	UL, CSA
Mounting bracket	Steel, galvanized	CE-marking	Yes

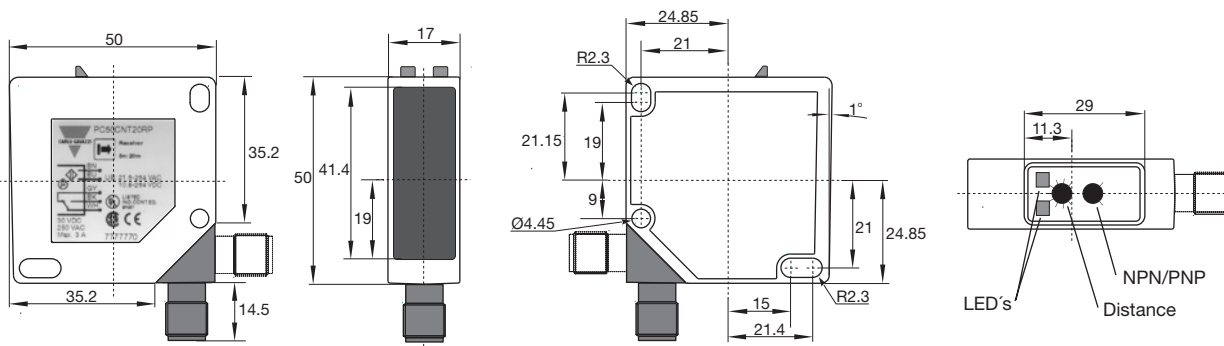
Operation Diagram

tv = Power ON delay

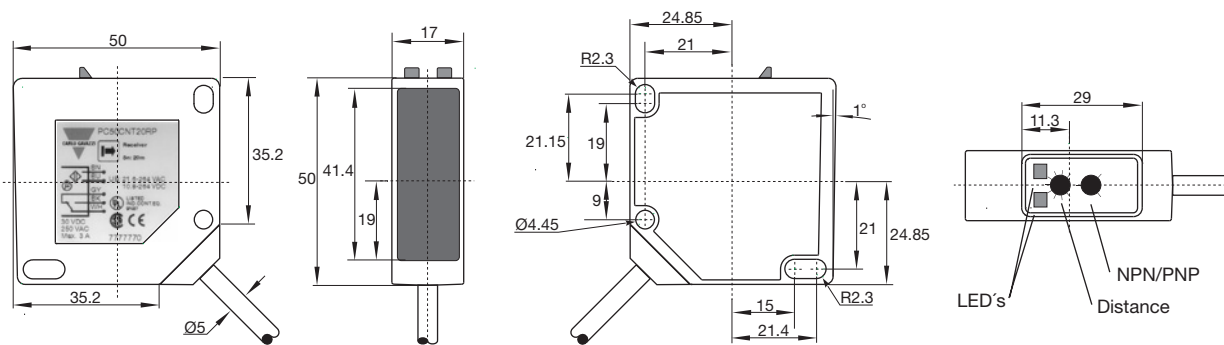


Dimensions

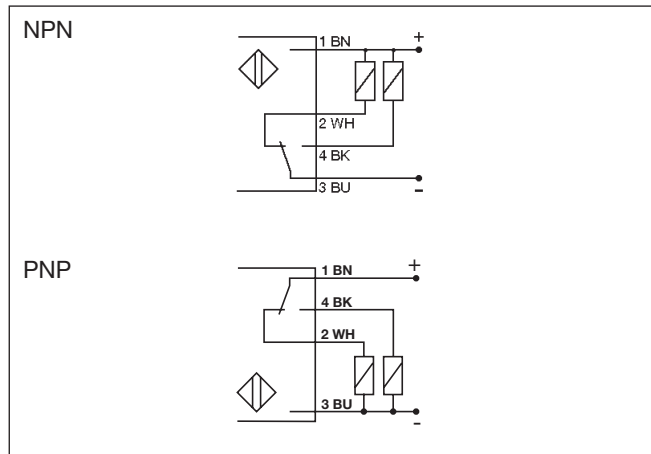
Plug version



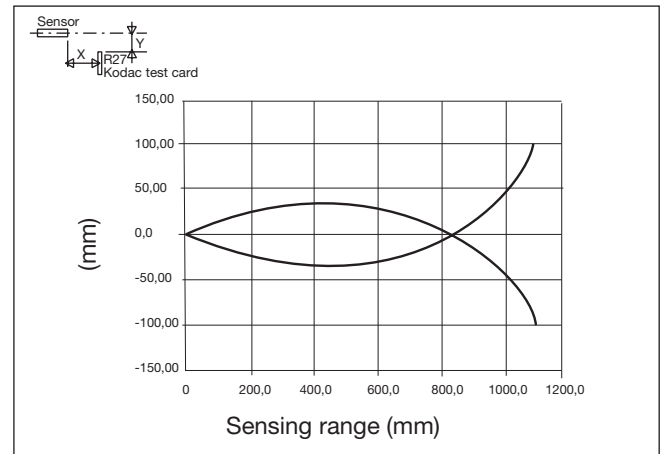
Cable version



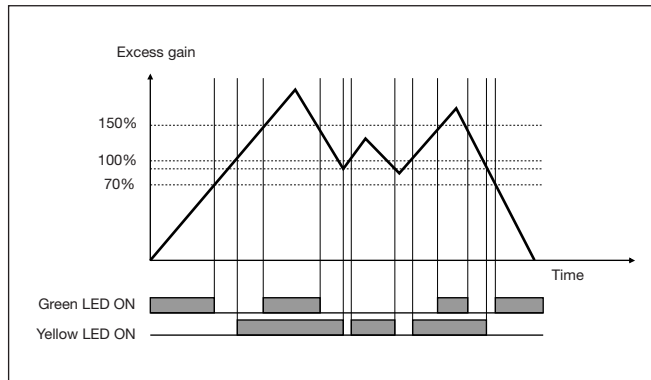
Wiring Diagrams



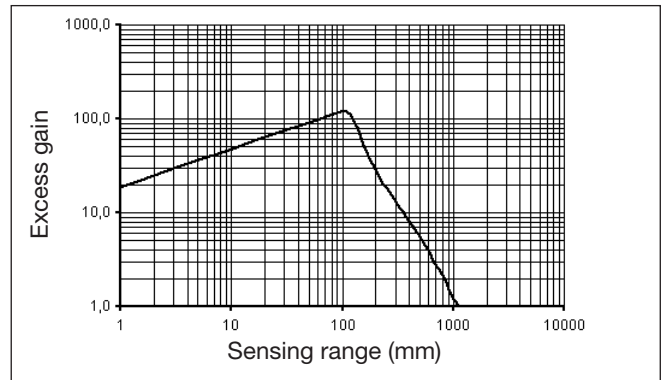
Detection Diagram



Signal Stability



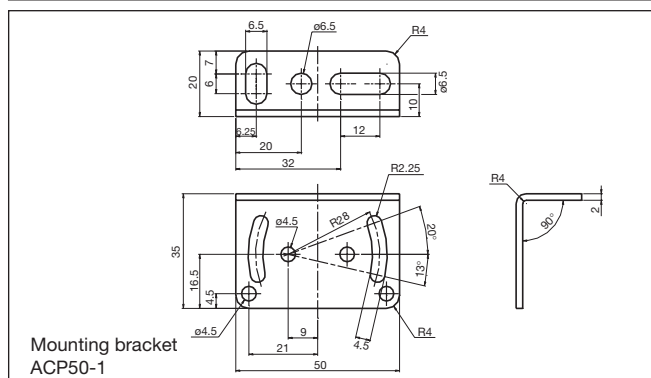
Excess Gain



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: PC50 CND..
- Installation instruction
- Mounting bracket APC50-1
- **Packaging:** Cardboard box

Accessories

- Screwdriver for adjustment: 77-001
- Connector type CON.1A..

For further information refer to "Accessories"