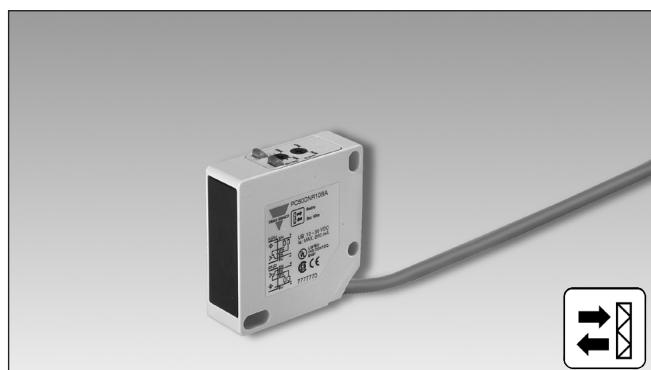


Photoelectrics

Retro-reflective, Polarized, Relay Output

Type PC50CNP06RP

CARLO GAVAZZI



- Range: 6 m
- Adjustable sensitivity
- Modulated, visible red light, polarized
- High immunity to shiny surfaces
- Supply voltage:
12 to 240 VDC and 24 to 240 VAC, 50/60 Hz
- Output: Relay 3 A, 30 VDC, 250 VAC
- Make or break switching function
- LED-indication for output ON, signal stability and supply ON
- High degree of EMC



Product Description

The PC50CNP. is a general purpose polarized retro-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 ade-

quate 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

PC50CNP06RP

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

Type Selection

Housing W x H x D	Range (S _n)	Ordering no. Make and break switching
17 x 50 x 50 mm	6 m	PC 50 CNP 06 RP

Note: Reflectors to be ordered separately

Specifications

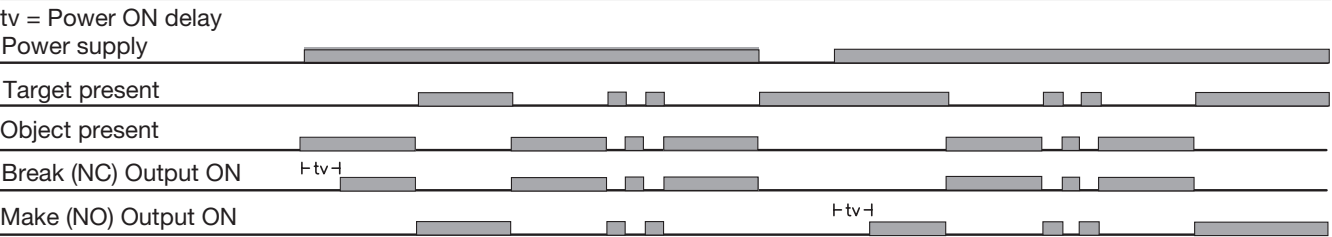
Rated operating distance (S_n)	Up to 6 m, with reflector type ER 4, ref. target	Ambient light	Max. 10'000 lux
Blind zone	Max. 20 cm	Operating frequency	20 Hz
Sensitivity	Adj. by single-turn. pot.	Response time	
Temperature drift	≤ 0.5%/°C	OFF-ON (t _{ON})	≤ 25 ms
Hysteresis (H)		ON-OFF (t _{OFF})	≤ 25 ms
Differential travel	3-20%	Power ON delay (t_v)	≤ 300 ms
Rated operational volt. (U_B)	12-240 VDC 24-240 VAC, 50 to 60 Hz	Output function	Light or dark operation is switch selectable
Rated operational power	≤ 2.5 VA (relay ON)	Indication function	
Output		Output ON	LED, yellow
Contact ratings		Supply ON, signal stability	LED, green
Resistive loads	AC 1 DC 1	Environment	
Mechanical life (typical)	3 A/250 VAC 3 A/30 VDC (>10 mA/5 VDC)	Overvoltage category	II (IEC 60664/60664A; 60947-1)
Electrical life (typical)	≥ 15 x 10 ⁶ operations ≥ 1 x 10 ⁵ operations at 3 A/240 VAC	Pollution degree	3 (IEC 60664/60664A; 60947-1)
Protection	Reverse polarity, transients	Degree of protection	IP 67 (IEC 60529; 60947-1)
Light source	GaAlAs, LED, 660 nm	Temperature	
Light type	Visible red, modulated	Operating	-20° to +60°C (-4° to +140°F)
Sensing angle	± 2° at 1/2 range	Storage	-25° to +70°C (-13° to +158°F)
		Vibration	10 to 150 Hz, 0.5 mm/7.5 g (IEC 60068-2-6)
		Shock	2 x 1 m & 100 x 0.5 m (IEC 60068-2-32)



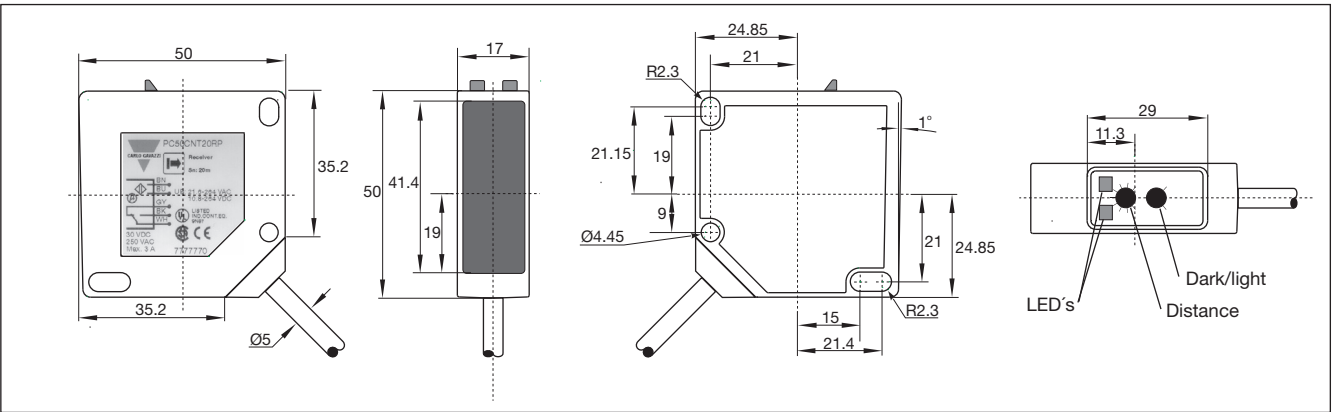
Specifications (cont.)

Rated insulation voltage	250 VAC (rms)	Connection	
Housing material		Cable	Grey, 2 m, 5 x 0.34 mm ²
Body	PC/ABS, grey reinforced	Cable gland	Nickel-plated brass
Front glass	Red PMMA	Weight	130 g
Mounting bracket	Steel, galvanized	Approvals	UL, CSA
		CE-marking	Yes

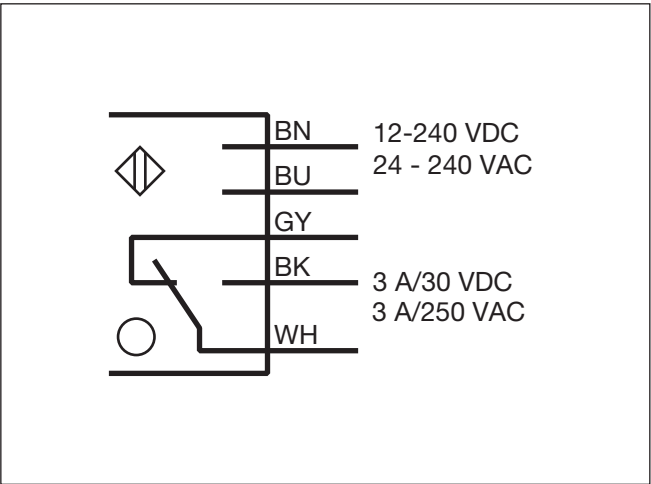
Operation Diagram



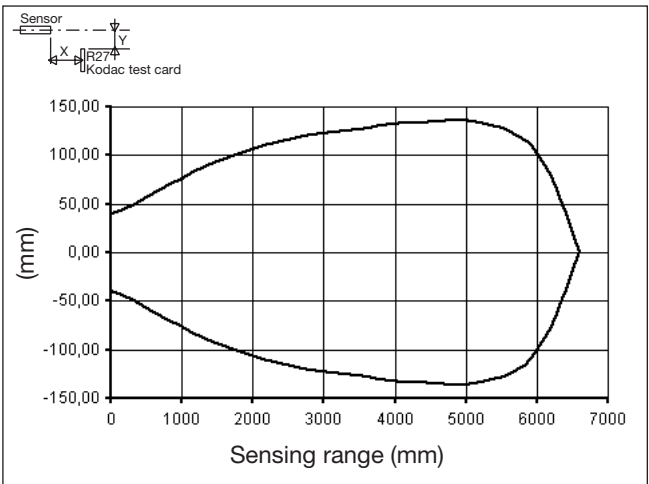
Dimensions



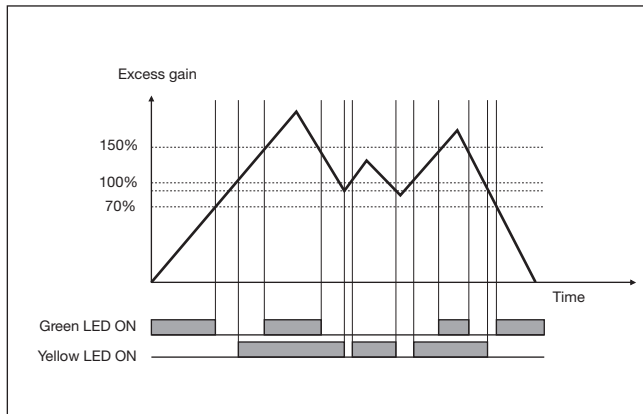
Wiring Diagram



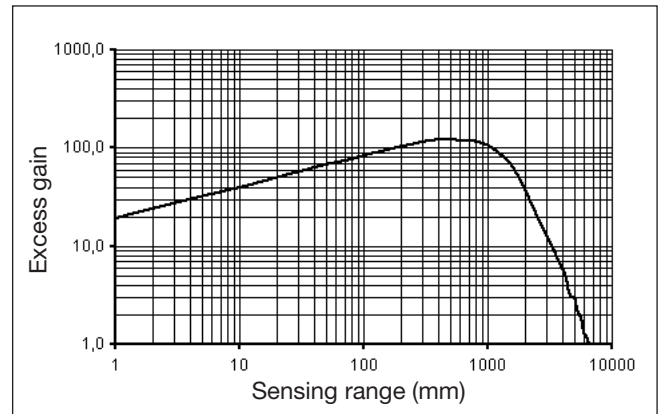
Detection Diagram



Signal Stability

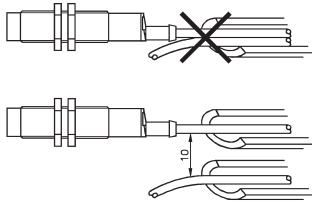


Excess Gain

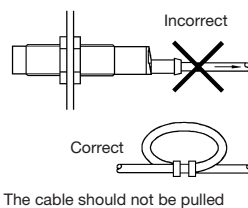


Installation Hints

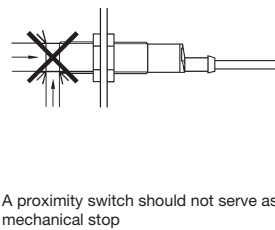
To avoid interference from inductive voltage/current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables



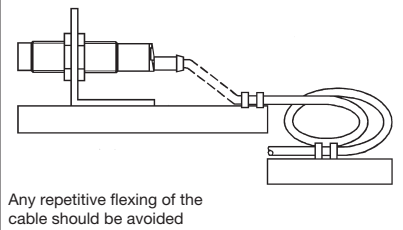
Relief of cable strain



Protection of the sensing face



Switch mounted on mobile carrier

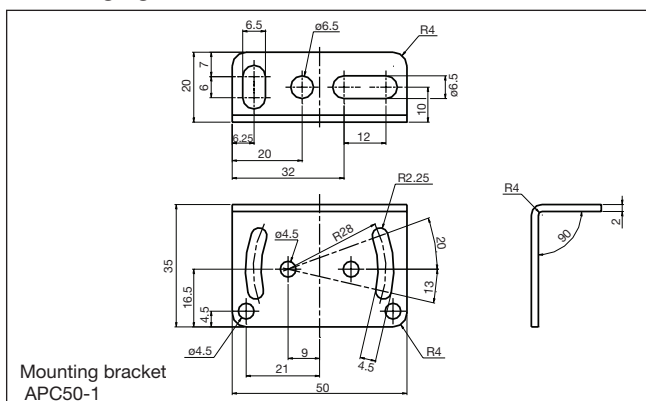


Delivery Contents

- Photoelectric switch: PC50CNP..
- Installation instruction
- Mounting bracket APC50-1
- **Packaging:** Cardboard box

Accessories

- Reflectors: ER-series
- Screwdriver for adjustment: 77-001



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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