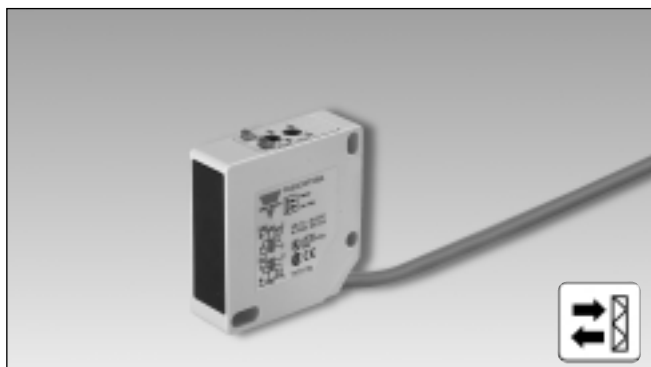


Photoelectrics

Retro-reflective, Relay Output

Type PC50CNR10RP

CARLO GAVAZZI



- Range: 10 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, 230 VAC
- Make and break switching function
- LED-indication for output ON, signal stability and supply ON
- High EMC immunity

Preliminary data sheet

Product Description

The PC50CNR. is a general purpose 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 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

PC50CNR10RP

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	10 m	PC 50 CNR 10 RP

Note: Reflectors to be ordered separately

Specifications

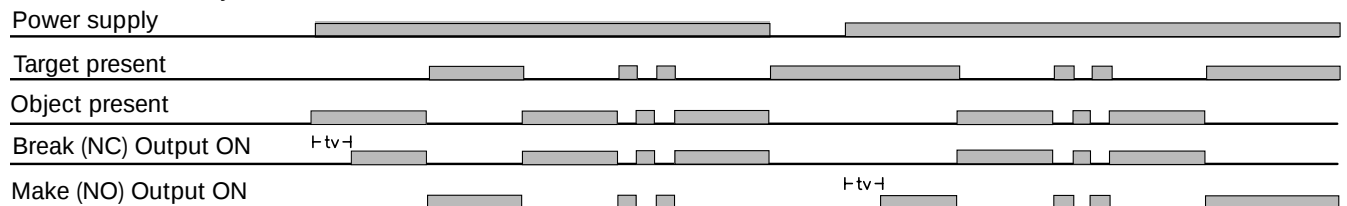
Rated operating distance (S _n)	Up to 10 m, with reflector type ER 4, ø84, ref. target	Response time OFF-ON (t _{ON}) ON-OFF (t _{OFF})	≤ 25 ms ≤ 25 ms
Blind zone	Max. 20 cm	Power ON delay (t _w)	≤ 300 ms
Sensitivity	Adj. by single-turn pot.meter	Output function	Light or dark operation is switch selectable
Temperature drift	± 0.5%/°C	Indication function Output ON Supply ON, signal stability	LED, yellow LED, green
Hysteresis (H) Differential travel	3-20%	Environment Overvoltage category Pollution degree Degree of protection	II (IEC 60664/60664A; 60947-1) 3 (IEC 60664/60664A; 60947-1) IP 67 (IEC 60529; 60947-1)
Rated operational volt. (U _B)	12-240 VDC 24-240 VAC, 50 to 60 Hz	Temperature Operating Storage	-20° to +60°C (-4° to +140°F) -25° to +80°C (-13° to +176°F)
Rated operational power	≤ 2.5 VA (relay ON)	Vibration	10 to 150 Hz, 0.5 mm/7.5 g (IEC 60068-2-6)
Output Contact ratings Resistive loads AC 1 DC 1	3 A/230 VAC 3 A/30 VDC (> 10 mA/5 VDC)	Shock	2 x 1 m & 100 x 0.5 m (IEC 60068-2-32)
Mechanical life (typical)	≥ 15 x 10 ⁶ operations	Rated insulation voltage	230 VAC (rms)
Electrical life (typical)	≥ 1 x 10 ⁵ operations at 3 A/230 VAC	Housing material Body Front glass Mounting bracket	PC/ABS, grey, reinforced PC black Steel, galvanized
Protection	Reverse polarity, transients		
Light source	GaAlAs, LED, 880 nm		
Light type	Infrared, modulated		
Sensing angle	± 2°		
Ambient light	Max. 10'000 lux		
Operating frequency	20 Hz		

Specifications (cont.)

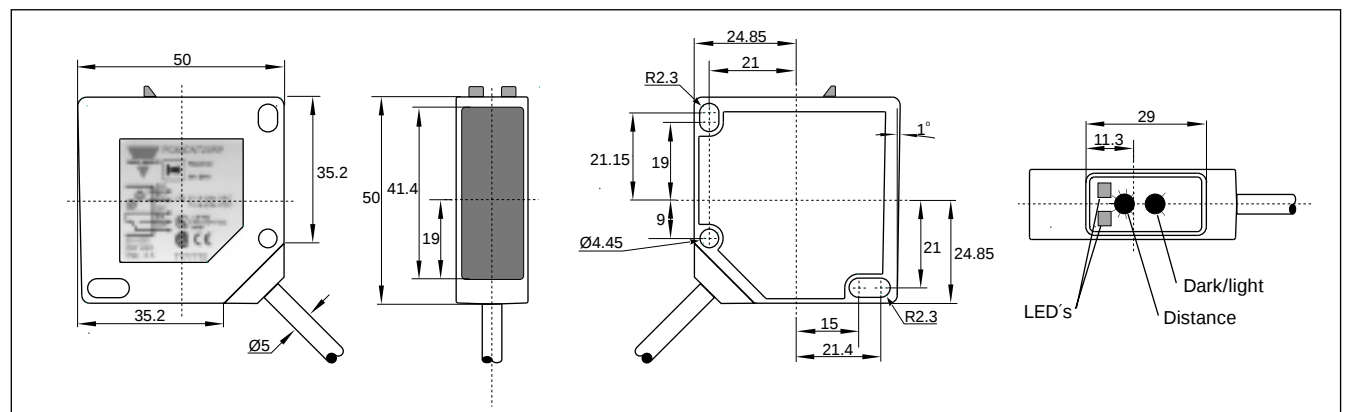
Connection		CE-marking	Yes
Cable	Grey, 2 m, 5 x 0.34 mm ²		
Weight	130 g		

Operation Diagram

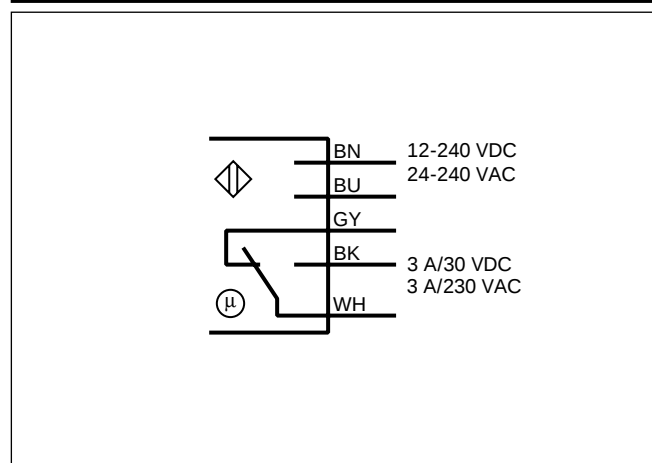
tv = Power ON delay



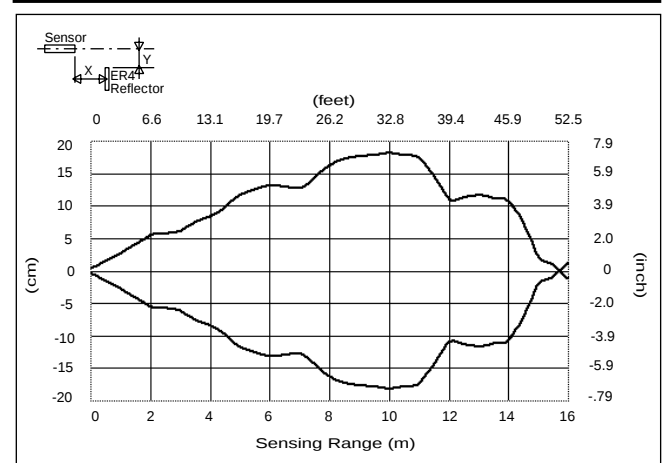
Dimensions



Wiring Diagram

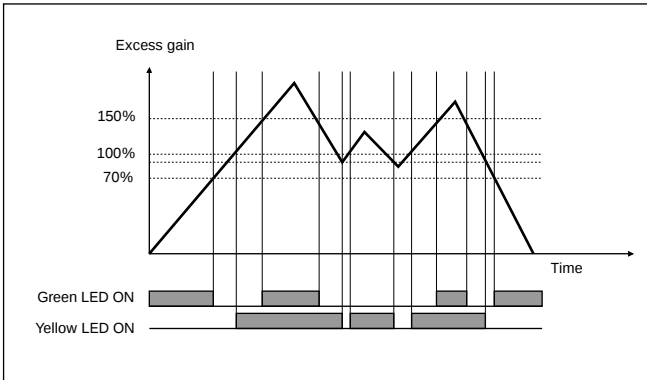


Detection Diagram

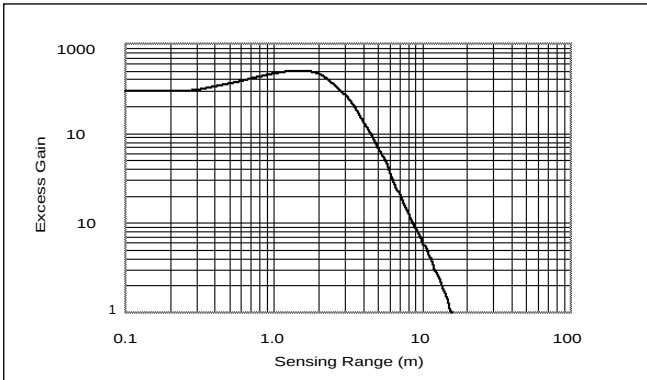




Signal Stability



Excess Gain



Delivery Contents

- Photoelectric switch: PC50CNR..
- Installation instruction
- Mounting bracket APC50-1
- **Packaging:** Cardboard box

Accessories

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

For further information refer to “Accessories”