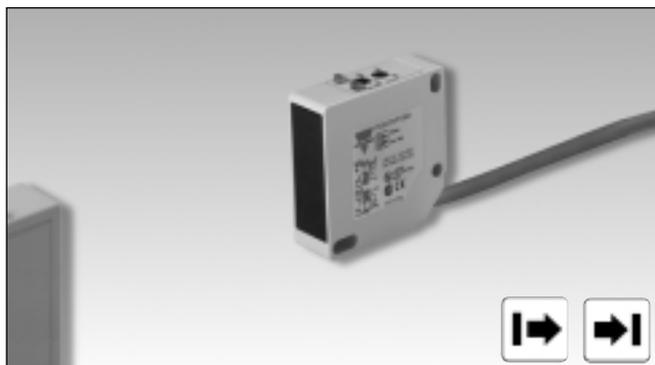


Photoelectrics

Through-beam, Relay Output

Type PC50CNT20R.



- Range: 20 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

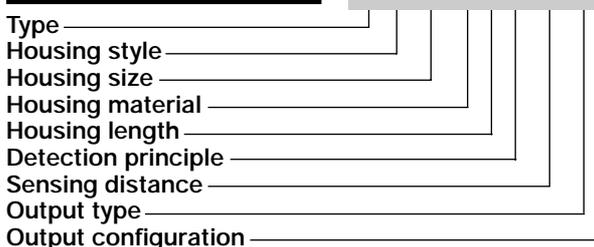
Product Description

The PC50CNT. is a family of general purpose through-beam sensors in a compact square 17 x 50 x 50 mm reinforced RC/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. Light and dark operation is switch selectable.

Ordering Key

PC50CNT20RP



Type Selection

Housing W x H x D	Range S _n	Ordering no. Receiver Make and break switching	Ordering no. Ermitter
17 x 50 x 50 mm	20 m	PC 50 CNT 20 RP	PC 50 CNT 20 R

Note: Please order emitter and receiver separately

Specifications Emitter

Rated operational volt. (U _B)	12-240 VDC 24-240 VAC, 50-60 Hz	Emitting angle	± 2°
Rated operational power	≤ 2.5 VA	Indication function	LED, green
Light source	GaAs LED, 880 nm	Power supply ON	
Light type	Infrared, modulated		

Specifications Receiver

Rated operating dist. (S _n)	Up to 20 m	Protection	Reverse polarity, transients
Blind zone	None	Operating frequency (f)	20 Hz
Sensitivity	Adj. single-turn pot.meter	Response time	OFF-ON (t _{ON}) ≤ 25 ms ON-OFF (t _{OFF}) ≤ 25 ms
Temperature drift	± 0.5%/°C	Power ON delay (t _v)	≤ 300 ms
Hysteresis (H) (differential travel)	3-20%	Output function	Light or dark operation is switch selectable
Rated operational volt. (U _B)	12-240 VDC 24-240 VAC, 50-60 Hz	Indication function	LED, yellow LED, green
Rated operational power	≤ 2.5 VA (relay ON)	Output ON	
Output		Supply ON, signal stability	
Contact ratings			
Resistive loads	AC 1 3 A/230 VAC DC 1 3 A/30 VDC (>10 mA/5 VDC)		
Mechanical life (typ.)	≥ 15 x 10 ⁶ operations		
Electrical life (typ.)	≥ 1 x 10 ⁵ operations at 3 A/230 VAC		

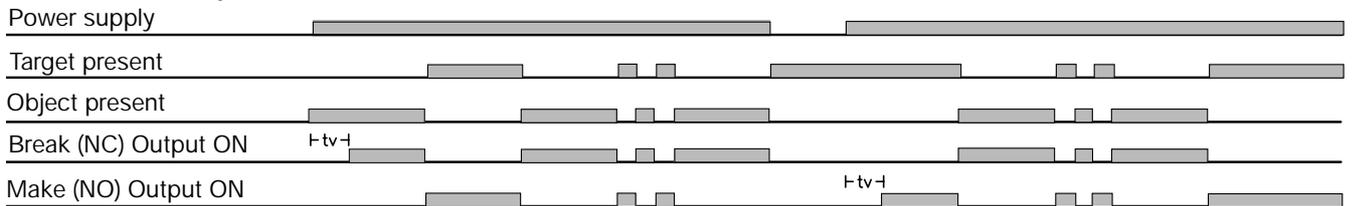


General Specifications

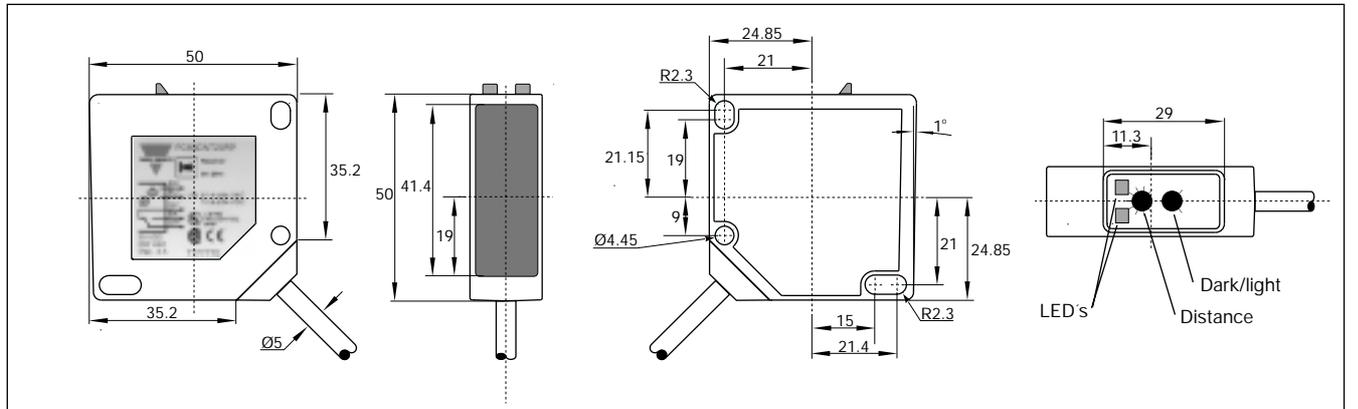
Environment		Rated insulation voltage	250 VAC (rms)
Overvoltage category	II (IEC 60664/60664A, 60947-1)	Housing material	
Pollution degree	3 (IEC 60664/60664A, 60947-1)	Body	PC/ABS, grey, reinforced
Degree of protection	IP 65 (IEC 60529, 60947-1)	Front glass	PC, black
Temperature		Mounting bracket	Steel, galvanized
Operating	-20° to +60°C (-4° to +140°F)	Connection	
Storage	-25° to +80°C (-13° to +176°F)	Cable receiver	PVC, grey, 2 m, 5 x 0.50 mm ²
Vibration	10 to 150 Hz, 0.5 mm/7.5 g (IEC 60068-2-6)	Cable emitter	PVC, grey, 2 m, 5 x 0.34 mm ²
Shock	2 x 1 m & 100 x 0.5 m (IEC 60068-2-32)	Weight	
		Emitter	130 g
		Receiver	130 g
		CE-marking	Yes

Operation Diagram

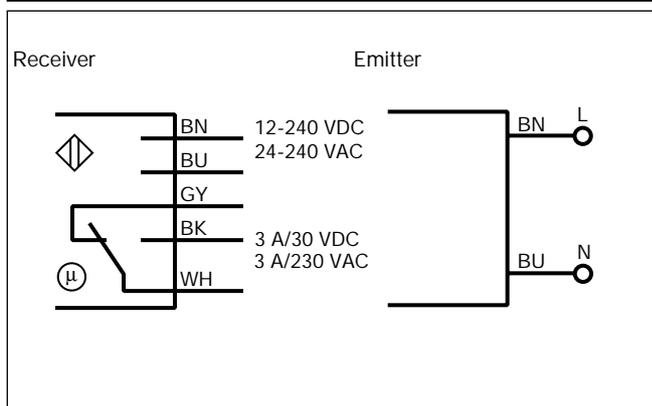
tv = Power ON delay



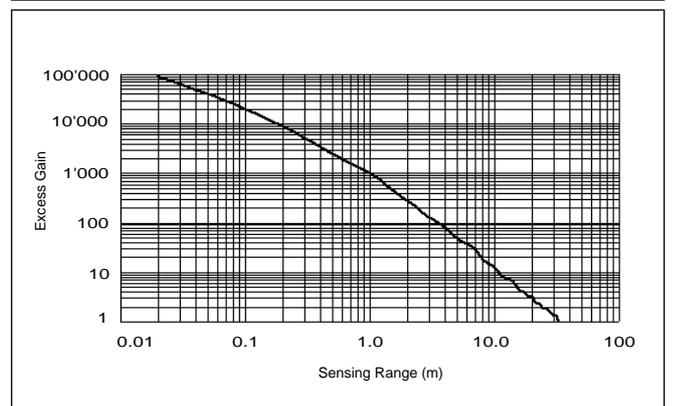
Dimensions



Wiring Diagram

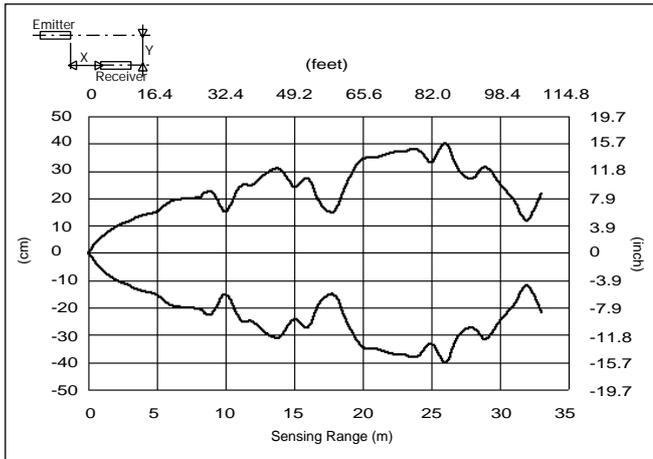


Excess Gain

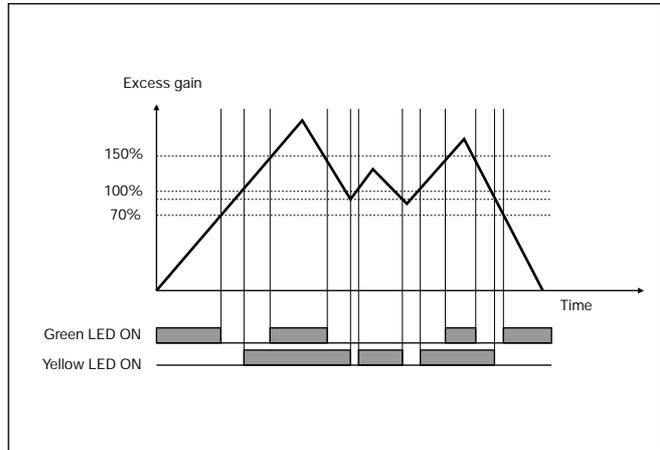




Detection Diagram



Signal Stability



Delivery Contents

- Photoelectric switch: PC50CNT..
- Installation instruction
- Mounting bracket APC50-1
- **Packaging:** Cardboard box

Accessories

- Screwdriver for adjustment: 77-001

For further information refer to "Accessories"