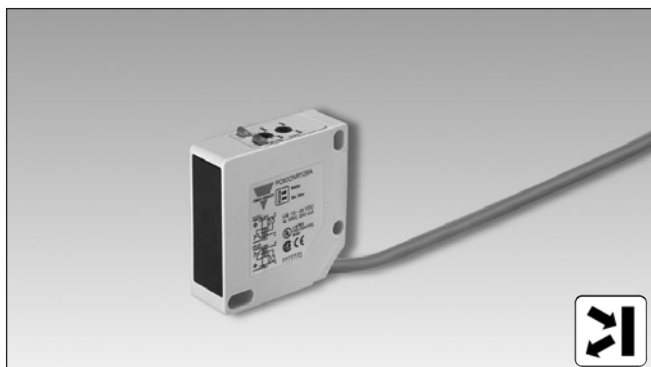


## Type PC50CND10RP



- 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



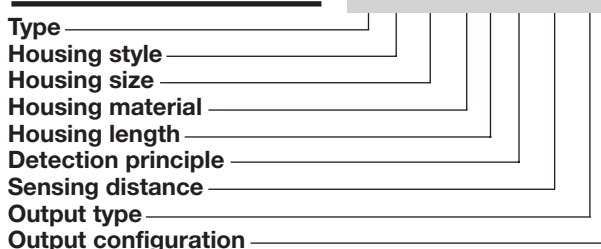
### Product Description

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

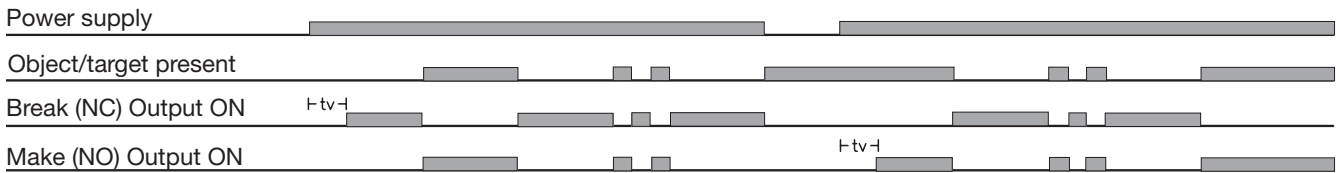
Housing W x H x D	Range (S <sub>n</sub> )	Ordering no. Make and break switching
17 x 50 x 50 mm	1 m	PC 50 CND 10 RP

### Specifications

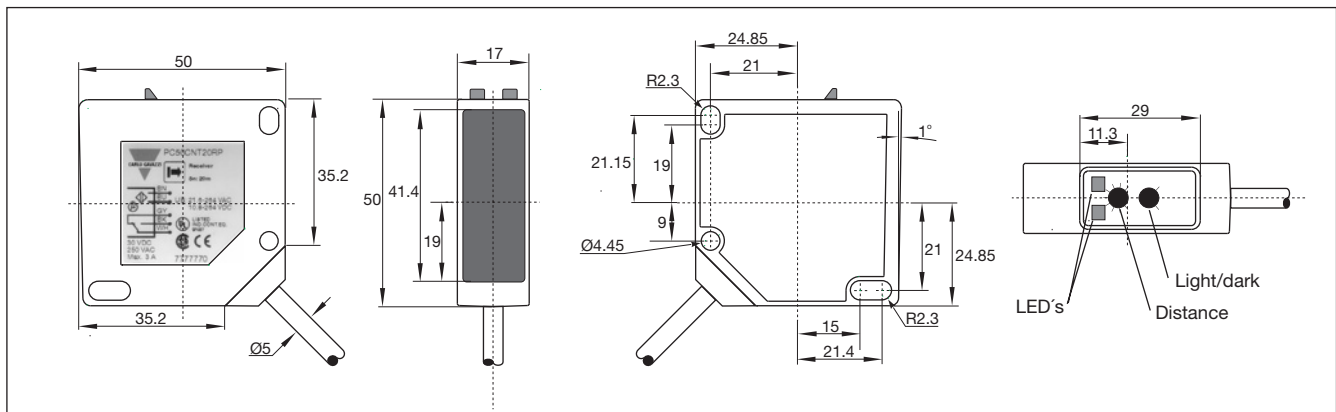
<b>Rated operating distance (S<sub>n</sub>)</b>	Up to 1 m, reference target Kodak test card R 27, white, 90% reflectivity, 200 x 200 mm	<b>Power ON delay (t<sub>v</sub>)</b>	≤ 300 ms
<b>Blind zone</b>	Max. 10 cm	<b>Output function</b>	Light and dark operation is switch selectable
<b>Sensitivity</b>	Adj.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

## Operation Diagram

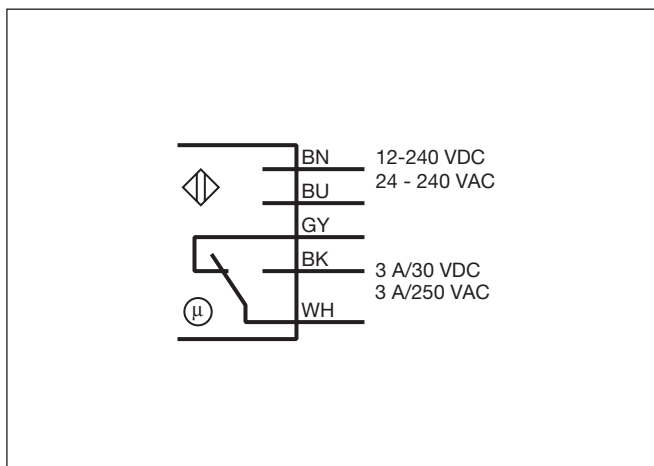
tv = Power ON delay



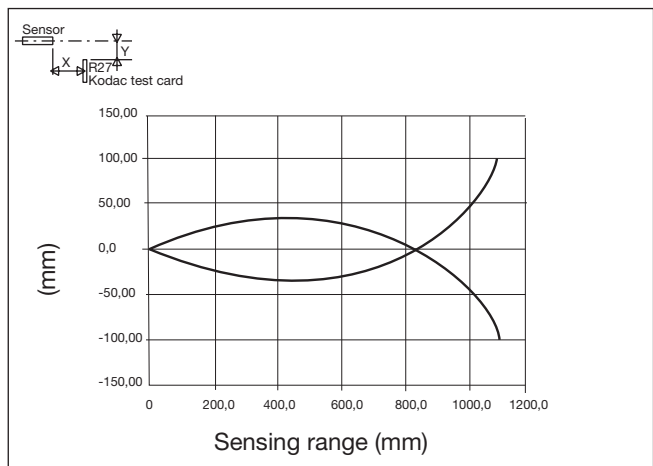
## Dimensions



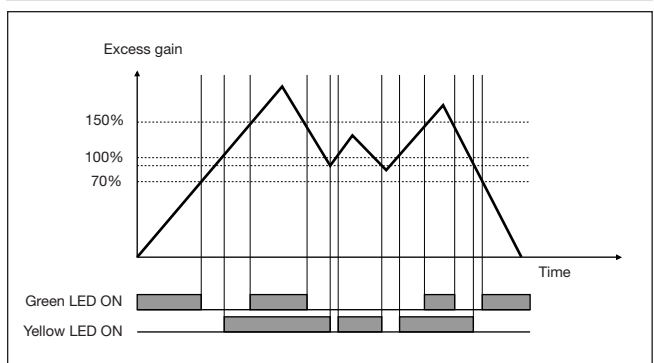
## Wiring Diagram



## Detection Diagram



## Signal Stability



## Excess Gain

