

# Plastic square photoelectric sensor PSE series



## Features

- Laser light source, long distance
- Ultra-small light spot, accurate positioning
- Universal dimension
- IP67 protection grade, suitable for harsh environments



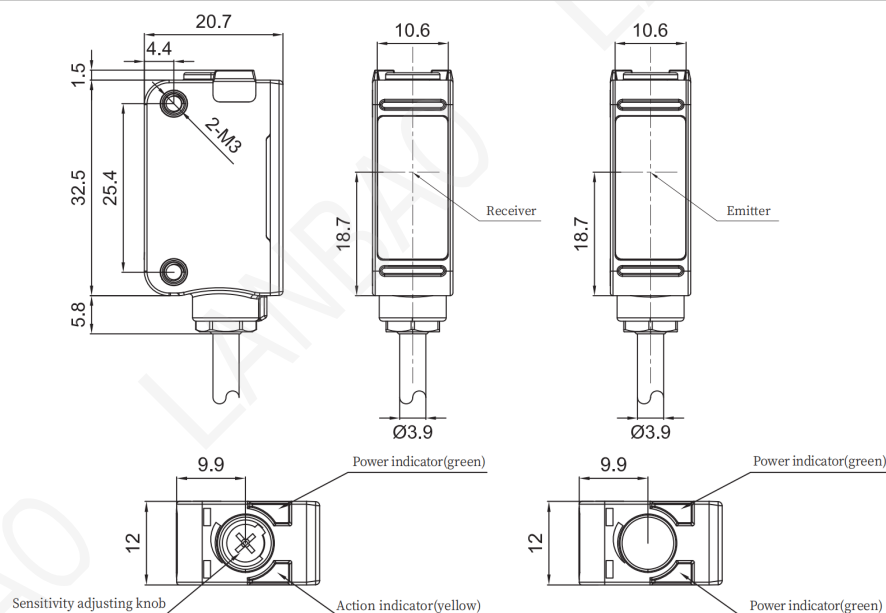
## Part number

|     |       | Emitter    | Receiver     |     |       | Emitter    | Receiver     |
|-----|-------|------------|--------------|-----|-------|------------|--------------|
| NPN | NO+NC | PSE-TM30DL | PSE-TM30DNRL | PNP | NO+NC | PSE-TM30DL | PSE-TM30DPRL |

## Technical specifications

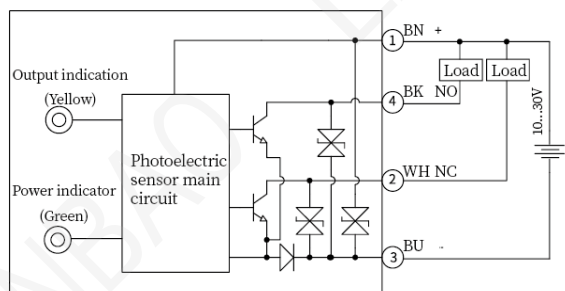
|                     |                                                                                                 |                       |                                                                                        |
|---------------------|-------------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------|
| Detection method    | Through beam                                                                                    | Response time         | T-on: ≤ 0.5ms; T-off: ≤ 0.5ms                                                          |
| Rated distance      | 30m                                                                                             | Indicator             | Green light: power indicator<br>Yellow light: output, overload or short circuit(flash) |
| Output type         | NPN NO+NC Or PNP NO+NC                                                                          | Anti ambient light    | Anti-sunlight interference ≤10,000lux;<br>Incandescent light interference ≤3,000lux    |
| Distance adjustment | Knob adjustment                                                                                 | Operating temperature | -10°C...50°C(no frost or condensation on lens surfaces)                                |
| Light spot size     | 36mm@30m(Main Light spot)                                                                       | Storage temperature   | -40°C ...70°C                                                                          |
| Output state        | Black wire NO, white wire NC                                                                    | Humidity range        | 35%~85%(no frost or condensation on lens surfaces)                                     |
| Supply voltage      | 10...30 VDC, Ripple<10%Vp-p                                                                     | Protection degree     | IP67                                                                                   |
| Consumption current | Emitter: ≤20mA; Receiver: ≤20mA                                                                 | Production standard   | EN60947-5-2:2012、IEC60947-5-2:2012                                                     |
| Load current        | ≤100mA                                                                                          | Material              | Housing: PC+ABS; Optical elements: Plastic PMMA                                        |
| Voltage drop        | ≤1.5V                                                                                           | Weight                | 50g                                                                                    |
| Light source        | Red laser(650nm) Class1                                                                         | Connection            | 2m PVC cable                                                                           |
| Min target          | ≥ Φ3mm@0~2m, ≥ Φ15mm@2~30m                                                                      |                       |                                                                                        |
| Circuit protection  | Short circuit protection, overload protection,<br>reverse polarity protection, zener protection |                       |                                                                                        |

## Dimensions

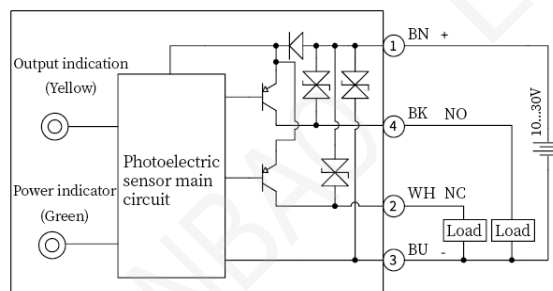


## Wiring diagram

Receiver- NPN



Receiver- PNP



Emitter

