

## Plastic square shape photoelectric sensors PTL series



### Features

- ◆Through beam reflection working principle;
- ◆Excellent anti-interference performance
- ◆High detection accuracy

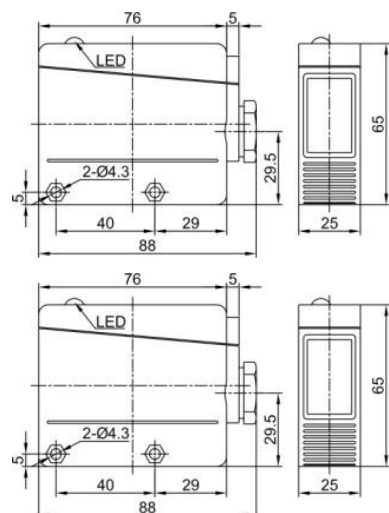
### Part number

|     |       | Emitter     | Receiver        |     |       | Emitter     | Receiver        |
|-----|-------|-------------|-----------------|-----|-------|-------------|-----------------|
| NPN | NO+NC | PTL-TM20D-D | PTL-TM20DNRT3-D | PNP | NO+NC | PTL-TM20D-D | PTL-TM20DPRT3-D |

### Technical specifications

|                         |                            |                       |                                         |
|-------------------------|----------------------------|-----------------------|-----------------------------------------|
| Detection type          | Through beam               | Consumption current   | ≤25mA                                   |
| Rated distance [Sn]     | 20m (non-adjustable)       | Circuit protection    | Short-circuit and reverse polarity      |
| Standard target         | >φ15mm opaque object       | Response time         | < 8.2ms                                 |
| Light source            | Infrared LED (880nm)       | Output indicator      | Emitter: Green LED Receiver: Yellow LED |
| Dimensions              | 88 mm *65 mm *25 mm        | Ambient temperature   | -15°C...+55°C                           |
| Output                  | NO+NC                      | Ambient humidity      | 35-85%RH (non-condensing)               |
| Supply voltage          | 10...30 VDC                | Voltage withstand     | 1000V/AC 50/60Hz 60s                    |
| Min target              | .....                      | Insulation resistance | ≥50MΩ(500VDC)                           |
| Hysteresis range [%/Sr] | .....                      | Vibration resistance  | 10...50Hz (0.5mm)                       |
| Repeat accuracy [R]     | ≤5%                        | Degree of protection  | IP67                                    |
| Load current            | ≤200mA (receiver)          | Housing material      | PC/ABS                                  |
| Residual voltage        | ≤2.5V (receiver)           | Connection type       | Terminal                                |
| Delay time              | 0.1...5s(P2 Potentiometer) |                       |                                         |

### Dimensions



Emitter

Receiver

### Wiring diagram

