

## Metal cylindrical shape photoelectric sensors PR12 series



### Features

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



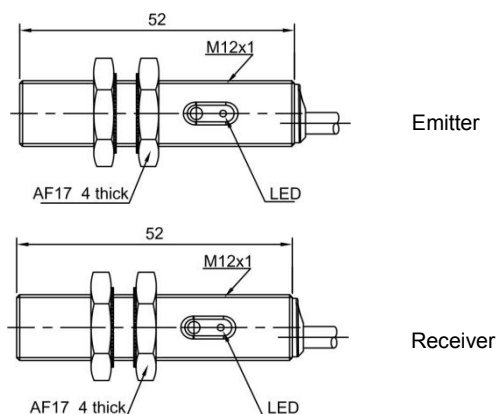
### Part number

|           | Emitter   | Receiver    |           | Emitter   | Receiver    |
|-----------|-----------|-------------|-----------|-----------|-------------|
| NPN NO    | PR12-TM5D | PR12-TM5DNO | PNP NO    | PR12-TM5D | PR12-TM5DPO |
| NPN NC    | PR12-TM5D | PR12-TM5DNC | PNP NC    | PR12-TM5D | PR12-TM5DPC |
| NPN NO+NC | PR12-TM5D | PR12-TM5DNR | PNP NO+NC | PR12-TM5D | PR12-TM5DPR |

### Technical specifications

|                         |                             |                       |                                         |
|-------------------------|-----------------------------|-----------------------|-----------------------------------------|
| Detection type          | Through beam                | Consumption current   | ≤25mA                                   |
| Rated distance [Sn]     | 5m (non-adjustable)         | Circuit protection    | Short-circuit and reverse polarity      |
| Standard target         | >φ10mm opaque object        | Response time         | < 8.2ms                                 |
| Light source            | Infrared LED (880nm)        | Output indicator      | Emitter: Green LED Receiver: Yellow LED |
| Dimensions              | M12*52mm                    | Ambient temperature   | -15°C...+55°C                           |
| Output                  | NO/NC (depends on receiver) | 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      | Nickel-copper alloy                     |
| Residual voltage        | ≤2.5V (receiver)            | Connection type       | 2m PVC cable                            |

### Dimensions



### Wiring diagram

