

Plastic square shape photoelectric sensors PSR series



Features

- ◆ 18mm threaded cylindrical installation or side installation, it is an ideal substitute for various styles of sensors;
- ◆ Large angle, long distance, easy to install and debug;
- ◆ With 360° visible bright LED status indicator;



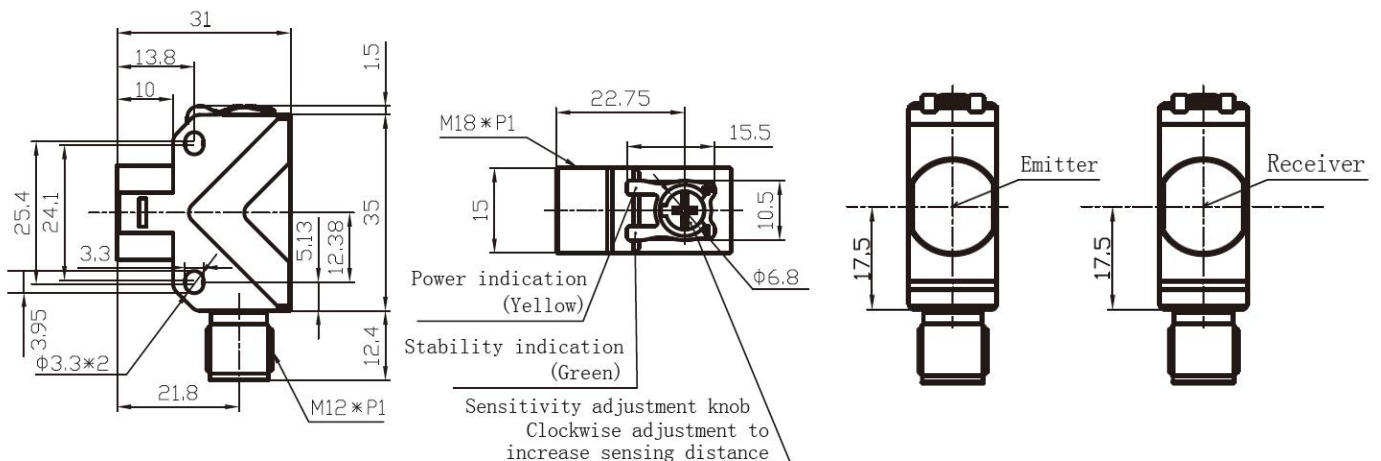
Part number

	Emitter	Receiver		Emitter	Receiver
NPN	PSR-TM20D-E2	PSR-TM20DNB-E2	PNP	PSR-TM20D-E2	PSR-TM20DPB-E2

Technical specifications

Detection type	Through beam	Anti-ambient light	Anti-ambient light interference < 10,000lx;
Rated distance [Sn]	0...20m		Incandescent light interference < 3,000lx
Standard target	> Φ15mm opaque object	Indicator display	Green light: power indicator
Light source	Infrared LED (850nm)		Yellow light: output indication, short circuit or overload indication (flashing)
Direction angle	> 4°	Ambient temperature	-15°C...60°C
Output	NO/NC	Ambient humidity	35-95%RH (non-condensing)
Supply voltage	10...30VDC	Voltage withstand	1000V/AC 50/60Hz 60s
Load current	≤100mA	Insulation resistance	≥50MΩ (500VDC)
Residual voltage	≤1V (Receiver)	Vibration resistance	10...50Hz (0.5mm)
Distance adjustment	Single-turn potentiometer	Degree of protection	IP67
Consumption current	≤15mA (Emitter), ≤18mA (Receiver)	Housing material	ABS
Circuit protection	Short-circuit, overload, reverse polarity and zener protection	Installation method	Composite installation
Response time	≤1ms	Optical components	Plastic PMMA
NO/NC adjustment	NO: 2 feet is connected to the positive electrode;	Weight	10g
	NC: 2 feet is connected to the negative electrode;	Connection type	M12 connector

Dimensions



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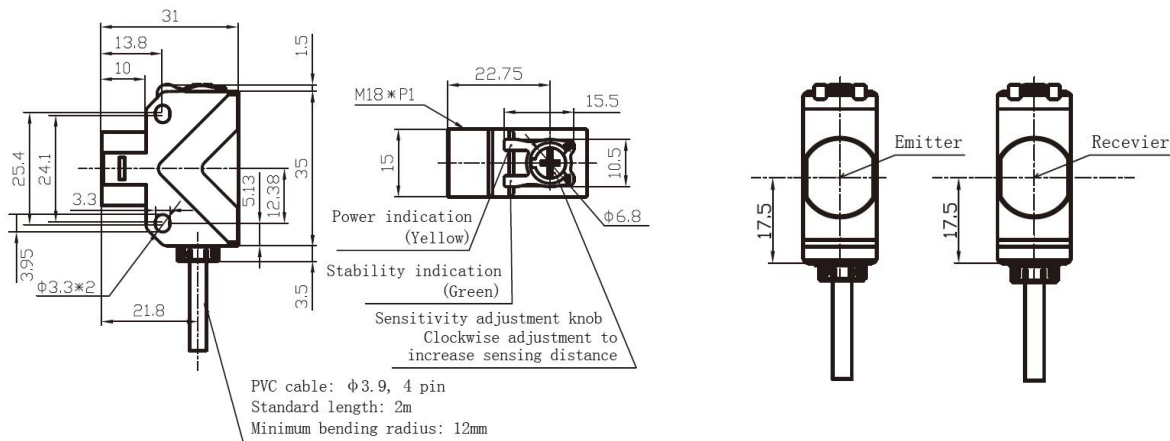
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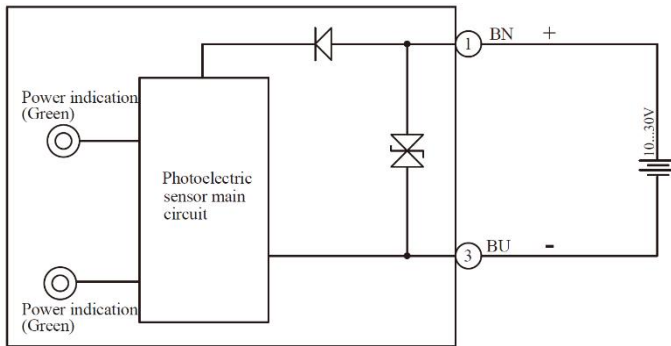
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Circuit protection	Short-circuit, overload, reverse polarity and zener protection	Installation method	Composite installation
Response time	≤1ms	Optical components	Plastic PMMA
NO/NC adjustment	NO: white line is connected to the positive electrode;	Weight	52g
	NC: white line is connected to the negative electrode;	Connection type	2m PVC cable

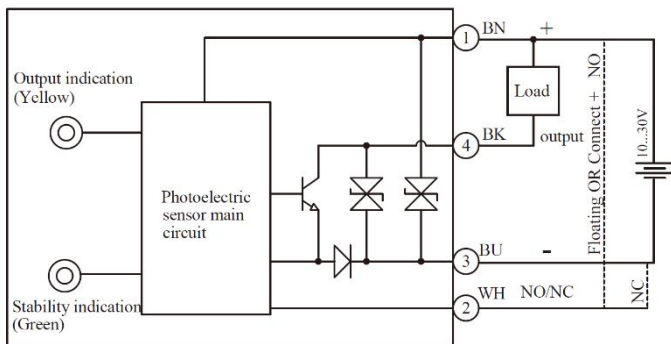
Dimensions


Wiring diagram

Emitter



NPN



PNP

