

Small size photoelectric sensors PSM series



Features

- 18mm threaded cylindrical mounting for easy installation;
- Short case for small installation space;
- Big angle, long distance, easy to install and debug;
- With 360° visible bright LED status indicator;
- Excellent anti-light interference, high stability;



Model

	Emitter	Receiver		Emitter	Receiver
NPN NO/NC	PSM-TM20D	PSM-TM20DNB	PNP NO/NC	PSM-TM20D	PSM-TM20DPB

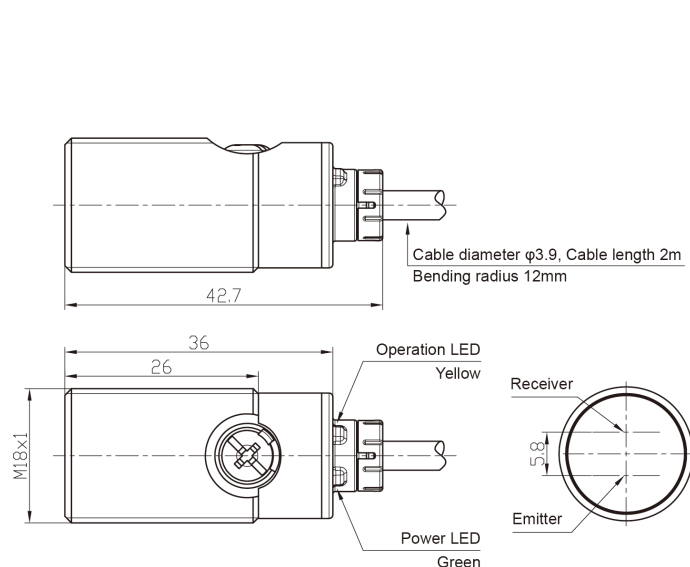
Specifications

Detection type	Through beam	Circuit protection	Short-circuit, overload, reverse polarity protection
Rated distance	20m	Connection	2m PVC cable
Light source	Infrared (850nm)	Indicator	Green LED: power, stable
Standard target	> $\phi 15$ mm opaque object		Yellow LED: output, short circuit or overload
Output	NPN NO/NC or PNP NO/NC	Anti-ambient light	Anti-sunlight interference $\leq 10,000$ lux;
Response time	≤ 1 ms		Incandescent light interference $\leq 30,000$ lux
Direction angle	$> 4^\circ$	Operating temperature	-25...55 $^\circ\text{C}$
Supply voltage	10...30 VDC	Storage temperature	-35...70 $^\circ\text{C}$
Consumption current	Emitter: ≤ 20 mA ; Receiver: ≤ 20 mA	Protection degree	IP67
Load current	≤ 200 mA	Certification	CE
Voltage drop	≤ 1 V	Material	Housing: Nickel copper alloy; Filter: PMMA
Distance adjustment	Single-turn potentiometer	Annex	M18 nut (4PCS), instruction manual
NO/NC adjustment	White wire is connected to the positive pole or hang up, NO mode; White wire is connected to the negative pole, NC mode		

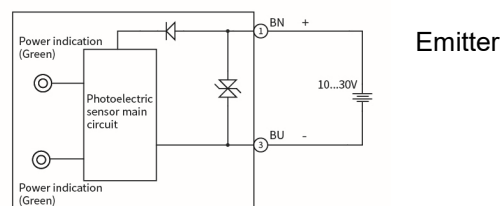
Remarks: ①Detection object is 90% white card with size 20cm * 20cm;

②The green LED becomes weaker, which means that the signal is weaker and the sensor is unstable; The yellow LED flashes, which means that the sensor is shorted or overloaded;

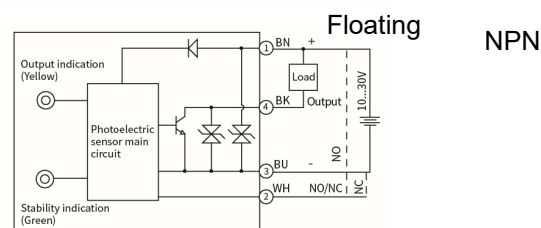
Dimensions



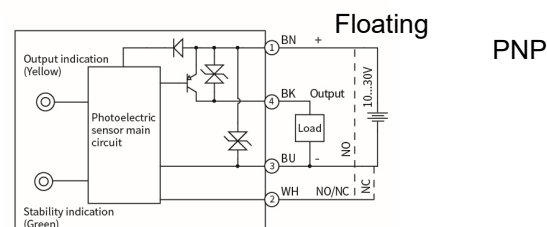
Circuit Diagrams



Emitter



NPN



PNP