

Small size photoelectric sensors PSS series



Features

- 18mm threaded cylindrical mounting, easy to install
- Short case for small installation space
- Big knob design for easy adjustment;
- IP67 protection, suitable for harsh environments;
- Small detection blind zone, appliable to detection of objects in bright background;



Model

Dimensions

NPN NO/NC	PSS-BC10DNB-E2	PNP NO/NC	PSS-BC10DPB-E2
	1 33 20 102 112		1 33 56 105 15 22

Specifications			
Detection type	Diffuse reflection	Hysteresis	320%
Rated distance	10cm	Indicator	Green LED: power, stable
Light source	Infrared (940nm)		Yellow LED: output, short circuit or overload
Output	NPN NO/NC or PNP NO/NC	Anti-ambient light	Anti-sunlight interference ≤ 10,000lux;
Response time	≤0.5ms		Incandescent light interference ≤ 3,000lux
Supply voltage	1030 VDC	Operating temperature	-2555 °C
Consumption current	≤20mA	Storage temperature	-3570 °C
Load current	≤200mA	Protection degree	IP67
Voltage drop	≤1V	Certification	CE
Circuit protection	Short-circuit, overload, reverse polarity protection	Material	Housing: PC+ABS; Filter: PMMA
Connection	M12 4-core connector	Annex	M18 nut (2PCS), instruction manual
Distance adjustment	Single-turn potentiometer		
NO/NC adjustment	Feet 2 is connected to the positive pole or hang up, NO mode; Feet 2 is connected to the negative pole, NC mode		

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

The 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;

Circuit Diagrams

35 Operation LED yellow Receiver Power LED green

NPN Floating BK Output 0 Photoelectric sensor main circuit 9 0 2<u>WH</u> NO/NC¦ ≥ **PNP** Floating DBN Output indication (Yellow) ⊕BK Photoelectric Load BU \bigcirc 2)<u>WH</u> NO/NC i ≥ Stability indication (Green)