

Mark sensor SPM series



Features

- Built-in RGB three-color light source color mode and color mark mode
- The detection distance is 3 times that of similar color mark sensors
- The detection return difference is adjustable, which can eliminate the influence of jitter of the measured object
- Light spot size is about 1.5*7mm (23mm detection distance)
- Two-point setting method
- Smaller size



Model specification

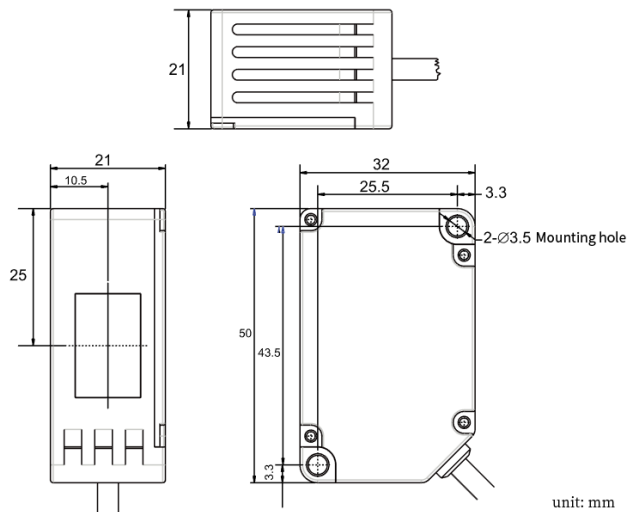
NPN	SPM-TNR-RGB	PNP	SPM-TPR-RGB
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Specifications

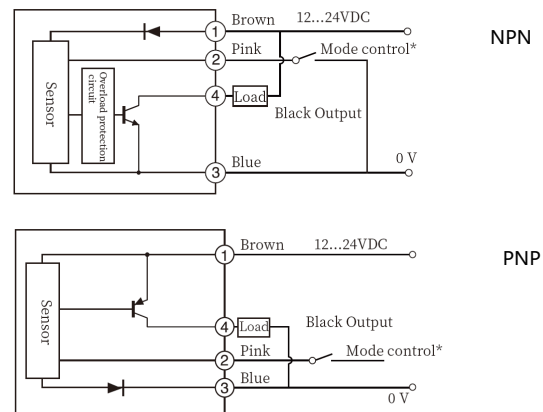
Detection distance	18...28mm		
Supply voltage	24VDC±10% Ripple P-P < 10%		
Light source	Composite LED:Red/Green/Blue(Light source wavelength: 640nm/525nm/470nm)		
Current consumption	Power < 850mW(Supply voltage is 24V、Consumption current < 35mA)		
Mode switch input	Color mark mode: Low(ON) 0...0.6VDC; Leakage current is below 0.5mA; Input impedance is about 10kΩ.	Color mark mode: Low(OFF) 0...0.6VDC or open	
	Color mode: High(OFF) 12... +VDC or open	Color mode: High(ON) 12... +VDC; Leakage current is below 3mA; Input impedance is about 10kΩ.	
Output type	NPN open-collector transistor:the max inflow current is 50mA;The applied voltage is below 30VDC(Between output and 0V);Residual voltage is less than 1.5V(When inflow current is 50mA)*	PNP open-collector transistor:the max inflow current is 50mA;The applied voltage is below 30VDC(Between output and +V);Residual voltage is less than 1.5V(When inflow current is 50mA)*	
	Output operation	Color mark mode: ON when color mark detection; Color mode: ON when consistent	
Protection circuit	Short circuit protection		
Response time	< 200μs		
Ambient temperature	-10...55°C(No condensing、No condensation)		
Environment humidity	35...85%RH(No condensation)		
Housing material	Housing: PBT; Operation panel: PC; Operation button: Silica gel; Lens:PC		
Connection method	2m cable(0.2mm ² 4-pins cable)		
Weight	About 104g		

*Specified measurement conditions: ambient temperature +23°C

Dimensions



Wiring diagram



Note: When the pink line is disconnected (OFF), it's color mode;
When the pink line is connected (ON), it's color mark mode.