

Color Sensor CPES series



Features

- Micro-color recognition
- Simple sensitivity adjustment, intelligent and digital setting
- Small size and high power dedicated detection head
- 8-channels or 4-channels detection, when multiple colors are detected, the functions can be changed from one generation to eight, reducing production costs
- Can detect nearly 3000 colors
- A variety of detection modes are suitable for a variety of different application requirements

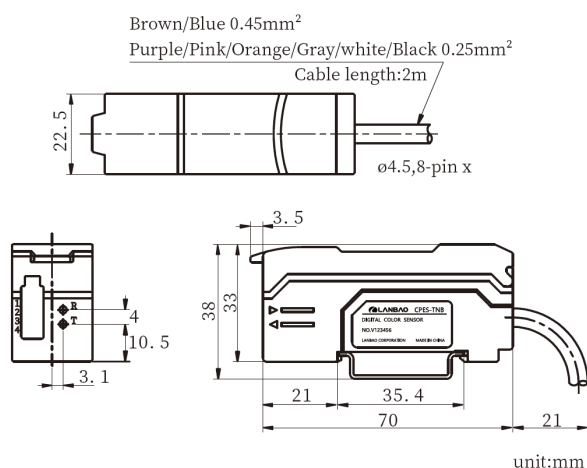
Model specification

NPN	CPES-TNB	PNP	CPES-TPB
-----	----------	-----	----------

Specifications

Response time	200μS(HIGH SPEED)/1ms(FINE)/4ms(TURBO)/8ms(SUPER)
Control output	NPN(PNP)Open collector X4 channel, max 40VDC(30VDC),1 output reaches 100mA, A total of 4 outputs reach 200mA,residual voltage:1V max
Protection circuit	Reverse protection, Overcurrent protection, Overvoltage protection
External calibration input	Input time: ≤20ms
External switching input (C/C+I mode)	Input time: ≤20ms
External offset input (Super I mode)	Input time: ≤20ms
Timer function	Timer OFF/OFF-delay/ON-delay/single trigger, timer time is adjustable from 1 to 1,000ms (for each domain separately)
Power supply	24VDC, Ripple(P-P): < 10%
Consumption current	Normal mode: 1.5W(≤62.5mA),Eco mode: 1W(≤42mA)
Ambient temperature	-10...55°C(No condensation)
Vibration resistance	10...55Hz, dual amplitude 1.5mm(2 hours each in X, Y, Z directions)
Material	Housing、 Cover: PC
Weight	About 150g (with 2m cable)

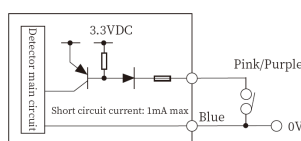
Dimensions



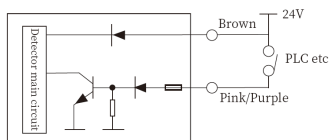
Wiring diagram

Input circuit

External regulation(Pink)/External database selection/external shift(purple)

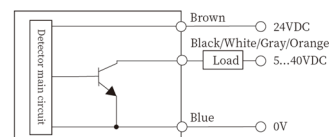


NPN

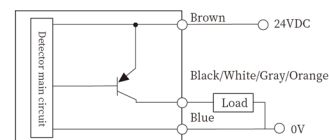


PNP

Output circuit



NPN



PNP

Detection head CPES series



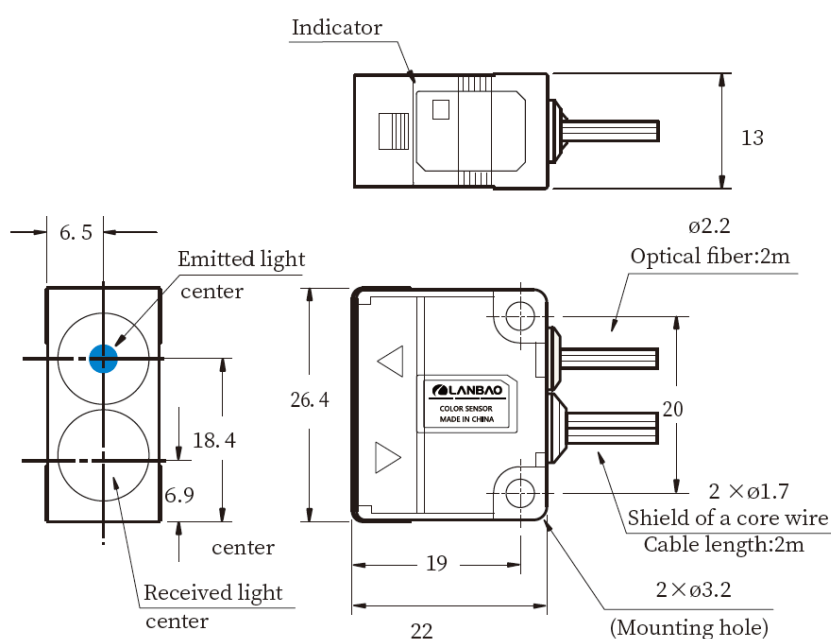
Model specification

NPN	CPES-C09
-----	----------

Specifications

Examination range	28...52mm
Min spot diameter	4.5mm@40mm
Light source	Composite LED:Red/Green/Blue(Lightsource wave length:665nm/520nm/465nm)
Minimum bending radius	R25mm
Ambient luminosity	Incandescent: maximum 1,000lux; Daylight: maximum 20,000lux
Ambient temperature	-10...55°C(No condensation)
Vibration resistance	10...55Hz, dual amplitude 1.5mm(2 hours each in X, Y, Z directions)
Protection degree	IP40
Material	Body: PC; Lens cover: Polyarylate
Weight	About 40g (with 2m cable)

Dimensions



unit:mm