



Basic Features	Working Principle	Photoelectric Sensor	
	Housing Style	Square	
	Optical Working Principle	Diffuse Reflection	
	Detection Range	10mm(±3mm)	
	Spot Size	1*6mm (Set Distance: 10mm)	
	Detected Object	—	
	Light Source	Red/Blue/Green Composite LED (Wavelength 625nm/470nm/525nm)	
	Indicator Light	Output Status - Orange	
	Sensitivity Adjustment	7-segment 8-digit Display (Red: 4 digits, Green: 4 digits)	
Electrical data	Switching Mode	L.on (light-on action)/D.on (dark-on action) switchable	
	Output Mode	NPN collector open	PNP collector open
	Response Time	Color Mark Mode 0.05ms, Color Mode 0.2ms	
	Switching Frequency	≤6kHz	
	Repeatability	5%SN	
	Hysteresis	5%	
	Operating Voltage	12~24V DC±10%	
	Current Consumption	≤35mA(24V DC)	
	Residual Voltage	<1.5V(Load current < 50mA)	
	Load Current	< 50mA	
	Insulation Resistance	Insulation Resistance between Power Terminal and Housing ≥ 20MΩ (250VDC)	
	Withstand Voltage	1000VAC (50/60Hz), 1 Minute between Power Terminal and Housing	
	Protection Circuit	Reverse Polarity Protection/short Circuit Protection/surge Protection	
Environmental conditions	Operating Temperature	-10℃~+50℃(No Freezing)	
	Storage Temperature	-20℃~+70℃(No Freezing)	
	Operating Humidity	35%~95%RH(No Condensation)	
	Storage Humidity	35%~85%RH(No Condensation)	
	Ambient Light	Incandescent Lamp ≤ 3000 Lux; Sunlight ≤ 10000 Lux	
	Vibration Resistance	10~50Hz, amplitude 1.5mm, 2 hours each in X/Y/Z axes	
	Protection Rating	IP67	
Mechanical data	Maximum Tightening Torque	—	
	Connection Method	2m/3-core cable, Ø4mm	
	Dimensions	57*35*24mm	
	Material	PC	
	Weight	0.05kg	
	Accessories	Installation Screws	
Model	NPN	ESE-10N	
	PNP	ESE-10P	

Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

AI Image

Code Readers

Vibration

Temperature

RFID

Safety door lock

Pressure Switch

Communication

Accessories

Guidance

Photoelectric

Cylindrical

IP69K high protection type

Square

Flat type

Thin type

BGS

Color/Mark Detection

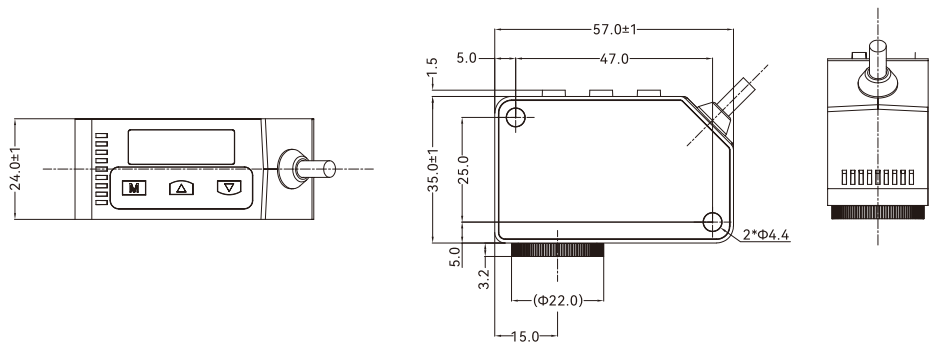
TOF type

Reflectors

Reflectors

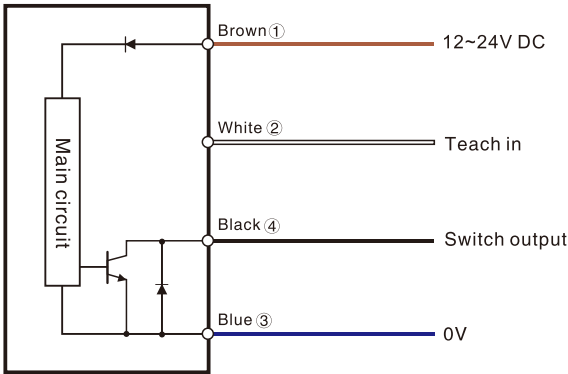
Color/Mark Detection

Dimensions Unit: mm

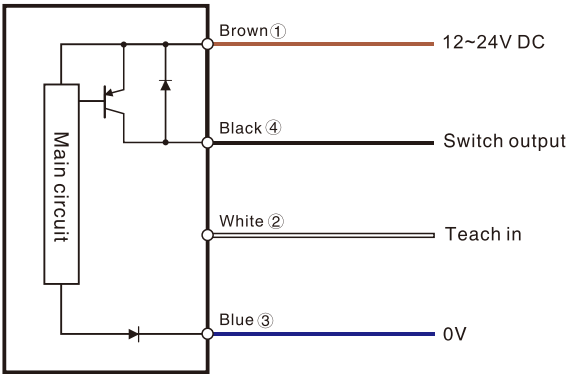


Circuit diagram

NPN Output



PNP Output



Guidance

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