

Color/Mark Detection

ESC Series

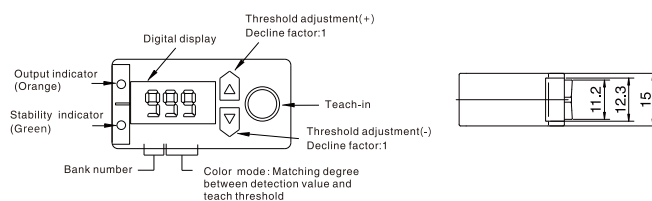
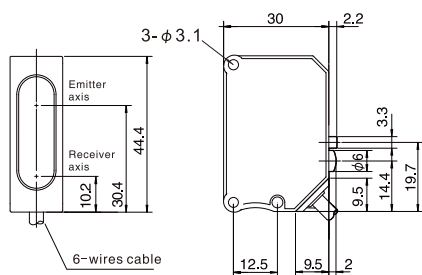


Appearance

Sensing type	Diffuse reflection
Sensing distance	18 ± 2mm
Spot size	φ 6mm/18mm
Output type	NPN/PNP Open-collector, ≤100mA/30V DC
Switch type	Selectable L.on/D.on
Indicator	Output indicator: Orange; Work indicator: Green
Digital display	7 segments, 3 digit display (Red and Green LED)
Response time	Mask mode: H1/0.25 ms, H2/0.5 ms, L/1.2 ms Color mode: H1/0.8 ms, H2/1.6 ms, L/4 ms
Time delay function	OFF delay/ ON delay/ Single pulse delay (0~990ms:10ms; 1~10s unit:1s)
Light source	RGB 3 color light source
Operating voltage	10~30V DC ± 10%
Current consumption	≤40mA
Load current	≤100mA
Ambient illuminance	Sunlight ≤10000Lux, Incandescent lamp ≤3000Lux
Ambient temperature	-25°C~+55°C, No freezing
Ambient humidity	35%~85%RH, No condensation
Insulation resistance	≥20 Ω (500V DC)
Impact resistance	50G(500m/s²), XYZ three directions
Degree of protection	IP67
Connection method	2M 4 core cable
Material	Housing: ABS, Lens: PMMA
Accessories	Bracket, mounting screw
Model No.	NPN ESC-18N PNP ESC-18P

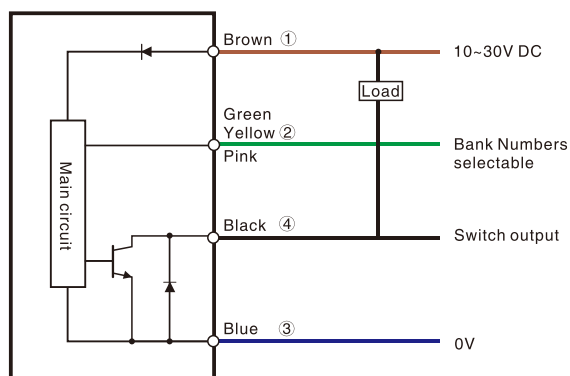
Dimensions

Unit: mm

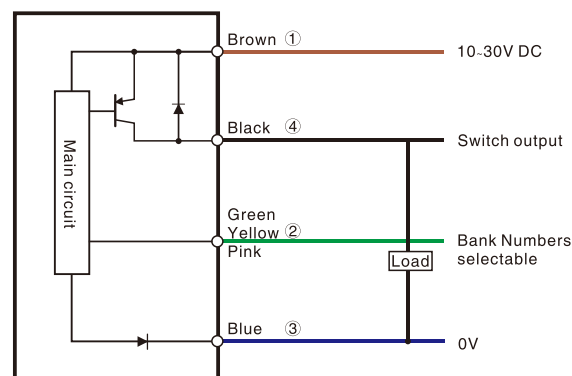


Circuit diagram

NPN Output



PNP Output





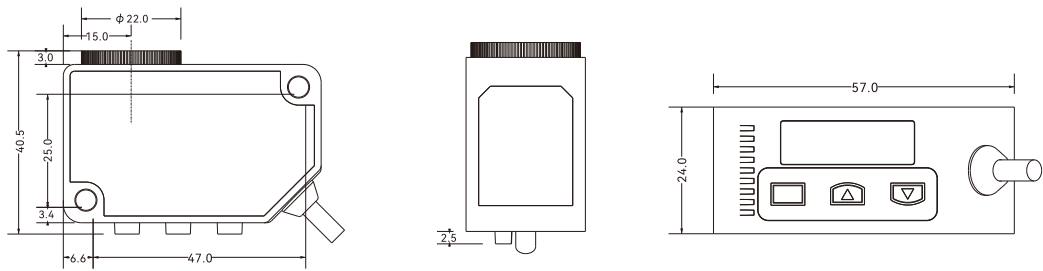
NEW!



Appearance	
Sensing method	Diffuse reflection
Sensing distance	10mm ± 3mm
Spot size	1*6mm/10mm
Light emitting element	Red/Blue/Green Composite LED (light emission peak wavelength: 625nm/470nm/525nm)
Output	NPN/PNP open-collector
Indicator	Output indicator: Yellow
Response time	Mark mode: 0.05ms, color mode: 0.2ms
Switch type	L.on/D.on selectable
Digital display	Four digits
Operating voltage	12~24V DC ± 10%
Residual voltage	< 1.5V(Load current < 50mA)
Current consumption	< 35mA(24V)
Load current	< 50mA
Circuit protection	Reverse polarity protection, short circuit protection
Ambient humidity	35%~85%RH
Ambient temperature	Working: -10℃~+55℃, no freezing, no condensation; Storage: -20℃~70℃
Insulation resistance	Insulation resistance >20MΩ at DC500V between all terminals and housing
Static electricity	± 8000V
Protection degree	IP67
Group pulse	± 2000V
Anti-vibration	10~50Hz, 1.5mm amplitude, 2 hours each in X,Y,Z directions
Ambient illuminance	Incandescent lamp: ≤3000Lux
Delay Function	OFF/ON, one time output delay ranging from 1~9999ms.
Model	NPN PNP
	ESE-10N ESE-10P

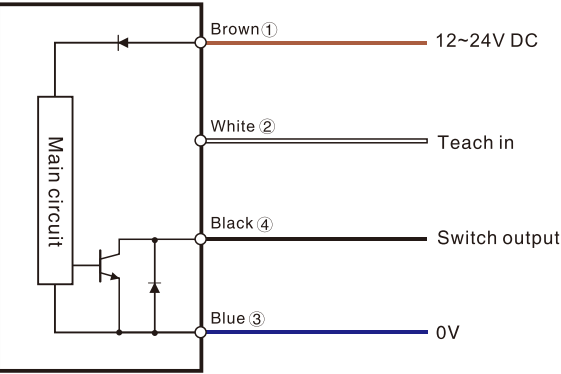
Dimensions

Unit:mm



Circuit diagram

NPN Output



PNP Output

