

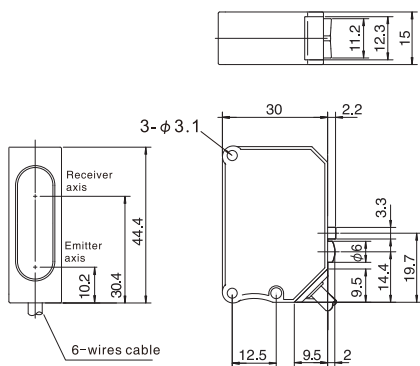
# Color/Mark Detection

## ESC Series

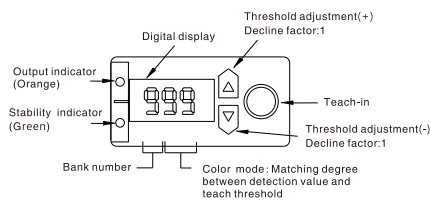


Appearance	
Sensing type	Diffuse reflection
Sensing distance	18 ± 2mm
Beam size	φ 6mm/18mm
Output type	NPN/PNP Open-collector, ≤100mA/30V DC
Switch type	Selectable L.on/D.on
Indicator	Output indicator: Orange; Work indicator; Green
Digital display	7 segments, 3 digit display (Red and Green LED)
Response time	Marks mode: H1/0.25 ms, H2/0.5 ms, L/1.2 ms Colors 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	35mA(12V), 25mA(24V)
Ambient brightness	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/s <sup>2</sup> ), XYZ three directions
Degree of protection	IP67
Connection method	2M 4 core cable
Material	Housing: ABS, Lens: PMMA
Model No.	NPN <b>ESC-18N</b> PNP <b>ESC-18P</b>

### Dimensions

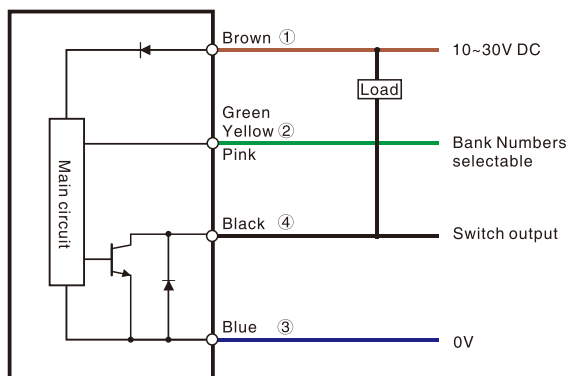


Unit: mm



### Circuit diagram

#### NPN Output



#### PNP Output

