

Square

ELC Series

Laser

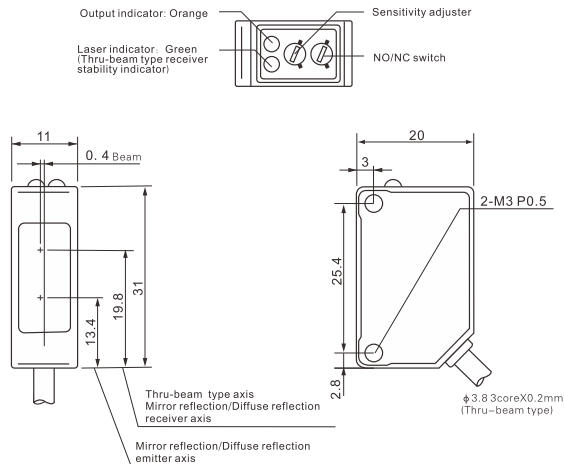


Appearance

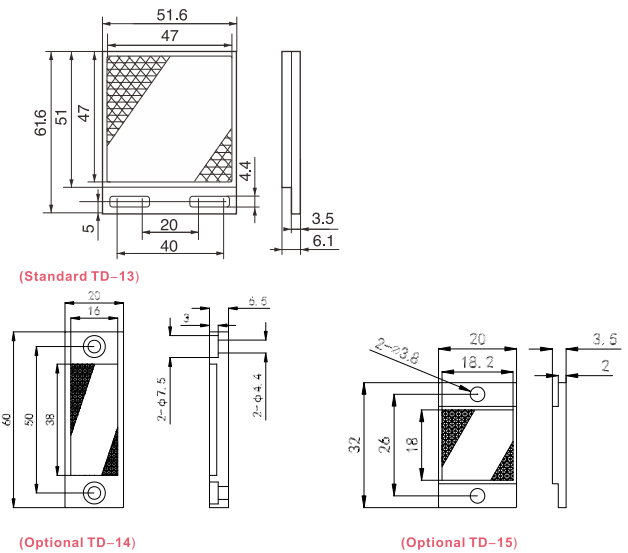
Sensing type	Thru-beam	Retro-reflection	Diffuse reflection
Sensing distance	30m	10m	40cm
Spot size	φ 30mm /30m	φ 10mm/ 10m	φ 2mm/40cm
Switch type	Selectable L.on/D.on		
Indicator	Laser indicator: Green; Output indicator: Yellow		
Response time	0.25 ms		
Sensitivity adjustment	Single-turn potentiometer		
Light source	Laser(650nm)		
Laser class	Class1		Class2
Operating voltage	12~24V DC ± 10%		
Current consumption	≤30mA		≤20mA
Ambient temperature	-10℃~+50℃, No freezing		
Ambient humidity	35%~85%RH, No condensation		
Anti-vibration	10~55Hz Amplitude1.5mm		
Impact resistance	50G(500m/s ²)		
Degree of protection	IP67		
Accessories	Bracket, screw	Bracket, screw, reflector	Bracket, screw
Model No.	NPN	ELC-TM30N	ELC-RM10N
	PNP	ELC-TM30P	ELC-RM10P
			ELC-D40N ELC-D40P

Dimensions

Unit: mm

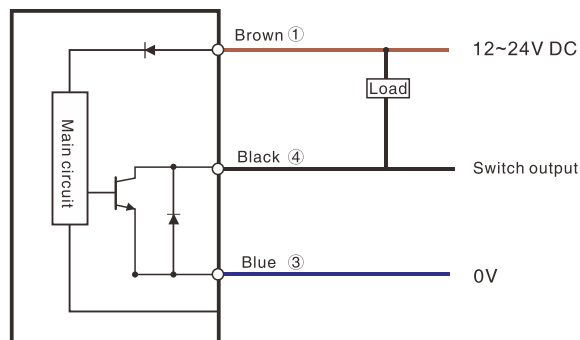


ELC-RM10N/P Reflector:

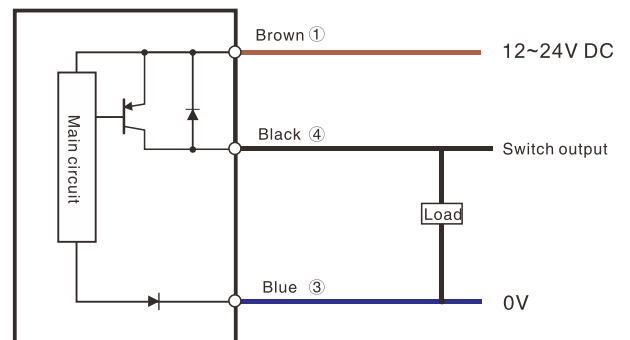


Circuit diagram

NPN Output



PNP Output





Economical Type

Appearance					
Sensing distance	Diffuse reflection-BGS	Diffuse reflection	Retro-reflection	Thru-beam	
Detection distance	1-15cm	40cm	5m	30m	
Setting distance	2-15cm	-	-	-	
Spot diameter	± Ø1.5mm/15cm	± Ø1.5mm/40cm	± Ø20mm/5m	± Ø60mm/30m	
Hysteresis	≤5% SN	≤20% SN			
Indicator	Working indicator light: green; Action indicator: Red				
Sensitivity adjustment	6 circle potentiometer	Single coil potentiometer			
Output mode	NPN or PNP open collector				
Switch mode	L.on (light-in action)/D.on (light-shielding action) can be switched				
Response time	≤2ms				
light source	Laser 650nm (modulation) Class 2				
Working voltage	10-30V DC				
Voltage	<1.5V				
Current consumption	≤20mA				
Load current	≤100mA				
Ambient illuminance	Incandescent lamp: 3000 lux or less / Sunlight: 5000 lux or less				
Ambient temperature	-25℃~+55℃, no freezing				
Ambient humidity	35%~85% RH, no condensation				
Withstand voltage	± 1000V 50/60Hz 60s				
Static electricity	± 8000V(air discharge)				
Group pulse	± 2000V (5kHz/50kHz)				
Anti-vibration	10-50Hz, 0.5mm amplitude, 2 hours each in X, Y, Z directions				
Circuit protection	Power reverse polarity protection, output reverse polarity protection, surge protection, short circuit protection Protection Power reverse polarity protection, surge protection, short circuit protection			Power reverse polarity protection, surge protection, short circuit protection	
Degree of protection	IP65				
Material	PBT + glass fiber (body), PMMA (lens)				
Connection	2M/3 core cable				
Accessories	Screwdriver				
Model No.	NPN	ELE-B15N	ELE-D40N	ELE-RM05N	ELE-TM30N
	PNP	ELE-B15P	ELE-D40P	ELE-RM05P	ELE-TM30P

Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

Vision

Code Readers

Vibration

Temperature

Accessories

Guidance

Laser sensors

Square

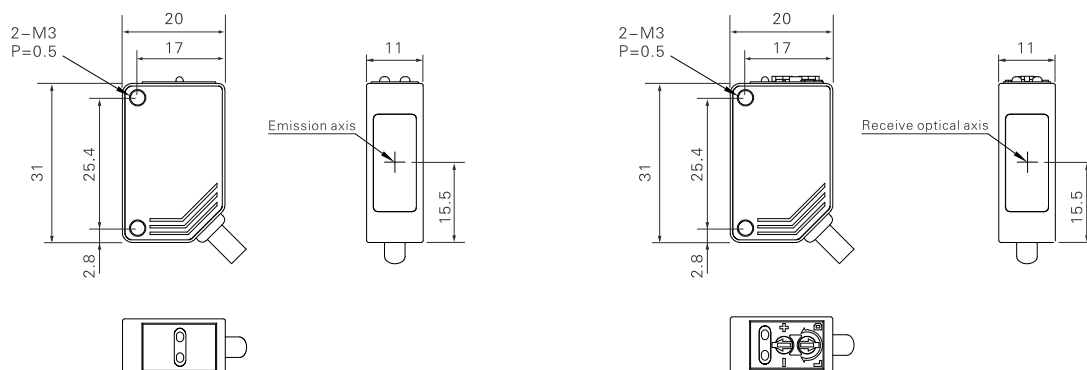
BGS

Transparent objects detection

Dimensions

Unit: mm

ELE-TM30N/P

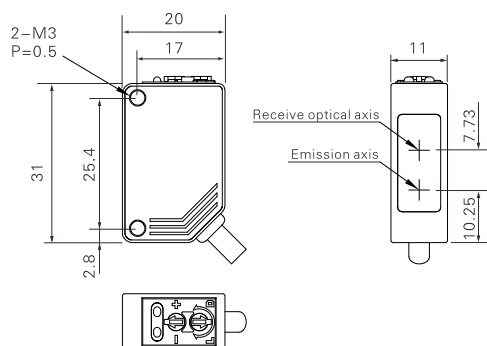


Square

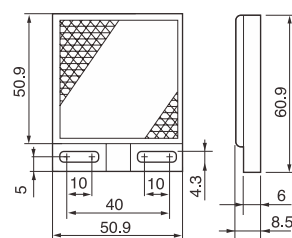
Dimensions

Unit: mm

ELE-B15N/P、ELE-D40N/P、ELE-RM05N/P



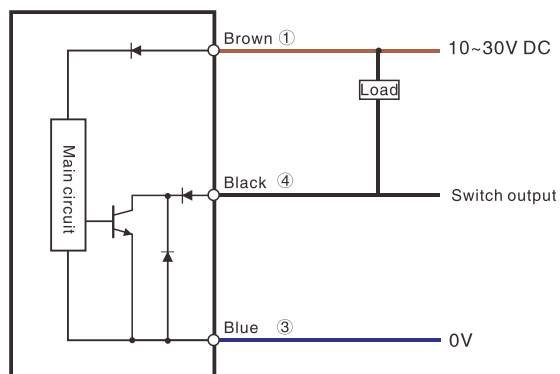
ELE-RM05 With reflector



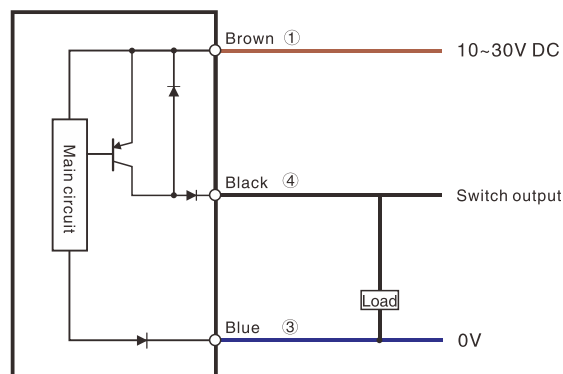
(Optional TD-11)

Circuit diagram

NPN Output



PNP Output



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Transparent objects
detection



Appearance

Inspection Method	Diffuse Reflection-Background Suppression
Detection Distance	50 ~ 350mm
Setting Distance	20 ~ 350mm
Spot Diameter	Φ3.5mm/350mm
Minimum detected object	Φ0.5mm
Hysteresis Range	≤5% SN
Output Mode	NPN or PNP open collector
Switch Mode	L.on/D.on Switchable
Indicator	Work indicator light: green; Output indicator light: red
Response Time	2ms
Sensitivity Modulation	6-turn Potentiometer
Laser Class	Class2
Light Source	Laser 650nm
Supply Voltage	10~24V DC
Current Consumption	≤20mA
Maximum Load Current	≤100mA
Residual Voltage	< 1.5V
Circuit Protection	Reverse Connection Protection/Short Circuit Protection
Surge	150V
Juxtaposed Installation	Can be installed side by side
Opposite Installation	Install in opposite direction 700mm
Insulation Resistance	Above 20MΩ between all power connection terminals and the casing (based on DC 250V)
Ambient Temperature	Operation Temperature: -10°C~+50°C no freezing
Ambient Humidity	Operation: 35%~85%RH, no condensation
Vibration Resistance	10~55Hz, 1.5mm Amplitude, 2 hours each in X, Y, Z directions
Impact Resistance	50G(500m/s ²)
Protection Degree	IP65
Housing	PBT+Fiberglass(shell) PMMA(lens)
Model	NPN ELE-B35N PNP ELE-B35P

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Laser sensors

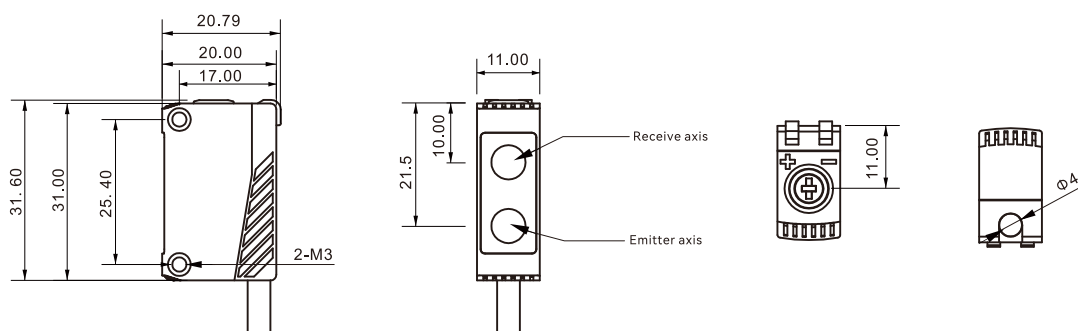
Square

BGS

Transparent objects detection

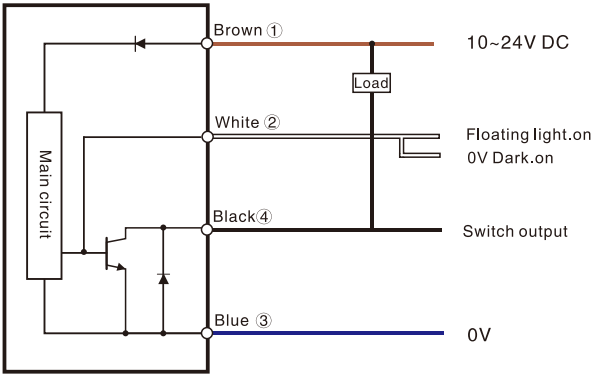
Dimensions

Unit: mm

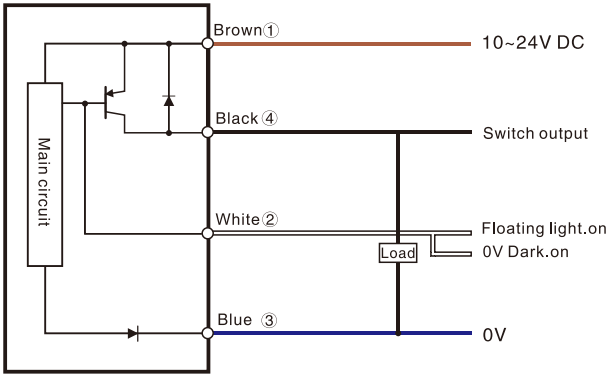


Square

NPN Output



PNP Output



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