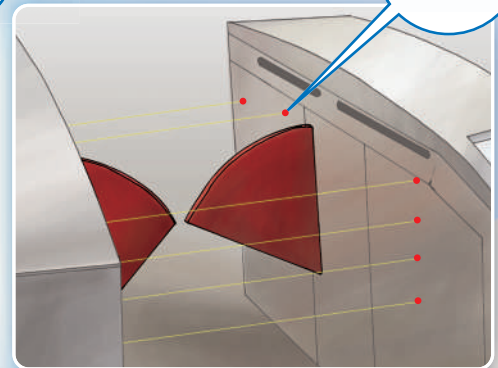


Environment-resistance and Stable detection

Features: This small screw-type photoelectric sensor is designed catering to the requirements of environment-resistance performance and low cost, thus making its application being wider.

- ① M12 × 28 mm small size
- ② Functions normally in the range of -25 to +55°C -13 to 131°F
- ③ Resistant to the interference of incandescent light of 10,000 lx, thus it can ensure the accurate and reliable detection.
- ④ Featuring an IP67 anti-dip protection structure for better protection



Flexible installation

Mounting head Mounting nut Main body of the sensor



The removable mounting head and mounting nut can be combined freely, thus realizing the flexible installation in various applications.

IP67

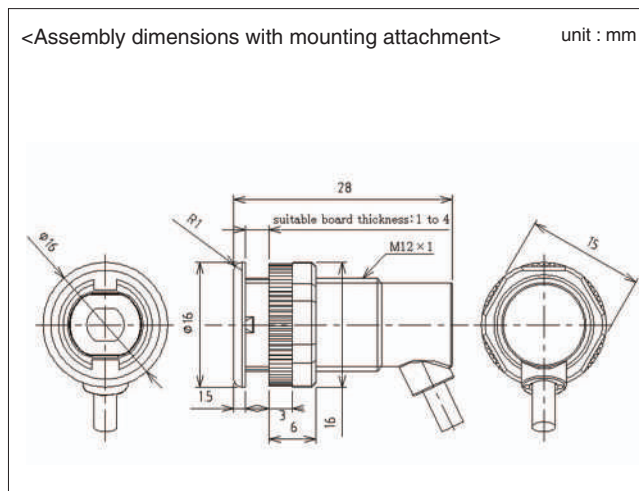
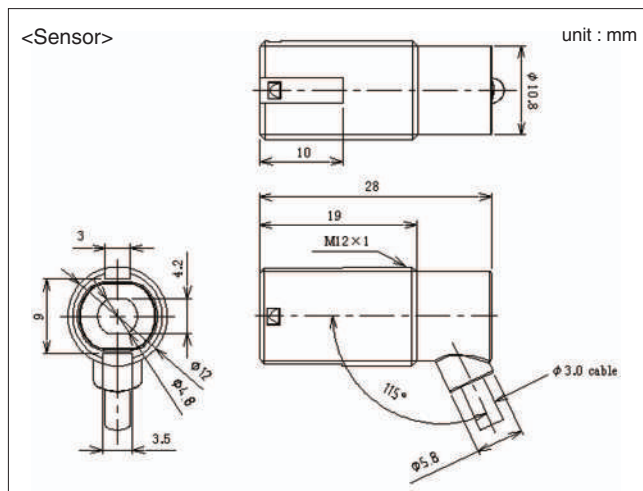


The protection structure conforming to IP67 (IEC) is used for better waterproof and dustproof performances.

Specifications

Model No.	NPN output type	CZ-111A	CZ-111B
	PNP output type	CZ-111A-P	CZ-111B-P
Power supply voltage	12 to 24 V DC \pm 10 %/Ripple p-p: 10 % or less		
Current consumption	Emitter: 18 mA or less Receiver: 15 mA or less		
Output	Output operation	<NPN output type> NPN open-collector transistor	<PNP output type> PNP open-collector transistor
	Short-circuit protection	Light-ON	Dark-ON
	Load current	Available (automatic restore function) 50 mA or less	
	External voltage	<NPN output type> 30 V DC or less (between output and 0 V)	<PNP output type> 30 V DC or less (between output and +V)
	Residual voltage	1 V or less (at current of 50 mA sink / source current)	
Response time	2 ms or less		
Emitting element	Infrared LED (modulation) Luminance wave: 850 nm		
Indicator	Operation indicator	Orange LED (lit when output ON) equipped on the emitter	
	Power supply indicator	Green LED (lit when power ON) equipped on the emitter/receiver	
Sensing range	5 m		
Sensing object	ϕ 8mm 0.315 in or more opaque		
Ambient temperature	-25 to +55 °C -13 to +131 °F (with no condensation or icing) Storage: -30 to +70 °C -22 to +138 °F		
Ambient humidity	35 to 85% RH		
Ambient illuminance	Incandescent light: 10,000 lx max. on the surface of the receiver		
Protection	IP67 (IEC)		
Vibration resistance	10 to 500 Hz, 2 amplitude 1.5 mm/MAX 10 G for 2 hours each in X, Y and Z directions (when power OFF)		
Shock resistance	500 m/s ² (approx. 50 G), 3 times each in X, Y and Z directions (when power OFF)		
Withstand voltage	1,000V AC, 1 minute (between power cable and case)		
Insulation resistance	250V DC megger, 20 M Ω min.		
Grounding	Floating		
Mounting torque	0.25 N-m or less		
Material	Lens	PC	
	Case	Material: PC, Color: black	
Cable	Type	Emitter: 0.15 mm ² 2-core cabtyre cable Receiver: 0.15 mm ² 3-core cabtyre cable	
	Standard length	0.5 m 1.640 ft	
	Cable extension	0.3 mm ² (min.) cable extendable up to 100 m 328.084 ft	
	Differentiation (by color)	Brown: +V Blue: 0 V Black: Output (Only receiver)	
Weight	Net weight: approx. 20 g, Gross weight: approx. 25 g		

Dimensions



Please contact.....

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