

Compact Photoelectric Sensor with Built-in Amplifier

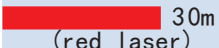
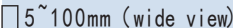
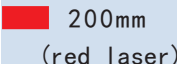
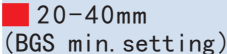
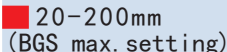
M8/M12 connectors are customisable.
Light ON and Dark ON are adjustable.



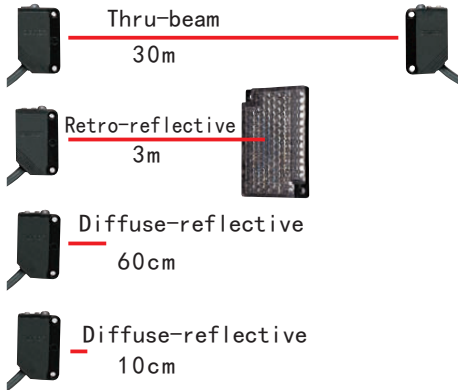
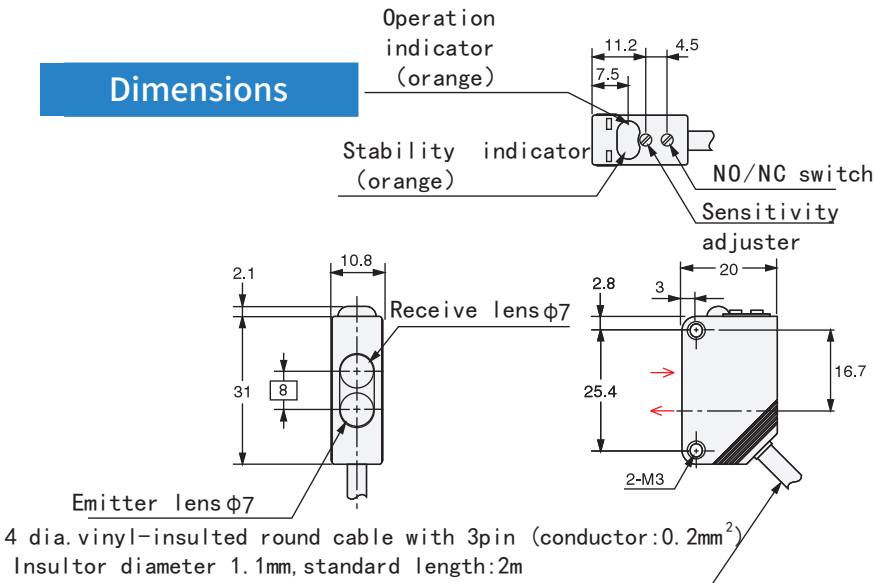
E3Z

Standard Models

Red LED Infrared light

Sensing Method	Appearance		Connection Method	Sensing Distance	Model	
	Emitter	Receiver			NPN Output	PNP Output
Thru-beam			Pre-wired (2m)	 6m	E3Z-T61	E3Z-T81
Retroreflective		 30m (red laser)		E3Z-LT61	E3Z-LT81	
		 (100mm-3m)		E3Z-R61	E3Z-R81	
Diffuse-reflective		 5~100mm (wide view)		E3Z-D61	E3Z-D81	
		 600mm		E3Z-D62	E3Z-D82	
Narrow-Beam Photoelectric Sensor		 200mm (red laser)		E3Z-L61	E3Z-L81	
Background Suppression Diffuse-reflective		 20-40mm (BGS min. setting)		E3Z-LS61	E3Z-LS81	
		 20-200mm (BGS max. setting)				

Dimensions



Ratings and specifications

Model		E3Z-T61	E3Z-LT61	E3Z-R61	E3Z-D61	E3Z-D62	E3Z-L61	E3Z-LS61
		E3Z-T81	E3Z-LT81	E3Z-R81	E3Z-D81	E3Z-D82	E3Z-L81	E3Z-LS81
Sensing distance		6m	30m	3m	100mm	600mm	200mm	20mm to set-distance
Standard sensing object		Opaque object 12mm min.		Opaque object 75mm min.	White paper (100x100mm)	White paper (300x300mm)	White paper (10x10mm)	White or black paper (100x100mm)
Differential travel					20% max.of sensing distance		10% max.of sensing distance	10% max.of sensing distance
Directional angle		3-7°	1° max	2-10°				
Power supply		12-24V DC±10%, ripple:(P-P±10% max)						
Current Consumption		Emitter: 15mA max.	Emitter: 20mA max.	30mA max.			10mA max.	30mA max.
		Receiver: 20mA max.	Receiver: 35mA max.					
Protection circuits		short-circuit-protection, reversed output polarity protection						
Response time		Operate or reset:1ms max.		Operate or reset:2ms max.	Operate or reset:1ms max.			
Output control		Load power supply voltage:26.4V DC max.						
		Load power supply current:100mA max.(residual voltage:1V max.)						
Light source (wavelength)		Infrared light (870nm)	Red laser	Red LED (660 nm)	Infrared light (860 nm)		Red laser	Red LED (660 nm)
Ambient illumination (Receiver side)		Incandescent lamp:3,000Lx max. Sunlight:10,000Lx max.						
Ambient temperature range		Operating:-25 to 55℃ Storage:-40 to 70℃ (with no icing or condensation)						
Ambient humidity range		Operating:35%-85% Storage:35-95% (with no condensation)						
Insulation resistance		20MΩ min. at 500V DC						
Vibration resistance		Destruction:10-55Hz,1.5mm double amplitude for 2 hours each in X,Y,and Z directions						
Shock resistance		Destruction:500m/s ² 3 times each in X,Y,and Z directions						
Degree of protection		IEC IP67						
Material	Case	PBT						
	Lens	Modified polyarylate						
Weight (packed state)		Approx. 120g			Approx. 65g			

I/O Circuit Diagrams

