

E3Z-L63



Ratings/Performance

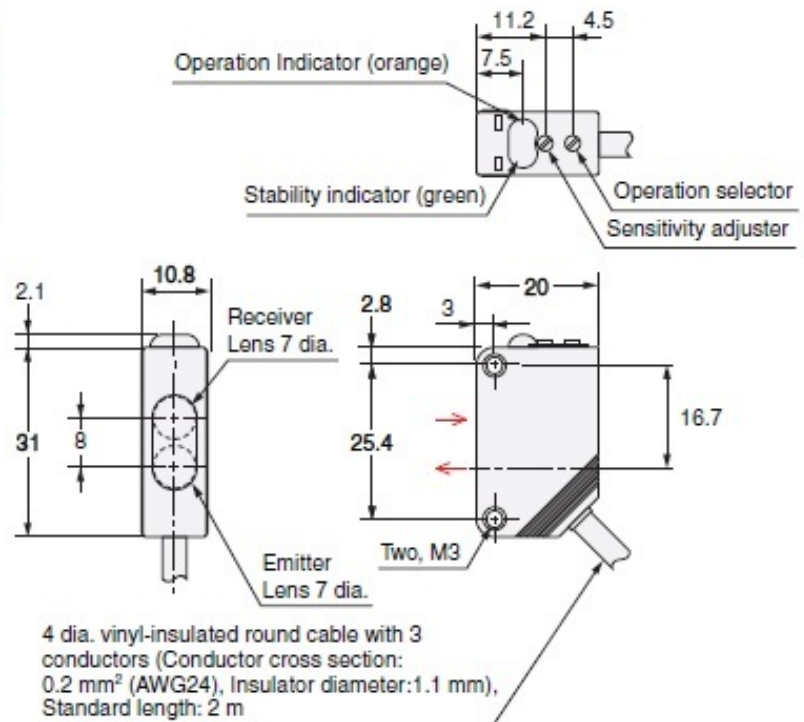
Shape	Square type
Sensing method	Limited Reflective
Sensing distance	Glass plate 100 x 100 mm: 10 to 50 mm
Spot size	2 mm dia. (Sensing distance: 30 mm)
Minimum sensing object	0.1 mm min. dia. (Pure copper wire)
Light source	Red LED (660 nm)
Power supply voltage	12 to 24 VDC $\pm$ 10% ripple (p-p) 10% max.
Current consumption	30 mA max.
Control output	NPN open collector 26.4 VDC max. 100 mA max. Residual voltage: 1 V max. (Load current Less than 10 mA) Residual voltage: 2 V max. (Load current 10 to 100 mA)
Operation mode	Light-ON/Dark-ON selectable
Protective circuit	Output short-circuit protection, Output reverse polarity protection, Power supply reverse polarity protection
Response time	Operate or reset: 1 ms max.
Sensitivity setting	Single-turn adjustment
Ambient illuminance	Incandescent lamp: 3,000 lx max. Sunlight: 10,000 lx max.
Ambient temperature range (Operating)	-25 to 55 °C (with no icing)
Ambient temperature range (Storage)	-40 to 70 °C (with no freezing or condensation)
Ambient humidity range (Operating)	35 to 85 % (with no condensation)
Ambient humidity range (Storage)	35 to 95 % (with no condensation)
Insulation resistance	20 M Ω min. (500 VDC megger)
Dielectric strength	1000 VAC 50/60 Hz 1 min
Vibration resistance	Destruction: 10 to 55 Hz, 1.5 mm double amplitude each in X, Y, and Z directions for 2 h
Shock resistance	Destruction: 500 m/s ² 3 times each in X, Y and Z directions
Degree of protection	IEC: IP67
Connection method	Pre-wired models (Cable length 2 m)
Indicator	Operation indicator (orange), Stability indicator (green)
Weight	Package: Approx. 65 g
Accessories	Instruction manual
Material	Case: Polybutylene terephthalate (PBT) Lens: Denatured Polyarylate

Dimensions

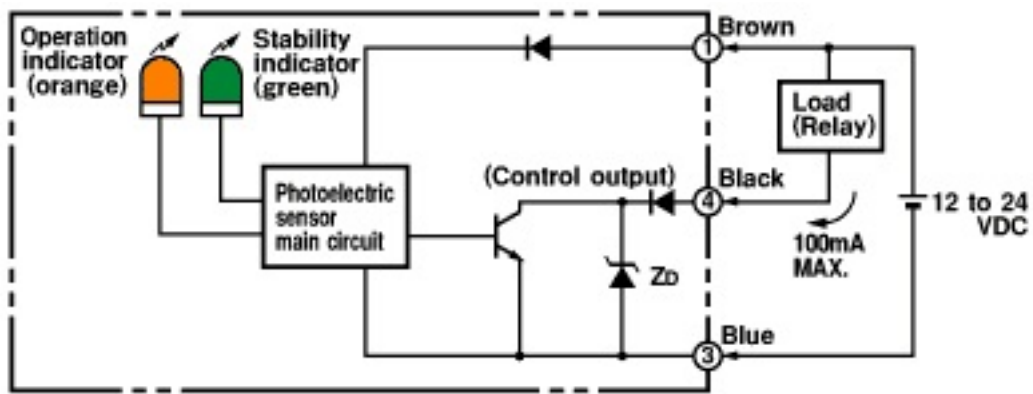
Retro-reflective Models

Pre-wired Models

E3Z-R61(K) E3Z-B61
E3Z-R81(K) E3Z-B81
E3Z-D61(K) E3Z-B62
E3Z-D81(K) E3Z-B82
E3Z-D62(K) E3Z-L63
E3Z-D82(K) E3Z-L83
E3Z-L61
E3Z-L81



Output circuit diagram



Timing chart

Operation mode	Timing chart	Mode switch
Light ON	Incident light No incident light Operation indicator (orange) ON OFF Output transistor ON OFF Load (Relay) Operate Reset [Between brown(1) and black(4)]	L side (LIGHT ON)
Dark ON	Incident light No incident light Operation indicator (orange) ON OFF Output transistor ON OFF Load (Relay) Operate Reset [Between brown(1) and black(4)]	D side (DARK ON)

Setting distance

Excess gain ratio vs. setting distance

Limited reflective Models

E3Z-L□3(L□8)

