ONRON Industrial Automation | • Global

Compact Photoelectric Sensor with Built-in Amplifier

E3Z-D61 2M



Diffuse-reflective, Sensing distance White paper 100 x 100 mm: 100 mm max., Light-ON/Dark-ON selectable, NPN, Pre-wired models, Infrared LED (860 nm)

Sensing method	Diffuse-reflective
Sensing distance	White paper 100 x 100 mm: 100 mm max.
Light source	Infrared LED (860 nm)
Connection method	Pre-wired models

Image

Ratings/Performance

As of July 7, 2019

Shape	Square type		
Sensing method	Diffuse-reflective		
Sensing distance	White paper 100 x 100 mm: 100 mm max.		
Differential distance	20% max. of sensing distance		
Light source	Infrared LED (860 nm)		
Power supply voltage	12 to 24 VDC±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.		
Operation mode	Light-ON/Dark-ON selectable		
Protective circuit	Output short-circuit protection, Output reverse polarity protection, Power supply reverse polarity protection, Mutual interference prevention		
Response time	Operate or reset: 1 ms max.		
Sensitivity setting	Single-turn adjustment		
Ambient illuminance	Incandescent lamp: 3000 lux max., Sunlight: 10000 lux max.		
Ambient temperature (Operating)	-25 to 55℃		
Ambient temperature (Storage)	-40 to 70°C		
Ambient humidity	Operating: 35 to 85% Storage: 35 to 95%		
Insulation resistance	20 MΩ 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**23 times each in X, Y and Z directions		
Degree of protection	IEC: IP67		

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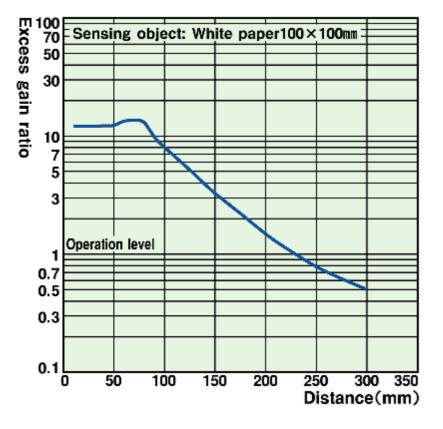
.2019	E3Z-D61 2M OMRON Industrial Automation	
Connection method	Pre-wired models (Cable length 2 m)	
Indicator	Operation indicator (orange), Stability indicator (green)	
Weight	Package: Approx. 65 g	
Accessories	Instruction manual	
Material	Case: Polybutylene terephthalate (PBT) Lens: Denatured Polyarylate	
		As of July 7, 201
Output circuit diagr	am	
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Operating range	per Y	As of July 7, 201
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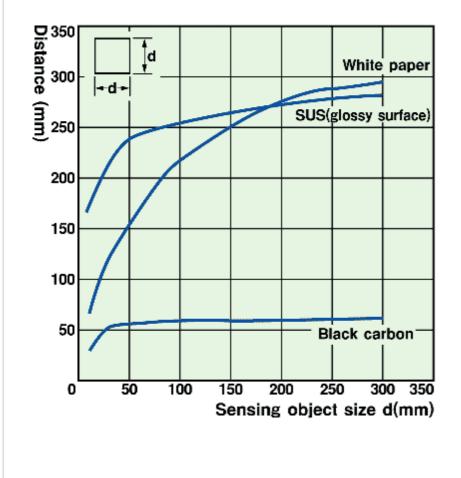
Setting distance

As of July 7, 2019

Excess gain ratio vs. setting distance



Sensing object size vs. setting distance



As of July 7, 2019