

Photoelectric Sensor

V3 / V4 series



- Easy and quick disconnection for quick maintenance. Simply remove the main body from the base to replace the sensor.
- Long sensing distance - 70 meters thru-beam.
- Terminal connection (AC types - V4 series).

Applications



Access control

Easy replacement

New style of QD!
Simply replace the main body leaving the base and cable in place.

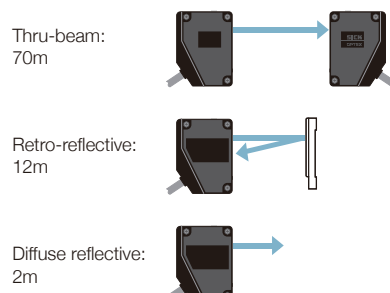


Strong light source!
Ideal for dusty/dirty conditions.

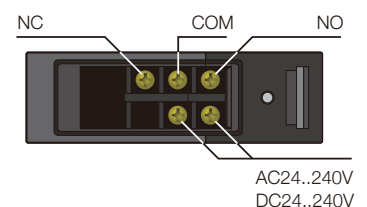
Class B types, applicable to household use. Severely controlled to self-emission noise.



Long Scanning Range
break through even in a foggy condition.

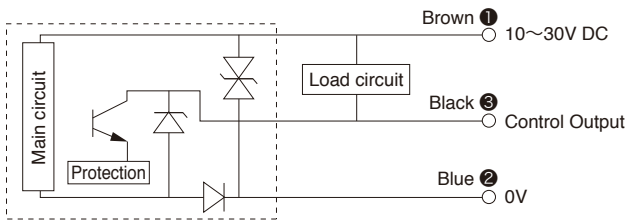


Terminal layout for easy connection (V4 series).

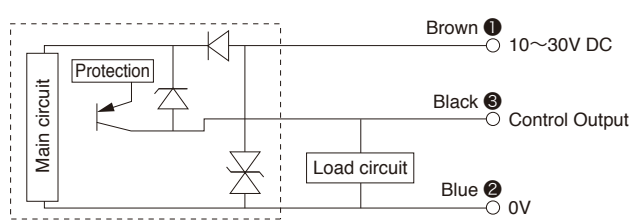


Circuit diagram (Transistor Output type)

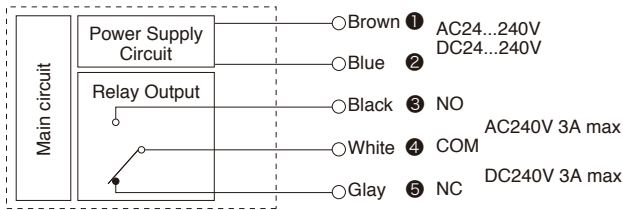
NPN output



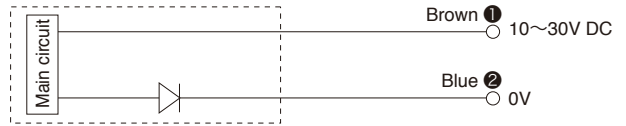
PNP output



AC/DC type

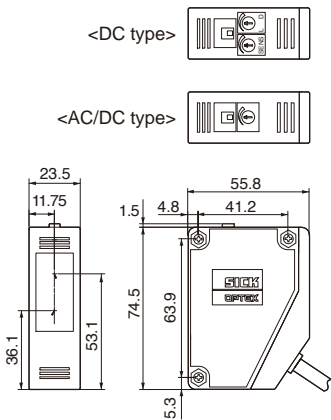


Emitter

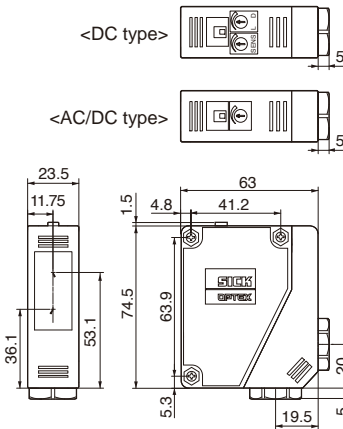


Dimensions

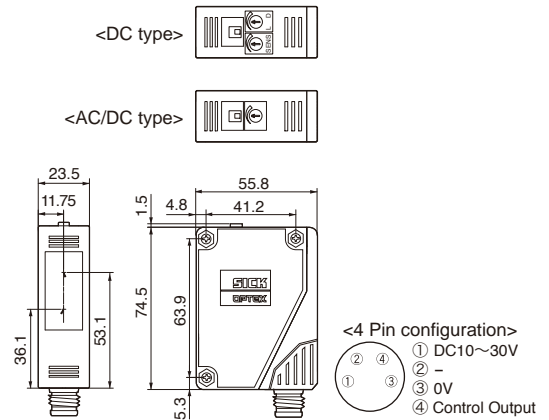
Cable type



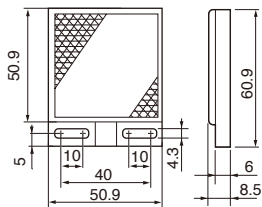
Terminal chamber type



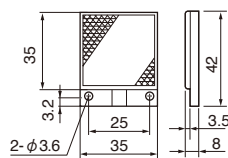
M12 Connector type



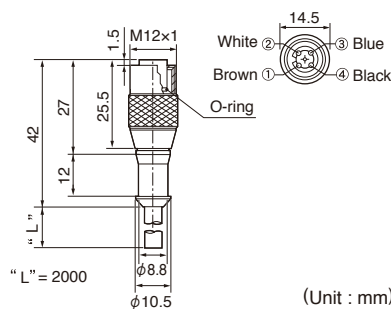
Standard reflector V-61



Small reflector V-42



M12 connector cable DOL-1204-G02M

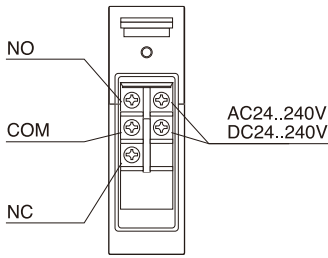


(Unit : mm)

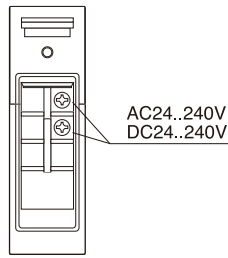
- C
- C2
- E
- J
- J2
- J3
- V
- V2
- V3
- V4
- SR-Q
- S
- Z
- BGS-Z
- Z2
- ZM
- K
- BGS-2S
- Y
- DM-18T
- Accessory

Connections

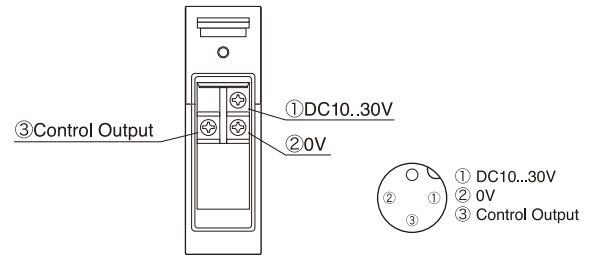
Relay type



Emitter



Transistor Output type



Specifications

Model	Relay output type			Transistor output type		
	Thru-beam	Retro-reflective	Diffuse reflective	Thru-beam	Retro-reflective	Diffuse reflective
V3 series (cable / QD type)	V3T-7000A (ClassA) V3T-7000 (ClassB)	V3R-1200A (ClassA) V3R-1200 (ClassB)	V3D-200A (ClassA) V3D-200 (ClassB)	V3T-7000N, P, CN, CP	V3R-1200N, P, CN, CP	V3D-200N, P, CN, CP
V4 series (Terminal type)	V4T-7000A (ClassA) V4T-7000 (ClassB)	V4R-1200A (ClassA) V4R-1200 (ClassB)	V4D-200A (ClassA) V4D-200 (ClassB)	V4T-7000N, P	V4R-1200N, P	V4D-200N, P
Supply voltage	DC24~240V ±10% AC24~240V ±10% 50/60Hz			DC10~30V Including ripple (P-P) 10%		
Current Consumption	3VA max. (Class A), 4VA max. (Class B)			2VA max. (Class A), 2.5VA max. (Class B) 35mA max.		
Light source	Red LED (635nm)			Red LED (635nm)		
Sensing distance	70m	12m/ Reflector V-61	2m	70m	12m/ Reflector V-61	2m
Hysteresis	-			20% max.		
Sensitivity adjustment	One turn potentiometer			One turn potentiometer		
Response time	15ms			0.5ms max.		
Indicator	Output indicator (Orange LED) / Stable indicator (Green LED)			Output indicator (Orange LED)/ Stable indicator (Green LED)		
Operating mode	Light ON			Light ON/ Dark ON, selectable by potentiometer		
Control output	Relay output 1 Form C AC 240V / DC 30V, 3A max (Resistive)			NPN/ PNP open collector DC30V, 100mA max. (Residual voltage 1.8V max.)		
Relay lifetime	Mechanical: 5x10 ⁷ times / Electrical: 10 ⁵ times			NIL		
Environmental illuminance	(Sunlight) 10,000lx (Incandescent Light) 3,000lx			(Sunlight) 10,000lx (Incandescent Light) 3,000lx		
Ambient Temperature	-25~55°C			-25~55°C		
Ambient Humidity	35~85%/RH			35~85%/RH		
Storage Temp./ Humidity	-40~70°C/ 35~95% RH			-40~70°C/ 35~95% RH		
Vibration Resistance	10~55Hz amplitude 1.5mm X, Y, Z each 2h			10~55Hz amplitude 1.5mm X, Y, Z each 2h		
Shock resistance	500m/s ² X, Y, Z each 3 times			500m/s ² X, Y, Z each 3 times		
Protection category	IEC 144 IP67			IEC 144 IP67		
UL	UL Recognition (ClassA model only)			UL Recognition		

Options

Standard reflector V-61



Small reflector V-42



Connector cable DOL-1204-G02M

