



Photoelectric Sensor

## V3, V4 SERIES

AC/DC Type

•V4T/V3T-7000

•V4R/V3R-1200

•V4D/V3D-200

### INSTRUCTION MANUAL

- Confirm if the item meets your needs.
- Before the use, you should first thoroughly read this manual and operate correctly as mentioned.
- You should keep this manual at hand for proper use.

### SPECIFICATIONS

# SPECIFICATIONS

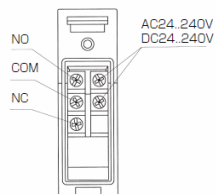
		AC/DC type					
		Through Beam		Retro Reflection		Diffused Reflection	
Connection		Terminal Chamber	Cable	Terminal Chamber	Cable	Terminal Chamber	Cable
Item	Type	V4T-7000	V3T-7000	V4R-1200	V3R-1200	V4D-200	V3D-200
Supply Voltage		DC24~240V ±10% AC24~240V±10% 50/60Hz					
Current Consumption		3VA max.(Class A),4VA max.(Class B)		2VA max.(Class A),2.5VA max.(Class B)			
Light Source		Red LED (635nm)					
Detecting Distance		70m		12m / Reflector V-61		2m	
Hysteresis		-				20% max	
Sensitivity Adjustment		One turn volume					
Response Time		20ms					
Indicator		Output indicator (orange LED) / Stable indicator (green LED)					
Operating Mode		Light ON					
Control Output		Relay Output 1Form C AC240V / DC30V,3A max (Resistive)					
Relay Lifetime		Mechanical : 5X10 <sup>7</sup> / Electrical : 10 <sup>5</sup>					
Environmental Illuminance	Sun Light	10,000lx					
	Incandescent Light	3,000lx					
Ambient Temperature		-25~55℃					
Ambient Humidity		35~85%/RH					
Storage Temp./Humidity		-40~70℃/35~95% RH					
Insulation Resistance		Min.20M Ω / DC500V					
Withstand Voltage		AC2,700V 50/60Hz 1minute					
Vibration Resistance		10~55Hz amplitude1.5mm X, Y, Z each 2h					
Shock Resistance		500m/s <sup>2</sup> X, Y, Z each 3times					
Protection Category		IEC 144 IP67					

### OTHER PRECAUTIONS

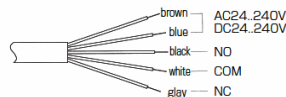
### HOW TO USE

- Be careful not to install the sensor at the following locations, as it may otherwise malfunction.
  - Where a lot of dust, vapor, or the like is present.
  - Where corrosive gas is produced.
  - Where water, oil or the like files directly onto the sensor.
  - Where strong vibration or shock is caused to the sensor.
- Do not use organic solvent, such as thinner, to remove contaminants from the body case, lid, and lens which are all of plastics. Using a dry rag, just wipe clean.
- When a switching regulator is to be used with a power supply, be sure to ground the Frame Ground Terminal.
- Do not use the sensor in a transient state at power on. (about 100ms)
- Do not run sensor cable near a high-voltage lines, or power lines or put them together in the same raceway. This warning should be strictly observed to prevent malfunctions caused by inductive interference.

AC/DC model Terminal Chamber type

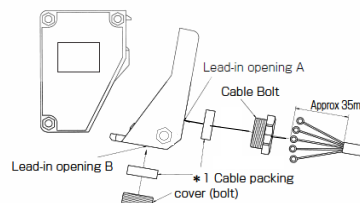


AC/DC model Cable type

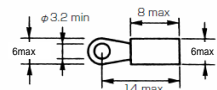


#### Connection

- Install the cables to match the connection terminal No. as shown below.
- Use either lead-in opening A or B according to the installation method involved.
- Install a cover (bolt) at the lead-in opening not to be used.
- The figure below shows how the cables are installed when lead-in opening A is used.
- ※ 1 Cable packing is selected separately either for cable or cover (bolt) according to cable diameter.  
Large 4 ~ 6 Small: 6 ~ 8



#### ○ Dimensions of applicable solderless terminals

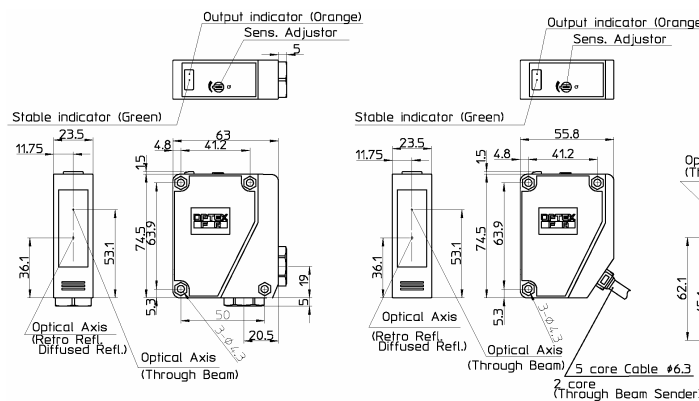
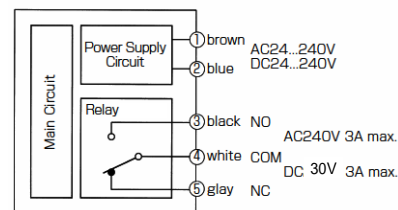


- Use solderless terminals with insulating tube.
- Use 4 to 8 mm diameter cables circular in section to maintain weightlessness.
- Wrong wiring may be a cause of burned or damaged sensor. Pay due attention to wiring.
- Be careful not to install the cable near power lines, for otherwise the sensor may malfunction.
- Using the mounting accessories supplied, the sensor can be installed on either floor or wall.

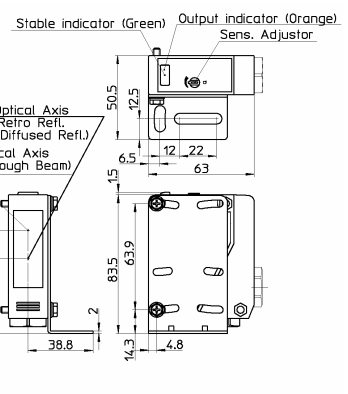
### INPUT AND OUTPUT CIRCUIT DIAGRAMS

### DIMENSIONS (Unit: mm)

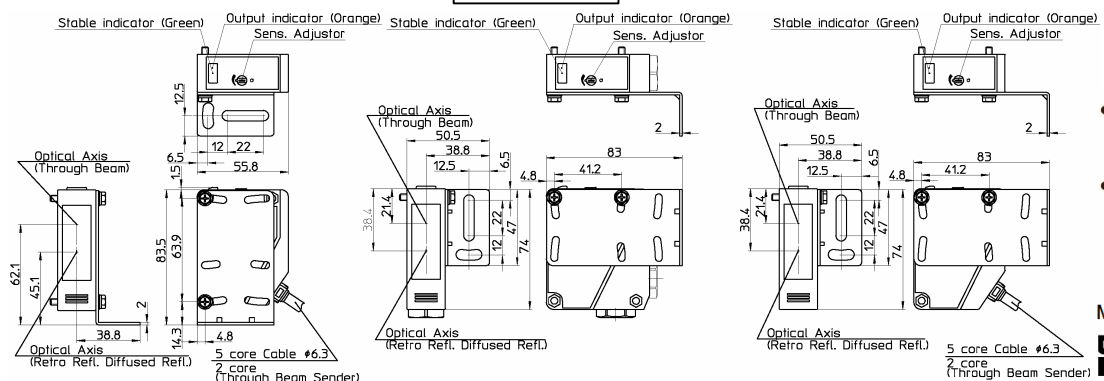
#### AC/DC type



#### Floor Installation



#### Wall Installation



- Specifications and equipment are subject to change without any obligations on the part of manufacture.
- For more information, questions and comments regarding products, please contact us below.

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