



Photoelectric Sensor V3, V4 SERIES AC/DC Type

- V4T/V3T-4000
- V4R/V3R-1000
- V4D/V3D-130

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

Connection	AC/DC type					
	Through Beam		Retro Reflection		Diffused Reflection	
Terminal Chamber	Cable	Terminal Chamber	Cable	Terminal Chamber	Cable	
Item	V4T-4000	V3T-4000	V4R-1000	V3R-1000	V4D-130	V3D-130
Supply Voltage	DC24~240V ±10% AC24~240V±10%					
Current Consumption	9.5VA (Transmitter 5VA, Receiver 4.5VA)		5VA			
Light Source	Red LED (680nm)					
Detecting Distance	40m		10m / Reflector V-61		1.3m	
Hysteresis	—					
Sensitivity Adjustment	One turn volume					
Response Time	20ms					
Indicator	Output Indicator (Orange LED)					
Operating Mode	Light ON					
Control Output	Relay Output 1Form C AC240V / DC30V, 3A max.					
Relay Lifetime	Mechanical : 5 × 10 ⁷ / Electrical : 10 ⁸					
Environmental Sun Light	10,000lx					
Illuminance Incandescent Light	3,000lx					
Ambient Temperature	-25 ~ 55°C					
Ambient Humidity	35 ~ 85 %/RH					
Strong Temperature/Humidity	-40~70°C/35~95%/RH					
Insulation Resistance	Min.20MΩ / DC500V					
Withstand Voltage	AC2700V 50/60Hz 1minute					
Vibration Resistance	10 ~ 55Hz amplitude 1.5mm X, Y, Z each 2h					
Shock Resistance	500 m/s ² X, Y, Z each 3 times					
Protection Category	IEC 144 IP 66					

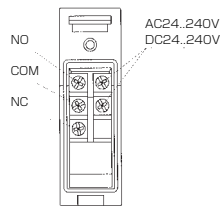
OTHER PRECAUTIONS

- 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.

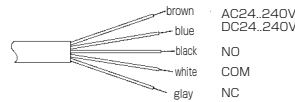
⚠ Must not use this item as safety equipment for the purpose of human body protection.

HOW TO USE

AC/DC model Terminal Chamber type

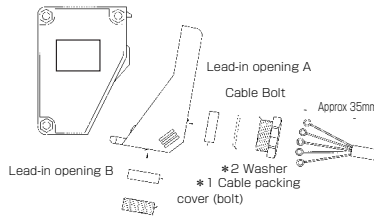


AC/DC model Cable type

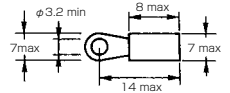


Connection

- 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 : φ8~φ10 Small : φ6~φ8
- ※2 Washer is to be used exclusively to the cable bolt.



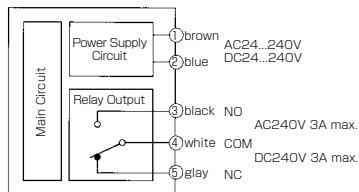
○ Dimensions of applicable solderless terminals



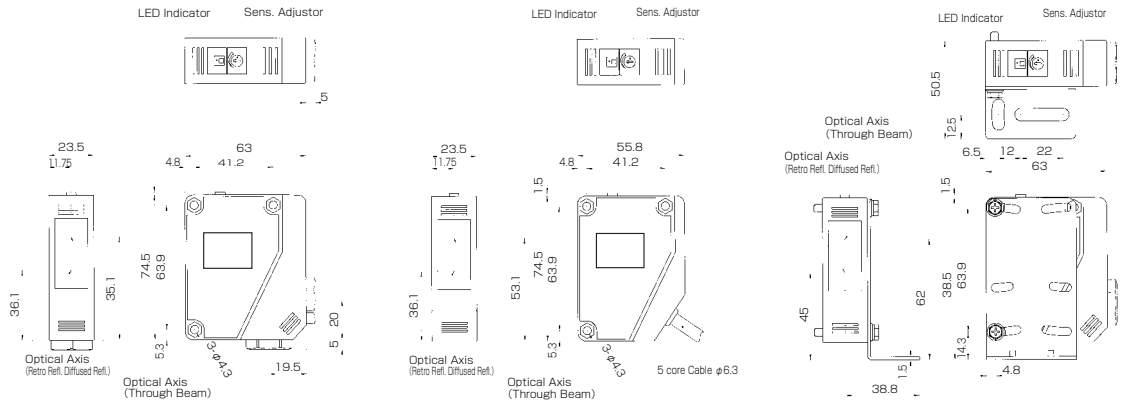
- Use solderless terminals with insulating tube.
- Use 6 to 10 mm diameter cables circular in section to maintain water-tightness.
- Wrong wiring may be a cause of burned or damaged sensor. Pay due attention to wiring.
- Be careful not to install the cable near power lines, for otherwise the sensor may malfunction.
- Using the mounting accessories supplied, the sensor can be installed on either floor or wall.

INPUT AND OUTPUT CIRCUIT DIAGRAMS

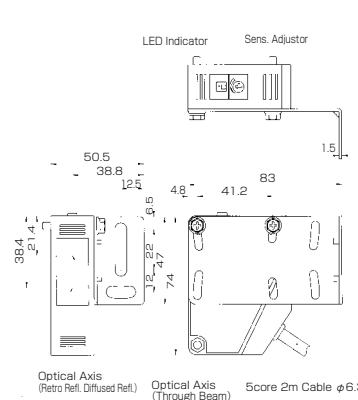
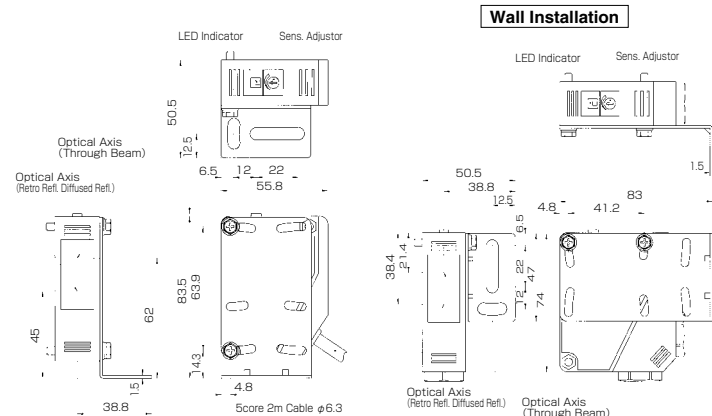
AC/DC type



DIMENSIONS



Floor 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.

Manufactured and sold by :

OPTEX FA CO.,LTD.

607-8085 Kyoto, Yamashina, Takehanadonomaecho 46-1, JAPAN
Tel: +81-(0)75-594-8123
Fax: +81-(0)75-594-8124

Website : <http://www.optex-fa.com>