

Photoelectric Sensors

Optex FA is now the second largest supplier of photoelectric sensors in Japan.

Optex provides an extensive selection of sensors to solve most applications.

All sensors are available in Cabled or M8 QD versions and are offered with a choice of NPN or PNP outputs.

Photoelectric Sensor V3 / V4 series

Photoelectric Sensor



V4 series
M12 QD type

V3 series
Cable type

V3 series Thru-beam type

(Sensing distance : 40m)
Relay output type · V3T-4000
Transistor output type · V3T-4000N / P
M12 QD Transistor type · V3T-4000CN / CP

Retro-reflective type

(Sensing distance : 0.01 - 10m)
Relay output type · V3R-1000
Transistor output type · V3R-1000N / P
M12 QD Transistor type · V3R-1000CN / CP

Applications



Access control

- **Easy and quick disconnection for quick maintenance. Simply remove the main body from the base to replace the sensor.**
- **Long sensing distance - 40 meters thru-beam.**
- **Terminal connection (AC types - V4 series).**

Features

Leave the base and cable in place, change the amplifier only (V3 and V4 series).

Easy replacement

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



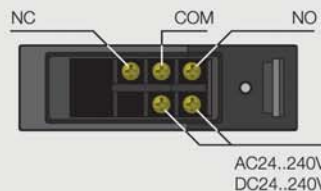
Replace unit UR-34 (Retro-type)



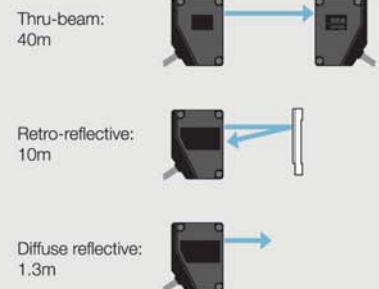
Strong light source!
Ideal for dusty/dirty conditions.



Terminal layout for easy connection (V4 series).



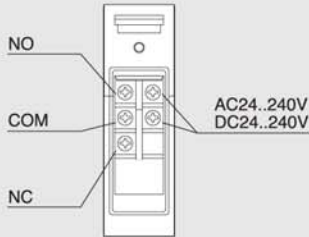
Long Scanning Range



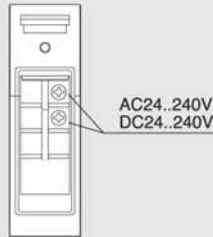
- C
- E
- J
- J2
- J3
- V
- V2
- V3**
- V4**
- SR-Q
- S
- Z
- BGS-Z
- K
- FGS-D
- BGS-D
- BGS-2S
- Y
- DM-18T
- Accessory

Connections

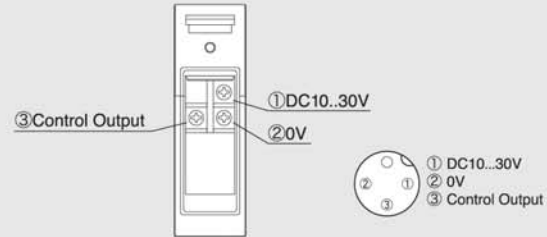
Relay type



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-4000	V3R-1000	V3D-130	V3T-4000N, P, CN, CP	V3R-1000N, P, CN, CP	V3D-130N, P, CN, CP
V4 series : (terminal type)	V4T-4000	V4R-1000	V4D-130	V4T-4000N, P	V4R-1000N, P	V4D-130N, P
Maintenance unit (common to V3/V4)	US-34 (emitter) UE-34 (receiver)	UR-34	UD-34	US-34D (emitter) UE-34N or 34P (receiver)	UR-34N or 34P	UD-34N or 34P
Sensing distance	40m	0.01 - 10m	1.3m	40m	0.01 - 10m	1.3m
Response time	20msec			0.5 msec		
Operating mode	Light ON			Light ON / Dark ON switchover		
Hysteresis	NIL		20% Max	NIL		20% Max
Light source	Red			Single LED (Orange) as output indicator		
Indicator	Single LED (Orange) as output indicator			NPN or PNP		
Control output	Relay NO/NC 240V AC / 30 VDC, 3A			10 - 30V DC including +/- 10% ripple		
Supply voltage	AC/DC 24-240V, +/- 10% ripple			10 - 30V DC including +/- 10% ripple		
Conformity	JIS/C4525, CE, UL					
Power consumption	9.5VA	5VA		40mA without load		
Connection : V3 series	2 meter cable			2 meter cable, or M12 QD		
V4 series	Terminal chamber, applicable cable ϕ 6 to ϕ 10			Terminal chamber, applicable cable ϕ 6 to ϕ 10		
Operating temp	-25 to 55 °C					
Operating humidity	35 to 85 % RH					
Storage temp	-40 to 70 C / 35 - 95% RH					
Sensitivity adjustment	Single turn pot.					
Protection category	IEC 144, IP66					
Shock resistance	50G , XYZ 3-ways					
Materials	Glassfiber reinforced ABS (Case), PMMA (Lens)					

Options

Standard reflector V-61



Small reflector V-42



Anti-cloud reflector V-60K



Connector cable 6009 382

