

Photoelectric Sensor

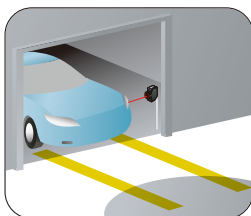
Y series

M8 QD type

Cable type

- Complete selection of sensing types including BGS and Transparent Object Detection.
- M18 Threaded Front Mounting.
- Stable Sensing Even For Plastic/Glass.

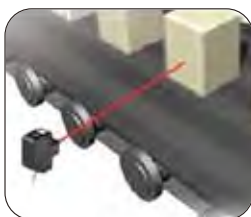
Applications



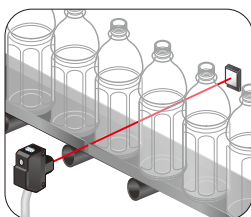
Verifying car position



For Detecting PWB



For Conveyor



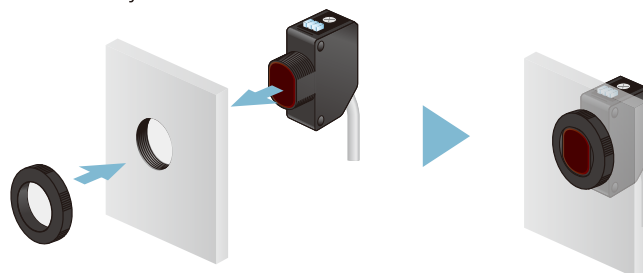
For Beverage industry

Wide Selection

The Y series is offered with seven different models. Thru-beam, Diffuse, Retro-reflective, Transparent object detection, Convergent Beam (two types) and BGS (Background suppression). There is a model for use in almost any application.

M18 Threaded Front Mounting

The sensor can be easily mounted by inserting into an 18 mm opening. There are also conventional mounting holes in the sensor body for added flexibility.



Pig-tail Connector

M12 pig-tail type are available for easy maintenance.



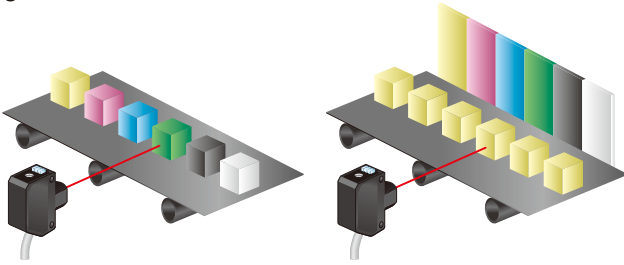
Rugged Waterproof Construction

The sensor has an IP67 rating. It is ideal for use in applications where it may be exposed to water spray.



BGS Sensing

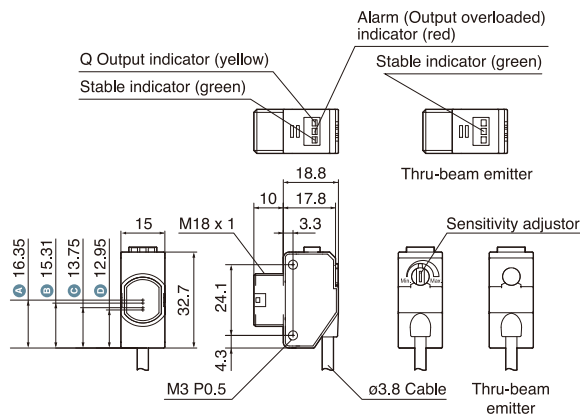
BGS (Background Suppression) sensors are not influenced by the color or texture of the target, the sensor is also able to ignore changes in the background.



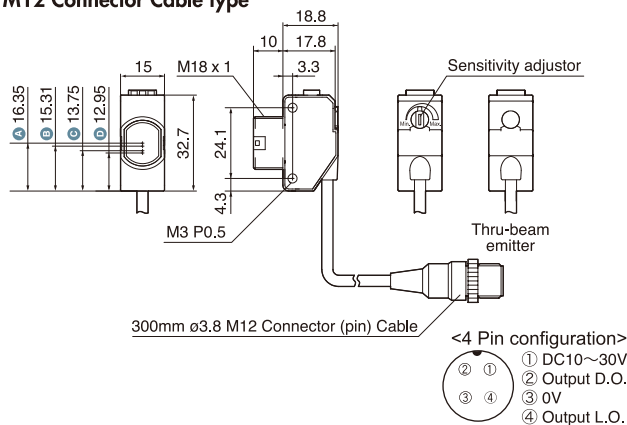
Dimensions

General Use Types except BGS

Cable type

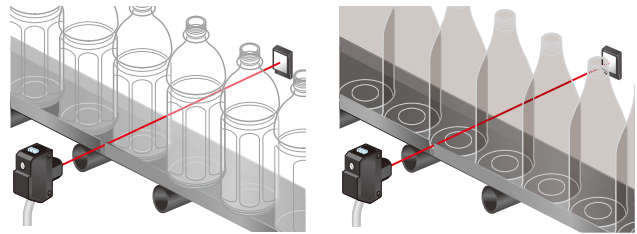


M12 Connector Cable type

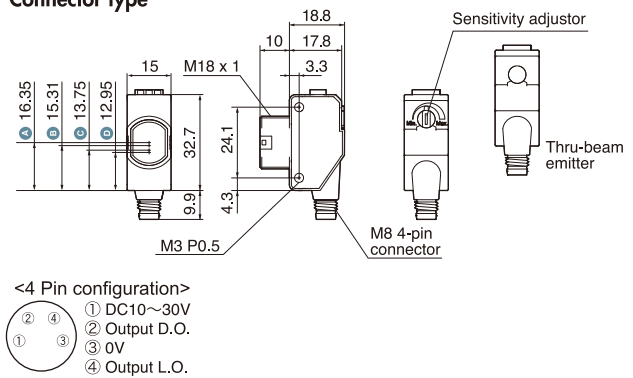


Stable Sensing Even For Plastic/Glass

The YR-Q series was designed for the detection of transparent targets. These are ideally suited for clear plastic and glass bottle applications.



Connector type



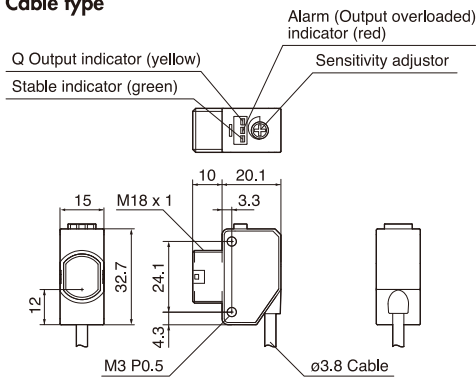
- A** Thru-beam type **C** Convergent Beam standard range type
- B** Convergent Beam short range type **D** Retro-reflective / Diffuse reflective type

(Unit : mm)

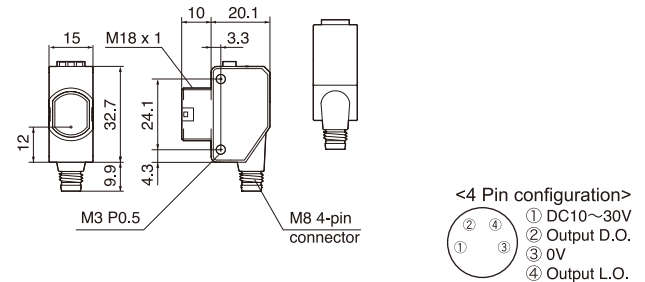
Dimensions

BGS Types

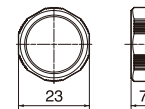
Cable type



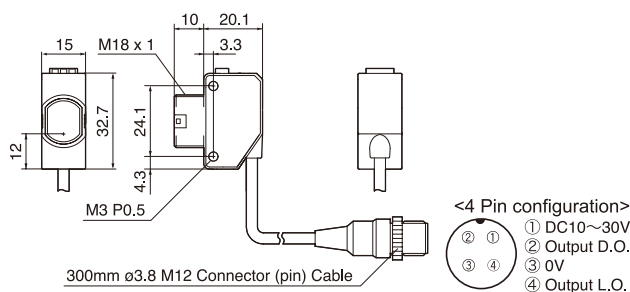
Connector type



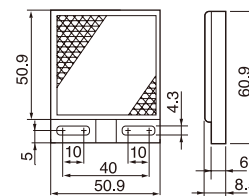
M18 x 1 Nut



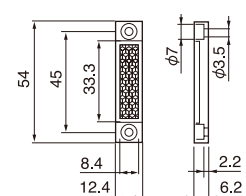
M12 Connector Cable type



V-61 for YR-140



P45A for YR-Q39



(Unit : mm)

Specifications

Model (NPN / PNP different model)	Thru-Beam	Diffuse reflective	Polarized Retro-reflective	Retro - Glass	Convergent Beam		BGS
					close focus	regular focus	
2 meter (approx. 78 inch) cable	YT-1180N / P	YD-15N / P	YR-140N / P	YR-Q39N / P	YD-L1N / P	YD-L2N / P	BGS-Y8N / P
M8 QD	YT-1180CN / CP	YD-15CN / 15CP	YR-140CN / CP	YR-Q39CN / CP	YD-L1CN / CP	YD-L2CN / CP	BGS-Y8CN / CP
M12 pig-tail	YT-1180N-M12 / P-M12	YD-15N-M12 / P-M12	YR-140N-M12 / P-M12	YR-Q39N-M12 / P-M12	YD-L1N-M12 / P-M12	YD-L2N-M12 / P-M12	BGS-Y8N-M12 / P-M12
Sensing distance	30m (1180 inch)	0.4m (15.7 inch)	3.5m (140 inch)	1m (39.3 inch)	16mm (0.6 inch)	43mm (1.7 inch)	200mm (7.9 inch) Setting range : 30-200mm
Light source	Red LED (visible)						
Hysteresis	N/A	20% max.	N/A	N/A	10% max.	10% max.	5%
Response time	0.5msec						
LED Indicator	3 Indicators (green indicator only : Emitter of YT-1180) Yellow: output Green: stable Red: alarm - overload						
Operating mode	Light ON and Dark ON outputs provided						
Sensitivity adjustment	1turn potentiometer						4 turn potentiometer
Control output	NPN or PNP open collector, 100mA max. / 30VDC						
Shock resistance	100G , xyz three directions						
Environmental illuminance	Sunlight : 10,000 lux, Incandescent lamp : 3,000 lux max						
Operating temp / humidity	-25°C to 55°C / 35 to 85% RH						
Storage temp / humidity	-40°C to 70°C / 35 to 90 % RH						
Supply voltage	10 - 30VDC incl. 10% ripple						
Power consumption	emitter : 15mA max. 30mA max. receiver : 20mA max.						
Conformity	CE , JIS/C4525						
Circuit protection	Reverse polarity, transient voltages, Output overcurrent						
Material	ABS with 20% glass (case), PMMA (lens)						
Protection category	IEC 144, IP67						

Options

V-61 for YR-140



P45A for YR-Q39



JCN-S : M8 Straight type



JCN-S : 2 meter
JCN-5S : 5 meter
JCN-10S : 10 meter

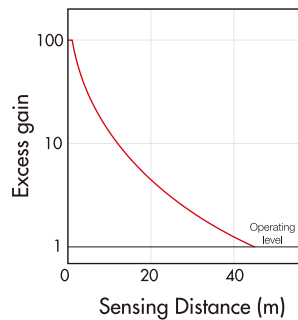
JCN-L : M8 L-shape type



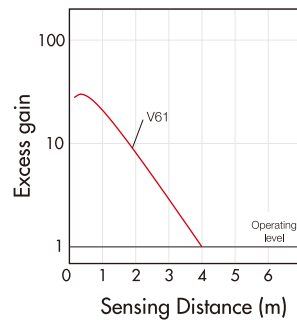
JCN-L : 2 meter
JCN-5L : 5 meter
JCN-10L : 10 meter

Reference (typical)

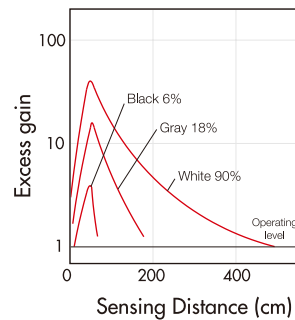
Thru-beam



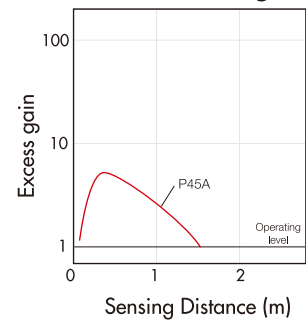
Retro reflective



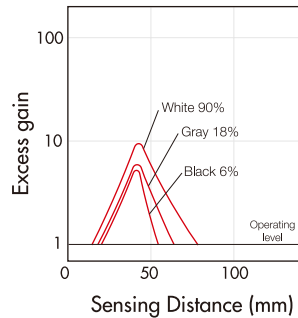
Diffuse reflective



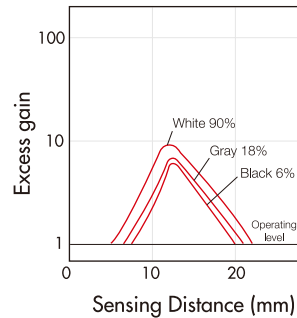
Glass sensing



Convergent (YD-L2)



Convergent (YD-L1)



BGS

