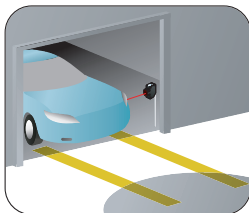


Photoelectric Sensor Y series

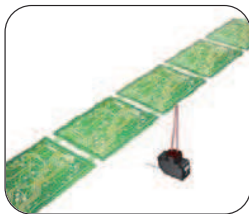


- Complete selection of sensing types including BGS and Transparent Object Detection.
- M18 Threaded Front Mounting.
- Stable Sensing Even For Plastic/Glass.

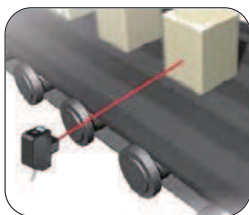
Applications



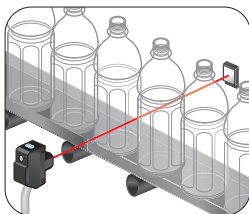
Verifying car position



For Detecting PWB



For Conveyor



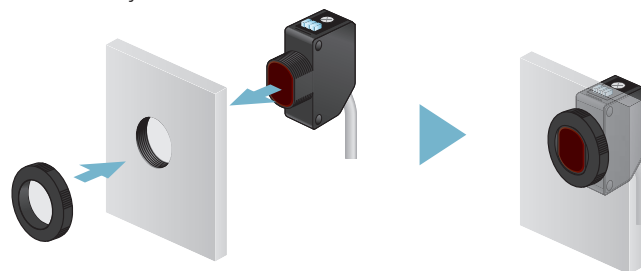
For Beverage industry

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.



C

C2

E

J

J2

J3

V

V2

V3

V4

SR-Q

S

Z
BGS-Z

Z2

Z3

ZM

K

BGS-2S

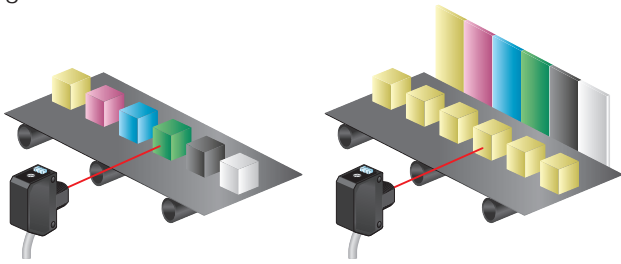
Y

DM-18T

Accessory

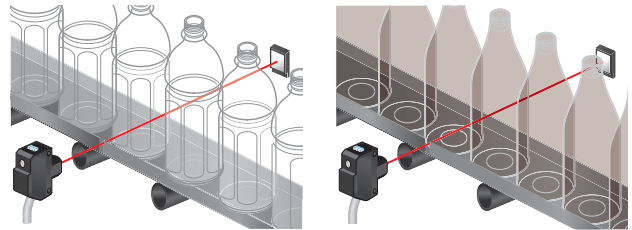
BGS Sensing

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.



Stable Sensing Even For Plastic/Glass

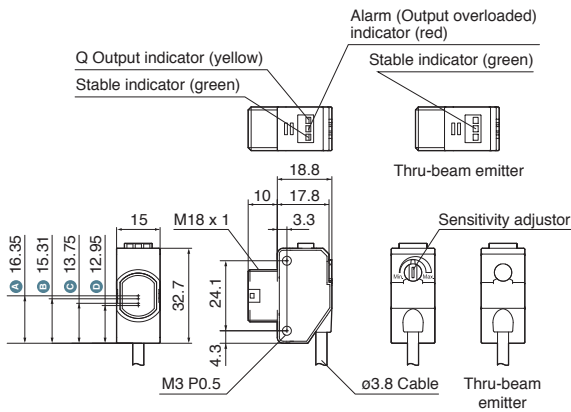
The YR-Q series was designed for the detection of transparent targets. These are ideally suited for clear plastic and glass bottle applications.



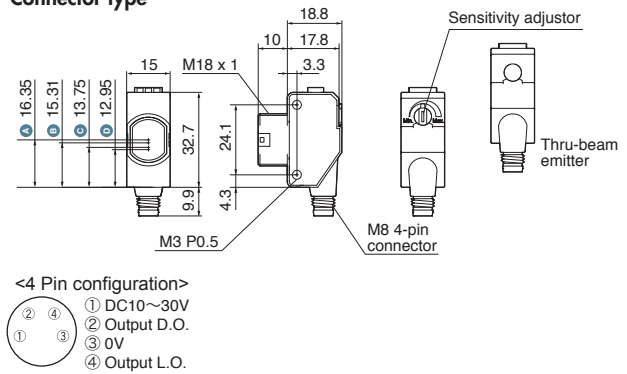
Dimensions

General Use Types except BGS

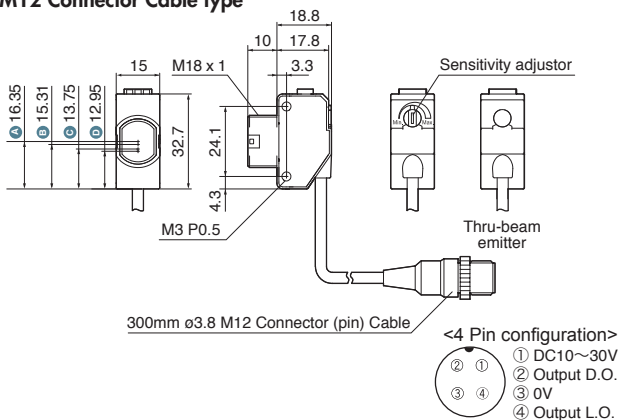
Cable type



Connector type



M12 Connector Cable type



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

(Unit : mm)



C

C2

E

J

J2

J3

V

V2

V3

V4

SR-Q

S

Z

BGS-Z

Z2

Z3

ZM

K

BGS-2S

Y

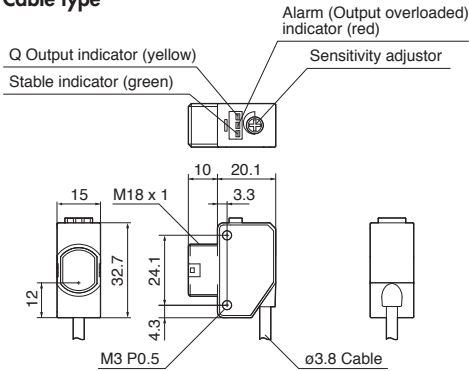
DM-18T

Accessory

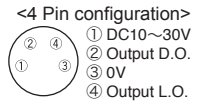
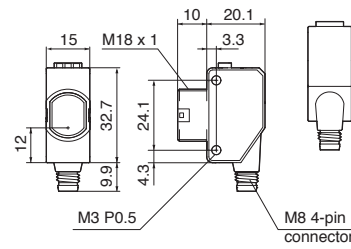
Dimensions

BGS Types

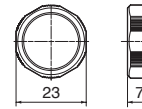
Cable type



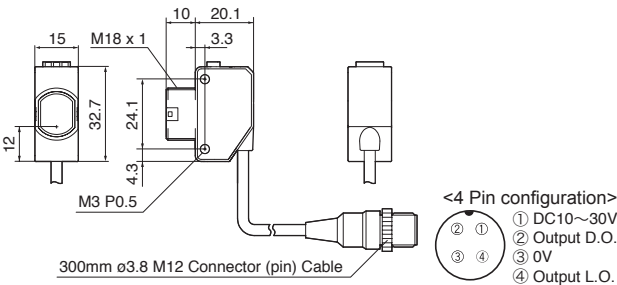
Connector type



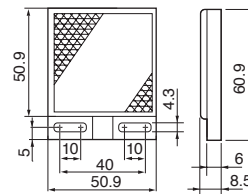
M18 x 1 Nut



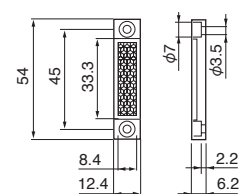
M12 Connector Cable type



V-61 for YR-140



P45A for YR-Q39



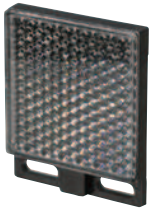
(Unit : mm)

Specifications

Model (NPN / PNP different model)	Thru-Beam	Diffuse reflective	Polarized Retro-reflective	Retro - Glass	Convergent Beam regular focus	BGS
2 meter (approx. 78 inch) cable	YT-1180N / P	YD-15N / P	YR-140N / P	YR-Q39N / P	YD-L2N / P	BGS-Y8N / P
M8 QD	YT-1180CN / CP	YD-15CN / 15CP	YR-140CN / CP	YR-Q39CN / 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-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)	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.	5%
Response time	0.5msec					
LED Indicator	3 Indicators (green indicator only :Emitter of YT-1180) Yellow: output Green: stable Red: alarm - overload					
Operation 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					
Ambient 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



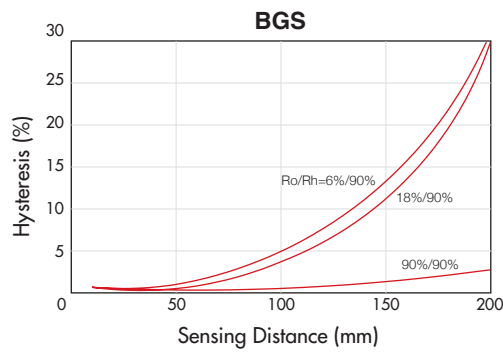
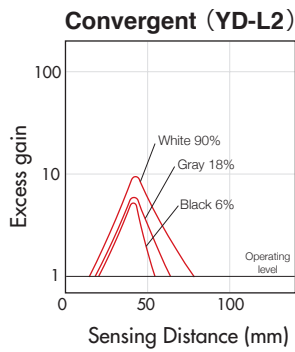
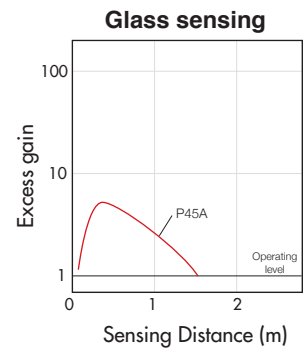
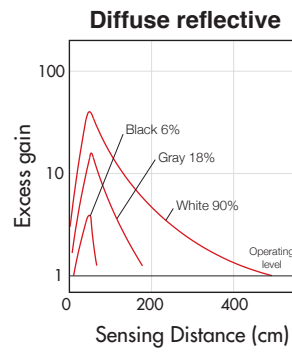
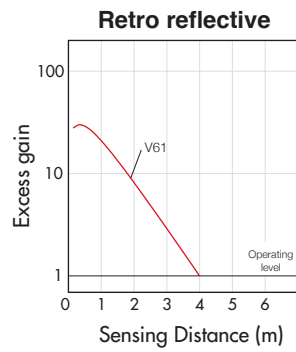
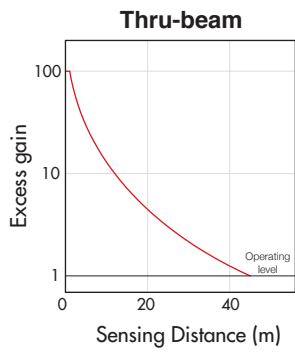
JCN-S : 2 meter
JCN-5S : 5 meter
JCN-10S : 10 meter

JCN-L : M8 L-shape type



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

Reference (typical)



- C
- C2
- E
- J
- J2
- J3
- V
- V2
- V3
- V4
- SR-Q
- S
- Z
- BGS-Z
- Z2
- Z3
- ZM
- K
- BGS-2S
- Y**
- DM-18T
- Accessory