



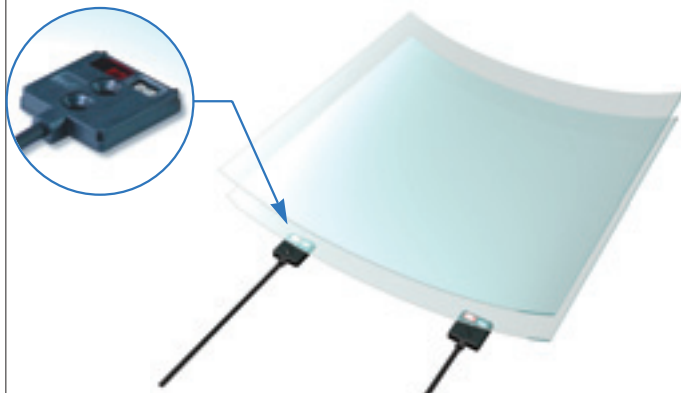
- Reliably detects inclined transparent glass  
Ideal for flush-mounting in robot end-effector.
- Unique optical system allows stable detection regardless of warpage or inclination of glass  
Unprecedented reliability in inclined object detection is realized by the use of two red LED light sources
- Thin (4mm) embedded amplifier photo sensor  
Counterbores for M3 countersunk screws convenient for flush-mounting in robot end-effector.

### Type

Detection method	Detecting distance	Model	Operation mode	Output mode
Diffuse-reflective type	20mm	ASG-S20R	Light-ON	NPN Open collector
Limited reflection type	3~15mm	ASG-Z15R		

### Applications

**Sensor flush-mounted in robot End-Effector**  
Photo sensor of only 4 mm in thickness flush-mounted in robot hand for detecting the presence of liquid crystal glass.



Optical system employing two LEDs as light sources.  
Used for reliable detection of inclined or warped glass.

### Difference between ASG-S20R and ASG-Z15R

- ASG-S20R is a diffuse-reflective type sensor with a wide activation range.  
If the detected glass is warped, the detecting distance can be 25 mm at maximum.
- ASG-Z15R is a limited zone-reflective sensor with a wide activation range.  
If the glass to detect is warped, the detecting distance can be 18 mm at maximum. The sensor is not activated by transparent glass in contact with the sensor.

