

## IB-01

## Sensor Head



## SPECIFICATIONS

Model		IB-01
Light source	Wavelength	660 nm (Visible light semiconductor laser)
	Laser Class	Class 1 Laser Product (IEC 60825-1, FDA (CDRH) Part 1040.10 <sup>*1</sup> )
Mounting distance		0 to 2,000 mm
Measurement range		ø1 mm (Installation distance 0 to 300 mm) ø1 to 2.5 mm (Installation distance 300 to 2,000 mm)
Sampling cycle		12,500 times/sec. (80 µs)
Minimum detectable object		ø8 µm (Installation distance 0 to 300 mm) ø8 to 50 µm (Installation distance 300 to 2,000 mm) <sup>*2</sup>
Repeatability		5 µm (distance 0 to 300 mm) <sup>*3</sup>
Temperature characteristics		±0.2 % of F.S./°C <sup>*4</sup>
Operation indicator		Laser emission warning indicator: green LED
Environmental resistance	Ambient light	Incandescent lamp: 5,000 lux, Solar light: 10,000 lux
	Ambient temperature	0 to +40 °C (No freezing)
	Relative humidity	35 to 85 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm, 2 hours in each of the X, Y, and Z axis
Material	Case	PBT
	Lens cover	Glass
	Cable	PVC (2 m)
Weight		Approx. 140 g

<sup>\*1</sup> The classification for FDA (CDRH) is implemented based on IEC60825-1 in accordance with the requirements of Laser Notice No.50.

<sup>\*2</sup> Value when measuring the target (white diffuse object) at the middle of the transmitter and receiver position, and at the centre of the measurement range.

<sup>\*3</sup> When distance between transmitter and receiver is set to 300 mm, and light is half-shielded at a position 150 mm from receiver. Deflection width (±2σ) when sampled for 30 seconds with an average number of times set to 64 times.

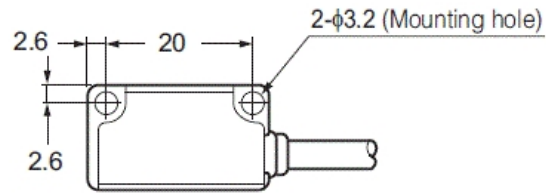
<sup>\*4</sup> When distance between transmitter and receiver is set to 100 mm and full light is received.

## Dimensions

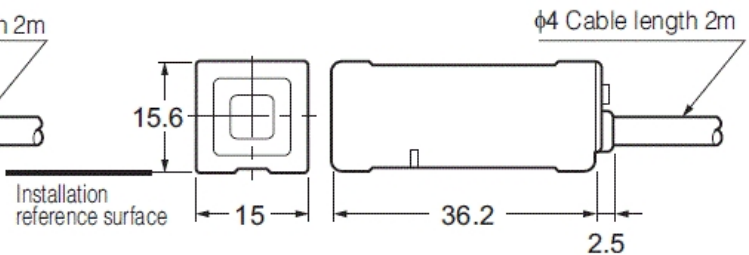
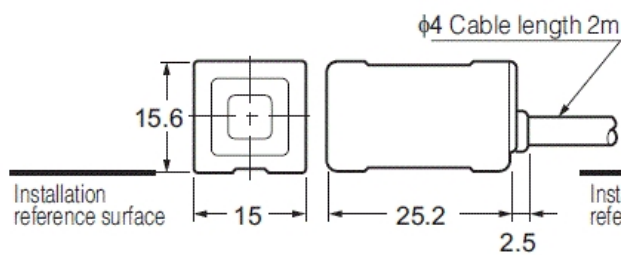
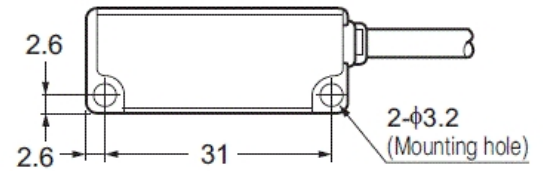
\* Download CAD file or product manual for larger image/text and more detail.

### IB-01

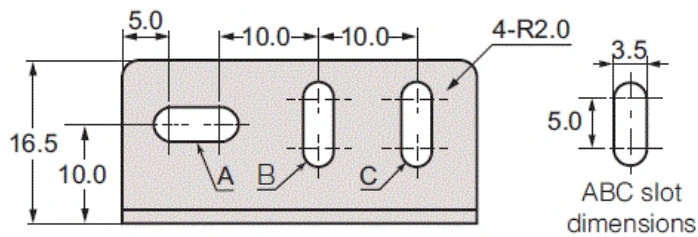
#### Receiver



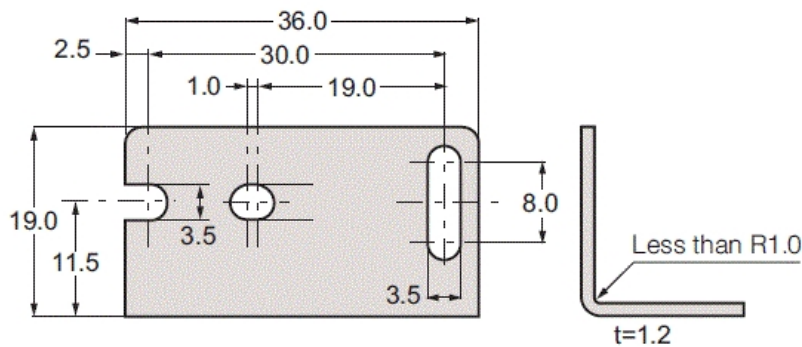
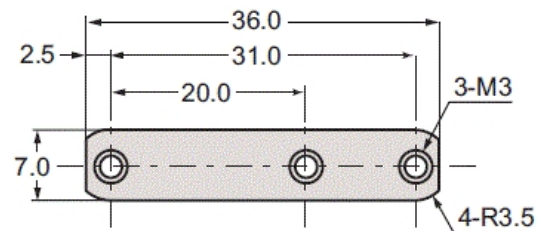
#### Transmitter



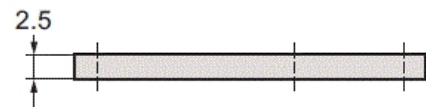
#### Mounting bracket (accessory) for IB-01



ABC slot dimensions



Less than R1.0  
t=1.2



\* Enclosed screws  
M3x20 ... 4 screws