



IL-030

Sensor heads



## SPECIFICATIONS

Model	IL-030	
Reference distance	30 mm	
Measurement range	20 to 45 mm	
Light source	Type	Red semiconductor laser, wavelength: 655 nm (visible light)
	Laser class	Class 1 (FDA (CDRH) Part1040.10) <sup>1</sup> Class 1 (IEC 60825-1)
	Output	220 μW
Spot diameter (at standard distance)	Approx. 200 × 750 μm	
Linearity	±0.1% of F.S. (25 mm to 35 mm) <sup>2,3</sup>	
Repeatability	1 μm <sup>4</sup>	
Sampling rate	0.33/1/2/5 ms (4 levels available)	
Operation status indicators	Laser emission warning indicator: Green LED, Analogue range indicator: Orange LED, Reference distance indicator: Red/Green LED	
Temperature characteristics	0.05% of F.S./°C <sup>3</sup>	
Environmental resistance	Enclosure rating	IP67
	Ambient light	Incandescent lamp: 5000 lux <sup>5</sup>
	Ambient temperature	-10 to +50°C (No condensation or freezing)
	Relative humidity	35 to 85% RH (No condensation)
	Vibration	10 to 55 Hz Double amplitude 1.5 mm XYZ each axis: 2 hours
	Pollution degree	3
Material	Housing material: PBT, Metal parts: SUS304, Packing: NBR, Lens cover: Glass, Cable: PVC	
Weight	Approx. 60 g	

<sup>1</sup> The laser classification for FDA (CDRH) is implemented based on IEC 60825-1 in accordance with the requirements of Laser Notice No.50.

<sup>2</sup> Value when measuring the KEYENCE standard target (white diffuse object).

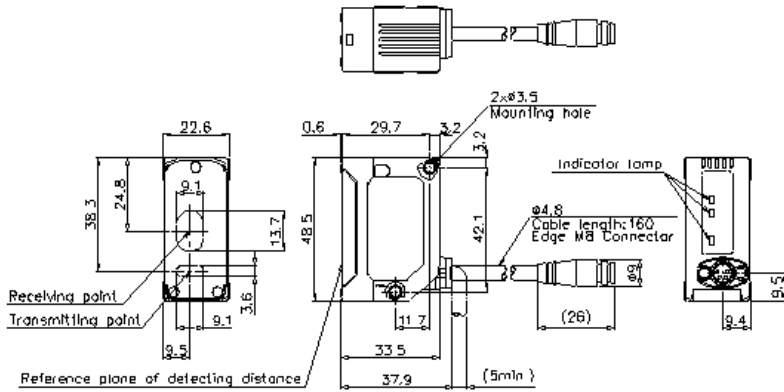
<sup>3</sup> F.S. of each model is as follows. IL-030: ±5 mm IL-065: ±10 mm IL-100: ±20 mm IL-300: ±140 mm IL-600: ±400 mm

<sup>4</sup> Value when measuring the KEYENCE standard target (white diffuse object) at the reference distance, sampling rate: 1 ms, and average number of times: 128. For the IL-300/IL-600, the sampling rate is 2 ms.

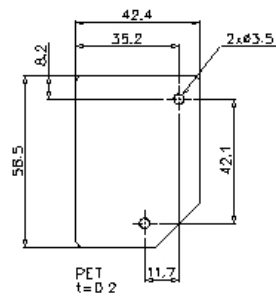
<sup>5</sup> Value when the sampling rate is set to 2 ms or 5 ms.

Dimensions

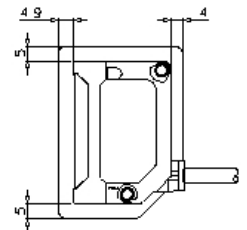
IL-030



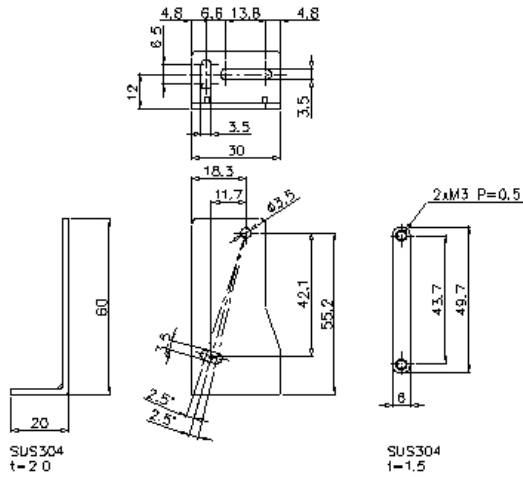
Insulating sheet(Accessory)



When the insulating sheet is attached.



Mounting bracket(Accessory)



When mounting bracket is attached

