



IA-065
Sensor Head



*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

Specifications

Model		IA-065
Reference distance		65 mm 2.56"
Measurement range		55 mm to 105 mm 2.17" to 4.13"
Light source	Type	Red semiconductor laser, wavelength: 655 nm (visible light)
	Laser class	Class II (FDA (CDRH) Part1040.10) Class 2 (IEC 60825-1)
	Output	560 μW
Spot diameter (at standard distance)		Approx. 550 x 1,750 μm 21.65 x 68.9 Mil
Linearity		±0.1% of F.S. (F.S.=±10 mm 0.39", 55 to 75 mm 2.17" to 2.95")*1
Repeatability		4 μm 0.16 Mil*2
Sampling cycle		0.33/1/2/5 ms (4 levels available)
Operation status indicators		Laser warning: Green LED, Analog output: Red LED, Measurement center: Green LED
Temperature characteristics		0.06% of F.S./°C (F.S.=±10 mm 0.39", 55 to 75 mm 2.17" to 2.95")
Environmental resistance	Enclosure rating	IP67
	Ambient light	Incandescent lamp: 7,500 lux*3
	Ambient temperature	-10 to +50 °C 14 to 122 °F (No condensation or freezing)
	Relative humidity	35 to 85 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm 0.06", 2 hours in each of the X, Y, and Z axis
Material		Housing material: PBT Metal parts: SUS304 Packing: NBR Lens cover: Glass Cable: PVC
Weight		Approx. 130 g (including cable)

*1 Value when measuring the KEYENCE standard target (white diffuse object).
*2 Value when measuring the KEYENCE standard target (white diffuse object) at the reference distance, sampling rate: 1 ms, and average number of times: 16.
*3 Value when the sampling rate is set to 2 ms or 5 ms.

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

Technical drawing of the H1000 cable gland, showing three views: front, side, and top.

Front View Dimensions:

- Total width: 24.1
- Central opening diameter: 11.6
- Side port diameter: 15.4
- Distance from top edge to side port center: 23.2
- Distance from bottom edge to side port center: 11.6
- Distance from side port center to bottom edge: 3.6
- Distance from side port center to central opening center: 10.5

Side View Dimensions:

- Total height: 52.5
- Base width: 41
- Distance from top edge to side port center: 34.7
- Distance from side port center to bottom edge: 11.7
- Distance from side port center to central opening center: 38.5

Top View Dimensions:

- Mounting hole diameter: $2 \times \varnothing 3.2$
- Distance between mounting points: 34.7
- Distance from side port center to bottom edge: 3.2
- Distance from side port center to central opening center: 46.1

Other Labels:

- Receiving point
- Transmitting point
- Reference plane of detecting distance
- Indicator lamp
- $\varnothing 2.5 \times 2$ -Core shield
- Cable length: 2m

Technical drawing of a PET bottle cap. The drawing shows a top view and a side view. The top view is a rectangle with dimensions 46.9 (width) and 62.5 (height). The side view is a rectangle with dimensions 46.1 (width) and 8.2 (height). The drawing includes a central hole with a diameter of 39.7 and two smaller holes with a diameter of 3.5. The material is PET and the thickness is T=0.2.

Technical drawing of a SUS304 stainless steel bracket. The drawing includes a side view and a top view. The side view shows a vertical plate with a width of 20 mm and a height of 62 mm. The top view shows a rectangular plate with a width of 31.3 mm and a height of 46.1 mm. The bracket has a 3.5 mm thick base and a 6.7 mm wide top flange. The material is SUS304 with a thickness of 2.0 mm. The drawing also shows a 3.5 mm wide slot and a 4.8 mm wide hole. The bracket is made of SUS304 stainless steel with a thickness of 2.0 mm.

Technical drawing of a vertical plate with the following dimensions and specifications:

- Top fastener: 2xM3 P=0.5
- Distance from top fastener to center of plate: 47.6
- Distance from bottom fastener to center of plate: 53.6
- Plate thickness: 6
- Material: SUS304
- Thickness: $t=1.5$