LJ-V7300

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			LJ-V7300
Mounting conditions			Diffuse reflection
Reference distance			300 mm 11.81"
Measurement range	Z-axis (height)		±145 mm 5.71" (F.S.=290 mm 11.42")
	X-axis (width)	NEAR side	110 mm 4.33"
		Reference distance	180 mm 7.09"
		Far side	240 mm 9.45"
Light source	Type		Blue semiconductor laser
	Wavelength		405 nm (visible beam)
	Laser class		Class 2 Laser Product (IEC60825-1, FDA(CDRH) Part 1040.10*1)
	Output		4.8 mW
Spot size (reference distance)			Approx. 240 mm × 610 µm 9.45" × 0.024016"
Repeatability	Z-axis (height)		5 µm 0.000197"*2*3
	X-axis (width)		60 µm 0.002363"*2*4
Linearity	Z-axis (height)		±0.05 to ±0.15% of F.S.*5*6
Profile data interval	X-axis (width)		300 µm 0.012"
Sampling cycle (trigger interval)			Top speed: 16 µs (high-speed mode), Top speed: 32 µs (advanced function mode)*7
Temperature characteristics			0.01% of F.S./°C
Environmental resistance	Enclosure rating		IP67 (IEC60529)*8
	Ambient light		Incandescent lamp: 10,000 lux max.*9
	Ambient temperature		0 to +45 °C 32 to 113 °F*10
	Relative humidity		85% RH or less (no condensation)
	Vibration resistance		10 to 57 Hz, Double amplitude 1.5 mm 0.06", 3 hours in each of the X, Y, and Z directions
	Shock resistance		15 G/6 ms
Material			Aluminum
Weight			Approx. 1,000 g

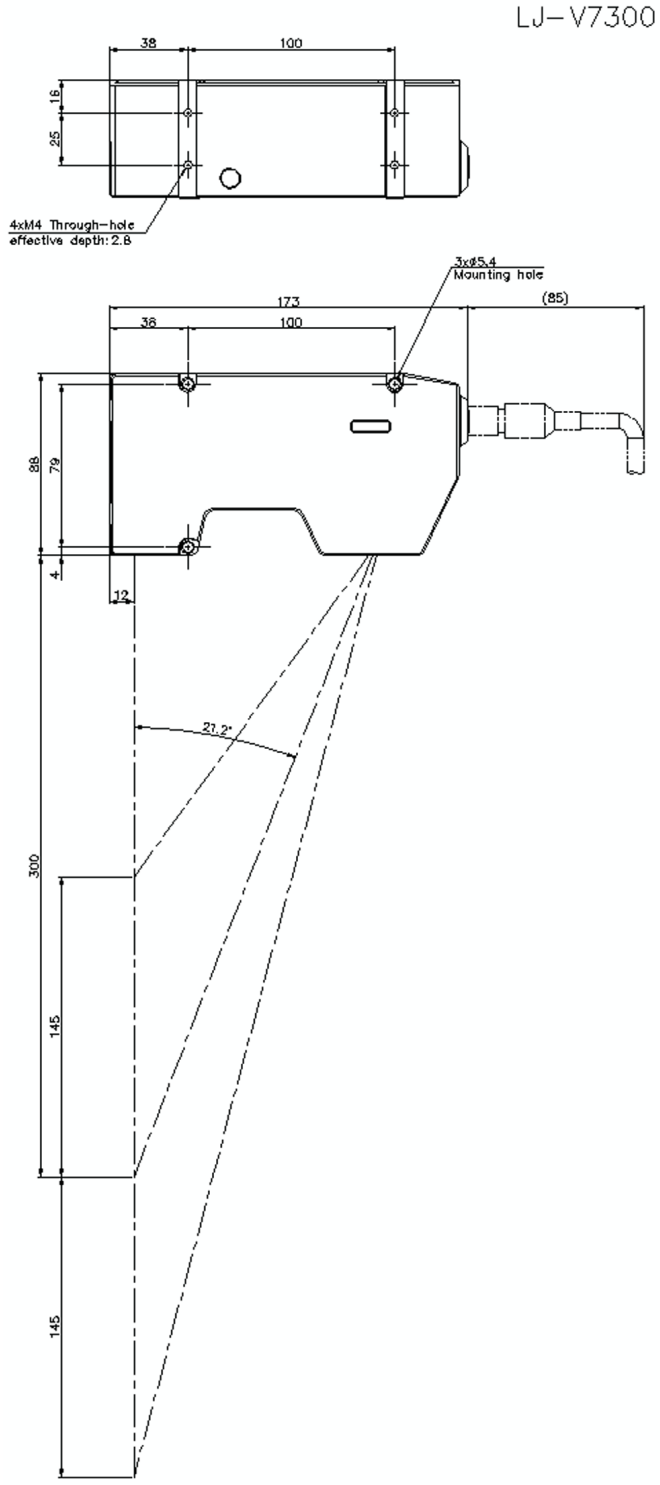
*1 The laser classification for FDA(CDRH) is implemented based on IEC60825-1 in accordance with the requirements of Laser Notice.
*2 This value is from a case in which measurement has been performed with a reference distance with 4,096 times of averaging.
*3 The measurement targets are KEYENCE standard targets. This value is from a case in which the average height of the default setting area has been measured in height mode. All other settings are default.
*4 The measurement target is a pin gauge. This value is from a case in which the position of the intersection between the rounded surface of the pin gauge and the edge level has been measured in position mode. All other settings are default.
*5 The measurement targets are KEYENCE standard targets. The profile data is from a case in which measurement has been performed with 64 times of smoothing and 8 times of averaging. All other settings are default.

*6 The linearity will differ depending on the measurement area.
*7 For high-speed mode, when the measurement area is at its minimum, binning is ON, image capture mode is set to standard, and parallel image capture is ON.
All other settings are default. For advanced function mode, when the measurement area is at its minimum, binning is ON and image capture mode is set to standard. All other settings are default.
8 This value is from a case in which the sensor head cable (CB-B) or extension cable (CB-B*E) has been connected.
*9 This is the illuminance for the light-receiving surface of the sensor head during white paper measurement when light has been shined onto the white paper.
*10 The sensor head must be mounted on a metal plate for use.

Dimensions

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

lj-v7300_dimension_01.gif



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