

LR-TB5000CL

Detection distance 5 m, Cable with connector M12, Laser Class 1

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

Specifications

Model		LR-TB5000CL
Type		Cable with connector M12
Detectable distance		60 to 5000 mm 2.36" to 196.85"*1
Spot diameter		Variable (use a spot diameter of 40 mm 1.57" or less)
Light source	Type	Red laser (660 nm)
	Laser class	Class 1 laser product (IEC60825-1,FDA (CDRH) Part1040.10*2)
Mutual interference prevention function		4 units (when using the interference prevention function)
Timer		OFF/OFF delay/ON delay/One-shot
Response time		2 ms/20 ms/50 ms/200 ms/2000 ms selectable
I/O	Control output	NPN open collector/PNP open collector selectable 30 VDC or less, 50 mA or less, residual voltage: 2 V or less, N.O./N.C. selectable *3*4
	Analog output	Current output/Voltage output selectable Current output: 4 to 20 mA with a max. load resistance of 500 Ω Voltage output: 0 to 10 V with an external load resistance of 5 kΩ or more *3*4
Protection circuit		Protection against reverse power connection, power supply surges, output over-current, reverse output connection, and output surge
Power voltage		20 to 30 VDC, including 10% ripple (P-P), Class 2 or LPS
Current consumption		50 mA or less (without load)*5
Environmental resistance	Enclosure rating	IP65/IP67 (IEC60529)
	Ambient light	Incandescent lamp/Sunlight: 10,0000 lux or less
	Ambient temperature	-20 to +55 °C -4 to 131 °F (No 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 directions
	Shock resistance	1,000 m/s², 6 times in each of the X, Y, and Z directions
Material		Case: Zinc die cast (Nickel chrome plating), Indicator cover and buttons: PES, Lens cover and display: PMMA (scratch-resistant coating specifications), Cable bushing: PBT, Cable: PVC, M12 connector: TPE, PBT, Nickel-plated brass
Accompanying items		Instruction manual
Weight		Approx. 160 g

*1 The range for displayable distance is from 50 to 5200.

*2 The laser classification for FDA (CDRH) is implemented based on IEC60825-1 in accordance with the requirements of Laser Notice.
*3 You can select the I/O from the following combinations.
Control output × 2, control output + external input
Control output + analog output (LR-TB5000/TB5000C/TB5000CL only)
External input + analog output (LR-TB5000/TB5000C/TB5000CL only)
(For details on the setting method, see the instruction manual.)
*4 IO-Link specification v.1.1/COM2 (38.4 kbps) is supported. You can download a setup file from the KEYENCE website (http://www.keyence.com).
If you are using the product in an environment in which you cannot download files over the Internet, contact your nearest KEYENCE office.
*5 150 mA or less(with load)

Dimensions

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

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