



## LR-TB2000C

Detection distance 2 m, Cable with connector M12, Laser Class 2



## SPECIFICATIONS

Model		LR-TB2000C
Type		Cable with connector M12
Detectable distance		60 to 2000 mm <sup>*1</sup>
Spot diameter		Approx. 4 mm
Response time		1 ms/10 ms/25 ms/100 ms/1000 ms selectable
Light source	Type	Red laser (660 nm)
	Laser class	Class 2 laser product (IEC60825-1,FDA (CDRH) Part1040.10 <sup>2</sup> )
Mutual interference prevention function		4 units (when using the interference prevention function)
Timer		OFF/OFF delay/ON delay/One-shot
Power voltage		20 to 30 VDC, including 10% ripple (P-P), Class 2 or LPS
Current consumption		45 mA or less (without load) <sup>*3</sup>
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 <sup>*4</sup> *5
	External input	Switchable between transmission OFF, teaching, and reference surface update Short-circuit current: 1 mA or less for both NPN and PNP For the applied voltage, see the wiring diagrams (pages 2 and 3 in the instruction manual). For the input times, see the time charts (page 4 in the instruction manual). <sup>*6</sup>
	Analogue output	-
Protection circuit		Protection against reverse power connection, power supply surges, output overcurrent, reverse output connection, and output surge
Environmental resistance	Enclosure rating	IP65/IP67 (IEC60529)
	Ambient light	Incandescent lamp/Sunlight: 10,000 lux or less
	Ambient temperature	-20 to +55 °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 directions
	Shock resistance	1,000 m/s <sup>2</sup> , 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, Laser warning and explanation labels
Weight		Approx. 85 g

<sup>\*1</sup> The range for displayable distance is from 50 to 2200.  
<sup>\*2</sup> The laser classification for FDA (CDRH) is implemented based on IEC60825-1 in accordance with the requirements of Laser Notice No.50.  
<sup>\*3</sup> 145 mA or less (with load)  
<sup>\*4</sup> You can select the I/O from the following combinations.  
Control output × 2, control output + external input  
Control output + analogue output (LR-TB5000/TB5000C/TB5000CL only),  
External input + analogue output (LR-TB5000/TB5000C/TB5000CL only)  
(For details on the setting method, see the instruction manual.)  
<sup>\*5</sup> 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.  
<sup>\*6</sup> You can select the I/O from the following combinations.  
Control output × 2, control output + external input, IO-Link  
(For details on the setting method, see page 3 of the instruction manual.)

Dimensions

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

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LR-TB2000C/LR-TB2000CL

