

# LR-TB2000CL

Detection distance 2 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-TB2000CL |
| Type | | Cable with connector M12 |
| Detectable distance | | 60 to 2000 mm 2.36" to 78.74"*1 |
| Spot diameter | | Approx. ø4 mm ø0.16" |
| Light source | Type | Red laser (660 nm) |
| | Laser class | Class 1 laser product<br>(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<br>selectable |
| I/O | Control output | NPN open collector/PNP open collector selectable<br>30 VDC or less, 50 mA or less, residual voltage: 2 V or less,<br>N.O./N.C. selectable<br>*3*4 |
| | Analog output | - |
| 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 | | 45 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),<br>Indicator cover and buttons: PES,<br>Lens cover and display: PMMA (scratch-resistant coating specifications),<br>Cable bushing: PBT,<br>Cable: PVC,<br>M12 connector: TPE, PBT, Nickel-plated brass |
| Accompanying items | | Instruction manual |
| Weight | | Approx. 85 g |

*1 The range for displayable distance is from 50 to 2200.
*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.
*5 145 mA or less (with load)

# Dimensions

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

## lr-tb2000c_tb2000cl_2_dimension_01.gif

