LR-W500

Cable type

CE ℭₛₚ®

SPECIFICATIONS

Model		LR-W500
Type		2 m cable type
Detecting distance		30 to 500 mm
Min. spot diameter		Adjustable spot Approx. ø3.5 mm at 100 mm Approx. ø9 mm at 250 mm Approx. ø18 mm at 500 mm
Response time		200 µs/1 ms/10 ms/100 ms/500 ms selectable [1]
Light source		White LED
Mutual interference reduction function		Up to 2 units when alternate frequencies set
Timer		OFF/ON delay/OFF delay/One-shot
Power supply	Power voltage	10 to 30 VDC, including 10% ripple (P-P), Class 2 or LPS
	Current consumption	65 mA or less (without load) at 24 VDC; 120 mA or less (without load) at 12 VDC [2]
I/O	Control output	NPN open collector/PNP open collector selectable 30 VDC or less, 50 mA or less, remaining voltage: 2 V or less N.O./N.C. selectable [3]
	External input	Tuning /Transmission OFF selectable Short circuit current: 1 mA or less for NPN/2 mA or less for PNP For the applied voltage, see the wiring diagrams in the instruction manual. For the input times, see the time charts in the instruction manual. [3]
Protection circuit		Protection against reverse power connection, power supply surge, output overcurrent, output surge, and reverse output connection
Environmental resistance	Enclosure rating	IP65/IP67 (IEC60529)
	Ambient light	Incandescent lamp: 10,000 lux or less, Sunlight: 20,000 lux or less
	Ambient temperature	-20 to +50 °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^2, 6 times in each of the X, Y, and Z directions
Material		Case: Zinc die cast (Nickel chrome plating), Indicator cover: PPSU, Buttons: PES Lens cover and display: PMMA (scratch-resistant coating), Cable bushing: PBT, Cable: PVC, Spot adjustment dial: Iron (triiron tetraoxide coated)
Weight		Approx. 170 g (including cable)

[1] When alternate frequencies are set, the response time increases by approximately 20%.
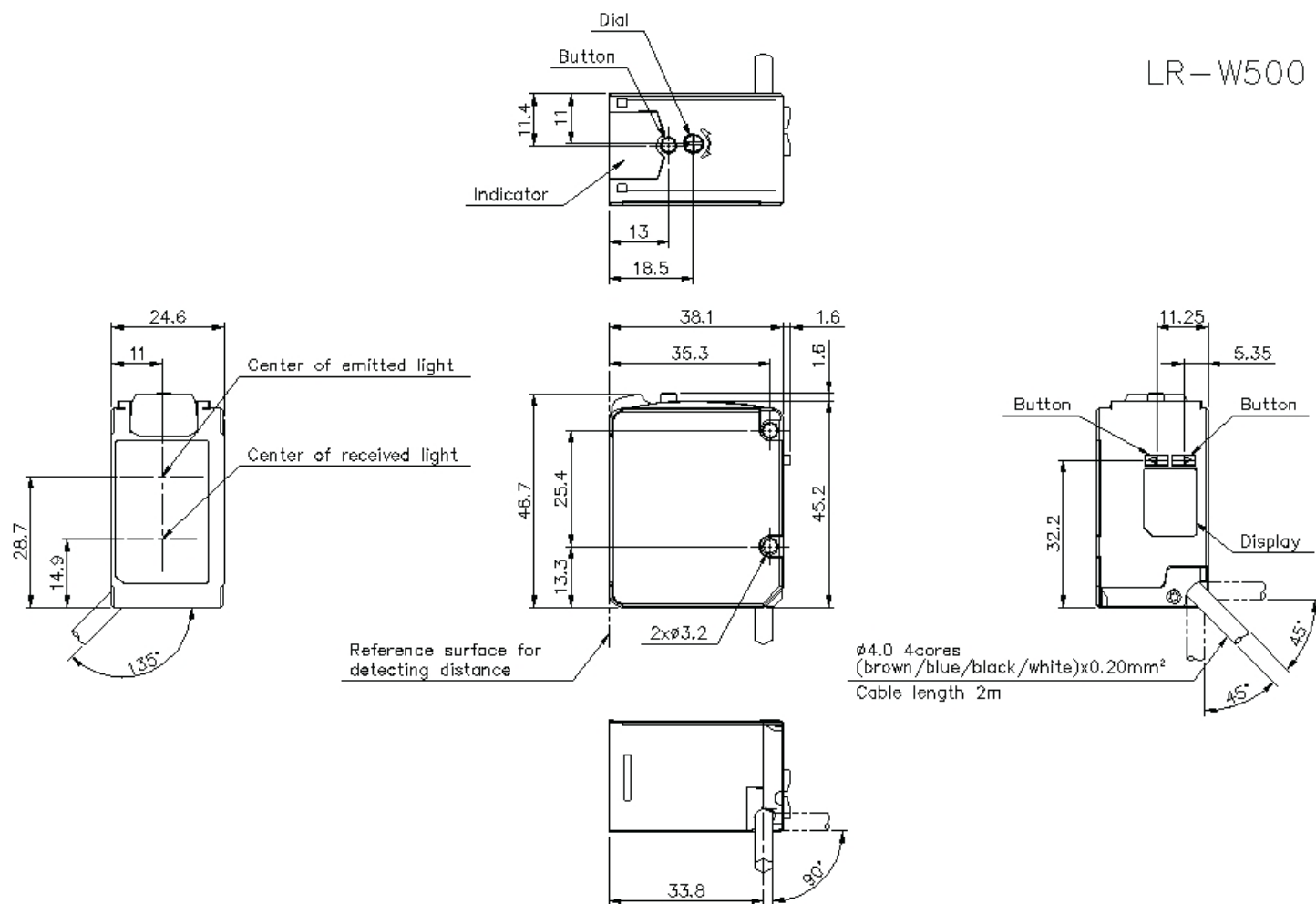[2] 195 mA or less (at 10 V, with load)
[3] IO-Link: Specification v.1.1/COM2 (38.4 kbps) is supported. The setup file can be downloaded from KEYENCE website (http://www.keyence.com).
If you are using the product in an environment in which you cannot download files over the Internet, contact your nearest KEYENCE office.
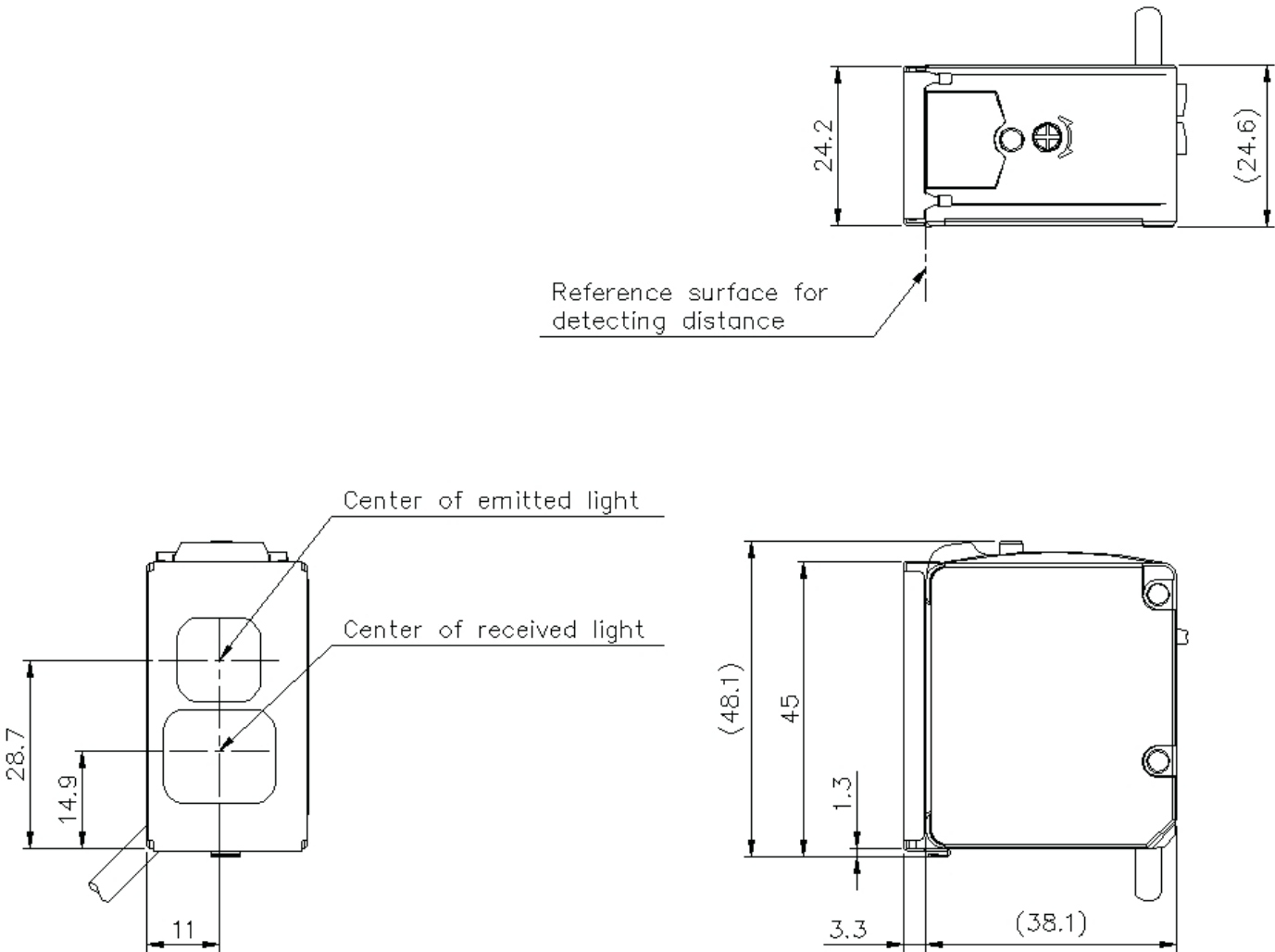
KEYENCE

Dimensions

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

lr-w500_dimension_01.gif

LR-W500

Dial
Button
11.4
11
Indicator
13
18.5

24.6
11
Center of emitted light
Center of received light
28.7
14.9
135°

38.1
35.3
1.6
1.6
46.7
25.4
45.2
13.3
2×ø3.2
Reference surface for
detecting distance

11.25
5.35
Button   Button
32.2
Display
ø4.0 4cores
(brown/blue/black/white)×0.20mm²
Cable length 2m
45°
45°

33.8
90°

lr-wa1_w500_dimension_01.gif

LR−WA1/LR−W500

24.2

(24.6)

Reference surface for
detecting distance

Center of emitted light

Center of received light

28.7

14.9

11

(48.1)

45

1.3

3.3

(38.1)

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OP−88023/88024/LR−W500

Reference surface for detecting distance

Center of emitted light

Center of received light

17.9

23.7

22.6

20.8

26

2.7

11.1

12.5

29.1

19.5

42.7

3.3