KEYENCE

LR-WF10
Fiber type Cable type

CE CSP us

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

Specifications

Model		LR-WF10
Type		Fiber Type 2 m cable type
Detecting distance		Detecting Distance and Min. Spot Diameter Based on Attached Fiber Head
Min. spot diameter		
Light source		White LED
Mutual interference reduction function		Up to 2 units when alternate frequencies set
Timer		OFF/ON delay/OFF delay/One-shot
Response time		250 μs, 1 ms, 10 ms, 100 ms, 500 ms Selectable[1][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. [4]
Protection circuit		Protection against reverse power connection, power supply surge, output overcurrent, output surge, and reverse output connection
Power supply	Power voltage	10 to 30 VDC, including 10% ripple (P-P), Class 2 or LPS
	Current consumption	50 mA or less (without load) at 24 VDC; 90 mA or less (without load) at 12 VDC[5]
Environmental resistance	Enclosure rating	IP65 (IEC60529)[6][7]
	Ambient light	Incandescent lamp: 10,000 lux or less, Sunlight: 20,000 lux or less
	Ambient temperature	-20 to +45 °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, Display: PMMA (scratch-resistant coating), Cable bushing: PBT, Cable: PVC, Fiber locking mount: PBT, NBR, Silicone rubber, SUS304, SUSXM7 Adapter: PBT
Weight		Approx. 150 g (including cable)

[1] When alternate frequencies are set, the response time increases by approximately 20%.
[2] When using the IO-Link communication, if the response time is set in 1ms or more, it becomes approximately 10% slower.
[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.

*4 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).
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*5 160 mA or less (at 10 V, with load)
*6 When the following small-diameter fiber units (the diameter of the cable is ø1.3 or ø1.0) are used, the IP65 rating cannot be satisfied
(FU-4F/66/91/93/43/63/63T etc.). When any small-diameter fiber units except for the above are used, IP65 is applied.
*7 When the waterproof adapter A/B are not used at the time of installation of a small-diameter fiber unit, the IP65 enclosure rating cannot be satisfied.

Dimensions

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

lr-wf10_dimension_01.gif