



PR-G51N
Rectangular Thru-beam Cable Type 30 m

CE ECOLAB Diversify

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

Specifications

Model		PR-G51N
Type		Thru-beam
Shape		Rectangular
Output		NPN
Cable connection		2 m cable
Detecting distance		30 m 98.43'
Number of control outputs		2 (Dark-ON +Light ON)*1
Output operation	Output 1	Dark-ON
	Output 2	Light-ON*2
Response time		1 ms
Sensitivity adjustment		One-turn trimmer (230°)
Spot diameter		—
Light source		4 elements, Red LED (631 nm)
Light interference prevention function		—
Indicator lamp		Transmitter: power supply indicator (green) Receiver: output indicator (yellow), Stable operation indicator (green)
Control output		NPN open collector 30 VDC or less, 100 mA or less Residual voltage: 1.2 V or less at less than 10 mA, 2 V or less at 10 to 100 mA
Stop emission input		Non-voltage input Input time ON: 1 ms or more, OFF: 20 ms or more
Protection circuit		Protection against reverse power connection, power supply surge, output overcurrent, output surge, and reverse output connection
Rating	Power voltage	10 to 30 VDC, including Ripple (P-P) 10 %
	Power consumption	Transmitter: 450 mW max. (15 mA max. at 24 V, 15 mA max. at 12 V) Receiver: 360 mW max. (12 mA max. at 24 V, 15 mA max. at 12 V)
Environmental resistance	Enclosure rating	IP68 (IEC60529), IP69K (DIN40050-9), 4X, 6P, 13 (NEMA250)*3
	Insulation resistance	20 MΩ or more (500 VDC)
	Ambient light	Incandescent lamp: 5,000 lux or less, Sunlight: 20,000 lux or less
	Ambient temperature	-20 to +70 °C -4 to 158 °F (No freezing)*4
	Storage temperature	-20 to +70 °C -4 to 158 °F
	Relative humidity	35 to 85 % RH (No condensation)
	Withstand voltage	1,000 VAC, 50/60 Hz, 1 min

	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/s ² , 6 times in each of the X, Y, and Z directions
Material	Case: SUS 316L, Indicator cover: PES, 7-segment display cover/Lens cover: PMMA (scratch-resistant coating) M18 nut: Brass (Nickel plating), Lock washer: Steel (Chrome plating)	
Accessories	Instruction manual	
Weight	Approx. 160 g	

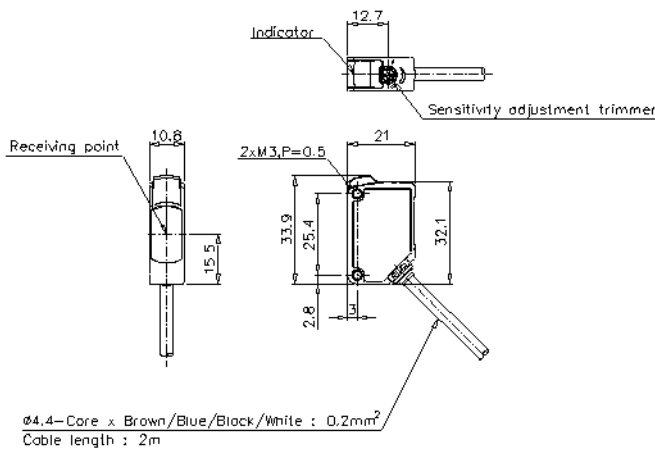
*1 For the threaded mount type sensors, the outputs are 1 NPN output and 1 PNP output.
*2 Output 2 is not available on the threaded mount type or M8 3-pin type.
*3 For the connector type, the enclosure rating varies depending on the cable that is used.
*4 When the ambient temperature is 60 °C 140 °F or higher, the device should be powered with no more than 24 VDC and 50 mA.

Dimensions

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

PR-G51N/G51P

Receiver



Transmitter

