

PZ-G51CB

Threaded mount Thrubeam M12 Connector Type, NPN

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

Specifications

Model		PZ-G51CB
Type		Thrubeam, Standard
Shape		Threaded
Output		Bipolar (NPN+PNP)
Cable connection		M12 connector *1
Detecting distance		20 m (65.6')
Spot diameter		—
Light source		Red LED
Sensitivity adjustment		1-turn trimmer (230°)
Response time		500 µs
Operation mode		LIGHT-ON/DARK-ON (switch-selectable)
Indicators (LED)		Power (T): Orange LED Output (R): Orange LED Stable operation: Green LED Light receiving: Red LED
Control output		Open collector output, 30 V max., 100 mA max., Residual voltage: 1 V max.
Protection circuit		Reversed polarity, overcurrent protection, surge absorber
Interference suppression		Up to 2 units (When polarization filters are attached)
Tightening torque		Threaded models (front M18 part): 1.0 N m max., (side slotted hole part): 0.5 N m max.
Rating	Power voltage	10 to 30 VDC, including Ripple (P-P) 10 %
	Current consumption	Transmitter: 20 mA or less, Receiver: 28 mA or less
Environmental resistance	Enclosure rating	IEC: IP67/NEMA: 4A, 6, 12/DIN: IP69K
	Ambient light	Incandescent lamp: 5,000 lux max., Sunlight: 20,000 lux max.
	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	Housing, M18 nut (threaded models only)	Glass-fiber reinforced PBT
	Lens cover	Polyarylate (PAR)
	Trimmer	Glass-fiber reinforced polyamide (PA)
	Case connection	Screw: Nickel-plated iron and zinc, packing: nitrile butadiene rubber (NBR)
	Cable (cable models only)	Polyvinyl chloride (PVC)

	Connector (connector type with cable only)	—
Accessories		Instruction manual, M18 nut x 1 piece (threaded models only)
Weight		Threaded connector models: Approx. 15 g

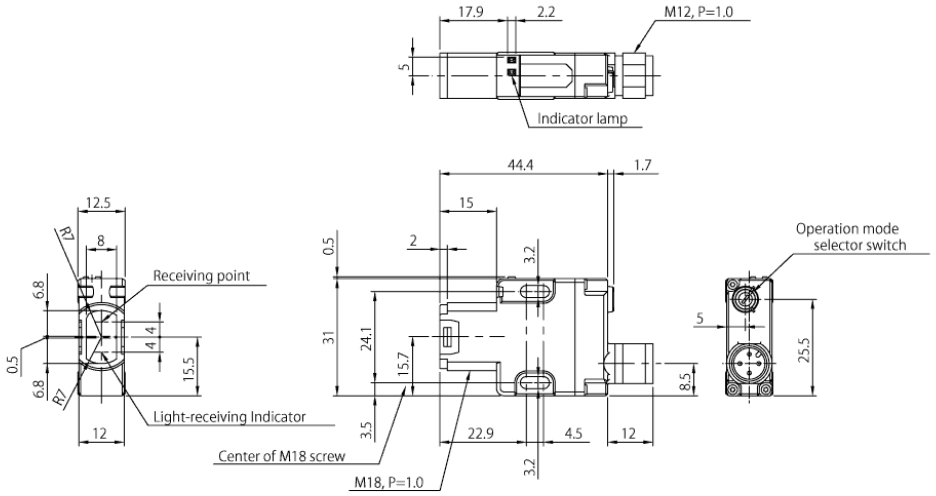
*1 Cable sold separately for connector models

Dimensions

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

PZ-G51CB

Receiver

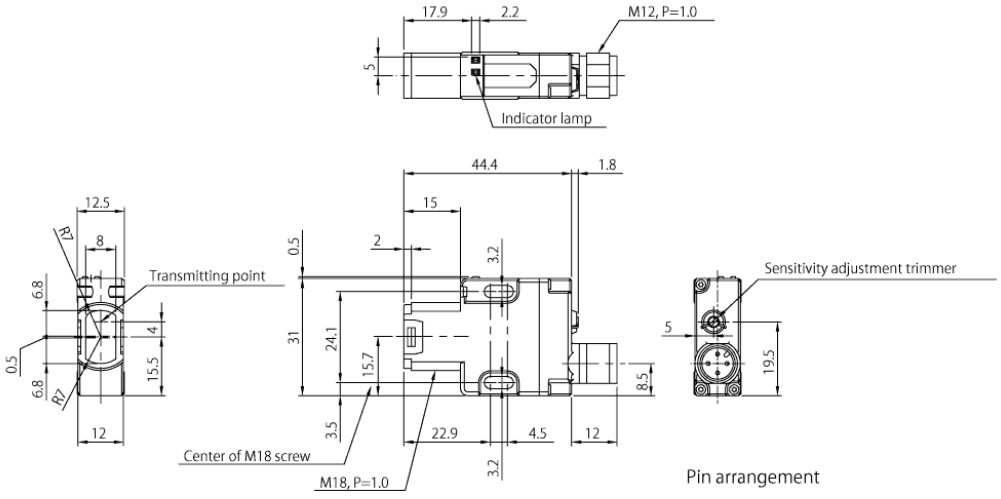


Pin arrangement



①	+V
②	OUT(NPN)
③	0V
④	OUT(PNP)

Transmitter



Pin arrangement

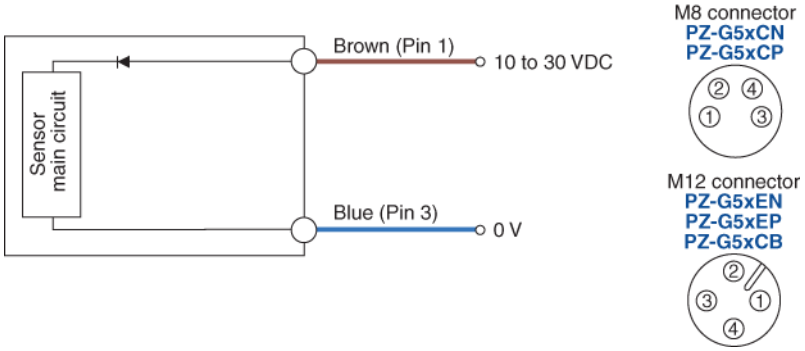


①	+V
②	-
③	0V
④	-

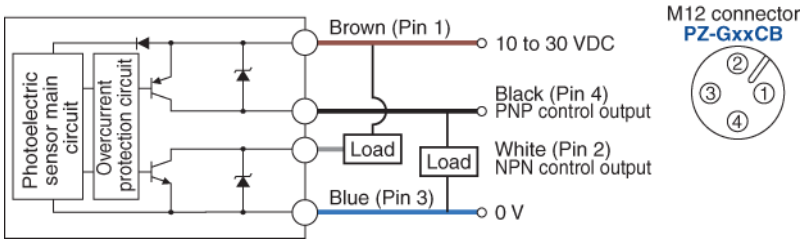
I/O Circuit Connection diagram

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

Thrubeam transmitter



Bipolar output
(thrubeam receiver, reflective, retro-reflective)



Characteristic

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