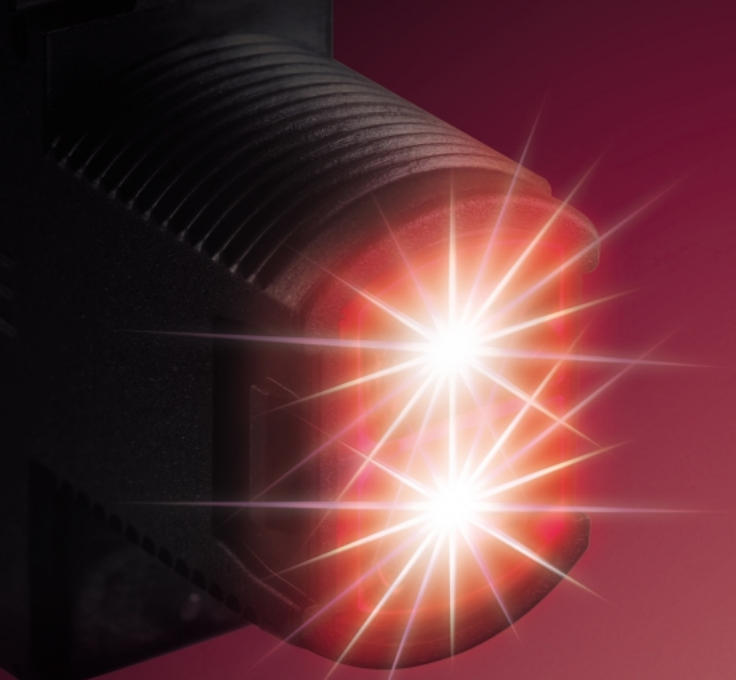
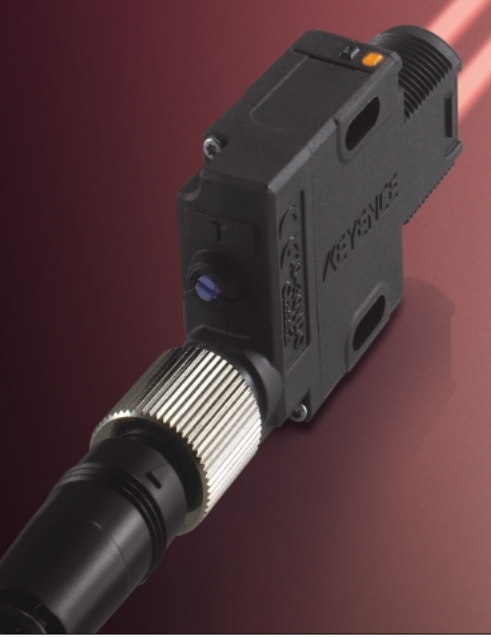


KEYENCE

NEW Self-contained Threaded Sensors
PZ-G Series



Dual LED



MEGA POWER

Long-range detection twice as far as conventional models

EASY ADJUSTMENT

The front light-receiving indicator allows easy optical axis alignment

EASY INSTALLATION

A one-touch mounting bracket makes screws unnecessary



Dramatically improved performance and ease-of-use

MEGA POWER

High-Power Dual LED-type

High-power thrubeam type PZ-G52

Detecting distance: 40 m (131.2')

4 times*
longer detecting distance
2 times*
faster response speed

* Compared with our conventional models

4-element red LED-type

Thrubeam type PZ-G51

Detecting distance: 20 m (65.6')

2 times*
longer detecting distance
2 times*
faster response speed

Reflective type PZ-G41

Detecting distance: 1 m (3.3')

The high-intensity 4-element red LED has greatly improved the detecting distance. The bright beam spot makes it easy to align the optical axis.

A 4-element LED is used in upper-level fiber sensors because its wavelength can be easily observed by the human eye and the intensity change over time is small.

* Compared with our conventional models

Retro-reflective type PZ-G61

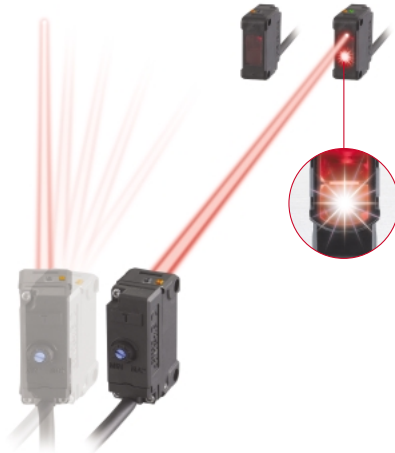
Detecting distance: 4.2 m (13.8')

[Self-contained Threaded Sensors PZ-G Series]

EASY ADJUSTMENT

Alignment indicator takes the guesswork out of long distance sensor setup

Has your receiver been bumped out of alignment? How can you tell? Thrubeam PZ-G models feature a bright red LED indicator that alerts you the instant proper alignment has been obtained. This simple yet crucial feature allows you to troubleshoot setup and run-time issues quickly, before they can snowball into major problems.



Laser Marked tags eliminate possible contamination

All information (model#, lot#, etc.) is laser marked directly onto the sensor housing. There are no labels, inks or paints to peel or chip off into your products.



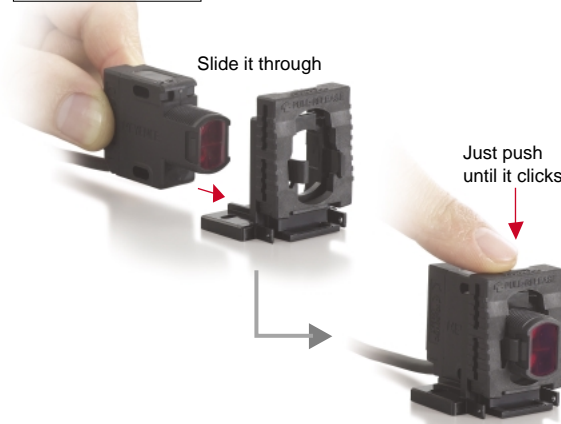
Easy-to-see blue trimmer
Enhances operation efficiency

EASY INSTALLATION

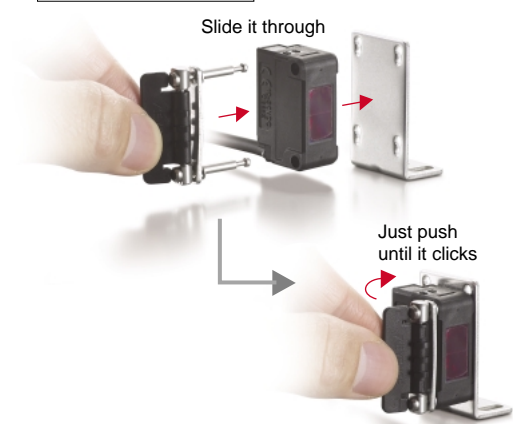
One-Touch mounting brackets cut installation time

Our unique one-touch brackets can save you and your customers considerable man-hours during installation or replacement.

Threaded models

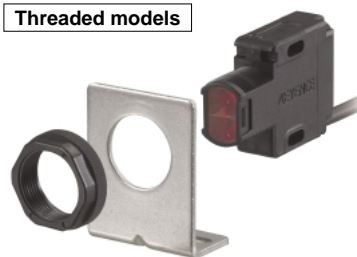


Rectangular models



A variety of mounting styles are available to adapt to your application.

Threaded models



Can be attached with an M18 nut

Rectangular models

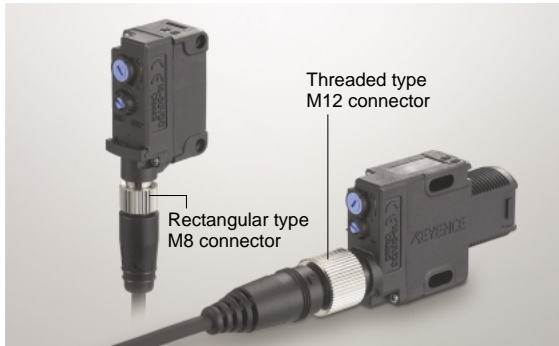


Can be attached with two M3 screws

Enhanced user-friendliness

Standard M8 and M12 quick-disconnects make replacement easier

The PZ-G features a standard pin-out, which allows it to be a drop-in replacement with existing wiring.



Our oil-resistant cable ensures reliable operation in an oily environment

In addition to the standard PVC cable, an oil-resistant PUR cable is available for use in harsh environments.



19 types of mounting brackets provide a variety of mounting methods

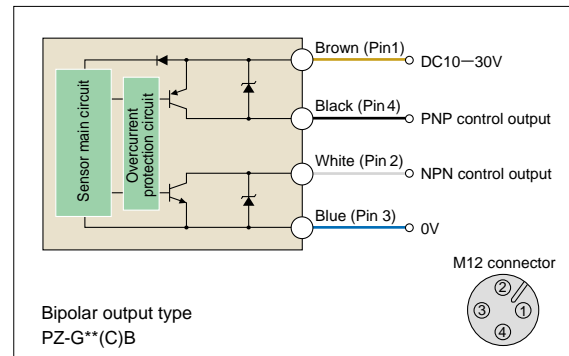
A bracket can be selected according to the installation conditions. 19 types, including a one-touch bracket, are available.



The mounting brackets shown above are only part of the lineup. See page 7 for further details.

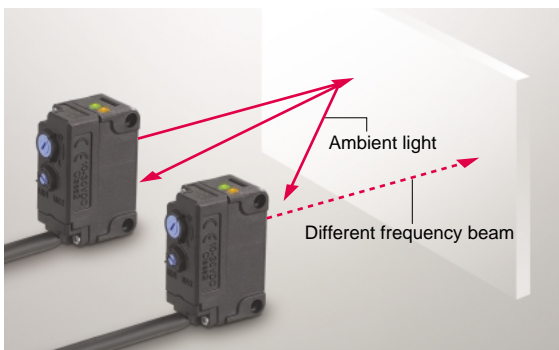
Bipolar output (NPN+PNP) compatible with any input device

Threaded models feature bipolar output (NPN and PNP), eliminating the need to stock sensors for both outputs.



The interference suppression function prevents interference from nearby units

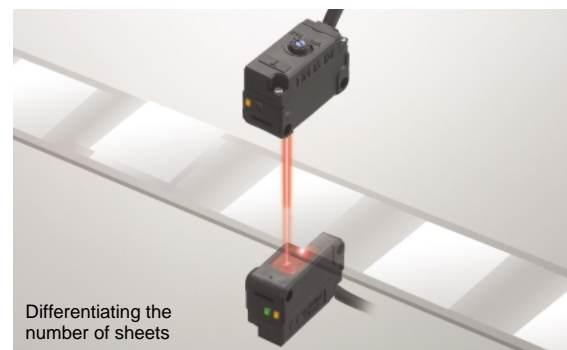
With thrubeam models, up to two sensors can be mounted in close proximity. Four sensors can be used by alternating the transmitter/ receiver position.



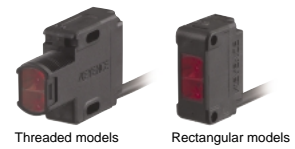
The different frequency function automatically shifts the emission cycle if ambient light is received by the receiver.

High-speed targets can be detected at a response speed of up to 500 s

A high-speed response of up to 500 s, twice as fast as our conventional models, ensures detection on a high-speed line. The high power ensures stable detection.

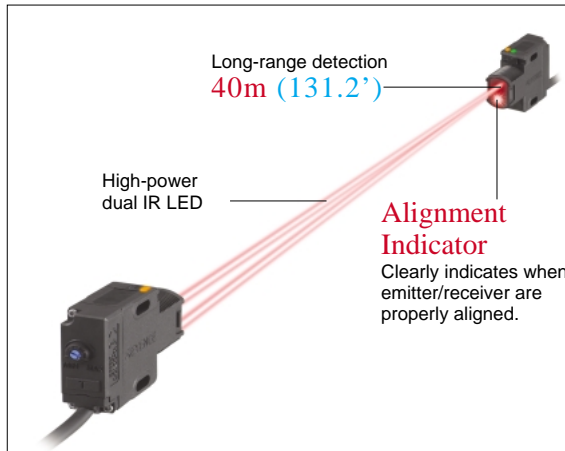


Model features

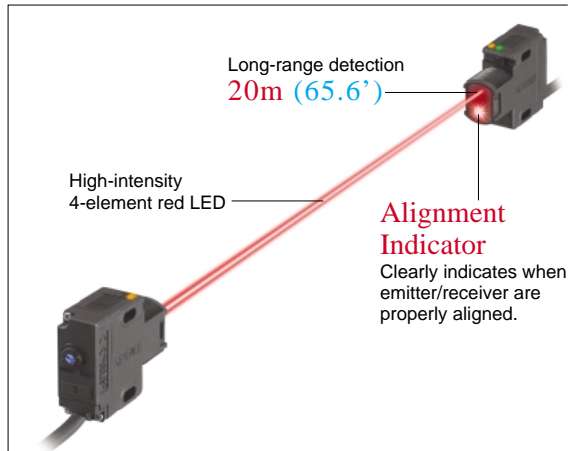


Thrubeam — The long-range high-power beam makes it easy to align the optical axis

High-power PZ-G52

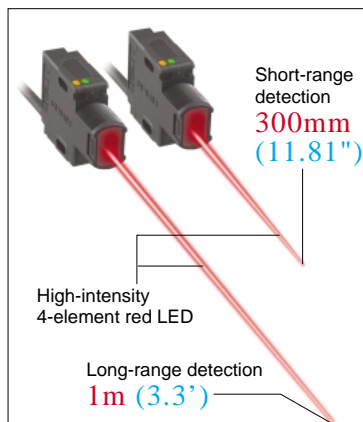


Standard PZ-G51

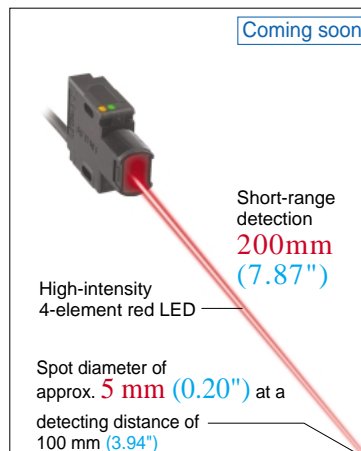


Reflective — The visible spot makes it easy to align the optical axis

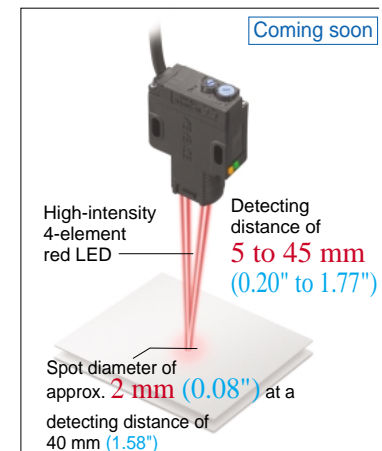
Diffuse reflective PZ-G41 (long-range) PZ-G42 (short-range)



Narrow-view reflective type PZ-G101

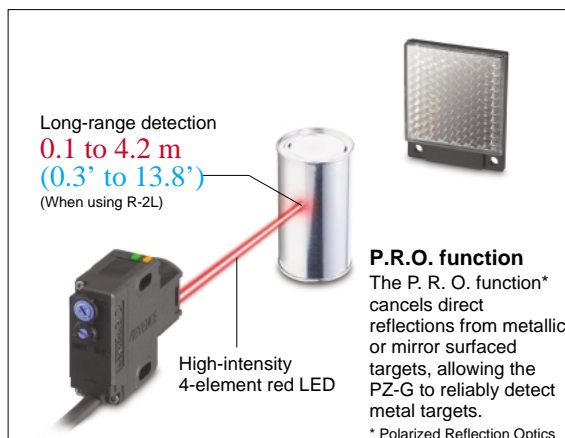


Definite reflective type PZ-G102

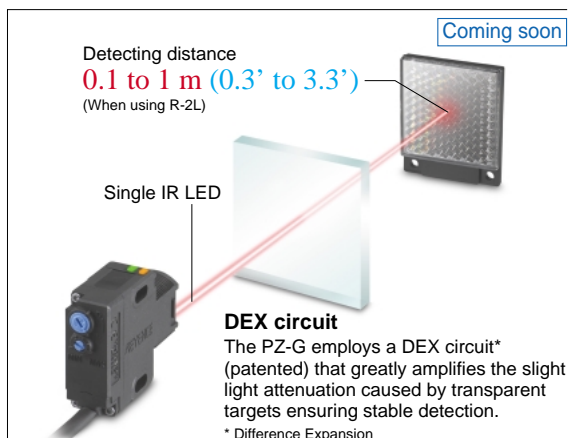


Retro-reflective — High-power long-range detection

Standard PZ-G61 (with P. R. O. function)



Transparent object detection type PZ-G62



Sensor head lineup / Model variations

Sensor head lineup



Type	Design	Detecting distance	Model variations			Light source (LED)	Cable*								
			NPN	PNP	Bipolar (NPN+PNP)										
 Thru-beam	Standard	Rectangular	 20 m (65.6')	PZ-G51N	PZ-G51P	—	Red	Cable (2m 6.6')							
		Threaded		PZ-G51CN	PZ-G51CP	—		M8 connector							
	High-power	Rectangular		 40 m (131.2')	—	—		PZ-G51B	Infrared x 2	Cable (2m 6.6')					
		Threaded			—	—		PZ-G51CB		M12 connector					
	 Reflective	Diffuse reflective long-range			Rectangular	 1 m (3.3')	PZ-G41N	PZ-G41P	—	Red	Cable (2m 6.6')				
					Threaded		PZ-G41CN	PZ-G41CP	—		M8 connector				
Diffuse reflective short-range			Rectangular		 300 mm (11.81")		—	—	PZ-G41B		Cable (2m 6.6')				
			Threaded				—	—	PZ-G41CB			M12 connector			
Narrow-view reflective <small>Coming soon</small>		Rectangular	 200 mm (7.87")	PZ-G42N			PZ-G42P	—	Cable (2m 6.6')						
		Threaded		PZ-G42CN			PZ-G42CP	—			M8 connector				
		Difinite reflective <small>Coming soon</small>		Rectangular			 5 to 45 mm (0.20" to 1.77")	—	—		PZ-G42B	Cable (2m 6.6')			
				Threaded				—	—		PZ-G42CB		M12 connector		
Retro-reflective**				Long-range (with P. R. O. function)				Rectangular	 0.1 to 4.2 m (0.3' to 13.8') (when using R-2L)		PZ-G101N	PZ-G101P	—	Red	Cable (2m 6.6')
								Threaded			PZ-G101CN	PZ-G101CP	—		M8 connector
		Transparent object detection <small>Coming soon</small>		Rectangular				 0.1 to 1 m (0.3' to 3.3') (when using R-2L)			—	—	PZ-G101B		Cable (2m 6.6')
				Threaded							—	—	PZ-G101CB		
Retro-reflective**	Long-range (with P. R. O. function)	Rectangular		 0.1 to 4.2 m (0.3' to 13.8') (when using R-2L)		PZ-G102N				PZ-G102P	—	Red	Cable (2m 6.6')		
		Threaded				PZ-G102CN				PZ-G102CP	—		M8 connector		
	Transparent object detection <small>Coming soon</small>	Rectangular			 0.1 to 1 m (0.3' to 3.3') (when using R-2L)	—				—	PZ-G102B		Cable (2m 6.6')		
		Threaded				—				—	PZ-G102CB			M12 connector	
Retro-reflective**	Long-range (with P. R. O. function)	Rectangular	 0.1 to 4.2 m (0.3' to 13.8') (when using R-2L)			PZ-G61N				PZ-G61P	—	Red	Cable (2m 6.6')		
		Threaded				PZ-G61CN				PZ-G61CP	—		M8 connector		
	Transparent object detection <small>Coming soon</small>	Rectangular				 0.1 to 1 m (0.3' to 3.3') (when using R-2L)	—			—	PZ-G61B		Cable (2m 6.6')		
		Threaded					—			—	PZ-G61CB			M12 connector	
Retro-reflective**	Long-range (with P. R. O. function)	Rectangular					 0.1 to 4.2 m (0.3' to 13.8') (when using R-2L)		PZ-G62N	PZ-G62P	—	Infrared	Cable (2m 6.6')		
		Threaded							PZ-G62CN	PZ-G62CP	—		M8 connector		
	Transparent object detection <small>Coming soon</small>	Rectangular						 0.1 to 1 m (0.3' to 3.3') (when using R-2L)	—	—	PZ-G62B		Cable (2m 6.6')		
		Threaded							—	—	PZ-G62CB			M12 connector	

*Cable sold separately for connector models **Reflector sold separately

Model variations

PZ-G

① Detection method

Reference No.	Reference No. description	
	Detection method	Details
51	Thru-beam type	Standard
52		High-power
41	Reflective type	Diffuse reflective long range
42		Diffuse reflective short range
101		Narrow-view
102		Definite reflective
61	Retro-reflective type	Long range (with P. R. O. function)
62		Transparent object detection (without P. R. O. function)

② Details

Reference letter	Reference letter description		
	Details	Cable	Output
N	Rectangular models	2 m 6.6' cable with a loose wire end	NPN
P			PNP
CN		M8 connector	NPN
CP			PNP
B	Threaded models	2 m 6.6' cable with a loose wire end	Bipolar (NPN+PNP)
CB			

Options

Brackets



Rectangular models

Model	For use with:	Details*	Accessories	Material	Weight		
PZ-B41A	Cable models	L-shaped mounting bracket (standard)	M3 screw, P=0.5xL12 (2 pieces)	Mounting bracket: SUS304 Screw: Stainless	Approx. 15 g		
PZ-B01A		L-shaped mounting bracket (small)			Approx. 10 g		
PZ-B61		L-shaped mounting bracket (protective)			Approx. 90 g		
PZ-B21A		Side-mounting bracket (vertical L)			Approx. 15 g		
PZ-B22A		Side-mounting bracket (vertical R)			Approx. 15 g		
PZ-B31		Side-mounting bracket (landscape L)			Approx. 20 g		
PZ-B32		Side-mounting bracket (landscape R)			Approx. 20 g		
PZ-B11		Landscape mounting bracket			Approx. 20 g		
PZ-B81		One-touch mounting bracket			Stopper	Mounting bracket: SUS304 Stopper: SUS303, Polyacetal	Approx. 20 g
PZ-B02		Connector models (M8 L-shaped cable only)			L-shaped mounting bracket	M3 screw, P=0.5xL12 (2 pieces)	Mounting bracket: SUS304 Screw: Stainless
PZ-B23	Side-mounting bracket (vertical L)		Approx. 25 g				
PZ-B24	Side-mounting bracket (vertical R)		Approx. 25 g				
PZ-B83	One-touch mounting bracket		Stopper	Mounting bracket: SUS304 Stopper: SUS303, Polyacetal	Approx. 30 g		
OP-84220	Cable models Connector models	Stopper for one-touch mounting brackets (PZ-B81/B83) (without an L-shaped bracket)	—	SUS303, Polyacetal	Approx. 10 g		

*One piece is included.

Threaded models

Model	For use with:	Details*	Accessories	Material	Weight
PZ-B03	Cable models Connector models	L-shaped mounting bracket A (standard)	—	SUS304	Approx. 25 g
PZ-B04		L-shaped mounting bracket (angle-adjustable)		SUS304	Approx. 35 g
PZ-B25		Side-mounting bracket (vertical)		SUS304	Approx. 30 g
PZ-B82**		One-touch mounting bracket		Base: Polyacetal Slide: Glass-reinforced polyamide	Approx. 10 g
OP-84225		M18 nut (2 pieces)		Glass-reinforced PBT	Approx. 5 g

*One piece is included (except OP-84225). **One M18 nut is supplied with threaded models. ***When using PZ-B82, OP-85135 attachment cannot be used.

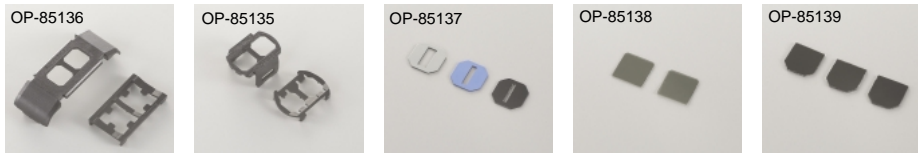
Rectangular/Threaded models

Model	For use with:	Details*	Accessories	Material	Weight
PZ-S10A	Cable models Connector models	Free adjuster tool (L=55 to 100 mm 2.17" to 3.94") Applicable mounting bracket: Side-mounting bracket (PZ-B21A, B22A, B31, B32, B23, B24, B25)	Binding band (2 pieces) Plate washer (1 piece)	Shaft: SUS303 Plastic part: Polyamide	Approx. 105 g
PZ-S20A		Free adjuster tool (L=55 to 200 mm 2.17" to 7.87") Applicable mounting bracket: Side-mounting bracket (PZ-B21A, B22A, B31, B32, B23, B24, B25)			Approx. 165 g

*One piece is included.

Options

Attachments



Model	For use with:	Description	Number included	Material	Weight
OP-85136	Thrubeam (Rectangular models)	Attachment A (for attaching a slit or a polarization filter)	2 sets	Polyacetal (POM)	Approx. 2 g
OP-85135*	Thrubeam (threaded models)	Attachment B (for attaching a slit or a polarization filter)	2 sets	Polyacetal (POM)	Approx. 1 g
OP-85137	Thrubeam (square/threaded models)	Slit (0.5 mm 0.02", 1 mm 0.04", 2 mm 0.08")	3sets	Polyvinyl chloride (PVC)	Approx. 1 g
OP-85138	Thrubeam (red LED models)	Polarization filter A (for the red LED type)	2 pieces	Triacetate (TAC)	Approx. 1 g
OP-85139	Thrubeam (red IR LED models)	Polarization filter B (for the red IR LED type)	3 pieces	Polyvinyl alcohol (PVA) Acetate plastic	Approx. 1 g

* OP-85135 cannot be attached when using PZ-B82 one-touch mounting bracket.

Specifications when an attachment is used

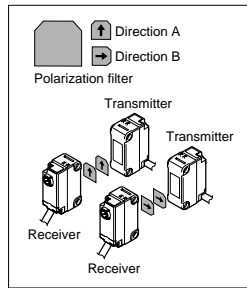
Sensor model	Slit (mm inch)	Polarization filter	Detecting distance (m ft)
PZ-G51	0.5 x 5 (0.02" x 0.20")	—	1 (3.3')
	1 x 5 (0.04" x 0.20")	—	2.5 (8.2')
	2 x 5 (0.08" x 0.20")	—	5 (16.4')
	—	Attached*	9 (29.5')
	0.5 x 5 (0.02" x 0.20")	Attached*	0.5 (1.6')
	1 x 5 (0.04" x 0.20")	Attached*	1.5 (4.9')
PZ-G52	2 x 5 (0.08" x 0.20")	Attached*	3 (9.8')
	0.5 x 5 (0.02" x 0.20")	—	2.5 (8.2')
	1 x 5 (0.04" x 0.20")	—	5.5 (18.0')
	2 x 5 (0.08" x 0.20")	—	10 (32.8')
	—	Attached*	15 (49.2')
	0.5 x 5 (0.02" x 0.20")	Attached*	1 (3.3')
	1 x 5 (0.04" x 0.20")	Attached*	2 (6.6')
	2 x 5 (0.08" x 0.20")	Attached*	5 (16.4')

* When attaching to make the polarization direction of the transmitter and the receiver same.

[Usage example 1]

Suppressing interference between two thrubeam sensors

Interference between thrubeam sensors can be suppressed with polarization filters. A polarization filter's characteristic depends on the direction and notch in which it is set. If the polarization direction of the filters attached to the transmitter and the receiver is the same, the beam can be received. If the direction of the filter is changed by 90 degrees, however, the beam cannot be received. Using this restriction, interference can be suppressed with polarization filters as shown.

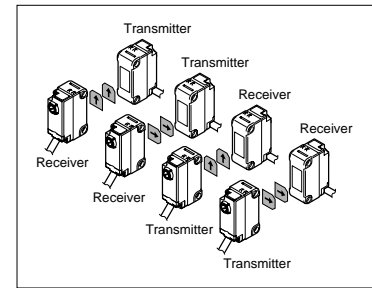


* Remove the protective sheets on both sides of the polarization filter before use.
* Adjust the sensitivity if interference occurs even with polarization filters.

[Usage example 2]

Suppressing interference between four thrubeam-type sensors

With another set of sensors set as in Usage Example 1, interference between four sensors can be suppressed by alternating the positions of the transmitters and the receivers. Be sure to pay attention to the direction of the notches on the filters.



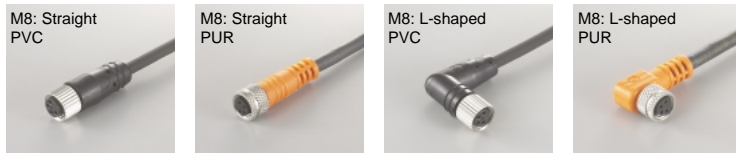
Reflectors



Model	For use with:	Detecting distance (m ft)		Description	Number included	Material	Weight
		PZ-G61 Long-range	PZ-G62 Transparent object detection				
OP-84219	Retro-reflective models	0.1 to 4.2 (0.3' to 13.8')	0.1 to 2 (0.3' to 6.6')	Reflector (R-2L)	1 piece	Reflective area: Acrylic, Base: ABS	Approx. 20 g
OP-96436		0.1 to 2.9 (0.3' to 9.5')	0.1 to 0.4 (0.3' to 1.3')	Reflector (R-3)		Reflective area: Acrylic, Base: ABS	Approx. 10 g
R-5		0.1 to 2.5 (0.3' to 8.2')	0.1 to 0.5 (0.3' to 1.6')	Reflector (R-5)		Reflective area: Acrylic, Base: ABS	Approx. 5 g
OP-84221		0.1 to 0.7 (0.3' to 2.3')	—	Reflective tape		Surface: Acrylic, Cube: Polycarbonate	Approx. 1 g

Cables / Input/output circuits

Connector cables



M8 connector

Model	Cable material	Description	Sensor connection		Opposite connection		Cable length (m ft)	Weight	
			Connector size	Design	Connector size	Design			
OP-73864	PVC	Connector – loose wires	M8	Straight	—	Loose wires	2 (6.6')	Approx. 55 g	
OP-73865			M8	Straight	—	Loose wires	10 (32.8')	Approx. 220 g	
OP-85497			M8	L-shaped	—	Loose wires	2 (6.6')	Approx. 55 g	
OP-85498	PUR	Connector – connector	M8	Straight	M8	Straight	2 (6.6')	Approx. 55 g	
OP-85499			M8	Straight	—	Loose wires	2 (6.6')	Approx. 65 g	
OP-85500			M8	Straight	—	Loose wires	10 (32.8')	Approx. 310 g	
OP-85584		Connector – loose wires	M8	L-shaped	—	Loose wires	2 (6.6')	Approx. 65 g	
OP-85585			M8	L-shaped	—	Loose wires	10 (32.8')	Approx. 310 g	
OP-85501			Connector – connector	M8	Straight	M8	Straight	2 (6.6')	Approx. 75 g
OP-85586				M8	L-shaped	M8	Straight	2 (6.6')	Approx. 75 g
OP-85509		M8		Straight	M12	Straight	2 (6.6')	Approx. 80 g	
OP-85510		Connector – connector	M8	Straight	M12	Straight	5 (16.4')	Approx. 165 g	
OP-85587			M8	L-shaped	M12	Straight	2 (6.6')	Approx. 80 g	
OP-85588			M8	L-shaped	M12	Straight	5 (16.4')	Approx. 170 g	

* One piece is included.



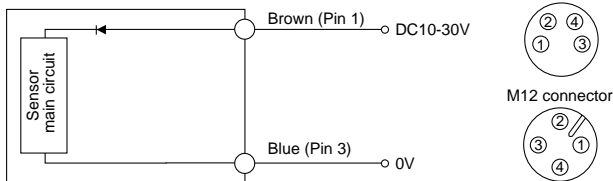
M12 connector

Model	Cable material	Description	Sensor connection		Opposite connection		Cable length (m ft)	Weight	
			Connector size	Design	Connector size	Design			
OP-75721	PVC	Connector – loose wires	M12	Straight	—	Loose wires	2 (6.6')	Approx. 65 g	
OP-85502			M12	Straight	—	Loose wires	10 (32.8')	Approx. 230 g	
OP-75722			M12	L-shaped	—	Loose wires	2 (6.6')	Approx. 65 g	
OP-85503	PUR	Connector – connector	M12	Straight	M12	Straight	2 (6.6')	Approx. 70 g	
OP-85504			M12	Straight	M12	Straight	5 (16.4')	Approx. 130 g	
OP-85505			M12	Straight	—	Loose wires	2 (6.6')	Approx. 75 g	
OP-85506		Connector – loose wires	M12	Straight	—	Loose wires	10 (32.8')	Approx. 320 g	
OP-85507			Connector – connector	M12	Straight	M12	Straight	2 (6.6')	Approx. 90 g
OP-85508				M12	Straight	M12	Straight	5 (16.4')	Approx. 175 g

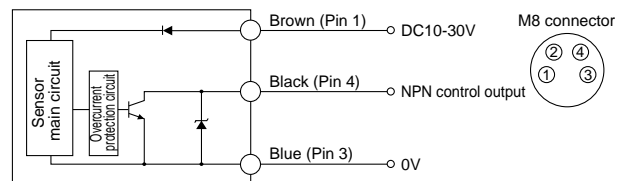
* One piece is included.

Input/output circuits

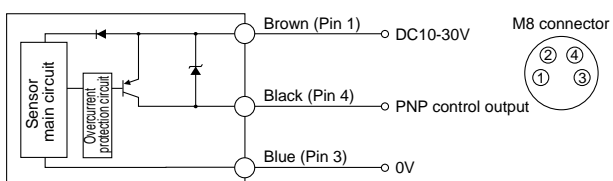
Threbeam transmitter PZ-G5*(C)PZ-G5*(C)B



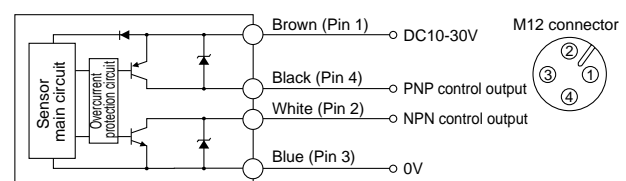
NPN output (threbeam receiver, reflective, retro-reflective) PZ-G**(C)N



PNP output (threbeam receiver, reflective, retro-reflective) PZ-G**(C)P



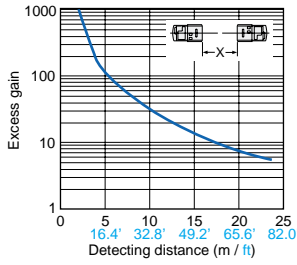
Bipolar output (threbeam receiver, reflective, retro-reflective) PZ-G**(C)B



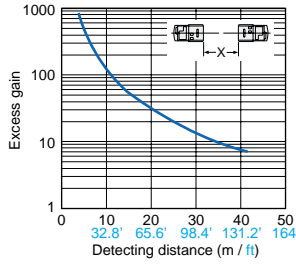
Characteristics

Receiver excess gain vs. detecting distance (Typical)

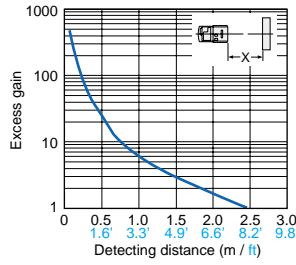
PZ-G51



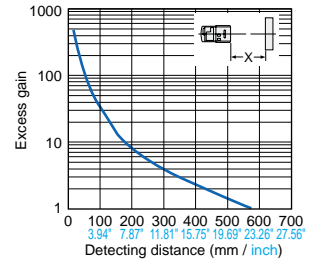
PZ-G52



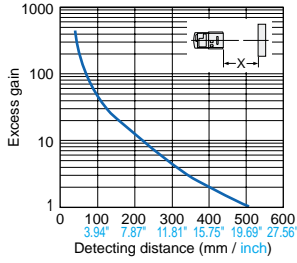
PZ-G41



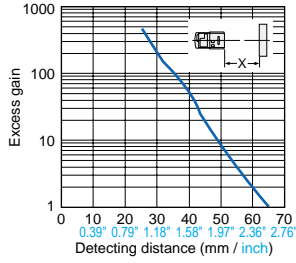
PZ-G42



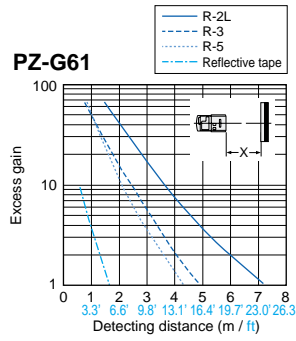
PZ-G101



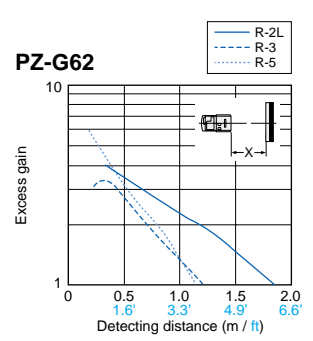
PZ-G102



PZ-G61

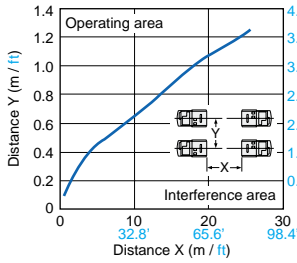


PZ-G62

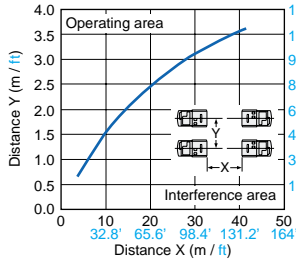


Interference area (Typical)

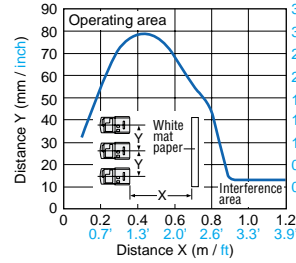
PZ-G51



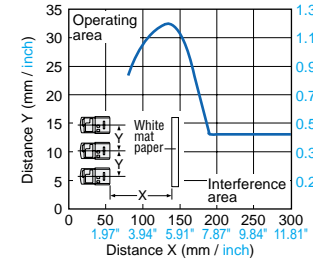
PZ-G52



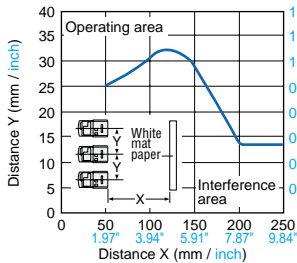
PZ-G41



PZ-G42



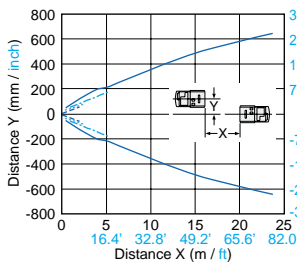
PZ-G101



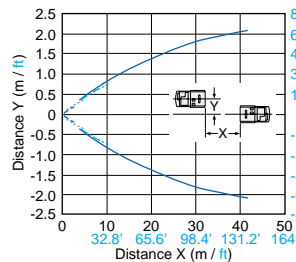
Note: PZ-G102/G61/G62 can be used while 3 units are mounted in close proximity to each other without mutual interference.

Parallel displacement of optical (Typical)

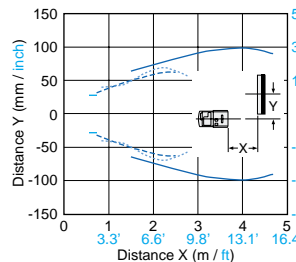
PZ-G51



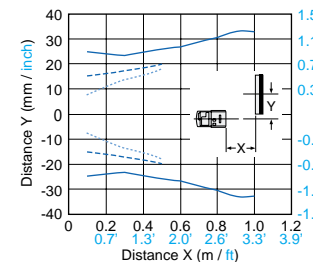
PZ-G52



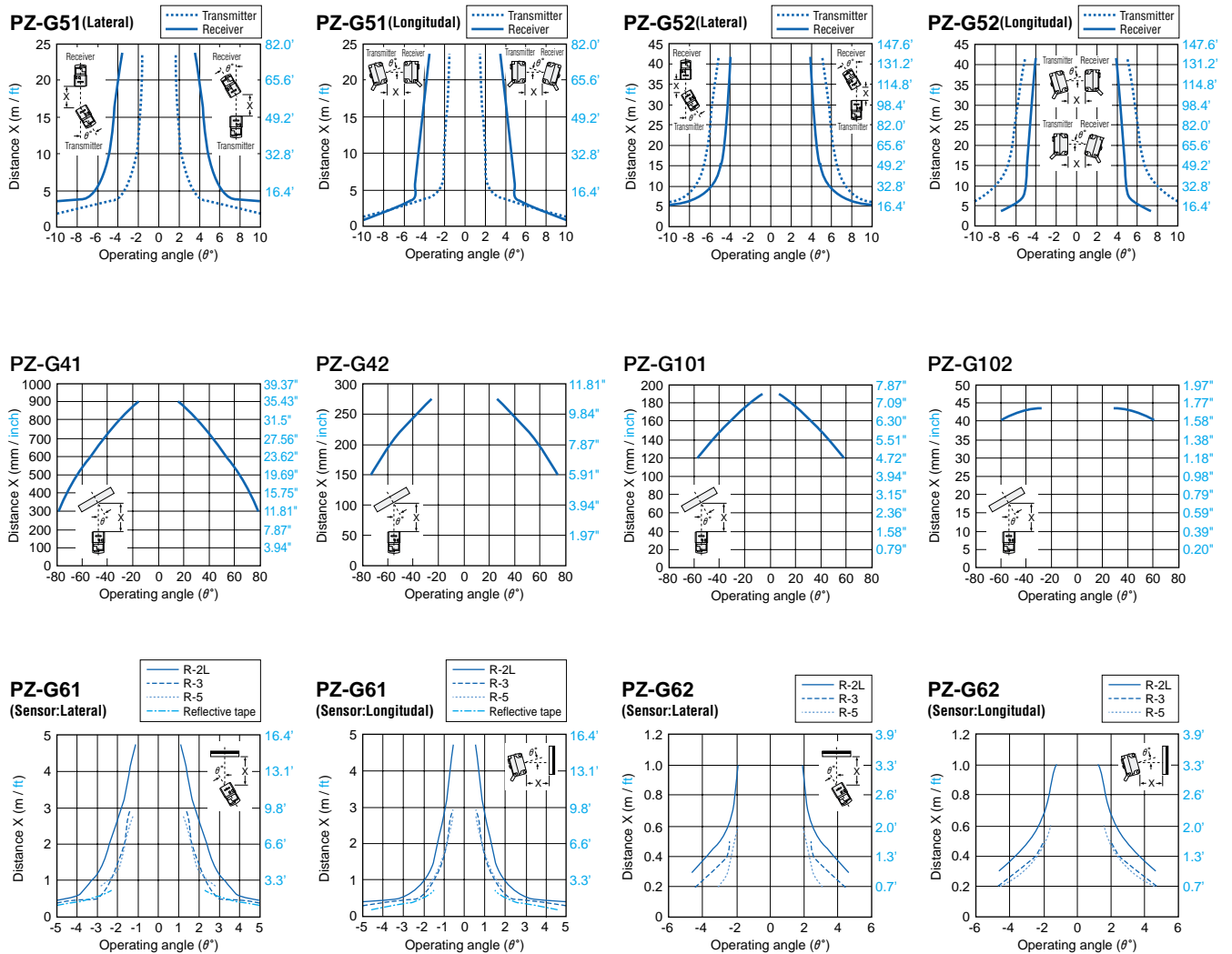
PZ-G61



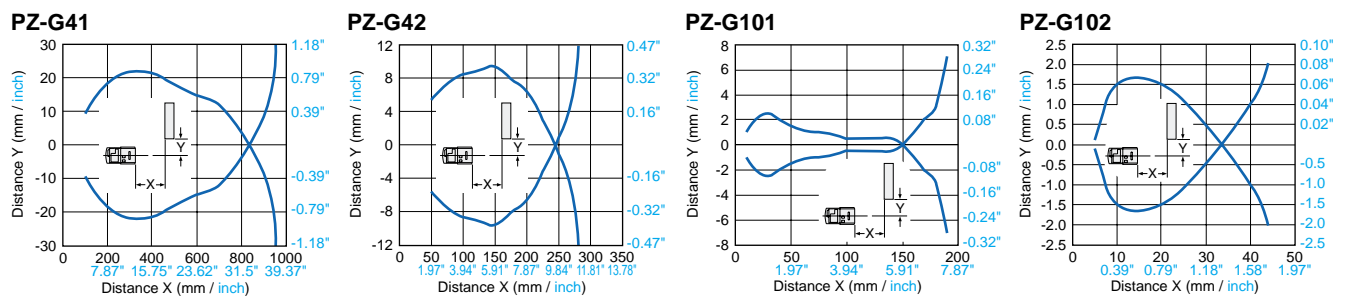
PZ-G62



Optical axis angle (Typical)



Operating distance vs. detecting distance (Typical)



Specifications



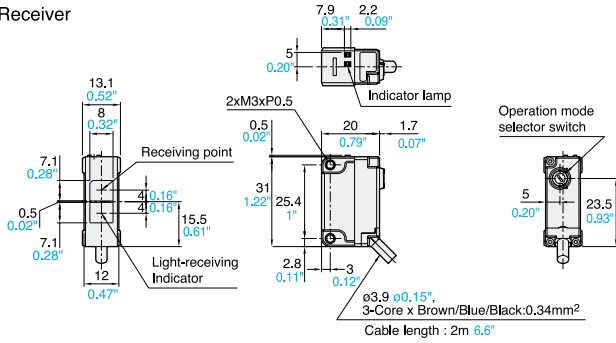
Models			Thrubeam		Diffuse Reflective				Retro-reflective**	
			Standard	High-power	Long-range	Short-range	Narrow-view reflective <small>Coming soon</small>	Definite reflective <small>Coming soon</small>	Long-range (with P.R.O. function)	Transparent object detection <small>Coming soon</small>
Design	Cable type*	Output								
Rectangular	Cable (2m)	NPN	PZ-G51N	PZ-G52N	PZ-G41N	PZ-G42N	PZ-G101N	PZ-G102N	PZ-G61N	PZ-G62N
		PNP	PZ-G51P	PZ-G52P	PZ-G41P	PZ-G42P	PZ-G101P	PZ-G102P	PZ-G61P	PZ-G62P
	M8 connector	NPN	PZ-G51CN	PZ-G52CN	PZ-G41CN	PZ-G42CN	PZ-G101CN	PZ-G102CN	PZ-G61CN	PZ-G62CN
		PNP	PZ-G51CP	PZ-G52CP	PZ-G41CP	PZ-G42CP	PZ-G101CP	PZ-G102CP	PZ-G61CP	PZ-G62CP
Threaded	Cable (2m)	Bipolar	PZ-G51B	PZ-G52B	PZ-G41B	PZ-G42B	PZ-G101B	PZ-G102B	PZ-G61B	PZ-G62B
	M12 connector	(NPN+PNP)	PZ-G51CB	PZ-G52CB	PZ-G41CB	PZ-G42CB	PZ-G101CB	PZ-G102CB	PZ-G61CB	PZ-G62CB
Detecting distance			20 m <small>(65.6')</small>	40 m <small>(131.2')</small>	1 m <small>(3.3')</small> <small>(When detecting 30 x 30 cm (11.81"x11.81") white paper)</small>	300 mm <small>(11.81")</small> <small>(When detecting 10 x 10 cm (3.94" x 3.94") white paper)</small>	200 mm <small>(7.87")</small>	5 to 45 mm <small>(0.20" to 1.77")</small>	0.1 to 4.2 m <small>(0.3' to 13.8')</small> <small>(When R-2L reflector is used)</small>	0.1 to 1 m <small>(0.3' to 3.3')</small> <small>(When R-2L reflector is used)</small>
Spot diameter			—	—	—	—	Approx. 5 mm <small>0.20" dia.</small> <small>(At a detecting distance of 100 mm 3.94")</small>	Approx. 2 mm <small>0.08" dia.</small> <small>(At a detecting distance of 40 mm 1.57")</small>	—	—
Light source			Red LED	Infrared LED x 2	Red LED				Infrared LED	
Sensitivity adjustment			1-turn trimmer (230°)							
Response time			500 µs							
Operation mode			LIGHT-ON/DARK-ON (switch-selectable)							
Indicators (LED)			T: Power (orange LED) R: Output (orange LED) Stable operation (green LED) Light receiving (red LED)			Output: Orange LED, Stable operation: Green 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							
Rating	Power supply		10 to 30 VDC including Ripple ±10% (P-P)							
	Current consumption		T: 20 mA max. R: 28 mA max.	T: 25 mA max. R: 28 mA max.	34 mA max.					
Environmental resistance	Enclosure rating		IEC, IP67 / NEMA: 4x, 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 130°F), No freezing							
	Relative humidity		35 to 85%, No condensation							
	Vibration		10 to 55 Hz, 1.5 mm double amplitude in the X, Y, and Z directions, 2 hours respectively							
Shock			1000 m/s ² 6 times in the X and Y directions							
Interference suppression			Up to 2 units <small>(When polarization filters are attached)</small>			Up to 2 units <small>(with the automatic different frequency function)</small>				
Material	Housing, M18 nut (threaded models only)		Glass-fiber reinforced PBT							
	Lens cover		Polyarylate (PAR)				Acrylic (PMMA)		Polyarylate (PAR)	
	Trimmer		Glass-fiber reinforced polyamide (PA)							
	Cable (cable models only)		Polyvinyl chloride (PVC)							
Tightening torque			Threaded models (front M18 part): 1.0 N·m max., (side slotted hole part): 0.5 N·m max.							
Accessories			Instruction manual, M18 nut x 1 piece (threaded models only)							
Weight			Rectangular cable models: Approx. 60 g (Thrubeam-models transmitter: Approx. 50 g) Square connector models: Approx. 10 g Threaded cable models: Approx. 65 g (Thrubeam-models transmitter: Approx. 55 g) Threaded connector models: Approx. 15 g							

*Cable sold separately for connector models **Reflector sold separately

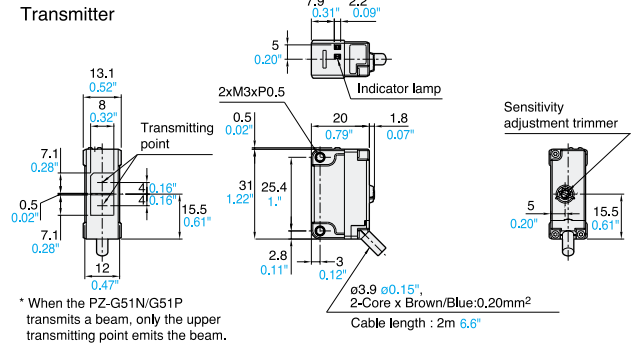
Sensors (thru-beam type)

PZ-G51N/G51P/G52N/G52P

Receiver

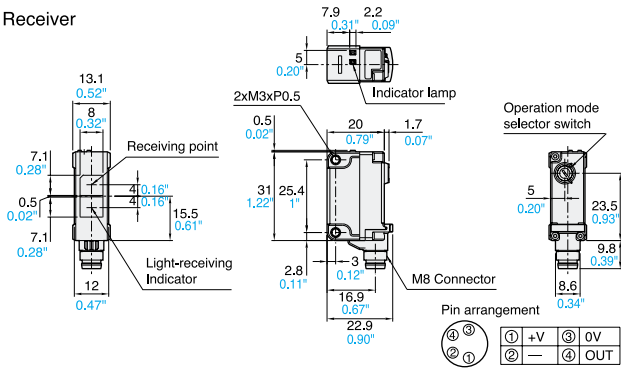


Transmitter

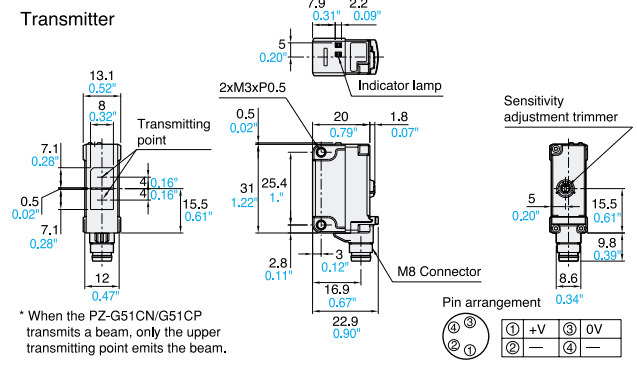


PZ-G51CN/G51CP/G52CN/G52CP

Receiver

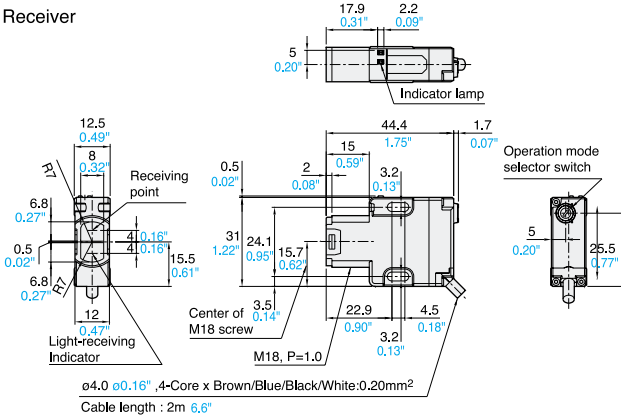


Transmitter

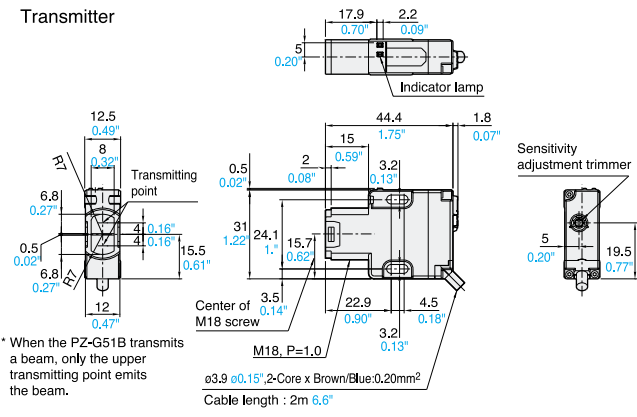


PZ-G51B/G52B

Receiver

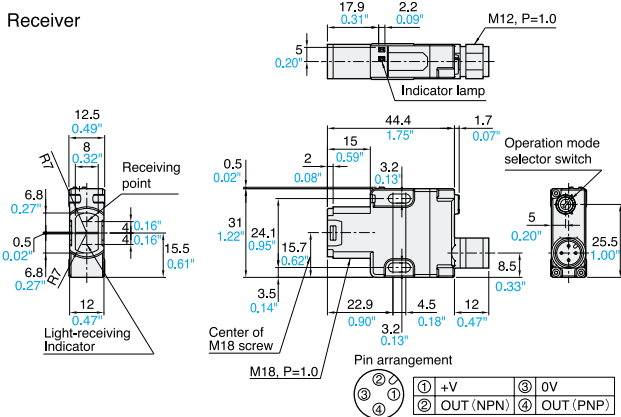


Transmitter

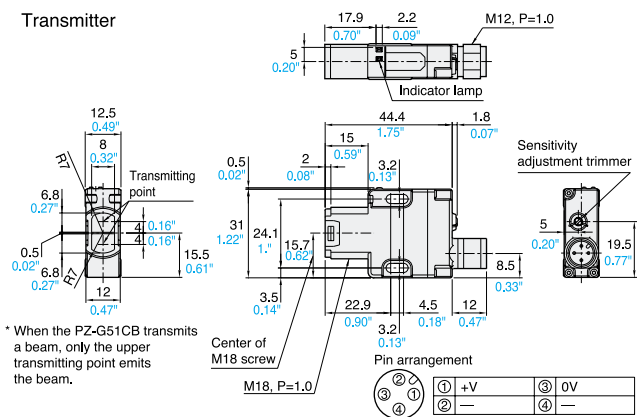


PZ-G51CB/G52CB

Receiver



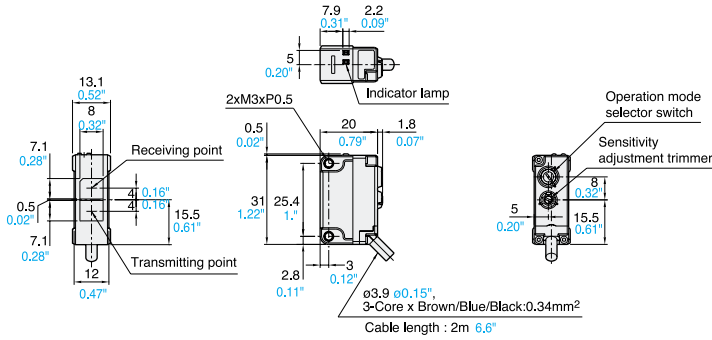
Transmitter



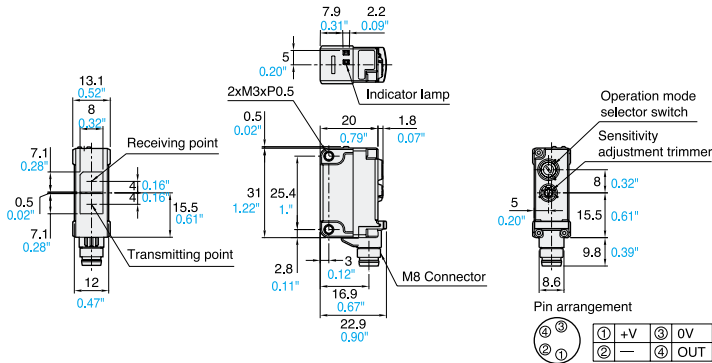
Dimensions

Sensors (reflective / polarized retro-reflective type)

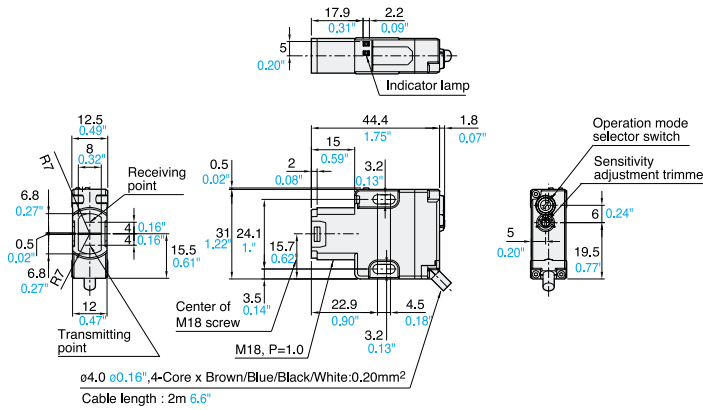
PZ-G□N/G□P (□:41/42/101/102/61/62)



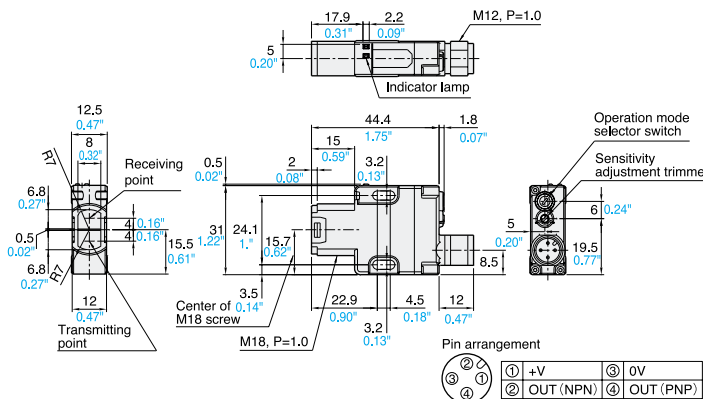
PZ-G□CN/G□CP (□:41/42/101/102/61/62)



PZ-G□B (□:41/42/101/102/61/62)

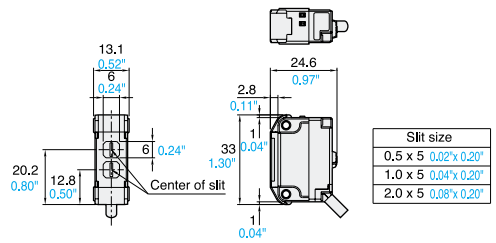


PZ-G□CB (□:41/42/101/102/61/62)

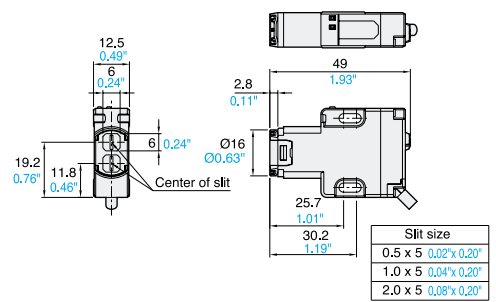


Attachments (optional)

OP-85136+PZ-G52

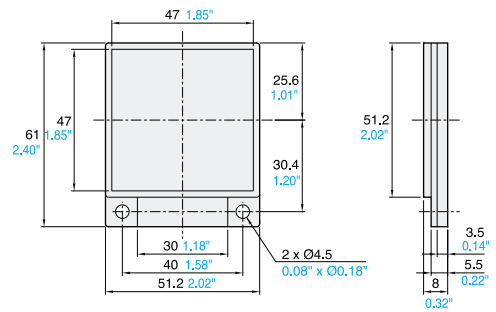


OP-85135+PZ-G52B

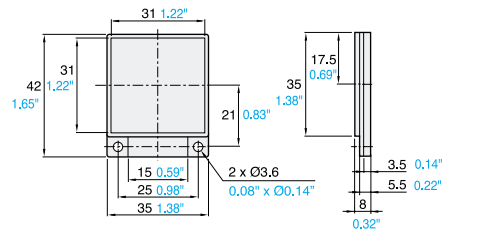


Reflectors (optional)

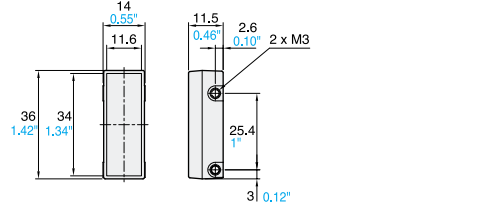
OP-84219 (R-2L)



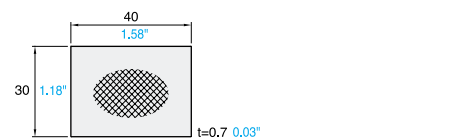
OP-96436 (R-3)



R-5

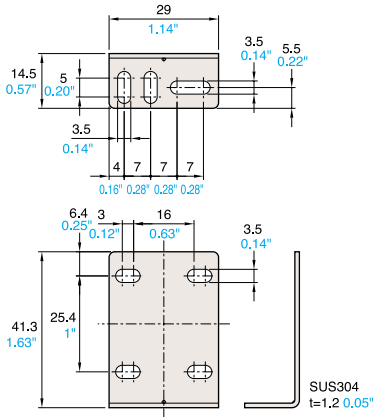


OP-84221 (reflective tape)

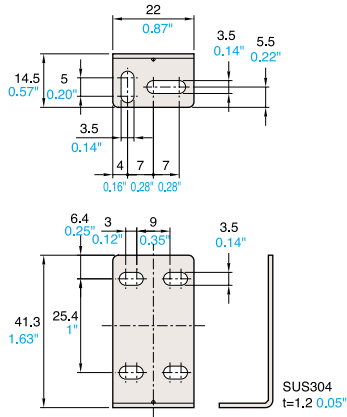


Mounting brackets / Rectangular models (Optional)

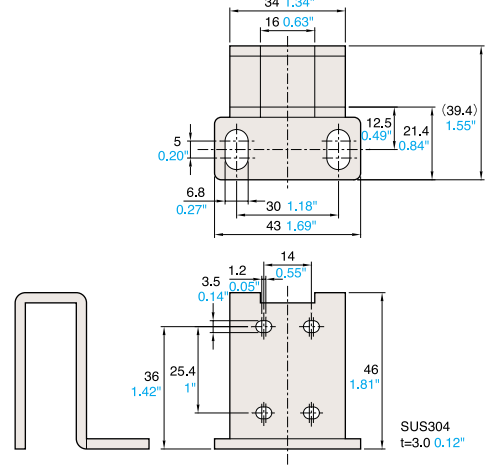
PZ-B41A



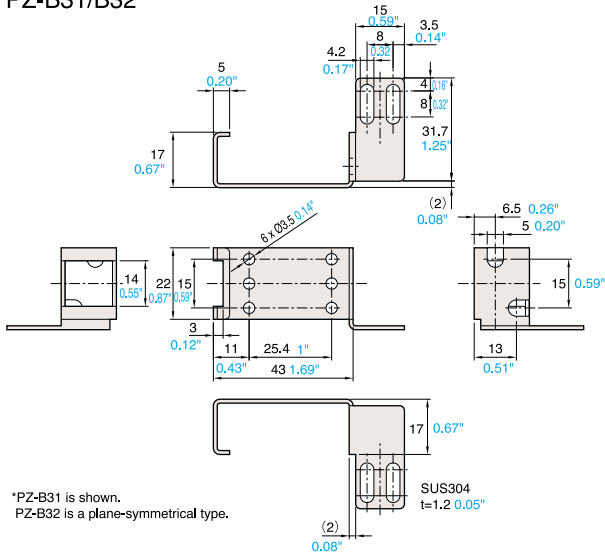
PZ-B01A



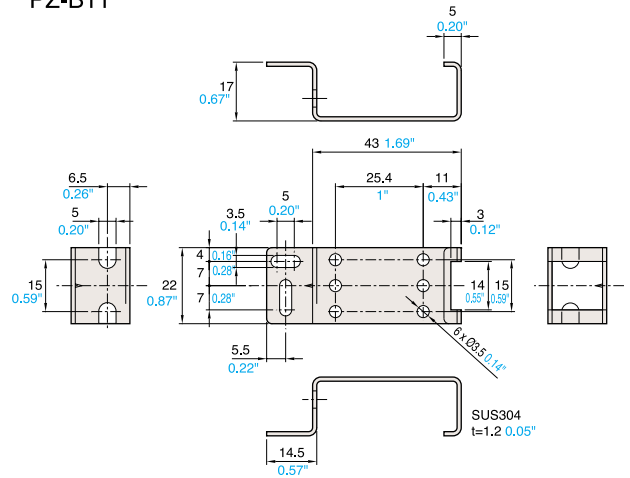
PZ-B61



PZ-B31/B32

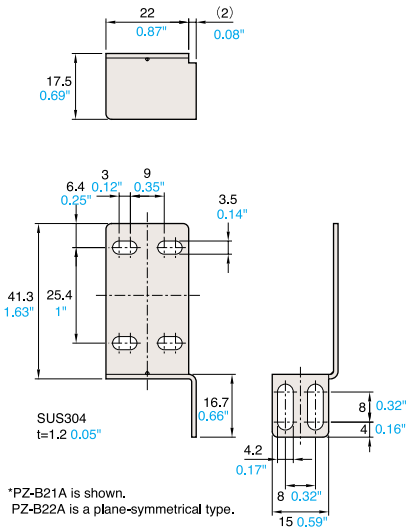


PZ-B11



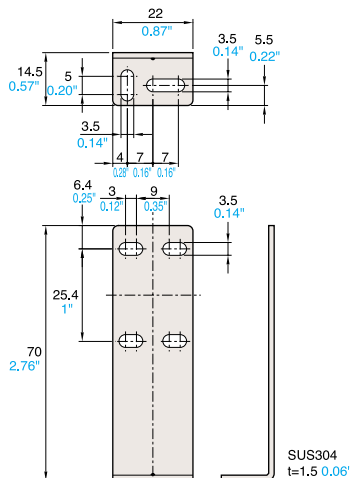
*PZ-B31 is shown.
PZ-B32 is a plane-symmetrical type.

PZ-B21A/B22A

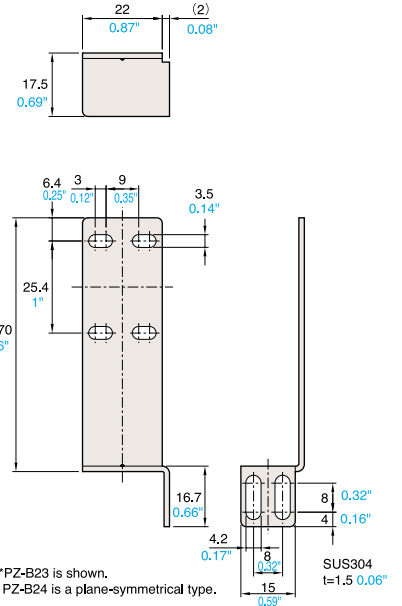


*PZ-B21A is shown.
PZ-B22A is a plane-symmetrical type.

PZ-B02



PZ-B23/B24

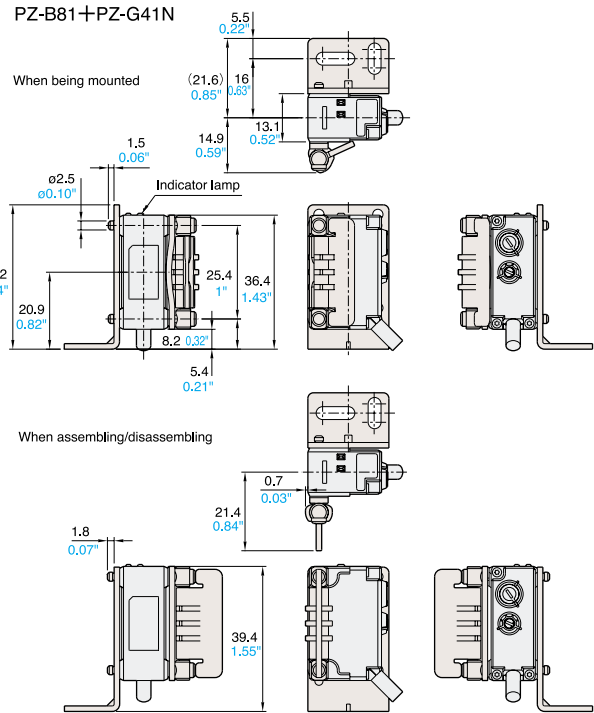
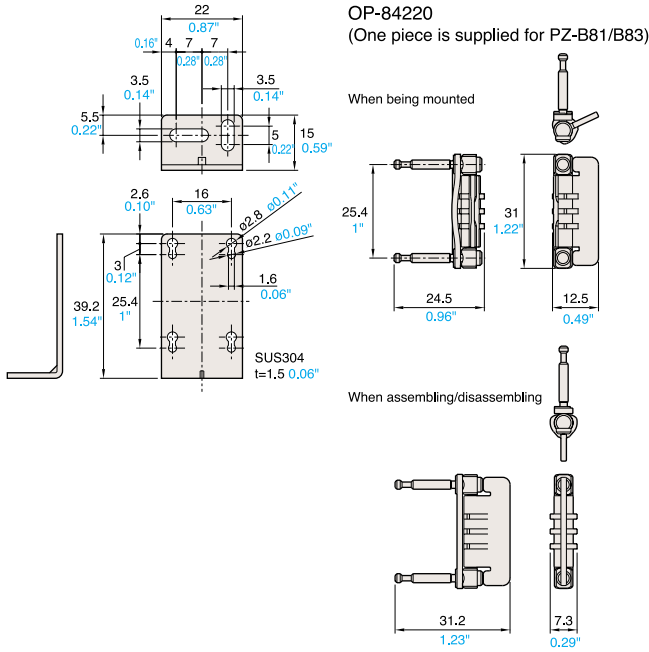


*PZ-B23 is shown.
PZ-B24 is a plane-symmetrical type.

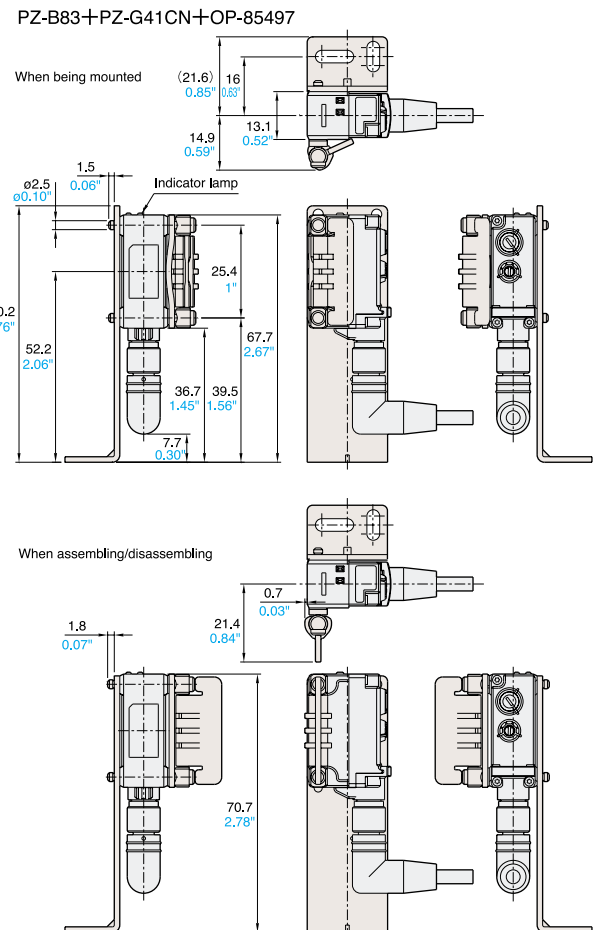
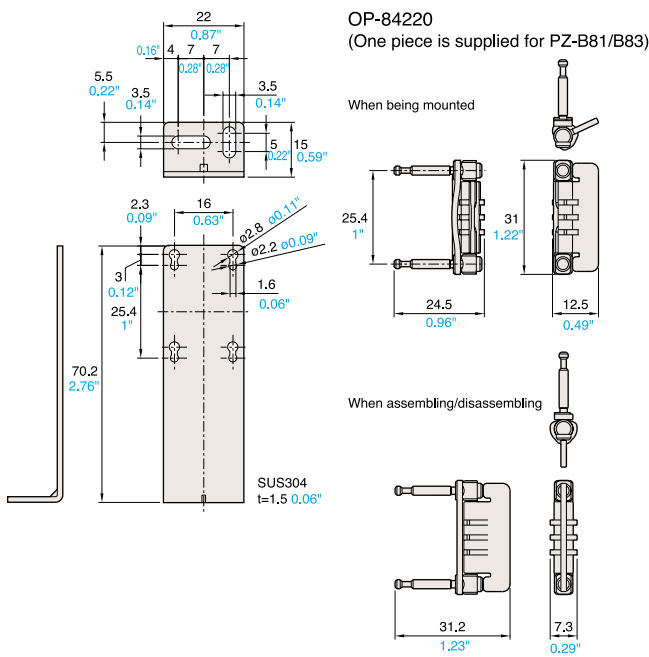
Dimensions

Mounting brackets / Rectangular models (Optional)

PZ-B81

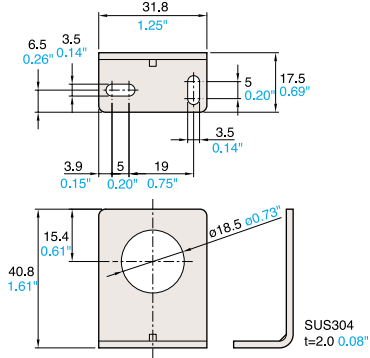


PZ-B83

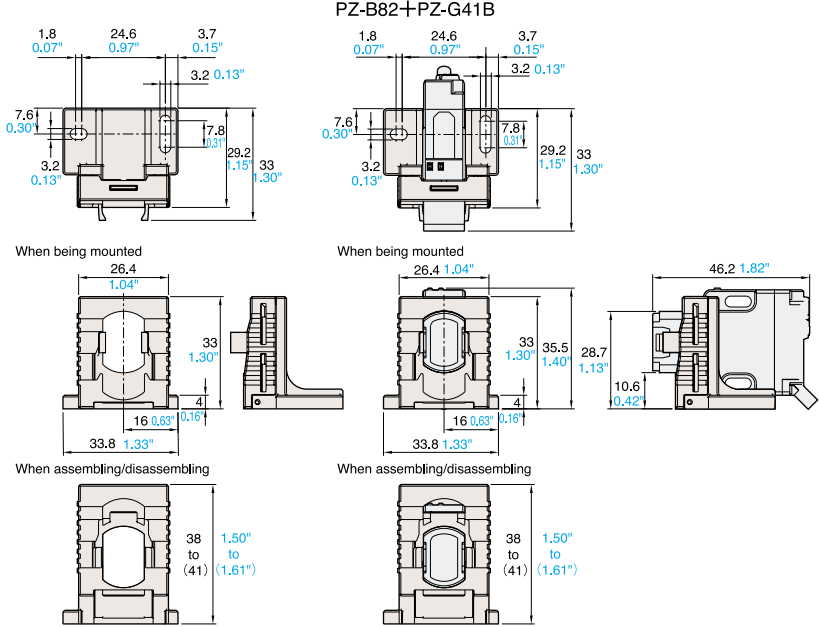


Mounting brackets / Threaded models (Optional)

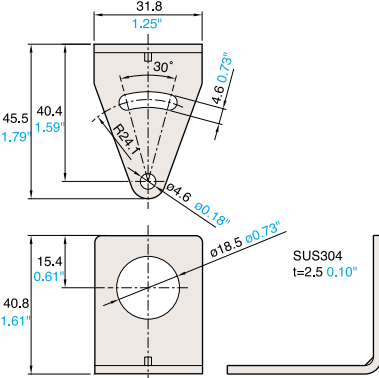
PZ-B03



PZ-B82



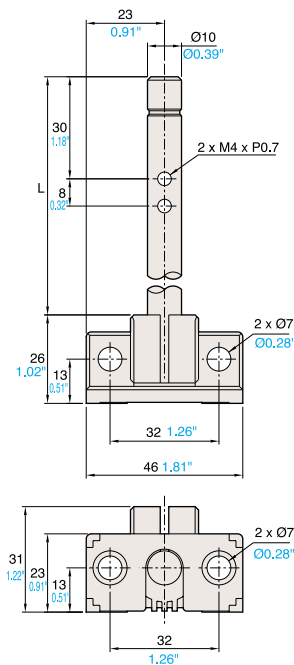
PZ-B04



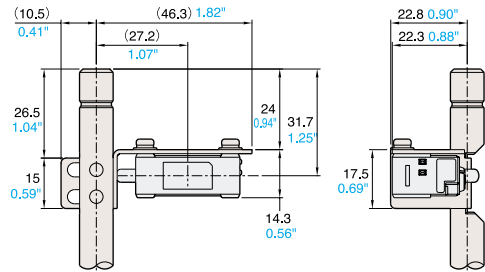
Mounting brackets / Rectangular models / Threaded models (Optional)

PZ-S10A/S20A

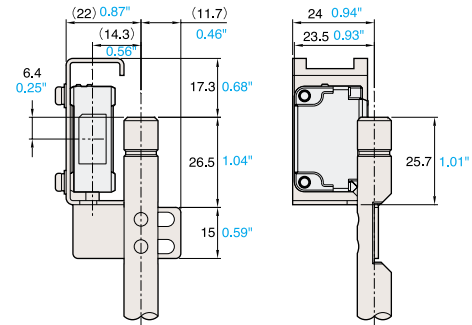
L=100mm:PZ-S10A
L=200mm:PZ-S20A



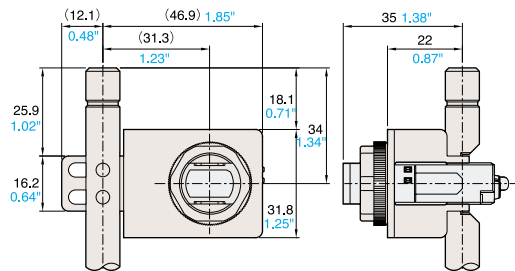
PZ-S□A+PZ-B21A+PZ-G41N



PZ-S□A+PZ-B31+PZ-G41N

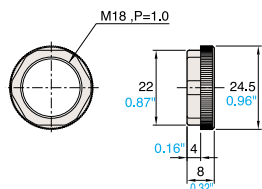


PZ-S□A+PZ-B25+PZ-G41B



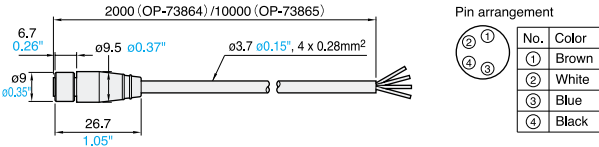
OP-84225

(One piece is supplied with threaded models)

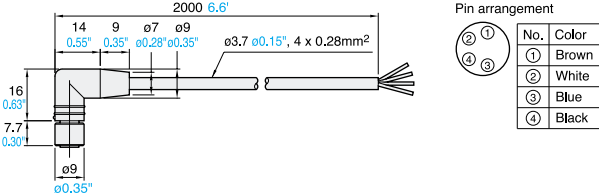


M8 connector cable (optional)

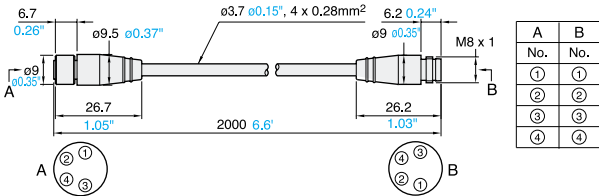
OP-73864/73865



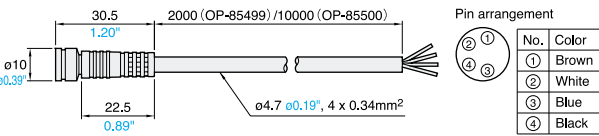
OP-85497



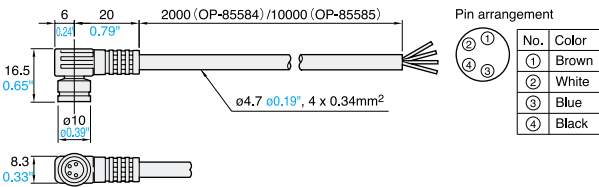
OP-85498



OP-85499/85500

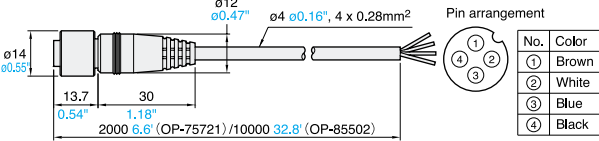


OP-85584/85585

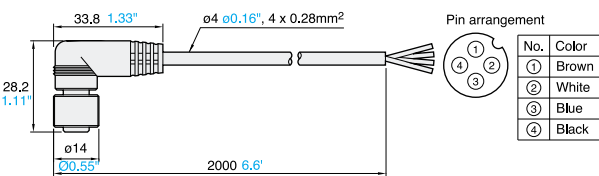


M12 connector cable (optional)

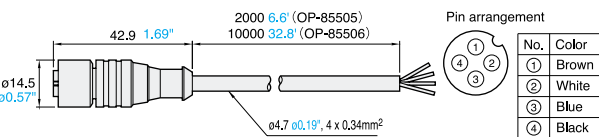
OP-75721/85502



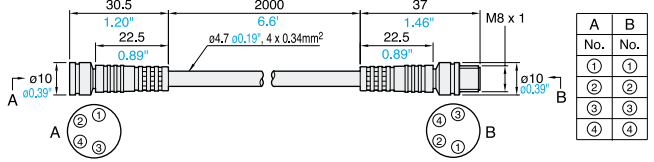
OP-75722



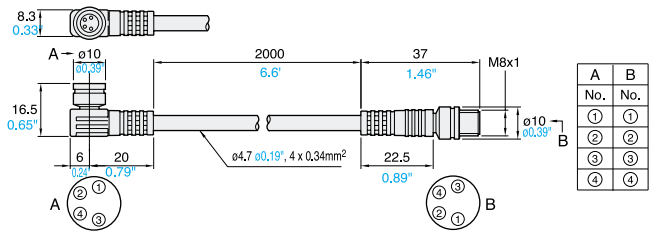
OP-85505/85506



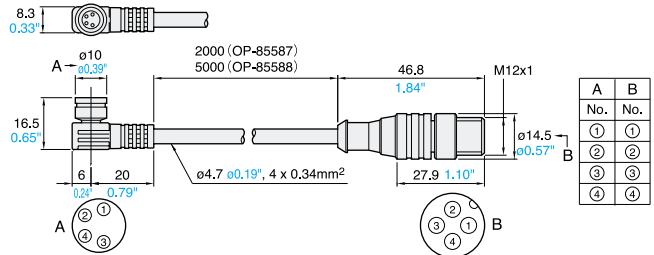
OP-85501



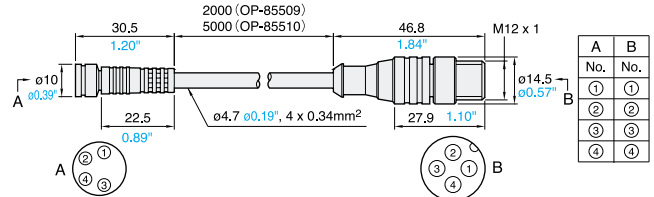
OP-85586



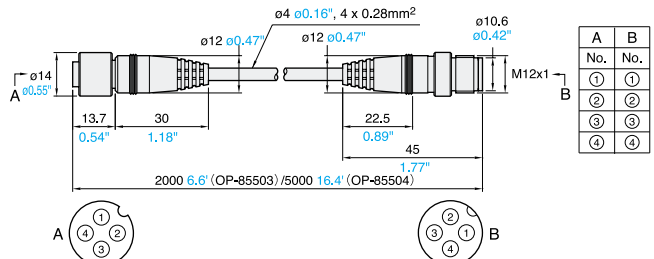
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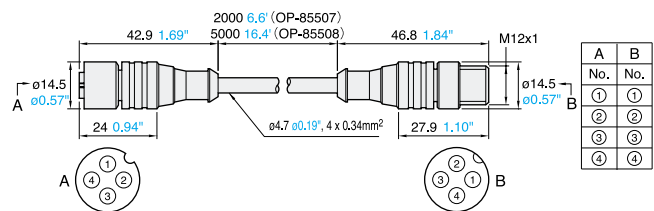
OP-85509/85510



OP-85503/85504



OP-85507/85508



MEMO

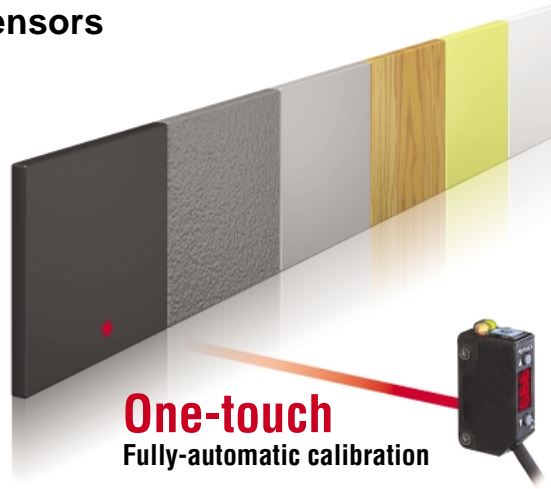
Background Suppression Model Unaffected by Color!

Self-contained Photoelectric Sensors PZ-V Series



Features

- Intelligent reflective type unaffected by a target's color or angle
- Digital display
- High-power custom red LED (Except for PZ-V71)
- High-intensity operation indicator



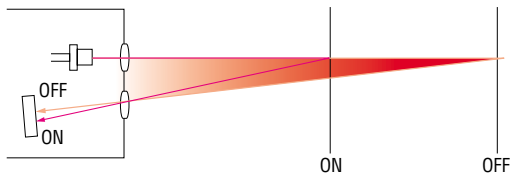
One-touch
Fully-automatic calibration

Here's How

PSD (Position-Sensitive Detector)

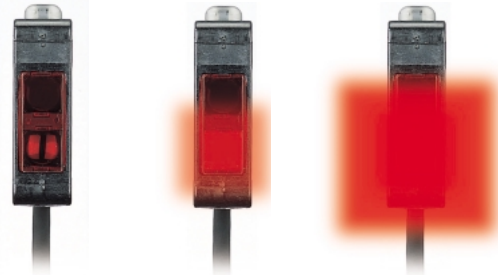
The target distance is detected according to the angle of the reflected light beam.

- Unaffected by a highly reflective target background
- Stable detection of targets with colors and materials of varying reflectance
- Highly accurate detection of minute objects



A.P.R. circuit (Automatic Power Reinforcement)

Stable detection is possible due to the A.P.R. circuit which automatically adjusts the amount of light emitted according to the color and angle of the target.



Sensor head lineup

Type	Adjustment	Configuration	Detecting distance	Model		Connector	Cable
				NPN	PNP		
Intelligent reflective	PUSH Auto		900 mm 35.43"	PZ-V71	PZ-V71P	—	2 m 6.6'
				PZ-V72	PZ-V72P	M8 connector	0.13 m 0.43'
				PZ-V73	PZ-V73P	M12 connector	0.3 m 0.98'
				PZ-V75 ^{1.}	—	—	2 m 6.6'
				PZ-V31	PZ-V31P	—	2 m 6.6'
				PZ-V32	PZ-V32P	M8 connector	0.13 m 0.43'
	PZ-V33	PZ-V33P	M12 connector	0.3 m 0.98'			
	PZ-V35 ^{1.}	PZ-V35P ^{1.}	—	2 m 6.6'			
	PZ-V11	PZ-V11P	—	2 m 6.6'			
	PZ-V12	PZ-V12P	M8 connector	0.13 m 0.43'			
	PZ-V13	PZ-V13P	M12 connector	0.3 m 0.98'			
	PZ-V15 ^{1.}	—	—	2 m 6.6'			

1. Different frequency type

Specifications are subject to change without notice.

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KEYENCE CORPORATION OF AMERICA

Corporate Office 50 Tice Blvd., Woodcliff Lake, NJ 07677 Phone:201-930-0100 Fax:201-930-0099 E-mail:keyence@keyence.com

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KEYENCE CANADA INC.

Head Office Phone:905-696-9970 Fax:905-696-8340 E-mail:keyence@keyence.com
Montreal Phone:514-694-4740 Fax:514-694-3206

KEYENCE MEXICO S.A. DE C.V.

Phone:+1-201-590-6000 Fax:+52-81-5000-9229
Email:keyencemexico@keyence.com

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