

Long Distance Laser Sensor

ZXL



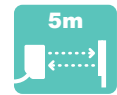
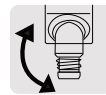
CE



Class II LASER Product

SALIENT FEATURES

- ◆ 0.5m sec Response
- ◆ ø160mm spot at 40m
- ◆ Light/ Dark On Selectable
- ◆ IP-67, Shock Resistant - 50G
- ◆ Bottom/ Side Rotating Connector



Model Number Legend

ZXL - 1 2 3 4 5

1. Series

ZXL

2. Type

T: Through Beam

R: Retro-reflective

3. Sensing Distance

5M: 5 Meters

40M: 40 Meters

4. Output

N: NPN

P: PNP

5. Connection

2M: 2m Cable

M8C: M8 Connector

M12J3: M12 Junction Connector with 0.3m extension

#. Accessories included

Mounting Bracket: 1 set

Screws: 1 set

Reflector (P250F): 1 No. (with retroreflective models)

Example:

ZXL-T40MN-2M

ZXL Series - Through beam, 40m Sensing Distance, NPN Open Collector - 2m Cable

NOTE:

Contact us for models not shown in catalogue.

Connector cables are sold separately; look in CC series catalogue for the same (www.inno.sg/cc).

Product Highlights

◆ Coaxial Laser

Coaxial Laser light source allows for a more narrow, non-divergent beam. This allows easy alignment with the target. Projected spot is easy to view because of the laser beam.



Rated distance **40** meter
Actual distance **100** meter

◆ Spot Size

The beam spot of the ZXL series is appropriately sized, striking a balance between alignment ease and size. The Through beam type has a spot of Ø160mm at 40 meters. The Retro-reflective type has a spot of Ø25mm at 5 meters.

◆ Powerful Beam

The most powerful through beam laser sensor in its class!!! The ZXL Through beam sensor has a rated distance of 40 meters; but will work upto 100 meters.

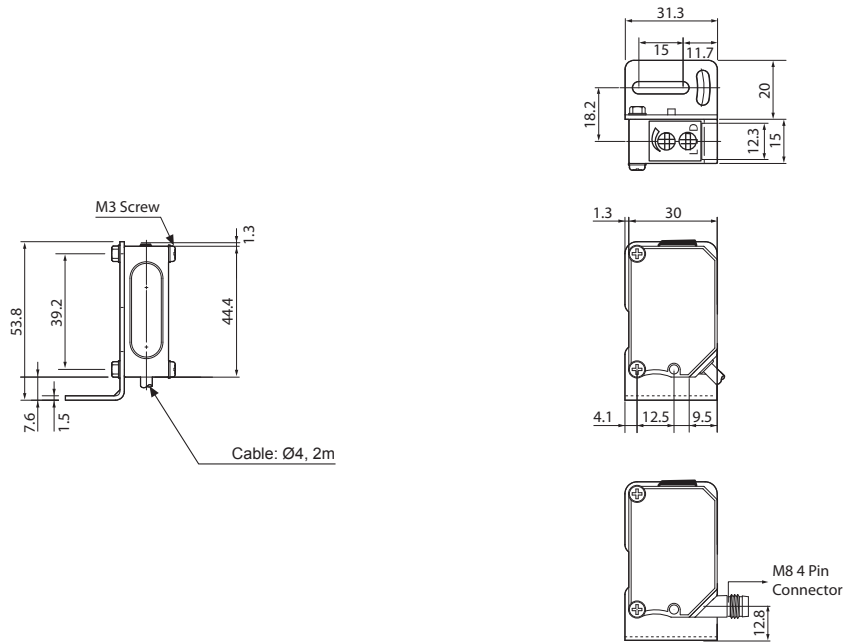
Ratings and Specifications

Type	Through Beam		Retro Reflective		
Control Output	PNP	NPN	PNP	NPN	
Model	Cable Type	ZXL-T40MP-2M	ZXL-T40MN-2M	ZXL-R5MP-2M	ZXL-R5MN-2M
	Connector Type	ZXL-T40MP-M8C	ZXL-T40MN-M8C	ZXL-R5MP-M8C	ZXL-R5MN-M8C
	Junction Connector	ZXL-T40MP-M12J3	ZXL-T40MN-M12J3	ZXL-R5MP-M12J3	ZXL-R5MN-M12J3
Sensing Distance	40 meter		5 meter		
Spot Size	Ø 15mm at 5 meter		Ø 20mm at 3.5 meter		
Test Object	-		with reflector P250F		
Response Time	0.5 ms Max.				
Light Source	Red LD, Class II				
Light Wavelength	650 nm; Pulse Length 4 µs				
Sensitivity Adjustment	1 turn pot.				
Operation Mode	Light ON/ Dark ON selectable				
Supply Voltage	10 - 30 VDC (Ripple Max 10%)				
Current Consumption	max. 30mA				
Control Output Rating	Load Voltage: max. 30 VDC; Load Current: max 100mA				
Ambient Illumination	Sunlight: 10,000 lux; Lamp: 3,000 lux				
Operation Indication	Emitter: Laser ON (Green); Receiver: Output ON (Orange)		Laser ON - Green; Output ON - Orange		
Shock Resistance	upto 50G (500 m/s ²), X, Y, Z directions				
Ambient Temperature	Operation: -10° ~ 40°C; Storage: -25° ~ 50°C (non- freezing; non- condensing)				
Ambient Humidity	Operation: 35 ~ 85% RH; Storage: 35 ~ 95% RH (non- condensing)				
Protection Class	IP67				
Weight	Cable type: 66 g; Connector type: 20 g				
Material	Housing: ABS with Glass, Lens: PMMA or Eqv.				

Sensor Dimension Drawing

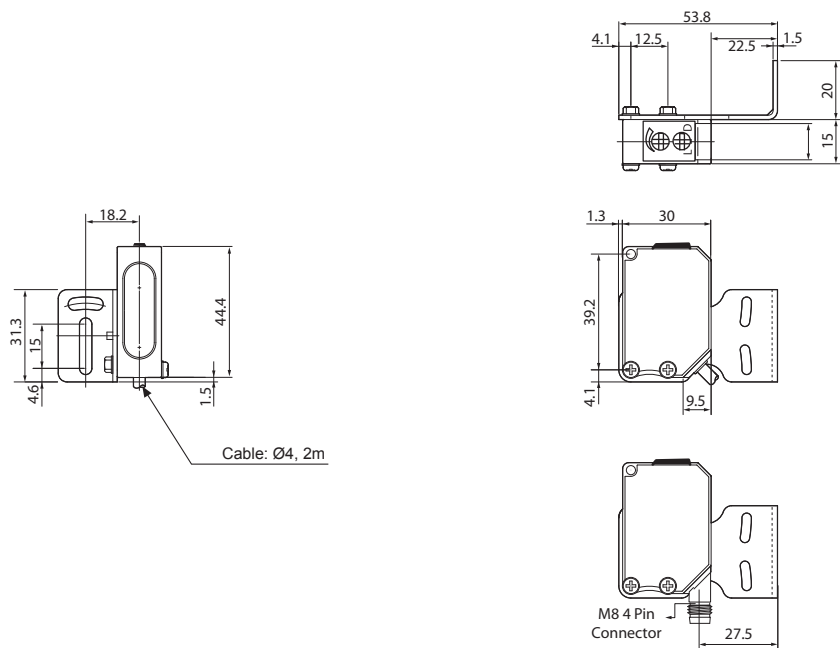
Unit with Clamp in bottom mounting position

◆ All Types



Unit with Clamp in side mounting position

◆ All Types

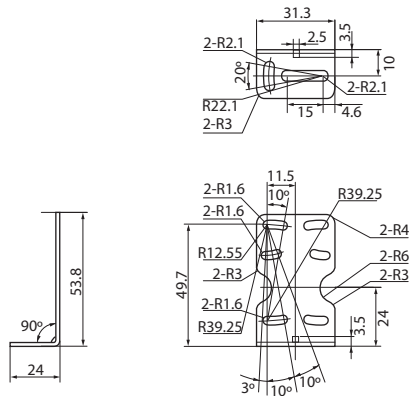


All dimensions are in mm

Sensor Dimension Drawing

Bracket

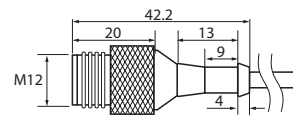
Ordering Code: ZXL-B



Junction Connector Male

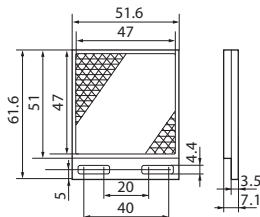
M12, 4 Pin male Connector

- ◆ ZXL-T40MP-M12J3
- ◆ ZXL-T40MN-M12J3
- ◆ ZXL-R5MP-M12J3
- ◆ ZXL-R5MN-M12J3

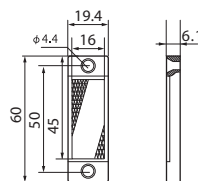


Reflector

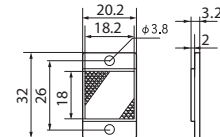
Ordering Code: P250F



Ordering Code: PL20F



Ordering Code: PL10F



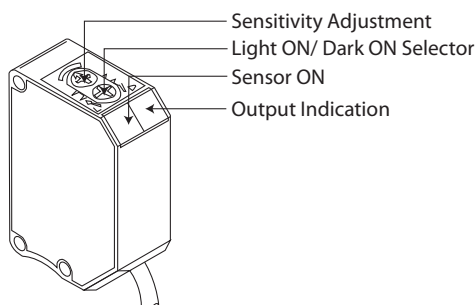
Reflector Sensing Distance for Sensor - ZXL-R5M □-□

Note: P250F is supplied along with unit, other types are to be ordered separately

Reflector	P250F	PL20F	PL10F
Sensing Distance	5	3.5	1.2

All dimensions are in mm

Nomenclature

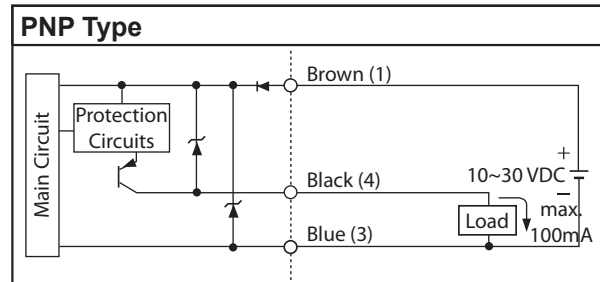
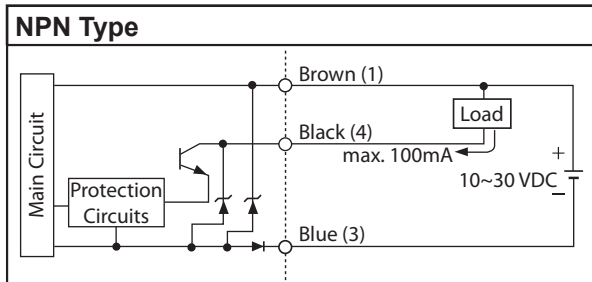


90° Rotatable Connector for mounting convenience. The connector enables both bottom and side mounting positions using the same mounting plate.

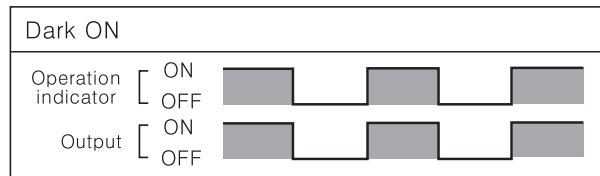
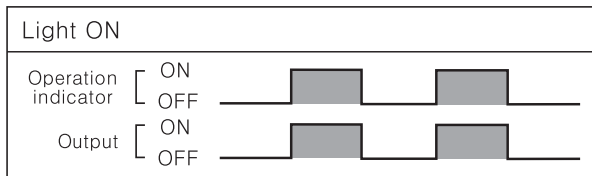


The connector is rotatable as indicated in the diagram. Turn the connector only as the Black Arrow indicates. Turning beyond the free limit indicated in the diagram will damage the connector and the unit will be beyond repair.

Control Output Diagram



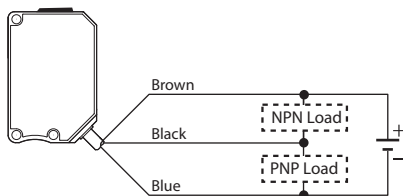
Operation Type



Connection

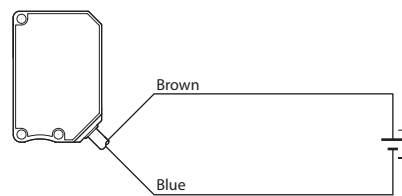
• Cable

◆ Through Beam- Receiver & Retro-reflective



Brown : DC 10~30V
 Blue : GND
 Black : Control Output

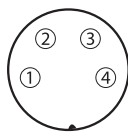
◆ Through Beam- Transmitter



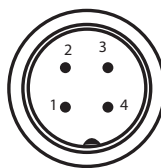
Brown : DC 10~30V
 Blue : GND

• Connector *

◆ M8 Connector



◆ M12 Junction Connector



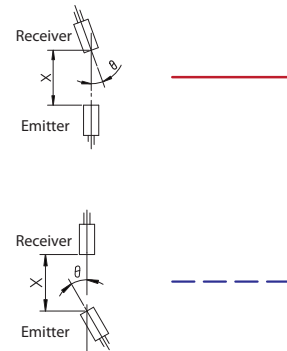
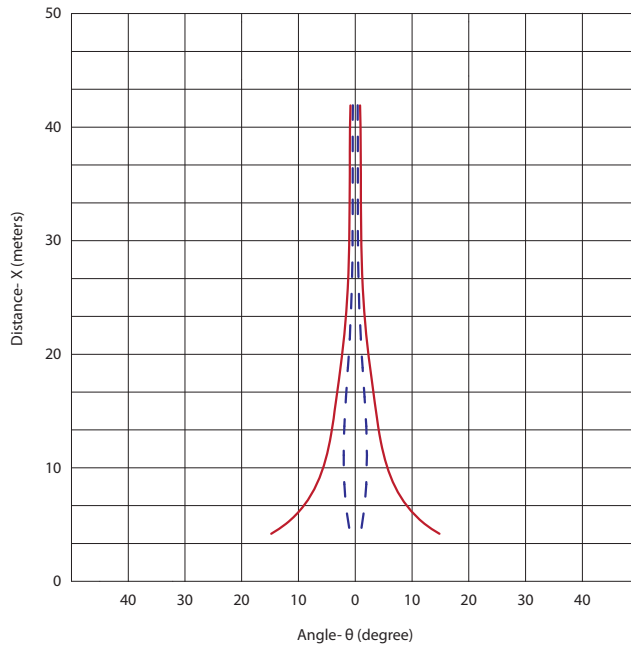
1 : DC 10~30V
 2 : - (No Connection)
 3 : 0V
 4 : Control Output

Note: * - Connector Cable is not supplied along with unit

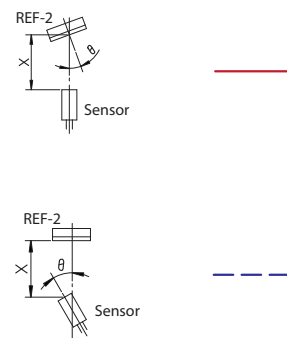
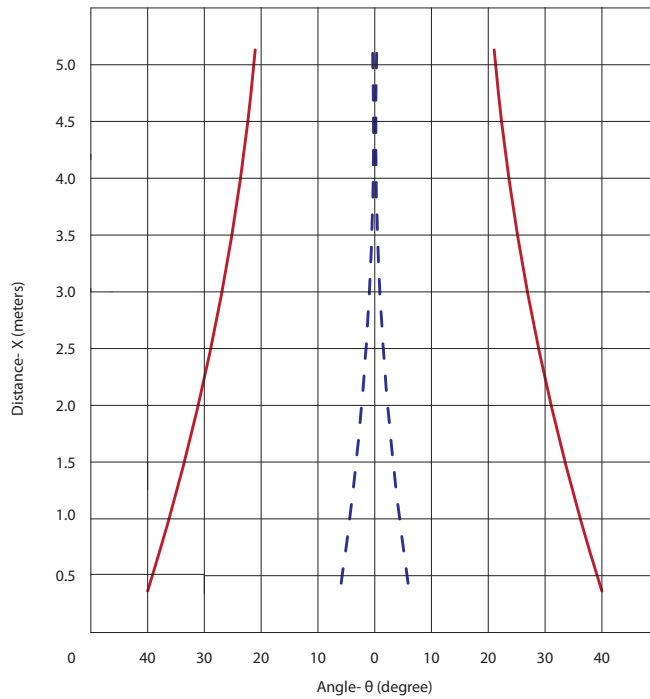
Operational Data

Angle Characteristic

◆ Through Beam (ZXL-T40M □-□)



◆ Retro-reflective (ZXL-R5M □-□)



- Proximity Sensors
- Photoelectric Sensors
- Measurement Sensors
- Vision & Safety Sensors
- Control
- Weighing
- Automation
- Components

Operational Data

ZXL

Proximity Sensors

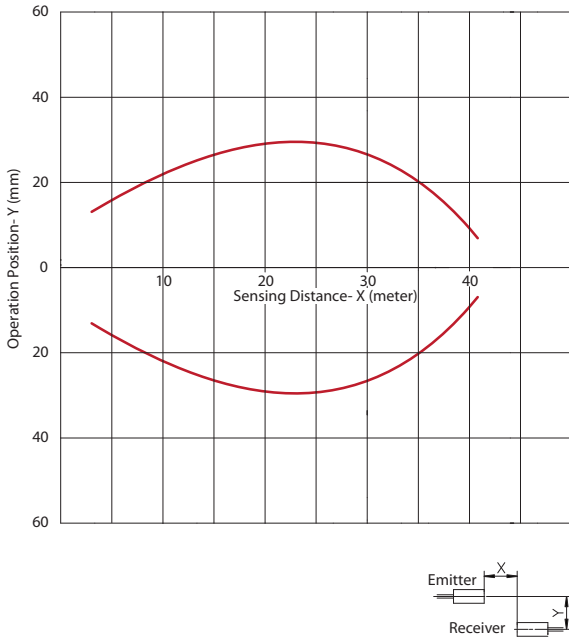
Photoelectric Sensors

Measurement Sensors

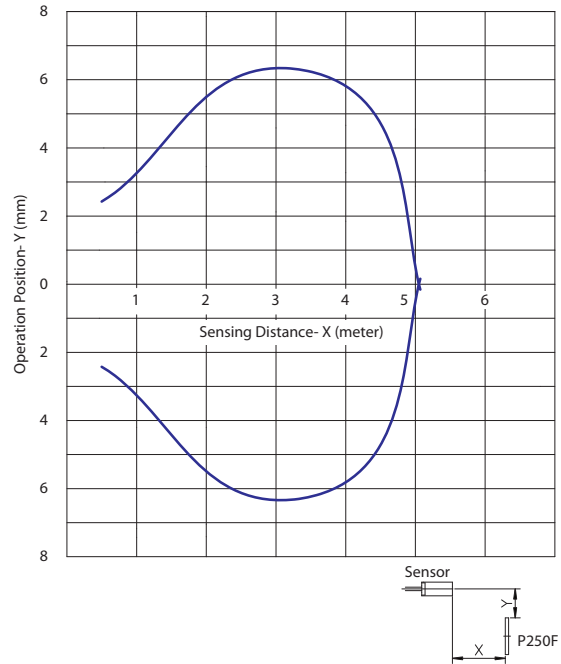
Vision & Safety Sensors

Parallel Shifting Characteristic

◆ Through Beam (ZXL-T40M □-□)

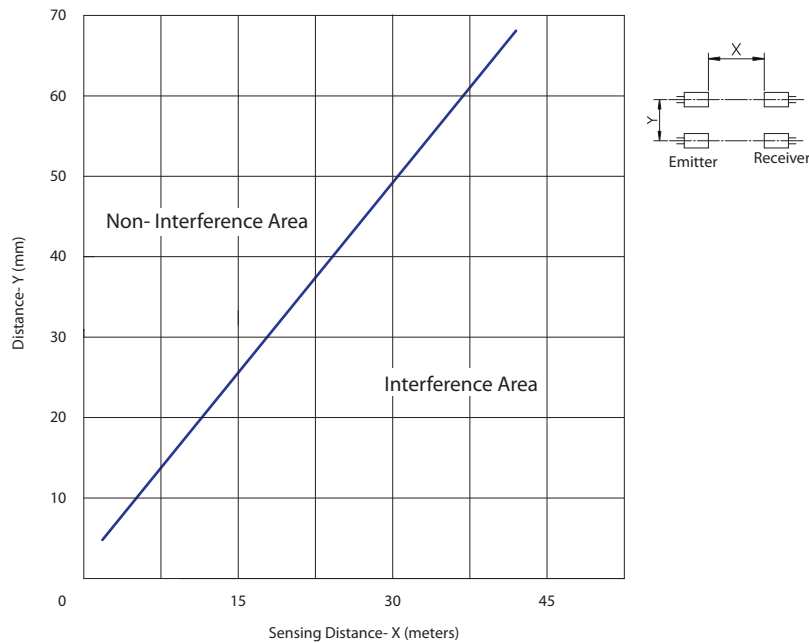


◆ Retro-reflective (ZXL-R5M □-□)



Interference Characteristic

◆ Through Beam (ZXL-T40M □-□)



Control

Weighing

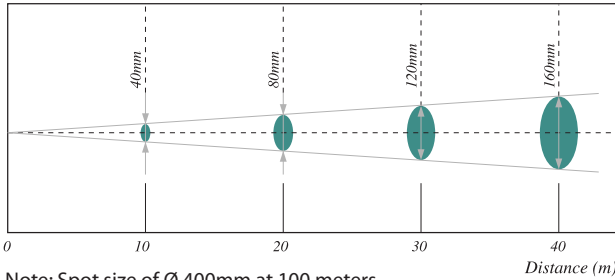
Automation

Components

Operational Data

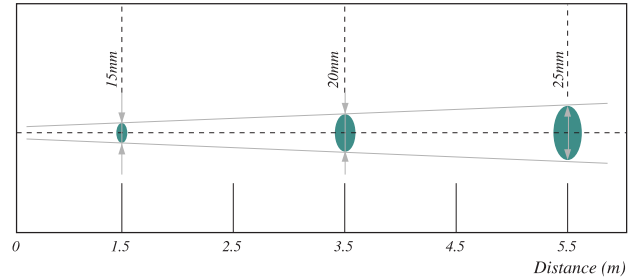
Spot Size

◆ Through Beam (ZXL-T □□-□)



Note: Spot size of \varnothing 400mm at 100 meters

◆ Retro-reflective (ZXL-R □□-□)



Operation Mode Adjustment

	<p>Light ON Mode Turn the Light ON/ Dark ON adjuster to the left to set it in Light ON mode.</p>		<p>Dark ON Mode Turn the Light ON/ Dark ON adjuster to the right to set it in Dark ON mode.</p>
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Sensitivity Adjustment

	<p>The 1 turn adjuster is to be rotated in the clockwise direction to increase the sensitivity of the receiver and thereby increase the sensing distance and/or area.</p>
	<p>The 1 turn adjuster is to be rotated in the anti-clockwise direction to decrease the sensitivity of the receiver and thereby decrease the sensing distance and/or area.</p>

Exclusively Represented by:

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