

BD Series

INSTRUCTION MANUAL

Autonics

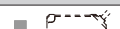
Follow Autonics website for the latest information.

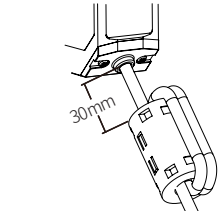
Failure to follow this instruction may result in output with noise.

- Follow instructions in 'Cautions during Use'. Otherwise, it may cause unexpected accidents.
- The power supply should be insulated and limited voltage/current or Class 2, SELV power supply device.
- Do not install where strong magnetic or electric field exist. Otherwise, the resolution may be adversely affected.
- Mutual optical interference between laser sensors and photoelectric sensors may result in malfunction.
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- When connecting DC relay or other inductive load to the output, remove surge by using diode or varistor.
- Since external disturbance light (sunlight, fluorescent lighting, etc.) can cause product malfunction, use the product with a light shield or slit.
- For the optimized performance, it is recommended to measure after 30 minutes from supplying power.
- Keep the emitter/receiver part clean to prevent water, oil, dust, etc. Use a soft cloth that does not produce dust during cleaning.
- When detecting with the maximum sensitivity, an error may occur depending on each characteristic deviation.
- Since it is a precision sensor, use it with caution against large shocks and thermal shocks.
- Remove the front protective sticker before operation the unit. If not it may affect the product performance.
- This unit may be used in the following environments.
 - Indoors (in the environment condition rated in 'Specifications')
 - Altitude max. 2,000 m
 - Pollution degree 3
 - Installation category II

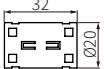
U4) Value measured by using an aluminum jig fix the sensor head and non-glossy white paper.

- The value is displaced more positive (+) as the object is closer to sensor head, more negative value (-) as the object is far from sensor head relative to the origin (0).

Example	Description
	When measuring black object with low reflectance the amount of light received decreases, install the sensor head closely to the object.



- Within 30 mm from the sensor head, wind the cable through the inside of the ferrite core three times and mount the ferrite core.



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- For more information about indicators, refer to the Installation Step 2. Selecting Sensor Head Mounting Location