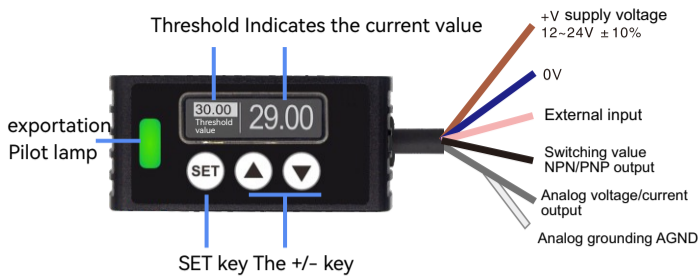


[Laser displacement sensor] Product instruction manual



1. Applicable specifications/regulations

This product complies with the following specifications/regulations.
 < European Specification > EMC Directive
 < US/Canada Specification > CAN/CSA-C22.2 NO.60947-5-2-14

2. Confirmation of packaging items:

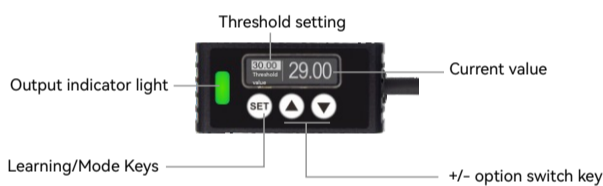
- Host
 - Specification of application
 - Product certificate
 - Mounting bracket (including screws)
- A set
1 piece
1 piece

3 Warnings

- Do not direct or reflect the laser light through the mirror body into the eye. If shot in the eye, it can cause blindness.
- This product is not explosion-proof structure, do not use in flammable or explosive gas, liquid environment.
- This product does not have the function of automatically stopping laser projection after decomposition, do not decompose or transform.
- Do not use this product as a safety device for the purpose of protecting human body. If used improperly, it may cause injury, fire, and electric shock

4. operation panel description:

Power-on Displays the threshold and current detection value. The red indicator is the output indicator, and the green indicator is the power supply indicator.



9. Teach:

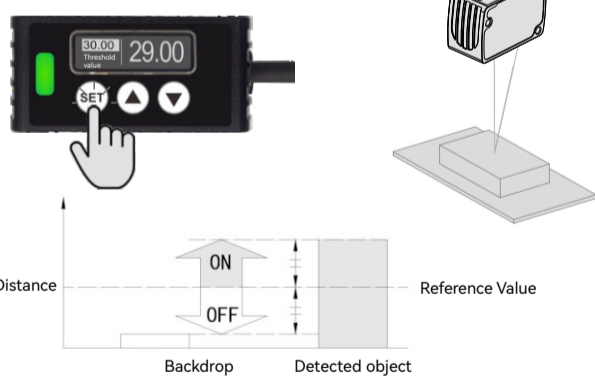
2 teachings:

- Basic guidance methods.

1, in the state of no object, press the "SET" key.



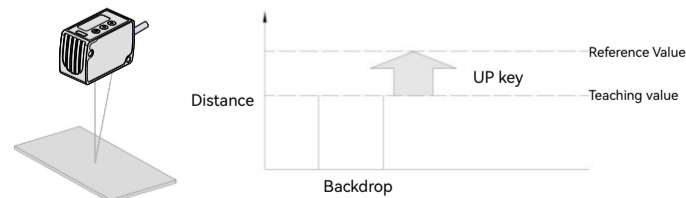
2, in the state of the object, press the "SET" key.



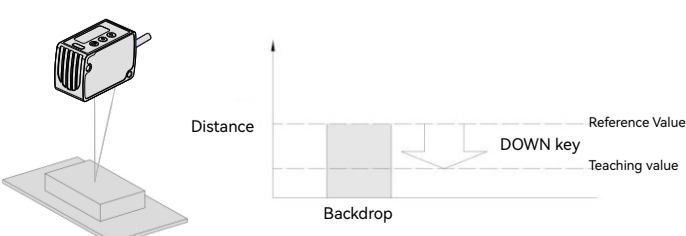
3. Complete the calibration. (When the difference between the two teachings is small, the return difference is too small.)

- In the case of small objects and backgrounds, how to use this teaching method is very convenient. < in case of background reference >

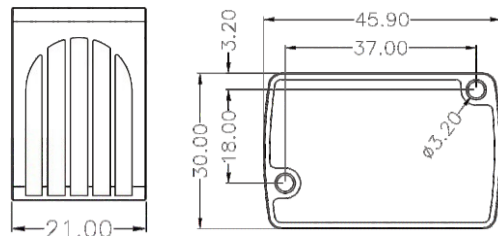
method is very convenient. < in case of background reference >



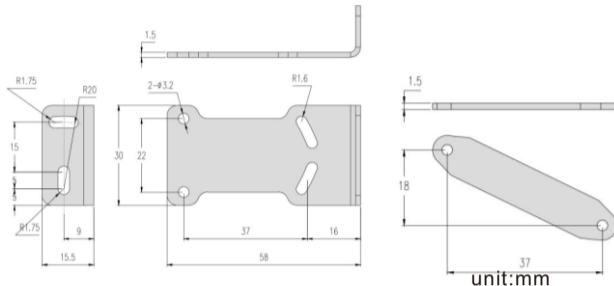
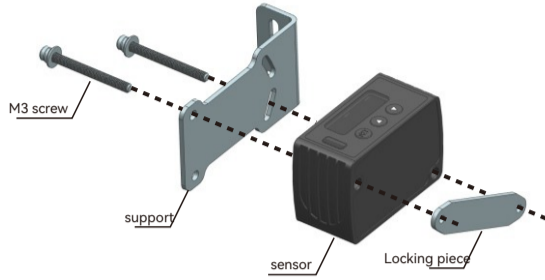
< In the case of detecting objects as benchmarks >



5. Product size diagram:



6, installation and support size diagram:

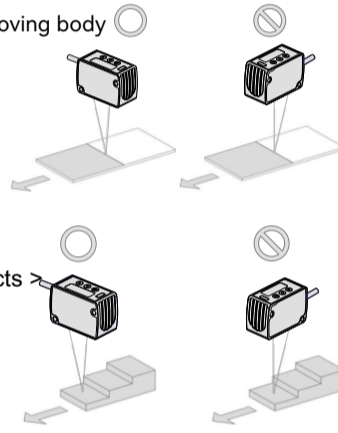


7, installation direction:

- Relative to the direction of the moving body

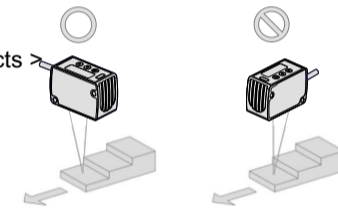
< Material, color difference case >

When measuring, if the material color of the moving measurement object is extremely different, install it according to the direction shown in the right figure, so that the measurement error can be controlled to a minimum.



< Measurement of rotating objects >

- When measuring the rotating object, install it in the direction shown in the figure on the right, which can inhibit the influence of the object's up and down vibration and position deviation.



1, in the state of the background object or in the state of the detection object, press the "SET" key.

2, in the case of background objects as the benchmark, press the "▲" key, set the reference value in the sensor. The value set in the checked object after pressing the "▼" key when the checked object is the base.

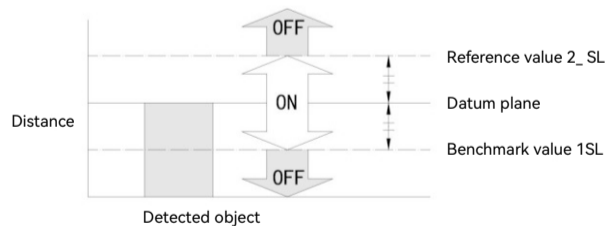
3. Complete the calibration.

1 point teaching (Window comparison mode)

- For the distance between the datum surface of the detected object, the 1-point instruction is not implemented, but the method of setting the upper and lower limits is implemented. This function is used to distinguish between the upper and lower limits.

- In the case of 1 point teaching (window comparison mode), please set it to [1 point teaching (window comparison mode)] in the detection output setting of PRO mode.

Refer to the "Operating Instructions for the Mode PRO" for setting methods.



1, in the case of detecting objects, press the "SET" key twice



2. Teaching is complete.

2 point teaching (Window comparison mode)

- In the case of 2-point teaching (window compare mode), please set it to [2-point teaching (window compare mode)] in the detection output setting of PRO mode.

Refer to the "Operation Instructions for the Mode PRO" for setting methods.

- When performing the instruction, please use a constant distance detection object (P-1, P-2)



< in case of segment difference >

- If there is a segment difference in the moving measurement object, install it according to the method shown in the figure on the right, so as to suppress the influence of the segment difference edge.

Measurements are made in narrow Spaces and depressed sections

- In the case of measurement in narrow places and holes, take care to avoid blocking the light path from the light emitting part to the light receiving part when installing.

In the case of mounting the sensor part to the wall

Please install according to the method shown in the right figure, so as to avoid the multiple reflected light generated by the wall will enter the light receiving part, in addition, in the case of high reflectivity of the wall, if changed to dull black, you can obtain good results.

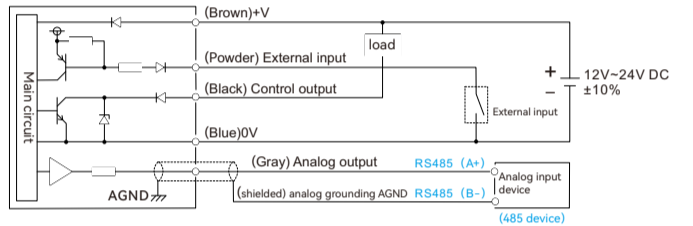
< About the maximum tilt Angle of the sensor >

- Sensor with mounting Angle range (90±15°)

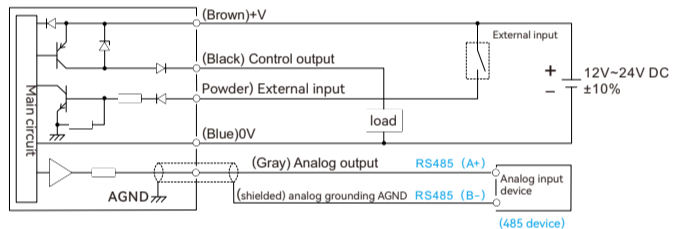
Please install and use in this Angle, beyond this range of measurement results will appear inaccurate measurement, misjudgment phenomenon.

8. Input/output circuit diagram:

- NPN+ analog output type (RS485 output)



- PNP+ analog output type (RS485 output)



1, in the detection of object P-1 state, press the "SET" key (the first time)

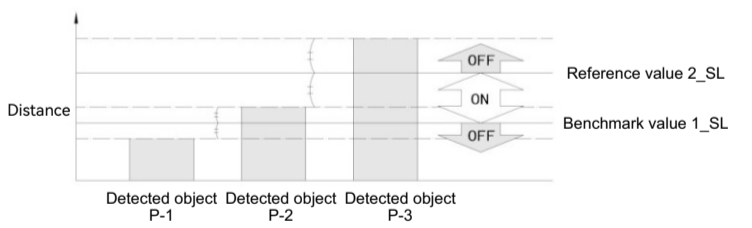
2, in the detection of object P-2 state, press the "SET" key (the second time) 3, complete the calibration.

3-point teaching (Window comparison mode)

● Perform the 3-point (P-1, P-2, P-3) instruction, as shown in the figure below, set the reference value 1_SL between the 1st and 2nd time, Method of setting the reference value 2_SL between the second and third times and setting the range of the reference value.

● In the case of 3-point teaching (window compare mode), please set to [3-point teaching (window compare mode)] in the menu detection output setting in advance.

● After teaching, P-1, P-2, P-3 will be automatically arranged in order from smallest to largest.



1, in the detection of object P-1 state, press the "SET" key (the first time)

2, in the detection of object P-2 state, press the "SET" key (the second time)

3, in the detection of object P-3 state, press the "SET" key (the third time)

4. Complete the calibration

10. Threshold fine-tuning function:

Usual detection mode:

Press the "▲" key or "▼" key to change the threshold directly.

Window comparison mode:

Press the "▲" key or "▼" key to change the threshold directly.

Press the "▲" key and "▼" key at the same time to switch threshold 1 and threshold 2.

11, zero function:

Zero setting function is the function of forcing the measurement value to "zero". When setting zero, the screen has a vertical line, as shown below:



Press the "SET" key and the "▲" key at the same time to reset the Settings

