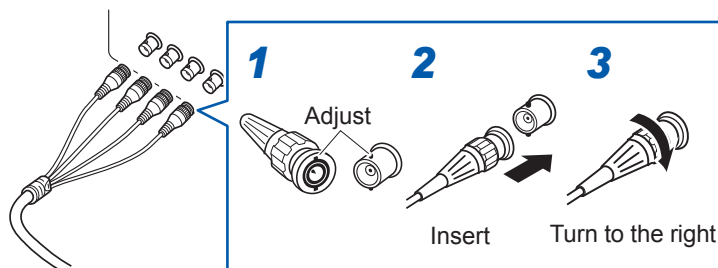


Connecting to the instrument

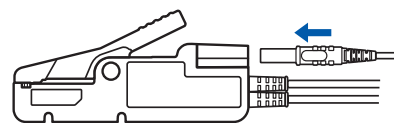


Connecting the return cable

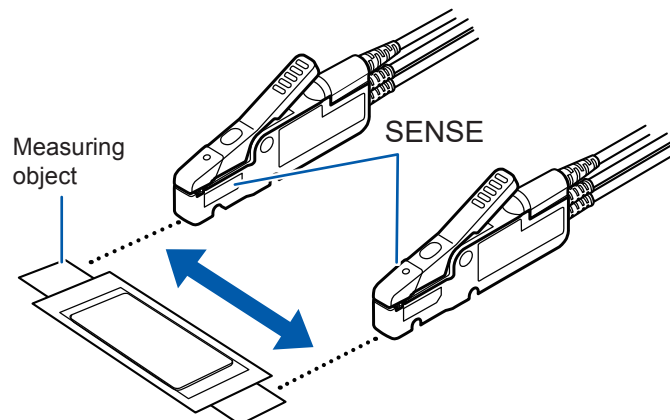
IMPORTANT

- Connect the return cable before measurement.
- Adjust the fixed position of the probe so that the return cable between the probes does not sag.

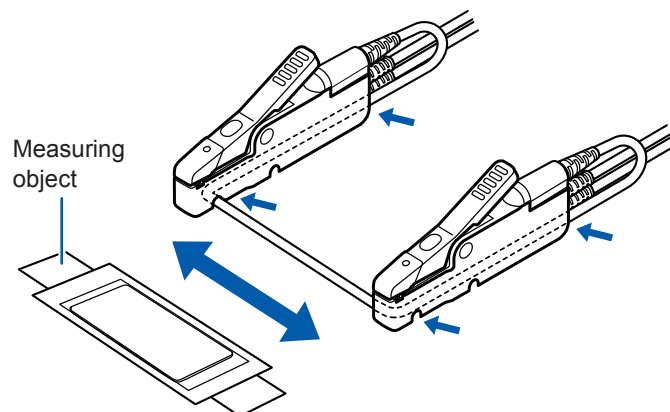
- 1 Securely insert the plug of the return cable up to the back of the probe (both red and black).



- 2 Arrange the probes so that the distance between the SENSE of the probes is the same as the actual object to be measured with the SENSE of the probes (both red and black) facing inwards.



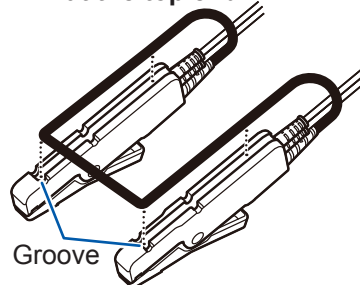
- 3 Adjust the position of the probes such that the return cable between the probes does not sag, and fix by pushing the return cable into the grooves of the probes.



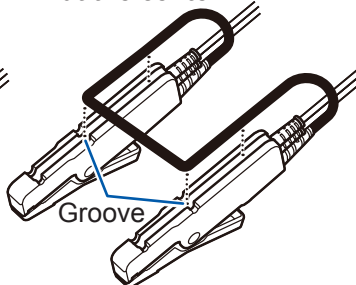
If the measurement is difficult, fixing can be done at the center. However, effectiveness of noise cancellation will reduce. (The return cable is indicated black in the illustration.)

When viewed from the bottom

Fix at the top end



Fix at the center



Use a cable of suitable length for the distance between the terminals of the measuring object from the three types of accessory cables.

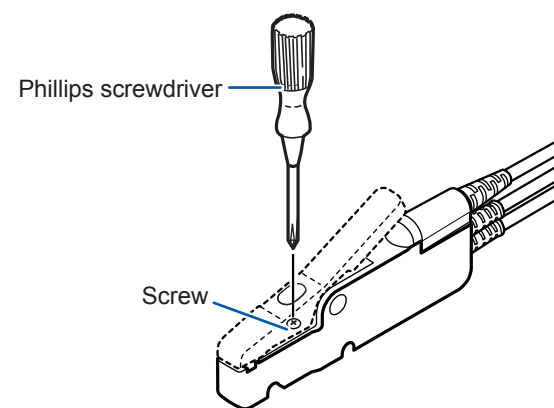
Return cable length	Distance between the terminals of the measuring object
400 mm	100 mm or less
550 mm (mounted before shipment)	100 mm to 250 mm
800 mm	250 mm to 500 mm

Adjustment Method for the Positioning Stopper

If the resistance of the measuring object is low, the contact position of the probes will affect the measured values. A positioning stopper is provided so that clipping can be always achieved at the same depth. Adjust the stopper position for each measuring object.

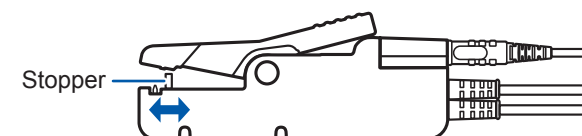
<Tools to be prepared> One Phillips screwdriver

- 1 Loosen the screw holding the stopper with the Phillips screwdriver (Screw size: M2 × 6 mm)



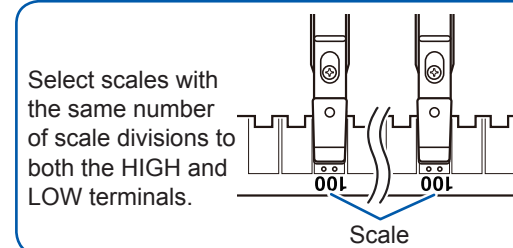
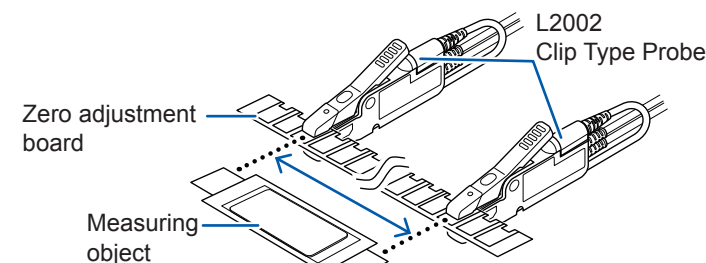
- 2 Adjust the stopper position by moving the stopper back and forth and tighten the screw.

The stopper position can be selected from five levels.



Zero Adjustment

Clip the zero adjustment board which is provided with the connection instrument to execute zero adjustment. Clip with the same width scale as the measuring object, and carry out zero adjustment with the connected instrument.



IMPORTANT

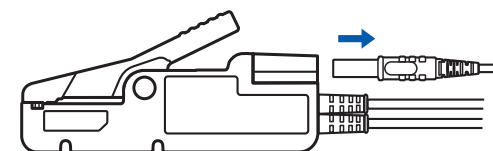
Ensure that the return cable between the probes does not sag.

Replacing the Used Tip Pin

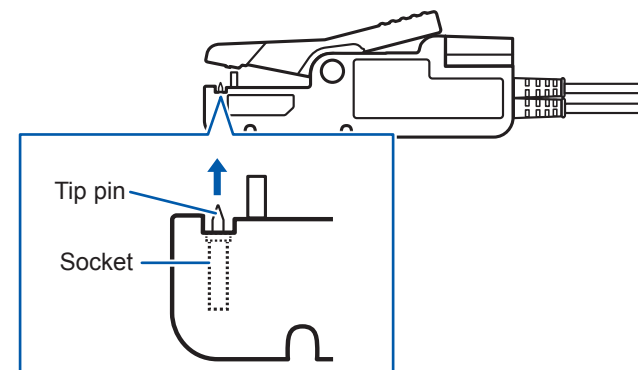
Replace the used tip pin with a new one when the tip pin breaks or is worn out. To purchase the tip pin, contact your authorized Hioki distributor or reseller.

<Tools to be prepared> Tip pin, pliers, etc.

- 1 Turn off the power to the connected instrument and remove the return cables of the probes.



- 2 Grip the tip pin to be replaced with the pliers and pull it out in the upward direction.

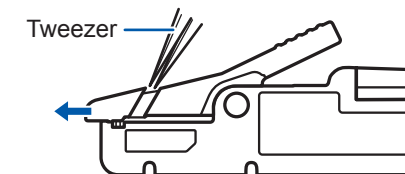


- 3 Insert a new tip pin in the socket and push it in completely.
- 4 Measure a known measuring object to check if the measured value is correct.

Replacing the Rubber

Replace the used rubber with a new one when the rubber is broken or is worn out. To purchase the rubber, contact your authorized Hioki distributor or reseller.

<Tools to be prepared> A pair of tweezers, etc. Place a pair of tweezers between the rubber and probe. Slide aside the rubber to remove. (Refer to the illustration below.)



Four-terminal Pair Method

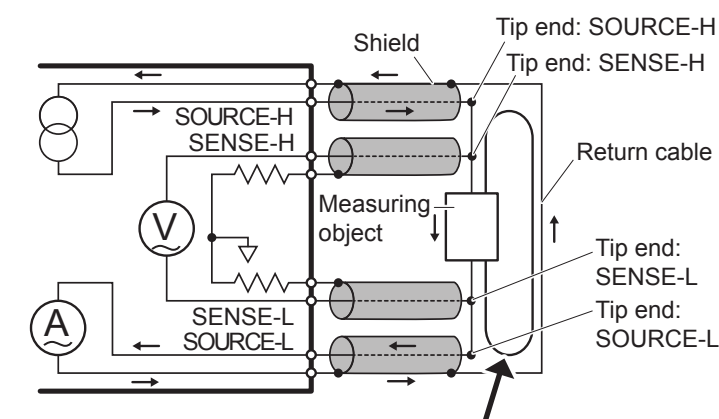
L2002 uses the four-terminal pair method as the measurement method.

Four-terminal pair method

In the four-terminal pair method, the current flows backward (current returns) with the same magnitude as the measuring current in the shields of the SOURCE cables, and then cancels the magnetic field of the measuring current. This method suppresses the induced electromotive force induced at the SENSE terminals, and detects the voltage actually generated in the object being measured.

Four-terminal pair method when using the optional probe

When the L2002 is used, the four-terminal pair method is structured as described below. Vicinity of the measurement object will not entirely be four-terminal pair, and will be affected by an inductive magnetic field. The shape of the return cable should not be changed, and kept away from metals when use. (When there are metals, inductive magnetic field occurs due to eddy current, and leads to measurement errors.)



- Keep the loop area between the return cable and measurement object as small as possible.
- Keep the loop shape and wiring position always the same.
- Keep away from metals.

When the measurement value fluctuates

Keep the return cable in shape, or the affects of the magnetic field changes and the measurement value may fluctuate. Twist the return cable to keep a fixed shape. (The return cable is indicated black in the illustration.)

