

BEFORE USE

Thank you for choosing us. Before use, please check contents of the package you received as outlined below. If you have any problems or questions with the product, please contact our sales office or representatives.

■ PACKAGE INCLUDES:

Clamp-on current sensor(1)

■ MODEL NO.

Confirm Model No. marking on the product to be exactly what you ordered.

■ INSTRUCTION MANUAL

This manual describes necessary points of caution when you use this product, including installation, connection and basic maintenance procedures.

■ SYMBOLS USED IN THIS MANUAL

⚠ The symbol indicated in this manual, means that the user must refer to the related parts in the manual for safe operation of the equipment. It is essential to read the instructions wherever the symbol appears in the manual.

⚠ WARNING: is reserved for conditions and actions that can cause serious or fatal injury.

⚠ CAUTION: is reserved for conditions and actions that can cause injury or instrument damage.

⚠ WARNING

- To avoid short-circuit accidents or personal injury, use this equipment in electrical circuits with:
 - Ground voltage (voltage to ground):
Rated 254V AC or less
 - Line voltage (line to line):
Rated 440V AC or less
- Also, do not use on bare conductors.

⚠ CAUTION

■ REGARDING SAFETY

If the equipment is used in a manner not specified by us, the protection provided by the equipment may be impaired.

■ GENERAL PRECAUTIONS

- Before you remove the sensor module or mount it, turn off the input signal for safety. While the line is alive, the module's cores, attracted to each other, may be hard to separate.
- The over-voltage clamp element is incorporated at the output for safety. However, leaving the circuit open for an extended time period is not recommended.

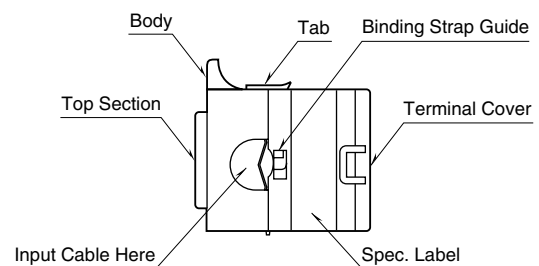
■ ENVIRONMENT

- Indoor use.
- When heavy dust or metal particles are present in the air, install the module inside proper housing with sufficient ventilation.
- Do not install the module where it is subjected to continuous vibration. Do not subject the module to physical impact.
- Environmental temperature must be within -10 to +55°C (14 to 131°F) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

■ WIRING

- Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these cables together with those in which noises are present. Do not install them in the same duct.

COMPONENT IDENTIFICATION



Individual models have different shapes.

INSTALLATION

■ CONNECTING THE INPUT CABLE

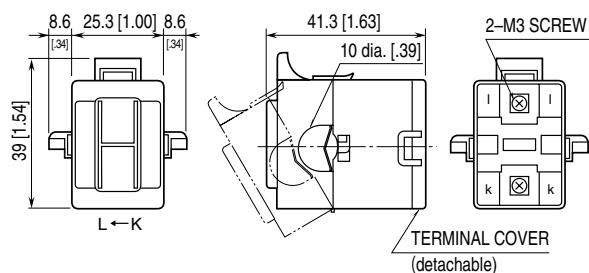
- 1) Pull the tab and open the top section. Place the input cable inside. If it is used for a transducer input with polarity, confirm the direction (K, L).
- 2) Put back the top section and push in the tab securely.
- 3) Fix the sensor module at the input cable with a binding strap.

TERMINAL CONNECTIONS

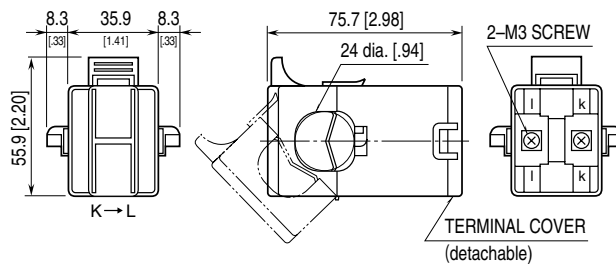
Connect the module referring to the drawings below.

EXTERNAL DIMENSIONS unit: mm [inch]

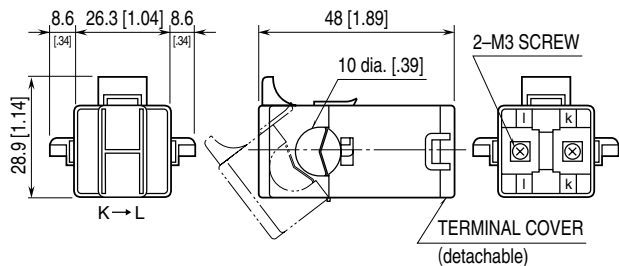
• CLSB-R5



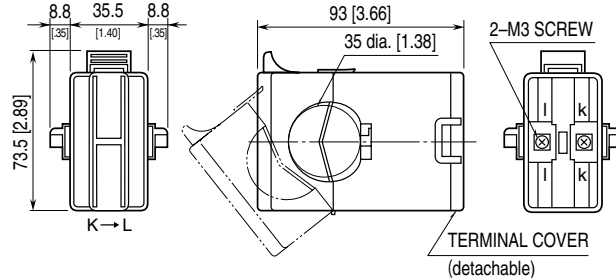
• CLSB-20



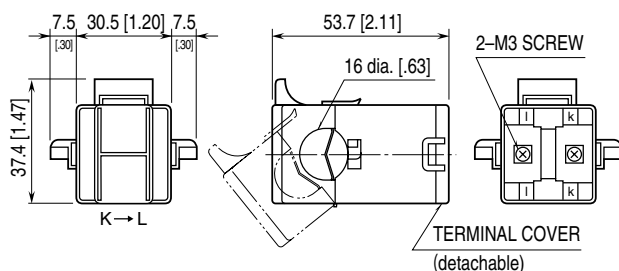
• CLSB-05



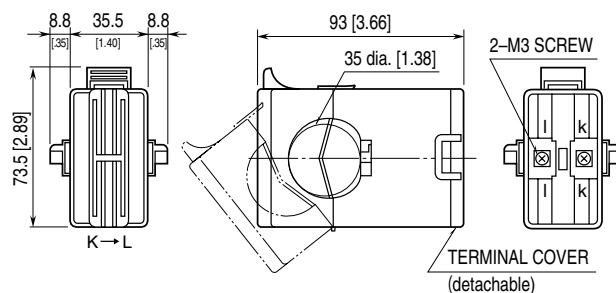
• CLSB-40



• CLSB-10



• CLSB-60



WIRING INSTRUCTIONS

OUTPUT WIRING

Use AWG22 or thicker wires for the output. Twist the paired wires, extendable up to 30 meters.

If the module is used for a transducer input with polarity, confirm the direction (K, L).

SCREW TERMINAL

Torque: 0.5 N·m

CHECKING

- 1) Terminal wiring: Check that all cables are correctly connected according to the connection diagram.
- 2) Input: Check the input signal.
- 3) Output: Check the output signal.