

<b>CLAMP-ON CURRENT SENSOR</b>	MODEL <b>CLSB</b>
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**BEFORE USE ....**

Thank you for choosing M-System. Before use, please check the contents of the package you received as outlined below. If you have any problems or questions with the product, please contact M-System's Sales Office or representatives.

**■ PACKAGE INCLUDES:**

Clamp-on current sensor ..... (1)

**■ MODEL NO.**

Check that model No. described on the specification label is 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.

**POINTS OF CAUTION**

**■ 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.

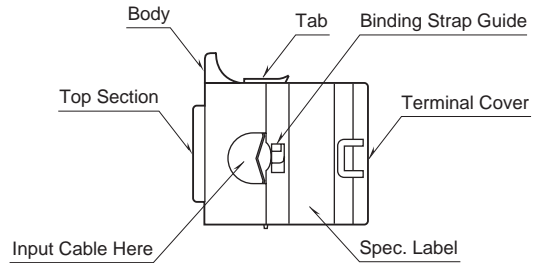
**■ ENVIRONMENT**

- 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 the output wire close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these wires 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 CONNECTION & WIRING

Connect the module referring to the drawings below.

### ■ OUTPUT WIRING

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

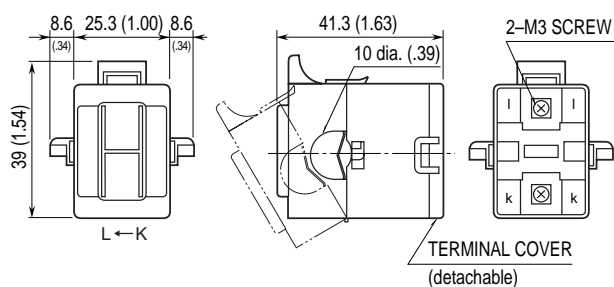
If the module is used for a transducer input with polarity, confirm the direction (K, L).

## CHECKING

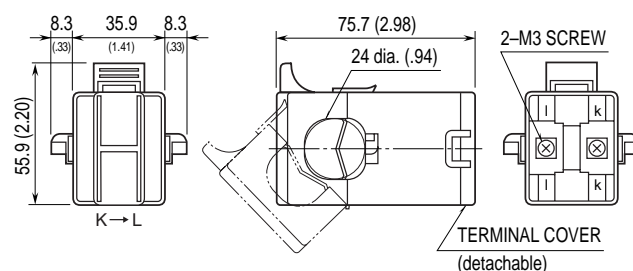
- 1) Terminal wiring: Check that all cables are correctly connected according to the connection diagram.
- 2) Input: Check the input signal.
- 3) Output: Check the output signal.

## EXTERNAL DIMENSIONS mm (inch)

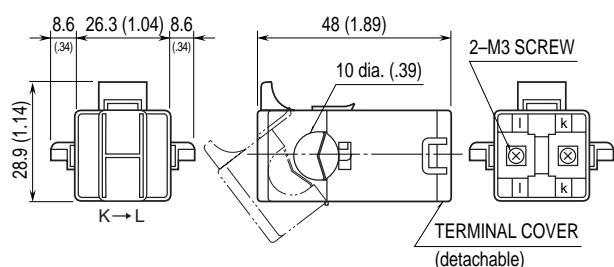
### ■ CLSB-R5



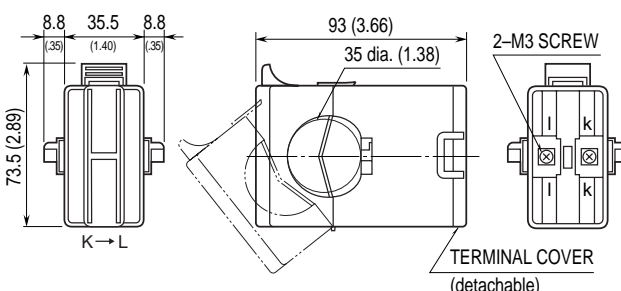
### ■ CLSB-20



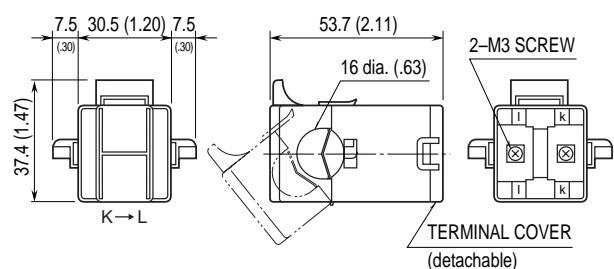
### ■ CLSB-05



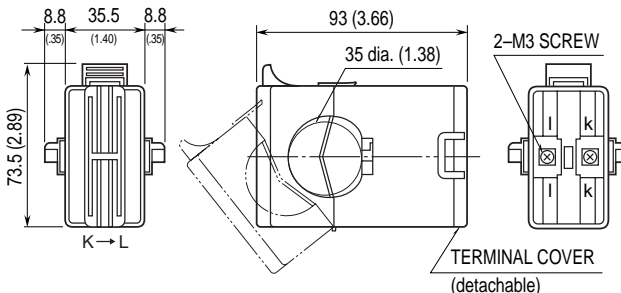
### ■ CLSB-40



### ■ CLSB-10



### ■ CLSB-60



### M-SYSTEM WARRANTY

M-System warrants such new M-System product which it manufactures to be free from defects in materials and workmanship during the 36-month period following the date that such product was originally purchased if such product has been used under normal operating conditions and properly maintained, M-System's sole liability, and purchaser's exclusive remedies, under this warranty are, at M-System's option, the repair, replacement or refund of the purchase price of any M-System product which is defective under the terms of this warranty. To submit a claim under this warranty, the purchaser must return, at its expense, the defective M-System product to the below address together with a copy of its original sales invoice. THIS IS THE ONLY WARRANTY APPLICABLE TO M-SYSTEM PRODUCT AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. M-SYSTEM SHALL HAVE NO LIABILITY FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES OF ANY KIND WHATSOEVER.

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