

# MRB-304-CV Molding Pressure Conversion Module Cover Relay Box: Relay Box Handling

This device is a relay box for the molding pressure conversion module MPC-201B-25, enabling use mounted to the mold surface without exposing sensor cables.

For overall system handling, see the instruction manual for the molding pressure conversion module MPC-201B-25. (Instruction manuals and product specifications can be downloaded from the MinebeaMitsumi website.

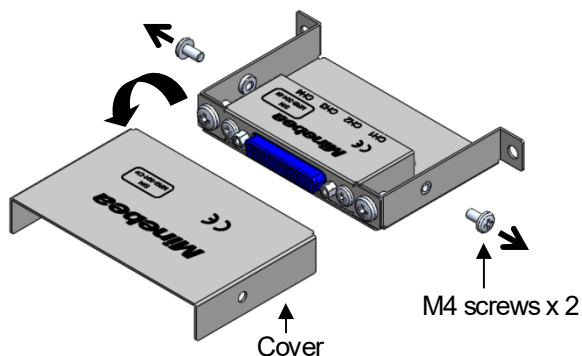
<https://product.minebeamitsumi.com/product/category/mcd/index.html>)

## Handling

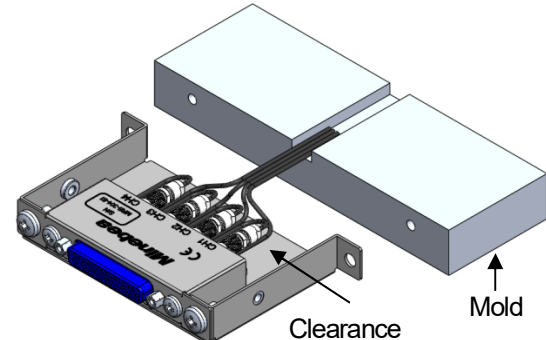
- The device is used mounted with bolts to the mold surface.

## Mounting Procedure

**(1) Remove the two M4 screws on the sides of the product, and then remove the cover.**

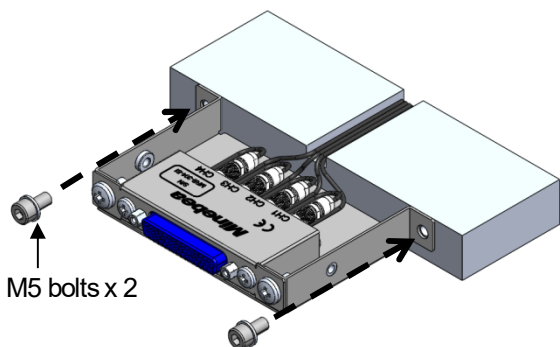


**(2) Connect the sensor connector while storing the sensor cables within the box.**



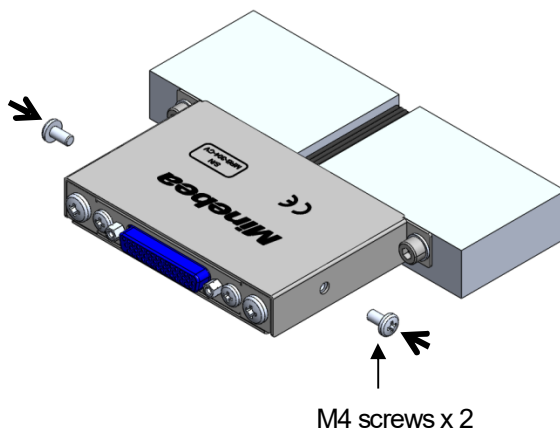
\*Bundle the extra sensor cable length in the clearance space or otherwise store it away.

**(3) Using the holes on the right and left of the relay box body, fix the product body to the mold with two M5 bolts.**



\*M5 tapping is required on the mold side mounting surface.  
\*M5 bolts are to be prepared by the customer.

**(4) Use the two M4 screws removed in step (1) to fix the cover to the product body.**

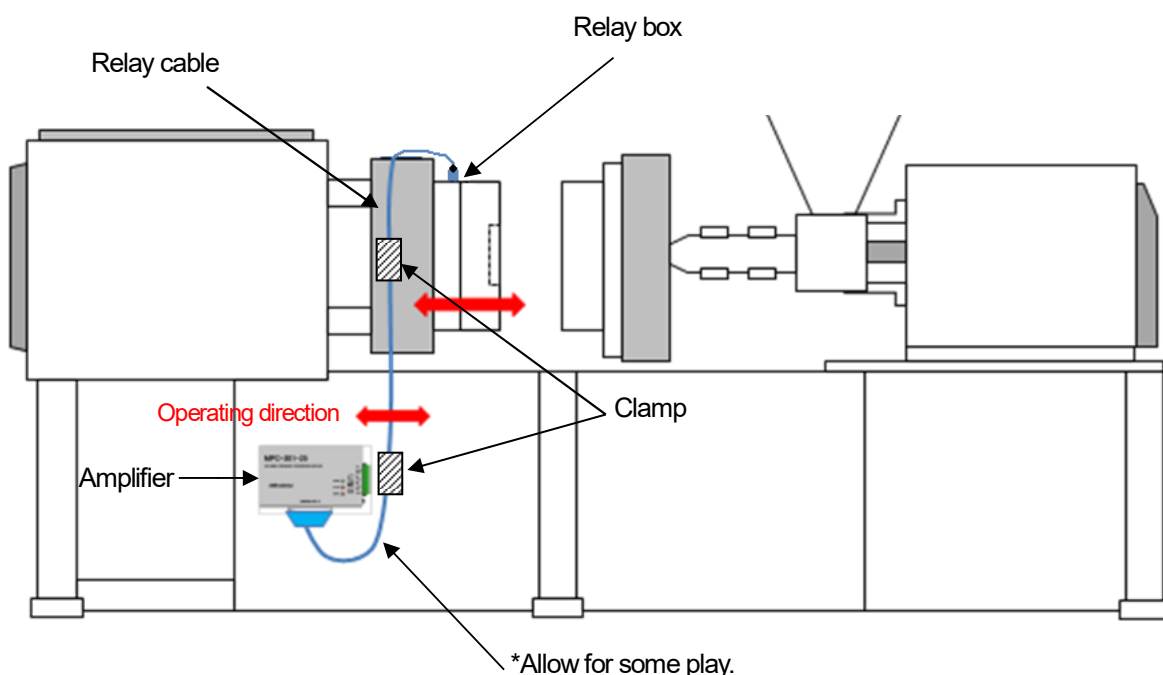


## Handling Precautions

- Regarding environmental specifications for installing this device, refer to the general specifications and use within their range.
- Be careful not to pinch the sensor cable between the mold and the relay box body.
- When bundling the extra sensor cable length, be careful to remain within its minimum bending radius.
- For the sensor cable minimum bending radius, see the LSMS-S06 and LSMSB product specifications on the MinebeaMitsumi website.

### Installation to molding machine (wiring)

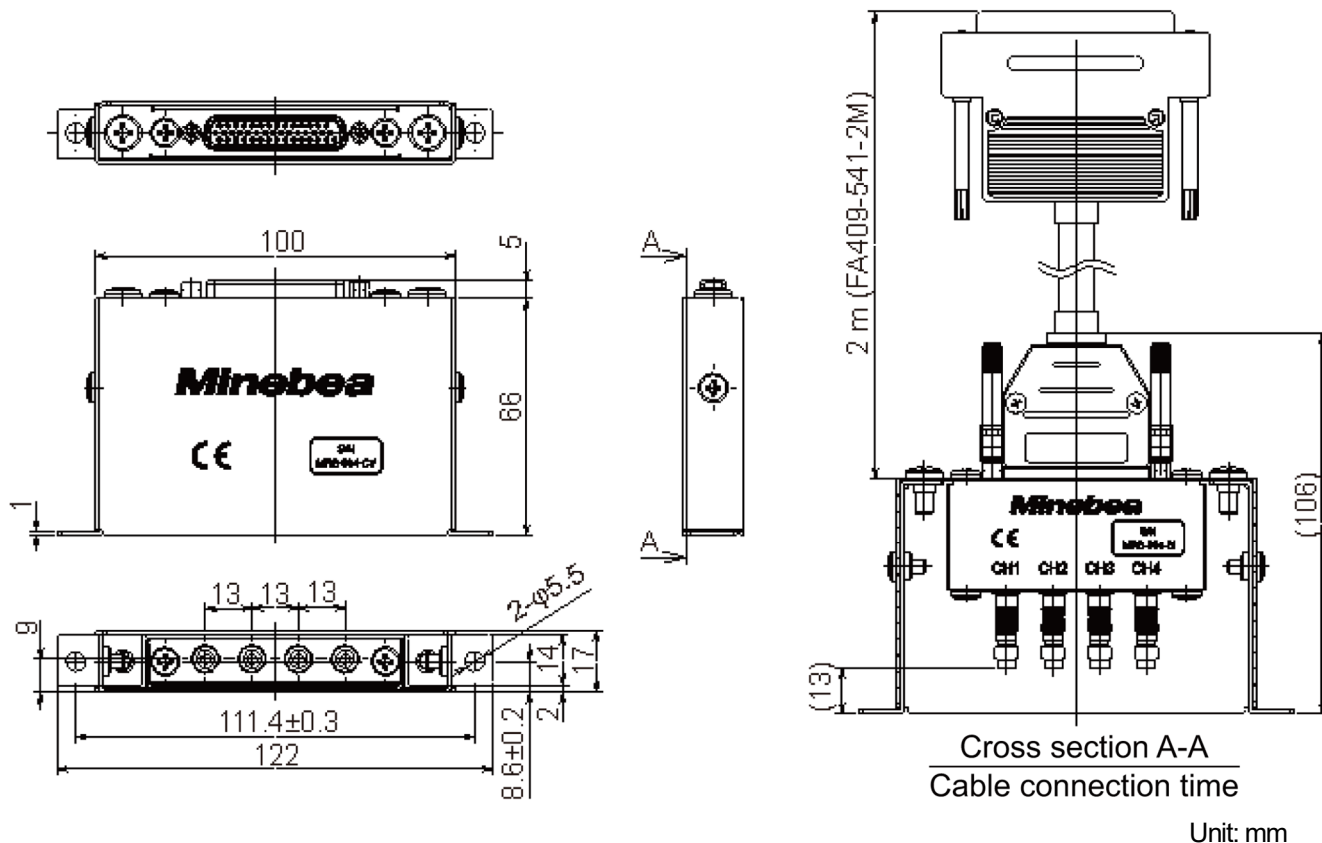
With the layout below as an example, install the amplifier and relay box so that they will not fall out or become disconnected. The amplifier should be installed so that it is within reach, with the LED display visible, on the operating side of the molding machine.



## Handling Precautions

- Be sure to allow the relay cable enough play that there will be no load applied to its base even if the mold moves. Do not attach cable clamps near movable parts.
- Lay out the relay cable with enough spare length that there will be no load applied even if the mold moves.
- The relay cable minimum bending radius is 50 mm. To prevent disconnection, use within the minimum bending radius.
- When connecting the relay box and relay cable, fully tighten the screws on the right and left of the D-sub connector.
- The relay cable uses a robot cable, which is a consumable part that may disconnect due to repeated bending. We recommend regular replacement or keeping a spare part available according to the usage frequency.
- Clamp the relay cable within 2 m of the relay box. The cable weight may cause load to be applied to the relay box, leading to deformation, etc.
- Lay out the sensor cable and relay cable so that they are not snagged or pulled when the mold moves. Bundle the extra cable length as needed.

**External Dimensions**



**General specifications**

- Operating temperature and humidity ranges
  - Temperature 0°C to 100°C
  - Humidity 85% RH or below (no condensation)
- Storage temperature -10°C to 100°C
- Vibration resistance 10 Hz to 55 Hz Double amplitude 1.5 mm 2 hours each in X, Y, and Z directions
- External dimensions (W x H x D) 121.6 mm x 17.2 mm x 70.9 mm (not including protrusions)
- Weight Approx. 210 g
- Case material SUS304
- Applicable converters LSMS-S06 Series, LSMSB Series Up to 4 units can be connected
- Applicable amplifiers MPC-201-25, MPC-201B-25
- Applicable standards EN61326-1:2013  
 “Electrical equipment for measurement, control and laboratory use - EMC requirements”  
 “Immunity requirements for equipment intended for use in industrial locations”  
 RoHS compliant

●The contents of this manual may subject to change without notice.

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