



MRD Type LOAD CELL INSTRUCTION MANUAL NO. 72

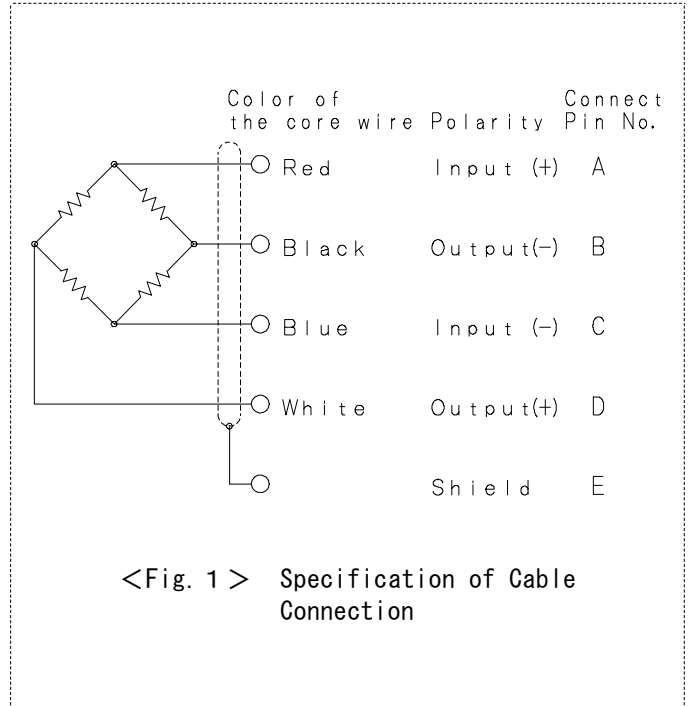
● Cable connection methods

Connection methods are show in the <Fig1> If you have misconnecting, there might be trubles with zero balance and errors on output voltage under load condition.

● Maximum Admissible Excitation Voltage

| | |
|---|-----|
| Maximum Admissible Excitation Voltage (AC/DC) | 6 V |
| Nominal Range Excitation Voltage (AC/DC) | 4 V |

<Table 1>



<Fig. 1> Specification of Cable Connection

● Mounting method of Model MRD and cautions to be taken when mounting Model MRD

1) Mounting with adhesive.

A Surface treatment of the mounting surface

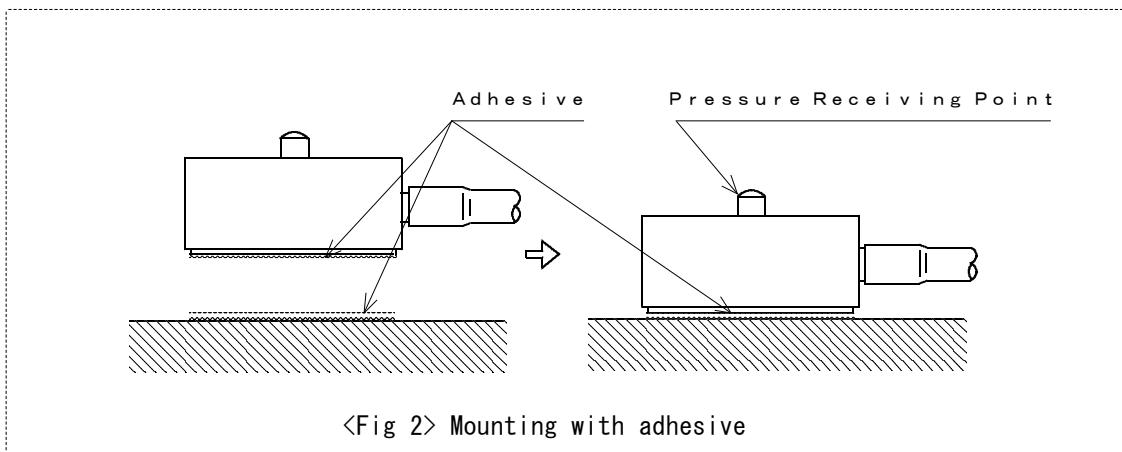
Polish the surface with Emery paper (#360). Clean the surface with a solvent thereafter.

B Applying adhesive

Use a rubber serie adhesive sold in the market. After evaporation of the solvent, apply the adhesive thinly and uniomrly to both the bottom surface of the load cell and the intended surface of the mounting base.

C Fixing the load cell

Mount the load cell on the intended surface of the mounting base. Press lightly with finger the circumference of the elastic body. Maintain the pressure until the load cell does not move on the intended surface. Refrain from applying pressure to the pressure receiving surface of the load cell as such may sometimes cause a breakage on the load cell. <Fig 2>

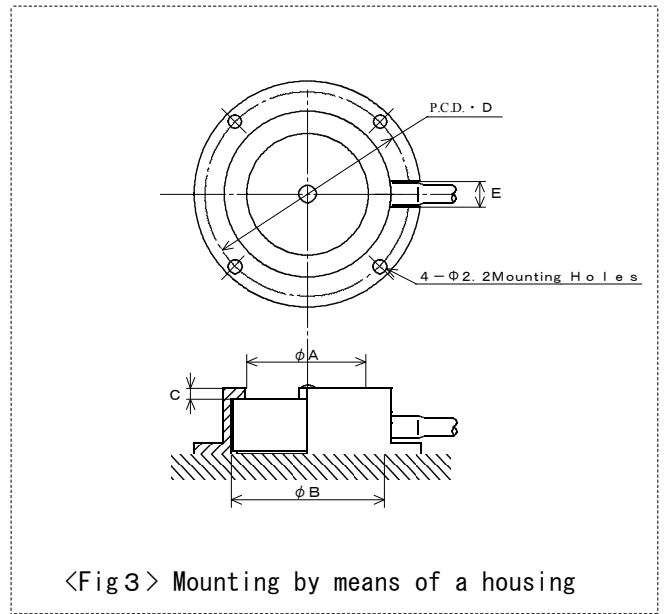


<Fig 2> Mounting with adhesive

- 2). Mounting by means of a housing
- A Surface treatment of the mounting surface.
Polish the surface with Emery paper. (#360).
- B Recommended dimensions of the housing : <Fig 3> ,<Table 2>

| MODEL | A | B | C | D | E |
|----------------|------|------|-----|----|-----|
| MRD- 5N~ 50N | 10 | 12.5 | 0.5 | 19 | 2.5 |
| MRD- 100N~ 2kN | 16.5 | 20.5 | 1.5 | 27 | 3.5 |
| MRD- 5kN~ 10kN | 17 | 25.5 | 2.0 | 32 | 3.5 |

<Table 2>



<Fig 3> Mounting by means of a housing

●Use Environment and Caution

1. This unit is not waterproof.
Please avoid from water and moisture.
2. Compensated temperature range is
0 ~ 60 °C

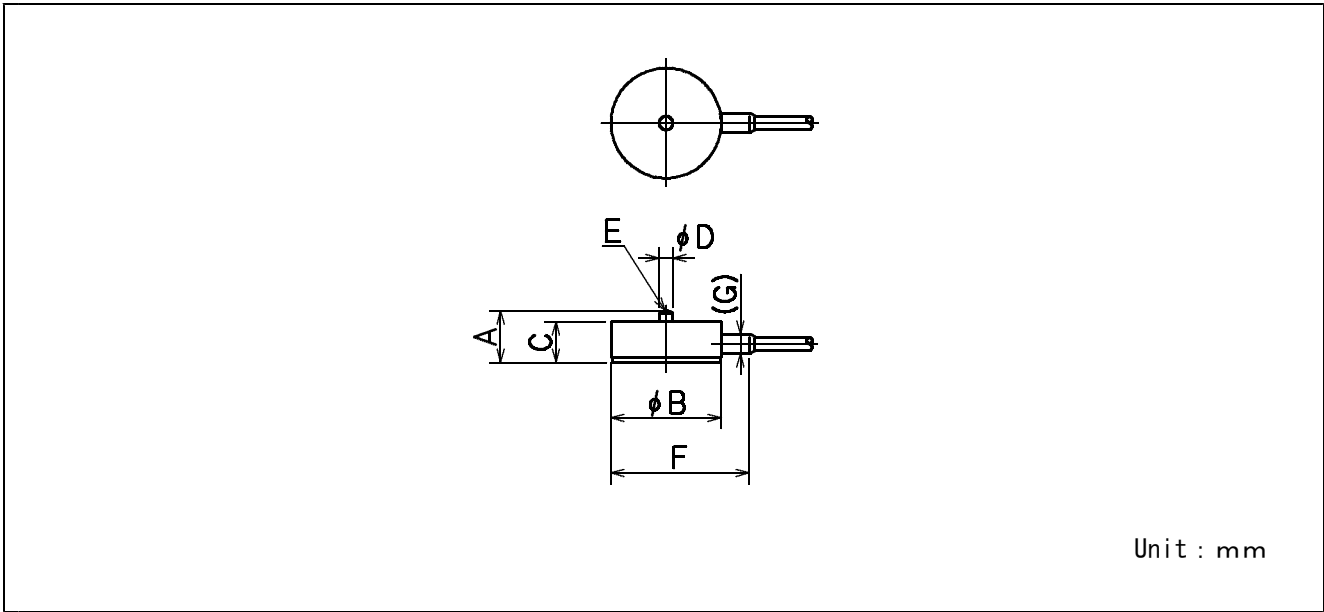
●Maintenance

We suggest you to have a yearly maintenance and calibration (both with the extra charge) to maintain the quality of this product.

●Warranty

This product has a warranty of one year after purchase. When there is any troubles or machine break down, we will repair the machine without any additional charges. But for your misure or disassembly, then we are not responsible for the gurantee. Please understand the situation that sometimes the machine is beyond repair due to the unlimited overload and voltage.

●Dimensional Drawing



Unit : mm

●Dimensional Chart (Unit:mm)

| Model | Rated Capacity | A | B | C | D | E | F | G |
|-----------|----------------|------|----|-----|-----|------|----|-----|
| MRD- 10N | 10N | 4 | 12 | 3.3 | 1.8 | SR2 | 17 | 2.4 |
| MRD- 20N | 20N | 4 | 12 | 3.3 | 1.8 | SR2 | 17 | 2.4 |
| MRD- 50N | 50N | 4 | 12 | 3.3 | 1.8 | SR2 | 17 | 2.4 |
| MRD- 100N | 100N | 9.5 | 20 | 7.5 | 2.5 | SR4 | 25 | 3 |
| MRD- 200N | 200N | 9.5 | 20 | 7.5 | 2.5 | SR4 | 25 | 3 |
| MRD- 500N | 500N | 9.5 | 20 | 7.5 | 2.5 | SR4 | 25 | 3 |
| MRD- 1kN | 1kN | 9.5 | 20 | 7.5 | 2.5 | SR4 | 25 | 3 |
| MRD- 2kN | 2kN | 9.5 | 20 | 7.5 | 2.5 | sR4 | 25 | 3 |
| MRD- 5kN | 5kN | 13.5 | 25 | 11 | 6 | SR15 | 30 | 3 |
| MRD- 10kN | 10kN | 13.5 | 25 | 11 | 6 | SR15 | 30 | 3 |

REV2006

SPECIFICATIONS

| TYPE | MRD |
|------------------------------------|--|
| Rated Capacity | 1 0 N ~ 1 0 k N |
| Safe Overload Rating | 1 5 0 % |
| Ultimate Overload Rating | 2 0 0 % |
| Rated Output | 1. 0 mV/V |
| Linearity | 1 % R. O. |
| Hysteresis | 1 % R. O. |
| Repeatability | 0. 5 % R. O. |
| Admissible Excitation Voltage | 6 V, Nominal Range 4 V |
| Input Resistance | 3 5 0 Ω |
| Output Resistance | 3 5 0 Ω |
| Compensated Temperature Range | 0 ~ 6 0 °C |
| Safe Temperature Range | - 1 0 ~ 6 0 °C |
| Temperature Effect on Zero Balance | 0. 2 % R. O. /°C |
| temperature Effect on Output | 0. 1 % /°C |
| Cable | φ 2 mm Four Conductor Shielded Cable 3 mm (10 ~ 500 N) φ 2. 4 mm Four Conductor Shielded Cable 3 mm (1 ~ 10 kN) |
| Remarks | |

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