



### Key feature:

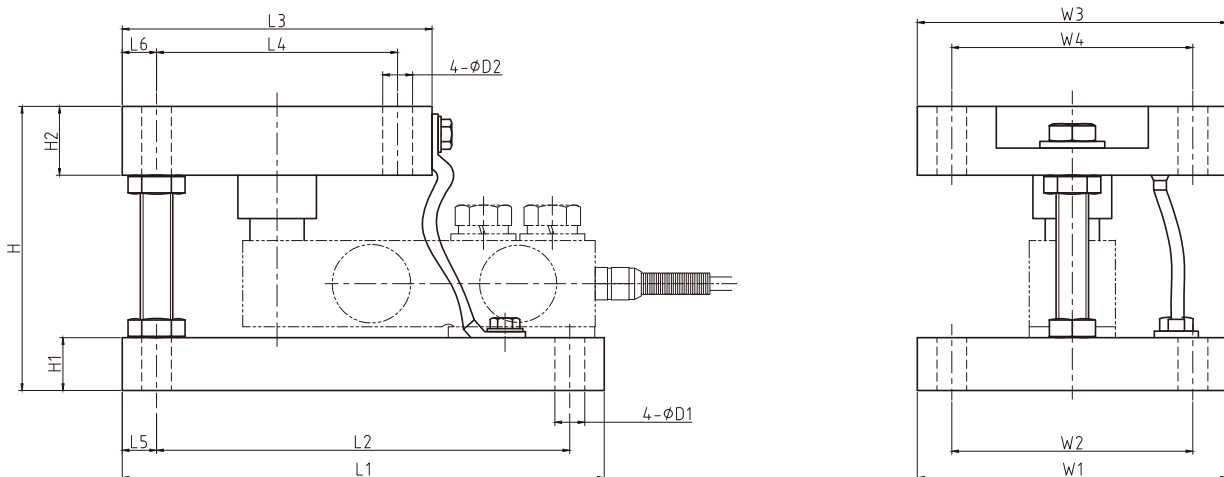
- Compact and easy installation.
- Upper plate with blind hole to be loaded.
- Adjustable height screw against overload and overturn.
- Self-reset vertical force with rocker pin.
- Alloy steel and stainless steel optional.
- Assembled with single-ended shear beam B510A



### Product description:

The M-B510A-2A is a typical weigh module assembled with B510A load cell, which is designed for dynamic weighing system, such as mixed hopper, silo, vessel and tank weighing systems. Capacity is from 0.5t to 10t. This module has 3 styles, fixed style, one-direction moving, free-moving with defined area, which are to avoid being stuck between upper plate and rocker pin during mixing inside.

### Dimensions (in mm& lb):



| Rated Capacity      | L1    | L2    | L3    | L4    | L5   | L6   | H     | H1   | H2   | W1    | W2    | W3    | W4    | D1   | D2   |
|---------------------|-------|-------|-------|-------|------|------|-------|------|------|-------|-------|-------|-------|------|------|
| lb/inches           |       |       |       |       |      |      |       |      |      |       |       |       |       |      |      |
| 1,000-4,000; 5000SE | 7.00  | 6.00  | 4.50  | 3.50  | 0.50 | 0.50 | 4.13  | 0.77 | 1.00 | 4.50  | 3.50  | 4.50  | 3.50  | 0.43 | 0.43 |
| 5,000-10,000        | 9.25  | 7.25  | 6.00  | 4.00  | 1.00 | 1.00 | 5.37  | 1.00 | 1.25 | 6.00  | 4.00  | 6.00  | 4.00  | 0.69 | 0.69 |
| 15,000-20,000       | 14.00 | 12.00 | 8.00  | 6.00  | 1.00 | 1.00 | 7.50  | 1.75 | 1.75 | 8.00  | 6.00  | 8.00  | 6.00  | 0.81 | 0.81 |
| kg/mm               |       |       |       |       |      |      |       |      |      |       |       |       |       |      |      |
| 500-2,000           | 177.8 | 152.4 | 114.3 | 88.9  | 12.7 | 12.7 | 104.8 | 19.5 | 25.4 | 114.3 | 88.9  | 114.3 | 88.9  | 11.0 | 11.0 |
| 3,000-5,000         | 235.0 | 184.2 | 152.4 | 101.6 | 25.4 | 25.4 | 136.5 | 25.4 | 31.8 | 152.4 | 101.6 | 152.4 | 101.6 | 17.5 | 17.5 |
| 7,500-10,000        | 355.6 | 304.8 | 203.2 | 152.4 | 25.4 | 25.4 | 190.5 | 44.5 | 44.5 | 203.2 | 152.4 | 203.2 | 152.4 | 20.6 | 20.6 |

## M-B510A-2A Weighing Module Specifications

| Parameter                                 | Units                      | Specification                                  |                             |
|---|----------------------------|--|-----------------------------|
| Model No.                                 |                            | M-B510A-2A                                     |                             |
| Load Cell                                 |                            | B510A  |                             |
| Rated capacity (E <sub>max</sub> )        | Klb                        | 1; 2.5; 4; 5SE4) ; 5; 10; <sup>4)</sup> 15; 20 |                             |
| Rated capacity (E <sub>max</sub> )        | t                          | 0.5; 1; 2; 3; 5; 7.5; 10                       |                             |
| Rated output                              | mV/V                       | 3.0 ± 0.003                                    |                             |
| Combined error                            | % of E <sub>max</sub>      | < ± 0.017                                      |                             |
| Repeatability error                       | % of AL <sup>3)</sup>      | < ± 0.010                                      |                             |
| Creep; 30 minute                          | % of AL                    | < ± 0.017                                      |                             |
| Min. dead load output return (DR); 30 min | % of AL                    | < ± 0.017                                      |                             |
| Temp. effect on                           | Min. dead load output      | % of E <sub>max</sub> /°C                      | < ± 0.0023                  |
|   | Rated output <sup>2)</sup> | % of AL/°C                                     | < ± 0.0020                  |
| Temperature range                         | Compensated                | °C(°F)   | -10 to +40 [+14 to +104]    |
|   | Operating                  |  | -30 to +65 [-22 to +149]    |
|   | Safe storage               |  | -40 to +80 [-40 to +176]    |
| Excitation voltage                        | Recommended                | V AC/DC  | 5 ~ 15                      |
|   | Maximum                    |  | 15                          |
| Terminal resistance                       | Excitation                 | Ω  | 382 ± 5                     |
|   | Output                     |  | 350 ± 3                     |
| Insulation resistance @50VDC              | MΩ                         | >5000  |                             |
| Breakdown voltage                         | V AC                       | >500   |                             |
| Seal type / IP rating                     |                            | Hermetically welded / IP68                     |                             |
| Load limit                                | Safe                       | % of E <sub>max</sub>                          | 150                         |
|   | Ultimate                   |  | 200                         |
| Cable length                              | m                          |  | Cap. ≤2000kg/5000lb SE: 3.0 |
|   |                            |  | Cap. ≥3000kg/5000lb: 5.0    |

### Notes:

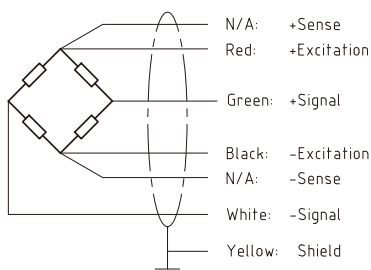
<sup>1)</sup> Error due to the combined effect of non-linearity and hysteresis

<sup>2)</sup> The sum of errors due to Temperature Effect on Output comply with the requirements of OIML R60 and NIST HB44

<sup>3)</sup> AL = Applied Load

<sup>4)</sup> SE = Small Edition

Cable Colour Code: 4-wire [Optional: 6-wire]



Shield connected to load cell body