

## Miniature Bending Beam



### FEATURES

- Capacities: 50, 100, 150, and 250 lbs
- Low profile for low-capacity scales
- Electroless nickel-plated alloy tool steel

### OPTIONAL FEATURE

- FM approval available

### DESCRIPTION

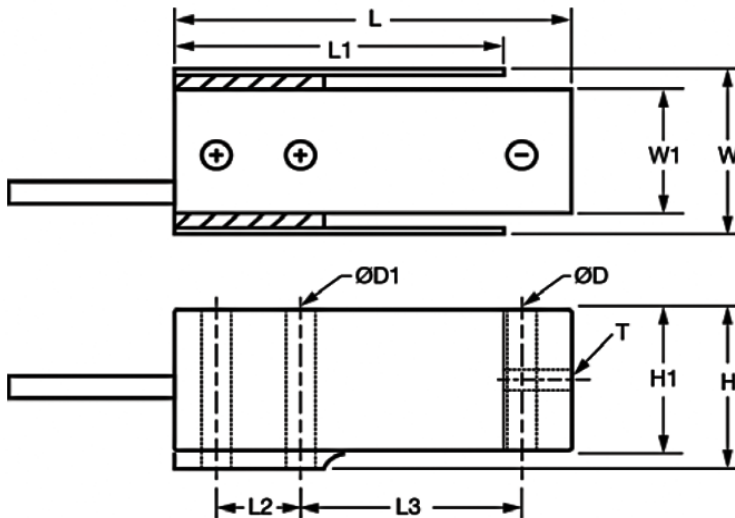
MBB is designed for low profile platform scales and tank scales in low capacities. It is constructed of high alloy tool steel which offers superior performance in creep characteristics and shock load capabilities over standard aluminum units.

MBB is fully potted and sealed with special chemical compounds to IP66 providing excellent protection against moisture and humidity.

### APPLICATIONS

- Silo/hopper/tank weighing
- Packaging machines
- Dosing/filling
- Belt scales/conveyor scales

### OUTLINE DIMENSIONS in mm



#### Wiring Diagram

- +Excitation (Red)
- Excitation (Black)
- +Signal (Green)
- Signal (White)

All Capacity  
Cable Length: 5' / 1.5m

| CAPACITY             |        | L     | L <sub>1</sub> | L <sub>2</sub> | L <sub>3</sub> | W    | W <sub>1</sub> | H    | H <sub>1</sub> | D <sub>1</sub> | D         | T         |
|----------------------|--------|-------|----------------|----------------|----------------|------|----------------|------|----------------|----------------|-----------|-----------|
| 50/100/150 lbs       | mm     | 60.33 | 50             | 12.7           | 33.66          | 19.5 | 12.7           | 24.8 | 22.2           | 4.5            | 4.5       | -         |
|                      | (inch) | 2.38  | 1.97           | 0.50           | 1.33           | 0.77 | 0.5            | 0.98 | 0.87           | 0.18           | 0.18      |           |
| 250 lbs              | mm     | 60.33 | 50             | 12.7           | 33.66          | 25.4 | 19.05          | 24.8 | 22.2           | 4.5            | 4.5       | -         |
|                      | (inch) | 2.38  | 1.97           | 0.50           | 1.33           | 1.00 | 0.75           | 0.98 | 0.87           | 0.18           | 0.18      |           |
| 50/100/150 lbs<br>OL | mm     | 60.33 | 50             | 12.7           | 33.66          | 21   | 12.7           | 24.8 | 22.2           | 4.4            | 4.4       | -         |
|                      | (inch) | 2.38  | 1.97           | 0.50           | 1.33           | 0.83 | 0.5            | 0.98 | 0.87           | 0.17           | 0.17      |           |
| 100/250 lbs VT       | mm     | 60.33 | 50             | 12.7           | 33.66          | 25.4 | 19.05          | 24.8 | 22.2           | 6.8            |           | -         |
|                      | (inch) | 2.38  | 1.97           | 0.50           | 1.33           | 1.00 | 0.75           | 0.98 | 0.87           | 0.26           | 1/4-20UNF |           |
| 100 lbs BCI          | mm     | 60.33 | 50             | 12.7           | 33.66          | 25.4 | 19.05          | 24.8 | 22.2           | 6.4            | 6.4       | -         |
|                      | (inch) | 2.38  | 1.97           | 0.50           | 1.33           | 1.00 | 0.75           | 0.98 | 0.87           | 0.25           | 0.25      |           |
| 250 lbs BCI          | mm     | 60.33 | 50             | 12.7           | 33.66          | 25.4 | 19.05          | 24.8 | 22.2           | 6.4            | 4.5       | -         |
|                      | (inch) | 2.38  | 1.97           | 0.50           | 1.33           | 1.00 | 0.75           | 0.98 | 0.87           | 0.25           | 0.18      |           |
| 250 lbs LT           | mm     | 60.33 | 50             | 12.7           |                | 25.4 | 19.05          | 24.8 | 22.2           | 4.4            |           | 1/4-28UNF |
|                      | (inch) | 2.38  | 1.97           | 0.50           |                | 1.00 | 0.75           | 0.98 | 0.87           | 0.17           |           |           |

All dimensions in mm

**SPECIFICATIONS**

| PARAMETER                                   | VALUE                     | UNIT                  |
|---|---------------------------|-----------------------|
| NTEP/OIML accuracy class                    | Non-Approved              |                       |
| Maximum no. of intervals (n)                | 3000                      |                       |
| Y = Emax/Vmin                               | 5000                      | Maximum available     |
| Standard capacities (Emax)                  | 50, 100, 150, 250         | lbs                   |
| Rated output—R.O.                           | 3.0                       | mV/V                  |
| Rated output tolerance                      | 10                        | ±% of rated output    |
| Zero balance                                | 1                         | ±% of rated output    |
| Non-linearity                               | 0.030                     | ±% of rated output    |
| Hysteresis                                  | 0.030                     | ±% of rated output    |
| Non-repeatability                           | 0.020                     | ±% of rated output    |
| Creep error (20 minutes)                    | 0.020                     | ±% of rated output    |
| Zero return (20 minutes)                    | 0.030                     | ±% of rated output    |
| Temperature effect on min. dead load output | 0.0026                    | ±% of rated output/°C |
| Temperature effect on sensitivity           | 0.0015                    | ±% of rated output/°C |
| Compensated temperature range               | -10 to +40                | °C                    |
| Operating temperature range                 | -20 to +60                | °C                    |
| Safe overload                               | 150                       | % of R.C.             |
| Ultimate overload                           | 300                       | % of R.C.             |
| Excitation, recommended                     | 10                        | VDC or VACRMS         |
| Excitation, maximum                         | 15                        | VDC or VACRMS         |
| Input impedance                             | 385±5                     |                       |
| Output impedance                            | 350±3                     |                       |
| Insulation resistance                       | >5000                     | M                     |
| Construction                                | Nickel-plated alloy steel |                       |
| Environmental protection                    | IP66                      |                       |

All specifications subject to change without notice.

FM Approval

Intrinsically Safe: Class I, II, III; Div. 1 Groups A-G

Non-Incendive: Class I; Div. 2 Groups A-D