

Miniature Bending Beam

FEATURES

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

APPLICATIONS

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

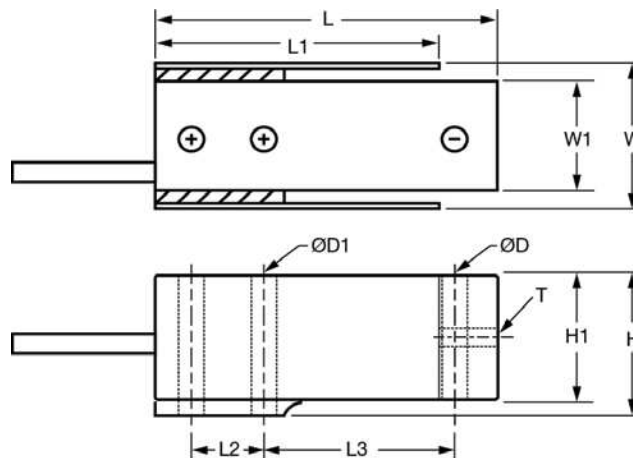
DESCRIPTION

The Model 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.

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



OUTLINE DIMENSIONS



Wiring
 + Excitation Red
 - Excitation Black
 + Signal Green
 - Signal White

**All Capacity
Cable Length: 5' / 1.5m**

| CAPACITY | | L | L ₁ | L ₂ | L ₃ | W | W ₁ | H | H ₁ | D ₁ | 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 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 | - | 1/4-28UNF |

Miniature Bending Beam

| SPECIFICATIONS | | |
|---|---------------------------|-----------------------|
| PARAMETER | VALUE | UNIT |
| NTEP/OIML accuracy class | Non-Approved | |
| Maximum no. of intervals (n) | 3000 | |
| $Y = E_{max}/V_{min}$ | 5000 | Maximum available |
| Standard capacities (E_{max}) | 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) | 0.030 | ±% 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 applied load/°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 VAC RMS |
| Excitation, maximum | 15 | VDC or VAC RMS |
| Input impedance | 385±5 | Ω |
| Output impedance | 350±3 | Ω |
| Insulation resistance | >5000 | MΩ |
| 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



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