

## Aluminum Single-Point Load Cell

### FEATURES

- Capacities 3–90 kg
- Aluminum construction
- Single-point 400 x 400 mm platform
- NTEP approved
- IP65 protection
- Available with metric and UNC threads
- **Optional**
  - EEx ia IIC T4 hazardous area approval
  - FM approval available
  - IP67 available



ATEX



### APPLICATIONS

- Bench scales
- Counting scales
- Grocery scales

### DESCRIPTION

Model 1010 is a single-point load cell designed for direct mounting of low cost, low capacity weighing platforms.

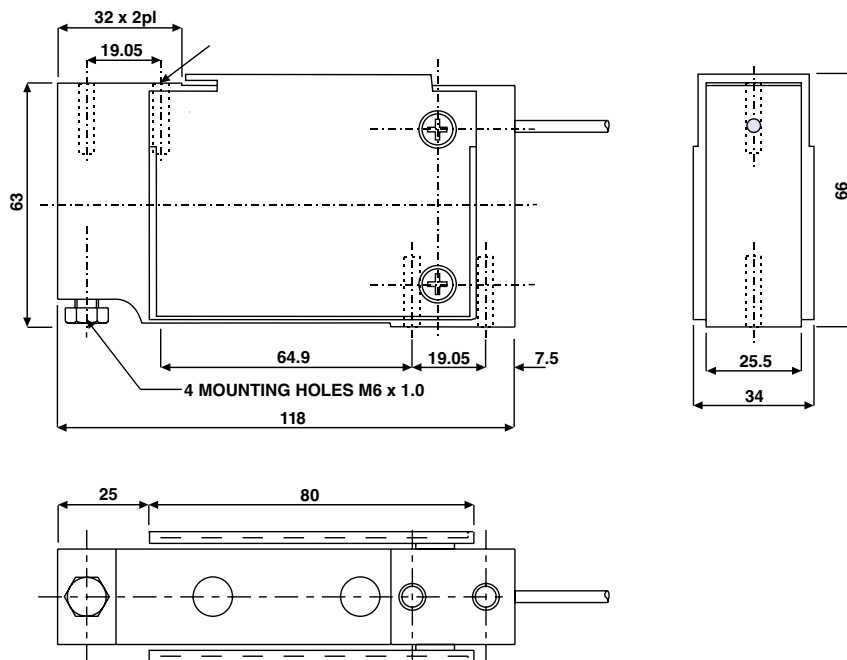
Its use in large platforms, combined with its high accuracy and low cost, makes this load cell ideally suited for a large range of weighing applications, including bench scales and counting scales.

A special humidity resistant protective coating is available which ensures long-term reliability. For hazardous environments this load cell has EEx ia IIC T4 level approved option.

Model 1010's built-in overload stop can provide mechanical protection against overloading.

The two additional sense wires feed back the voltage reaching the load cell. Complete compensation of changes in lead resistance due to temperature change and/or cable extension is achieved by feeding this voltage into the appropriate electronics.

### OUTLINE DIMENSIONS in millimeters



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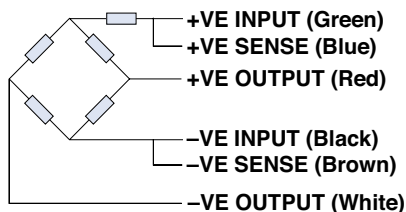
| SPECIFICATIONS                    |  |              |                       |
|-----------------------------------|--|--------------|-----------------------|
| PARAMETER                         | VALUE*                                 |              | UNIT                  |
| Rated capacity—R.C. ( $E_{max}$ ) | 3, 5, 7, 10, 15, 20, 30, 50, 90        |              | kg                    |
| NTEP/OIML accuracy class          | NTEP                                   | Non-Approved |                       |
| Maximum no. of intervals (n)      | 5000 single                            | 3000         |                       |
| $Y = E_{max}/V_{min}$             | 10000                                  | 10000        | Maximum available     |
| Rated output—R.O.                 | 2.0                                    |              | mV/V                  |
| Rated output tolerance            | 0.2                                    |              | ±mV/V                 |
| Zero balance                      | 0.2                                    |              | ±mV/V                 |
| Zero return, 30 min.              | 0.0330                                 | 0.0170       | ±% of applied load    |
| Total error (per OIML R60)        | 0.0200                                 | 0.0200       | ±% of rated output    |
| Temperature effect on zero        | 0.0023                                 | 0.004        | ±% of rated output/°C |
| Temperature effect on output      | 0.001                                  | 0.0010       | ±% of applied load/°C |
| Eccentric loading error           | 0.0057                                 | 0.0074       | ±% of rated load/cm   |
| Temperature range, compensated    | -10 to +40                             |              | °C                    |
| Temperature range, safe           | -20 to +70                             |              | °C                    |
| Maximum safe central overload     | 150                                    |              | % of R.C.             |
| Ultimate central overload         | 300                                    |              | % of R.C.             |
| Excitation, recommended           | 10                                     |              | VDC or VAC RMS        |
| Excitation, maximum               | 15                                     |              | VDC or VAC RMS        |
| Input impedance                   | 415±15                                 |              | Ω                     |
| Output impedance                  | 350±3                                  |              | Ω                     |
| Insulation resistance             | >2000                                  |              | MΩ                    |
| Cable length                      | 1.0                                    |              | m                     |
| Cable type                        | 6 wire, PVC, single floating screen    |              | Standard              |
| Construction                      | Plated (anodize) aluminum              |              |                       |
| Environmental protection          | IP65**                                 |              |                       |
| Platform size (max)               | 400 x 400                              |              | mm                    |
| Recommended torque                | Up to 30 kg: 7.0<br>50 kg and up: 10.0 |              | N-m                   |

\* 1010 is non-balanced load cell (non-balanced bridge), 1015 is balanced

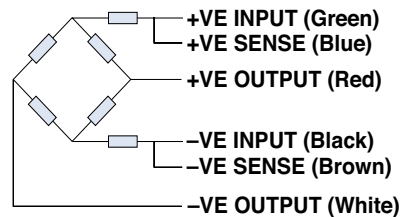
\*\* IP67 available upon request

All specifications subject to change without notice.

**WIRING SCHEMATIC DIAGRAM (1010)**  
(Unbalanced bridge configuration)



**WIRING SCHEMATIC DIAGRAM (1015)**  
(Balanced temperature compensation)



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