

## Aluminum Medium Capacity Single-Point Load Cell

### FEATURES

- Capacities 50–250 kg
- Aluminum construction
- Single-point 400 × 400 mm platform
- OIML R60 and NTEP approved
- IP66 protection
- Available with metric and UNC threads
- **Optional**
  - ATEX, FM and IECEx approvals available



### APPLICATIONS

- Small platforms
- Hanging scales
- Personal scales



### DESCRIPTION

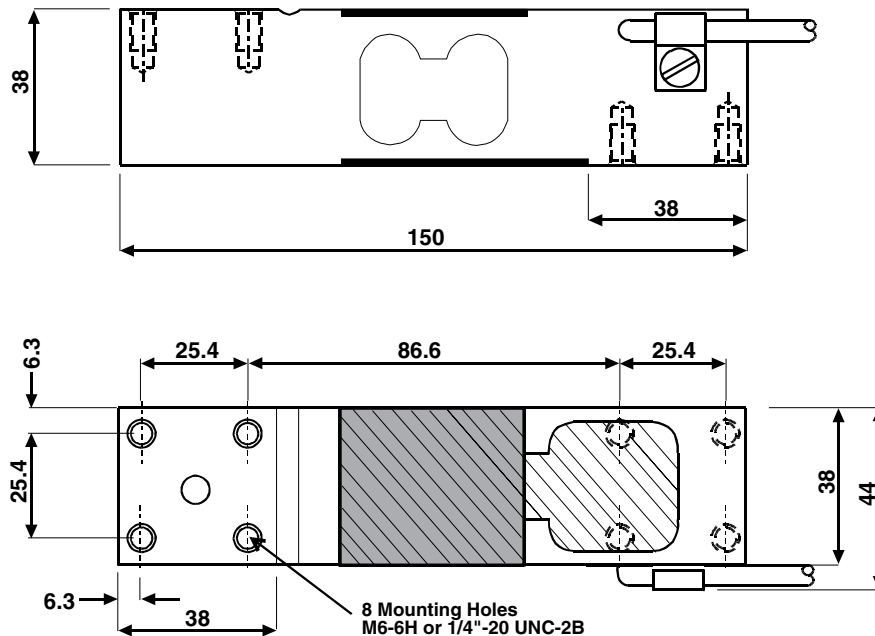
Model 1242 is a high accuracy, low profile, low cost, two-beam, single-point load cell ideally suited for industrial application where space is limited. Typical applications include platforms, hanging scales and personal weighers.

This high accuracy load cell is OIML R60 class C6 approved. For hazardous environments this load cell has ATEX approval, as well as Factory Mutual approval.

A special humidity resistant protective coating assures long-term stability over the entire compensated temperature range.

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 can be achieved by feeding this voltage into the appropriate electronics.

### OUTLINE DIMENSIONS in millimeters

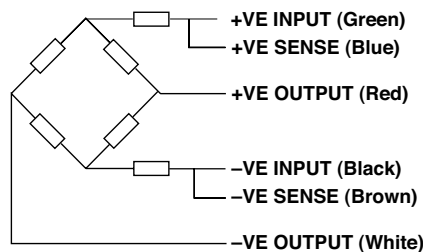


Aluminum Medium Capacity Single-Point Load Cell

| SPECIFICATIONS                    |                                     |              |        |         |                       |
|-----------------------------------|-------------------------------------|--------------|--------|---------|-----------------------|
| PARAMETER                         | VALUE                               |              |        |         | UNIT                  |
| Rated capacity—R.C. ( $E_{max}$ ) | 50, 100, 150, 200, 250              |              |        |         | kg                    |
| NTEP/OIML accuracy class          | NTEP                                | Non-Approved | C3*    | C6**    |                       |
| Maximum no. of intervals (n)      | 5000 single                         | 1000         | 3000   | 6000    |                       |
| $Y = E_{max}/V_{min}$             | 10000                               | 1400         | 6000   | 10000   | Max. 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                              | 0.0300       | 0.0170 | 0.0083  | ±% of applied load    |
| Total error                       | 0.0200                              | 0.0500       | 0.0200 | 0.0100  | ±% of rated output    |
| Temperature effect on zero        | 0.0023                              | 0.0100       | 0.0023 | 0.0014  | ±% of rated output/°C |
| Temperature effect on output      | 0.0010                              | 0.0030       | 0.0010 | 0.00058 | ±% of applied load/°C |
| Eccentric loading error           | 0.0049                              | 0.0085       | 0.0049 | 0.0024  | ±% 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                  | 351±5                               |              |        |         | Ω                     |
| Insulation resistance             | >2000                               |              |        |         | MΩ                    |
| Cable length                      | 1.5                                 |              |        |         | m                     |
| Cable type                        | 6-wire, PVC, single floating screen |              |        |         | Standard              |
| Construction                      | Plated (anodize) aluminum           |              |        |         |                       |
| Environmental protection          | IP66                                |              |        |         |                       |
| Platform size (max.)              | 400 x 400                           |              |        |         | mm                    |
| Recommended torque                | 10.0                                |              |        |         | N*m                   |

\* 50% utilization  
 \*\* 60% utilization  
 All specifications subject to change without notice.

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



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