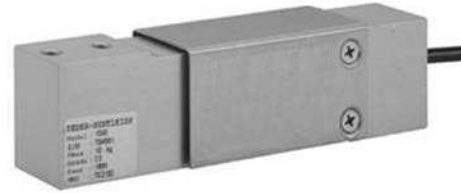


## Low Capacity Single-Point Aluminum Load Cells

### FEATURES

- Capacities 5–100 kg
- Aluminum construction
- Single-point 400 x 400 mm platform
- OIML R60 and NTEP approved
- IP65 protection
- Available with metric and UNC threads
- Optional
  - FM approval available
  - IP67 available



### APPLICATIONS

- Bench scales
- Counting scales
- Grocery scales

### DESCRIPTION

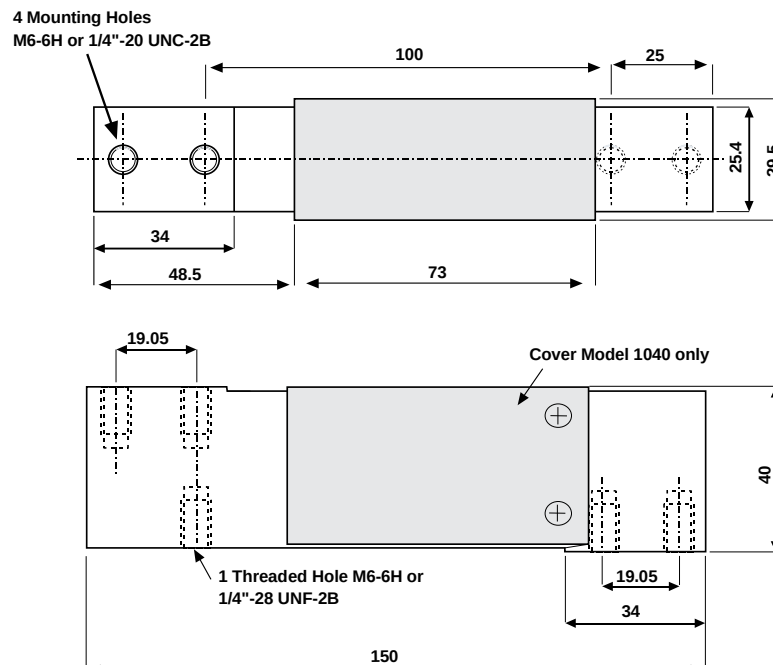
Models 1040 and 1041 are low profile single-point load cells designed for direct mounting of low cost weighing platforms.

Their small physical size, combined with high accuracy and low cost, makes these load cells ideally suited for retail, bench and counting scales.

Available in anodized aluminum these high accuracy load cells are approved to NTEP and other stringent approval standards, including OIML R60. An optional 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, is achieved by feeding this voltage into the appropriate electronics.

### OUTLINE DIMENSIONS in millimeters



## Low Capacity Single-Point Aluminum Load Cells

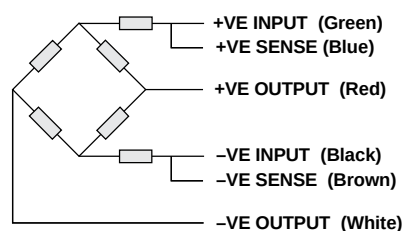
| SPECIFICATIONS                    |                                               |              |        |                         |
|-----------------------------------|-----------------------------------------------|--------------|--------|-------------------------|
| PARAMETER                         | VALUE                                         |              |        | UNIT                    |
| NTEP/OIML accuracy class          | NTEP                                          | Non-Approved | C3*    |                         |
| Maximum no. of intervals (n)      | 5000 single                                   | 1000         | 3000   |                         |
| Rated capacity—R.C. ( $E_{max}$ ) | 5, 7, 10, 15, 20, 30, 50, 75, 100             |              |        | kg                      |
| 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 | ±% of applied load      |
| Total error                       | 0.0200                                        | 0.0500       | 0.0200 | ±% of rated output      |
| Temperature effect on zero        | 0.0023                                        | 0.0100       | 0.0023 | ±% of rated output/°C   |
| $Y = E_{max}/V_{min}$             | 6000                                          | 1400         | 6000   | Maximum available 10000 |
| Temperature effect on output      | 0.0010                                        | 0.0030       | 0.0010 | ±% of applied load/°C   |
| Eccentric loading error           | 0.0049                                        | 0.0074       | 0.0049 | ±% of rated load/cm     |
| Temp. range, compensated          | -10 to +40                                    |              |        | °C                      |
| Temp. 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 VACRMS           |
| Excitation, maximum               | 15                                            |              |        | VDC or VACRMS           |
| Input impedance                   | 415±15                                        |              |        | Ω                       |
| Output impedance                  | 350±3                                         |              |        | Ω                       |
| Insulation resistance             | >2000                                         |              |        | MΩ                      |
| Cable length                      | 1040: 1.0 1041: 0.5                           |              |        | m                       |
| Cable type                        | 6 wire, PVC, single loading screen            |              |        | Standard                |
| Construction                      | Plated (anodized) aluminum 1040 aluminum—1041 |              |        |                         |
| 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                     |

\* 50% utilization. Other utilization factors available upon request.

\*\* Available also in IP67

All specifications are subject to change without notice.

**Wiring Schematic Diagram**  
(1040 Balanced bridge configuration)



**Wiring Schematic Diagram**  
(1041 Unbalanced bridge configuration)

