

## Single-Point Aluminum Load Cell

### FEATURES

- Capacities: 3–200 kg
- Only 22 mm high
- Aluminum construction
- Single-point 350 x 350 mm platform
- IP66 protection
- OIML R60 and NTEP approved
- **Optional**
  - EEx ia IIC T4 - ATEX hazardous area approval
  - FM approval
  - Symmetric configuration available



### APPLICATIONS

- Bench scales
- Counting scales
- Grocery scales

### DESCRIPTION

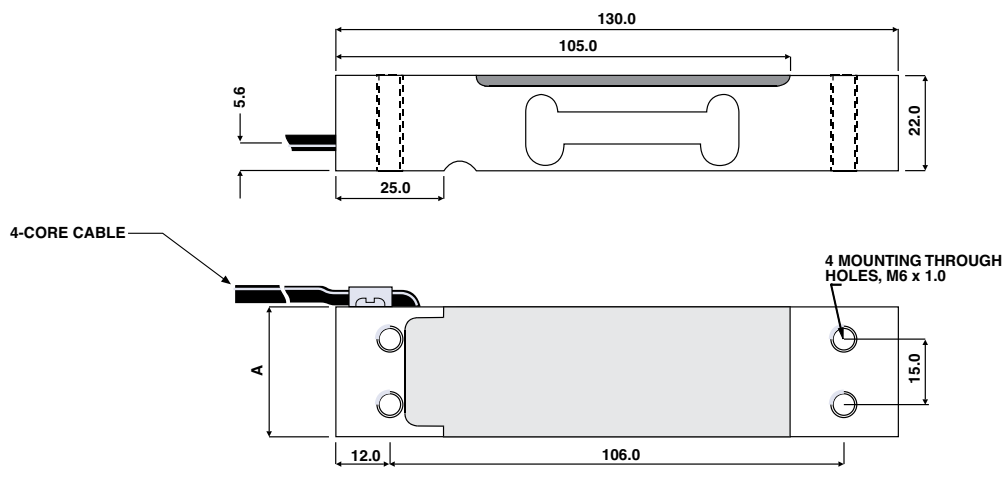
Model 1022 is a low profile single-point load cell designed for direct mounting in low cost weighing platforms.

Its small physical size, combined with high accuracy and aluminum construction, makes this low cost load cell ideally suited for retail, bench and counting scales.

Using 1022 load cells simplifies scale construction, which results in significant parts and labor savings.

Model 1022 is available in a range of capacities, from 3 to 200 kg and approved to OIML R60 (4000d) or NTEP (5000d, single). Environmental protection to IP66 is provided as standard. For hazardous environments, ATEX EEx ia IIC T4 approved versions are available.

### OUTLINE DIMENSIONS in millimeters



| CAPACITY          | A    |
|-------------------|------|
| 3, 5, 7 kg        | 25.4 |
| 10, 15, 20, 30 kg | 30.0 |
| 35–200 kg         | 40.0 |

## Single-Point Aluminum Load Cell

| SPECIFICATIONS                    |                                                   |              |        |         |                         |
|-----------------------------------|---------------------------------------------------|--------------|--------|---------|-------------------------|
| PARAMETER                         | VALUE                                             |              |        |         | UNIT                    |
| Rated capacity—R.C. ( $E_{max}$ ) | 3, 5, 7, 10, 15, 20, 30, 35, 50, 100, 150, 200*** |              |        |         | kg                      |
| NTEP/OIML accuracy class          | NTEP                                              | Non-Approved | C3*    | C4      |                         |
| Maximum no. of intervals (n)      | 5000 single**                                     | 1000         | 3000   | 4000    |                         |
| $Y = E_{max}/V_{min}$             | 10000                                             | 1400         | 6000   | 10000   | Maximum available 12000 |
| 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 | 0.0125  | ±% of applied load      |
| Total error (per OIML R60)        | 0.0200                                            | 0.0500       | 0.0200 | 0.0150  | ±% 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 | 0.00075 | ±% of rated output/°C   |
| Eccentric loading error           | 0.0057                                            | 0.0085       | 0.0057 | 0.0042  | ±% 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                      | 0.5                                               |              |        |         | m                       |
| Cable type                        | 4 wire, PVC, single floating screen               |              |        |         | Standard                |
| Construction                      | Aluminum                                          |              |        |         |                         |
| Environmental protection          | IP66                                              |              |        |         |                         |
| Platform size (max)               | 350 x 350                                         |              |        |         | mm                      |
| Recommended torque                | Up to 30 kg: 7.0<br>35 kg and up: 10.0            |              |        |         | N*m                     |

\* 50% utilization

\*\* Also available at 50% utilization

\*\*\* 150–200 kg are not approved by NTEP, 200 kg is not approved by OIML

All specifications subject to change without notice.

### WIRING SCHEMATIC DIAGRAM (Unbalanced bridge configuration)

