

T301

digital super-precision load cell



a giant step in load cell technology

Avery Weigh-Tronix

T301

Since the load cell was invented, Avery Weigh-Tronix has led the world in its design and manufacture. Today, tens of thousands of its tried and trusted analogue cells are at the heart of weighing equipment and systems throughout the world.

Now Avery Weigh-Tronix has been instrumental in another major advance in weighing technology: the **T301** digital load cell.

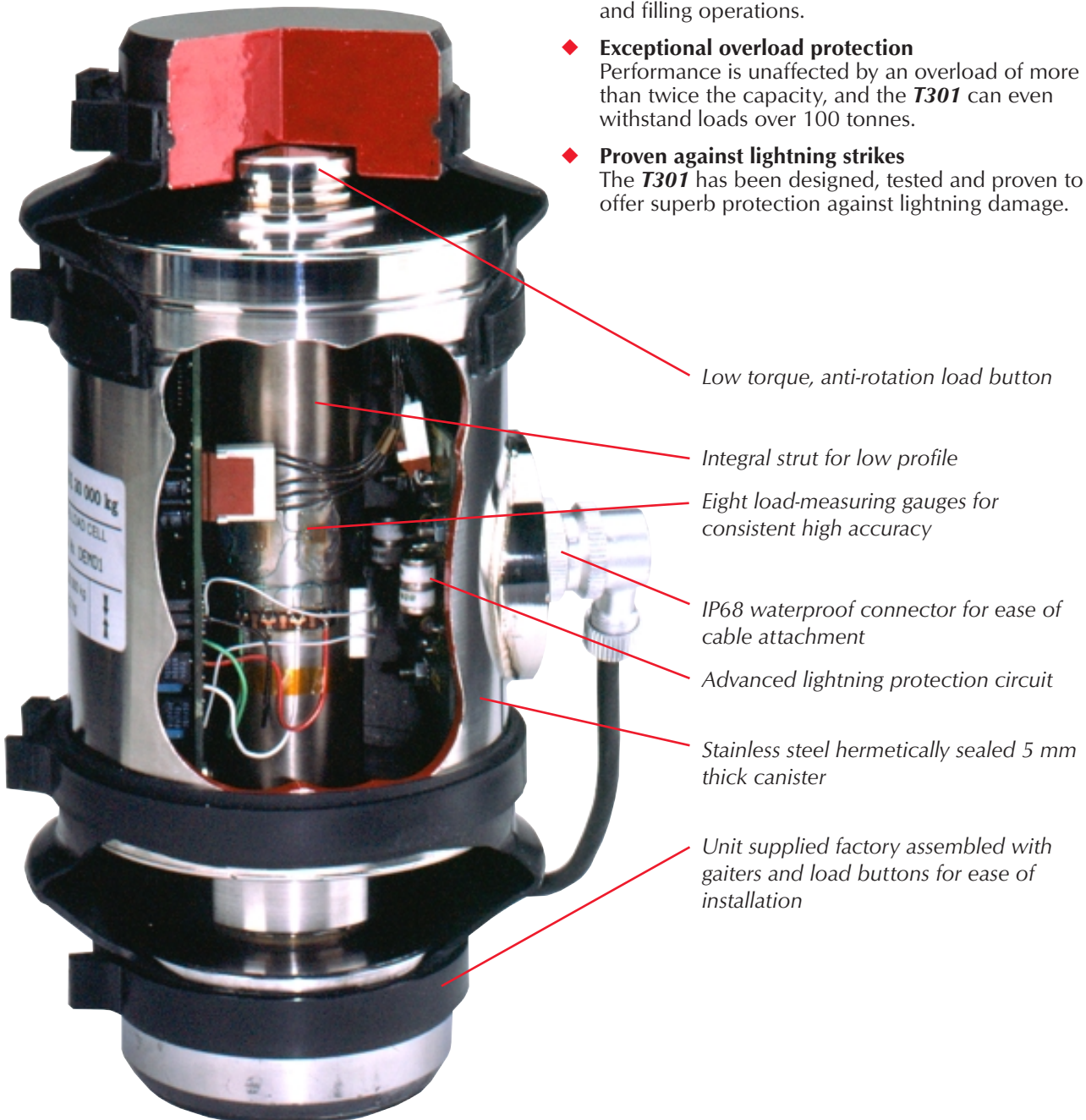
Outstanding performance in all conditions

With a state of the art 20 bit processor and eight million internal counts, the **T301** offers the ultimate in weighing accuracy and reliability.

Its innovative design eliminates many of the problems that can occur with some conventional load cells.

Features include:

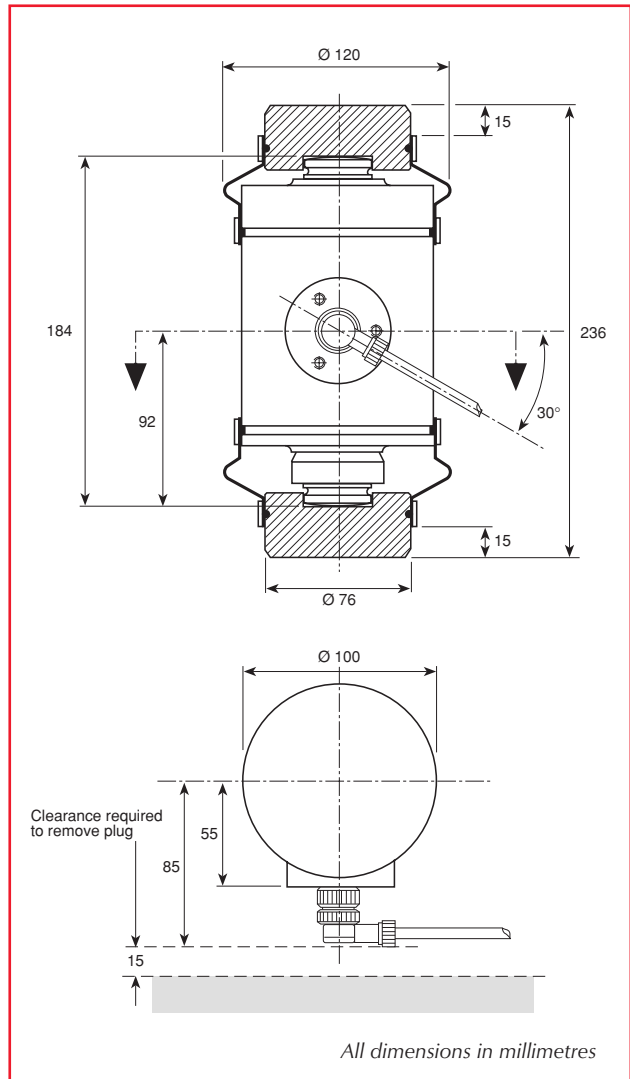
- ◆ **Excellent filtering**
Excellent filtering ensures an accurate result under all site conditions including high winds, vibration and filling operations.
- ◆ **Exceptional overload protection**
Performance is unaffected by an overload of more than twice the capacity, and the **T301** can even withstand loads over 100 tonnes.
- ◆ **Proven against lightning strikes**
The **T301** has been designed, tested and proven to offer superb protection against lightning damage.



the heavy duty load cell with exceptional accuracy

- ◆ **Vastly reduced rotation**
A unique low torque, double camber load button greatly reduces rotation damage to both cable and canister. While rotation may pose a problem to some cells, the accuracy of the **T301** never wavers.
- ◆ **Unaffected by off-centre loads**
Inside the cell are eight load-measuring gauges rather than the conventional four - offering consistently high accuracy even for off-centre loads.
- ◆ **Cost-effective low profile design**
Shorter integral strut gives the cell a super-low profile design that allows lower weighbridge decks, shorter ramps for surface mounted platforms or reduced civil costs for pit installation.
- ◆ **Quick to install**
The **T301** is easier and quicker to fit than analogue load cells - so your weighbridge can be up and running in the fastest possible time.
- ◆ **Exceptional strength**
Unlike some cells, the **T301** has an exceptionally strong canister design to withstand the wear, tear and accidental damage within harsh weighing environments.
- ◆ **True hermetic sealing**
The load cell is sealed against moisture ingress to IP68.
- ◆ **Continuous automatic diagnostics**
- ◆ **Tested beyond the limit**
Despite its innovative weighing technology, the **T301** has been tested beyond the limit - and proven. Rigorous laboratory tests to international standards prove its performance under extremes of temperature, lightning, shock and vibration. And extensive experience in Asia, Africa and Europe show it measures up under the toughest working conditions.
- ◆ **International approval**
The **T301** also has the seal of approval for trade use from authorities across the world.

Below: The T301 links to a range of Avery Weigh-Tronix multi-function intelligent digital indicators which offer fully configurable on-board software options as standard.



digital super-precision load cell

Specification

Calibrated Capacity (OIML)	30 tonnes
Maximum Range of Indication	50 tonnes
Accuracy to OIML R60	6000 Divisions
Electrical Supply (Minimum)	± 7.5v, DC
Electrical Supply (Maximum)	± 12v, DC
Communication	Balanced Pair RS485, 19200 Baud
Output Update Rate	10 Readings/sec
Internal Resolution	8 x 10 ⁶ Counts
Output Resolution	1.5 x 10 ⁶ Counts
Non-Linearity and Hysteresis (Combined Error)	± 150ppm (Maximum)
Repeatability	80ppm
30 min Creep (OIML R60)	± 120ppm (Maximum)
30 min Zero Return (OIML R60)	± 80ppm (Maximum)
Temperature Effect on Rated Output (-10°C to + 40°C)	± 6ppm/° C (Maximum)
Temperature Effect on Zero Balance (-10°C to + 40°C)	± 15ppm/° C of Rated Span (Maximum)
Overload Rating (without affecting Performance)	225% (67.5 tonnes) Rated Capacity
Overload Rating (Ultimate)	350% (105 tonnes) Rated Capacity



CALIBRATION
No. 0054

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