# Model 220

Tedea-Huntleigh

VISHAY PRECISION GROUP

# High Accuracy Compression Load Cell

OIML NTEP ATEX FM

## FEATURES

- Capacities 5 - 50 Ton
- Stainless steel construction
- OIML R60 and NTEP approved
- IP68 protection

## OPTIONAL FEATURES

- EEx ia IIC T6 hazardous area approval
- FM approval available

## DESCRIPTION

Model 220 is a low profile bending ring load cell designed for high capacity weighing applications, including weighbridges, tanks, silos and high capacity platform scales as well as force measurement.

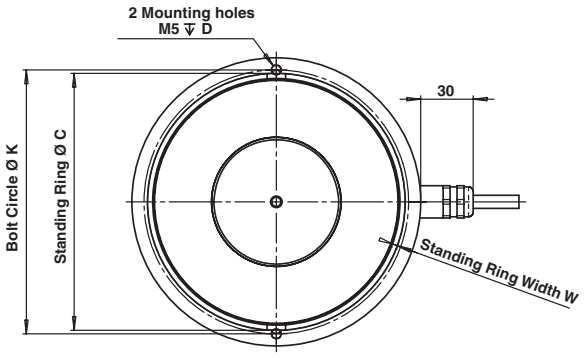
It's small physical size, combined with high accuracy and low cost, makes this load cell ideally suited for modern low profile designs in both approved applications and process weighing.

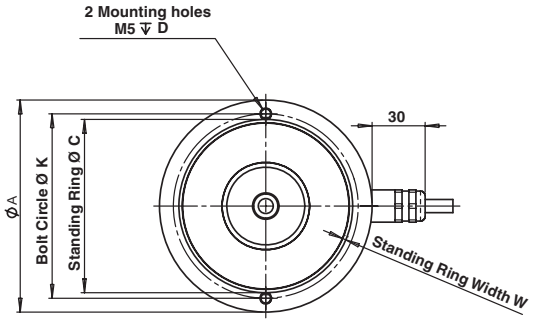
This high accuracy load cell has factory Mutual approval and is OIML R60 approved to 6000 divisions. For hazardous environments, this load cell has an EEx ia IIC T6 approved option. When combined with Tedea-Huntleigh mounting accessories, this load cell will provide a simple, accurate and reliable weighing system.

## APPLICATIONS

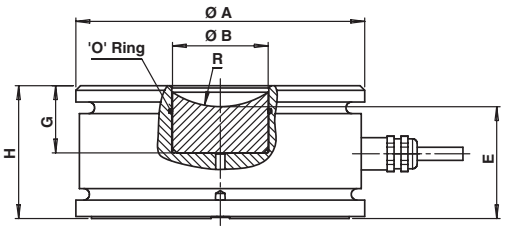
- Truck scales
- Hopper for process weighing
- Tank & silo weighing
- Harsh environment

## OUTLINE DIMENSIONS in mm

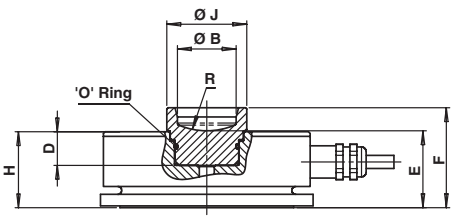



20t, 30t, 50t




5t, 10t




| | A | B | C | D | E | F | G | H | J | K | W | R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5t | 80.0 | 25.4 | 71.0 | 7.0 | 33.4 | 43.4 | 20.0 | 30.0 | 34.6 | 70.0 | 1.0 | 31.0 |
| 10t | 92.0 | 25.4 | 75.2 | 6.0 | 33.4 | 43.4 | 14.6 | 33.0 | 34.6 | 80.0 | 1.5 | 31.0 |
| 20t &30t | 110.0 | 28.4 | 101.0 | 7.5 | 39.1 | | 26.3 | 50.1 | | 102.0 | 1.5 | 31.0 |
| 50t | 125.0 | 41.4 | 111.5 | 8.0 | 48.5 | | 29.2 | 57.7 | | 114.5 | 2.3 | 37.3 |



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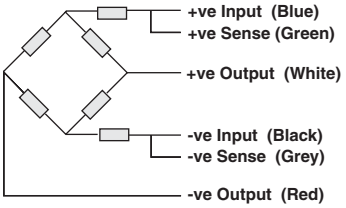
## SPECIFICATIONS

| PARAMETER | VALUE | | | | UNIT |
|---|---|---|---|---|---|
| **Rated capacity-R.C. ($E_{max}$)** | 5000, 10000, 20000, 30000, 50000*** | | | | kg |
| **NTEP/OIML Accuracy class** | **NTEP** | **C1** | **C3*** | **C4**** | |
| **Maximum no. of intervals (n)** | 10000 IIIL multiple | 1000 | 3000 | 4000 | |
| **$Y = E_{max}/V_{min}$** | 11000 | 5000 | 14000 | 14000 | |
| **Rated output-R.O.** | 2.0 | | | | mV/V |
| **Rated output tolerance** | 0.1 | | | | ±% of rated output |
| **Zero balance** | 2 | | | | ±% of rated output |
| **Zero Return, 30 min.** | 0.0330 | 0.0500 | 0.0170 | 0.0125 | ±% of applied load |
| **Total Error (per OIMP R60)** | 0.0200 | 0.0500 | 0.0200 | 0.0150 | ±% of rated output |
| **Temperature effect on zero** | 0.0023 | 0.0028 | 0.0010 | 0.0010 | ±% of rated output/°C |
| **Temperature effect on output** | 0.001 | 0.0020 | 0.0010 | 0.0008 | ±% of applied load/°C |
| **Temperature range, compensated** | -10 to +40 | | | | °C |
| **Temperature range, safe** | -30 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** | 20 | | | | Vdc or Vac rms |
| **Input impedance** | 1065±60 | | | | Ohms |
| **Output impedance** | 1025±20 | | | | Ohms |
| **Insulation resistance** | >2000 | | | | Mega-Ohms |
| **Cable length** | 5m (5T), 10m (10 & 20T), 20m (30 & 50T) | | | | m |
| **Cable type** | 6 wire, braided, Polyurethane, double floating screen | | | | Standard |
| **Construction** | Stainless steel | | | | |
| **Environmental protection** | IP68 | | | | |

* 20% utilization
** 40% utilization
*** Capacities 5-20 ton available in C6 45% utilization

**Wiring Schematic Diagram**



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