

Tension Compression Load Cell

FEATURES

- Capacities 50-500 kg
- Anodized aluminum construction
- OIML R60 approved
- IP67 protection
- For use in tension or compression
- 6 wire (sense) circuit

APPLICATIONS

- Hopper (Tank weighing)
- Hybrid scales
- Belt weighing
- Lever arm conversions
- · Material testing machines
- Vibrations filling equipment
- Dynamometers



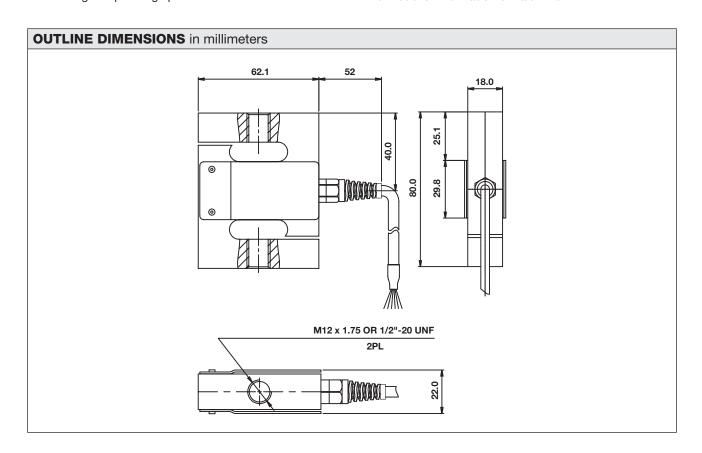
The Model 614 is a tension-compression load cell. Humidity resistant coating and shielded cables enable this load cell to be used in demanding environments while maintaining its operating specifications.



The additional sense wires compensate for changes in lead resistance due to temperature change and/or cable extension.

Ideally suited for lever conversions, hanging scales, force measurement and a wide range of other industrial applications.

The Model 614 is made from aluminum.



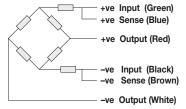


Tension Compression Load Cell

| SPECIFICATIONS | | | | |
|---|---|--------|----------------|-----------------------|
| PARAMETER | VALUE | | | UNIT |
| Rated capacity—R.C. (E _{max}) | 50, 100, 150, 200, 300, 500 | | | kg |
| Accuracy class | Non-Approved | C3* | | |
| Maximum no. of intervals (n) | 1000 | 3000 | | |
| Y = E _{max} /V _{min} | 2500 | 8000 | 12000** | |
| Rated output—R.O. | 2.0 | | | mV/V |
| Rated output tolerance | 0.2 | | | ±% mV/V |
| Zero balance | 0.02 | | | ±% mV/V |
| Zero return, 30 min. | 0.05 | 0.017 | | ±% of applied load |
| Total error (per OIML R60) | 0.05 | 0.020 | | ±% of rated output |
| Temperature effect on zero | 0.01 | 0.0023 | | ±% of rated output/°C |
| Temperature effect on output | 0.003 | 0.0012 | | ±% of 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 | 15 | | | VDC or VAC RMS |
| Input impedance | 415±15 | | | Ω |
| Output impedance | 350±3 | | | Ω |
| Insulation resistance | >2000 | | | ΜΩ |
| Cable length | 3.0 | | | m |
| Cable type | 6-wire, braided PVC, dual floating screen | | | Standard |
| Construction | Plated (anodized) aluminum | | | |
| Environmental protection | IP67 | | | |

^{* 50%} utilization

Wiring Schematic Diagram (Balanced bridge configuration)



 $^{^{**}}$ Y=8000 for capacities 50–200 kg. Y=12000 for capacities 300–500 kg All specifications are subject to change without notice.



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