



PENKO Engineering BV

The Leading Experts In Weighing & Dosing
50kg-500kg

614

FEATURES

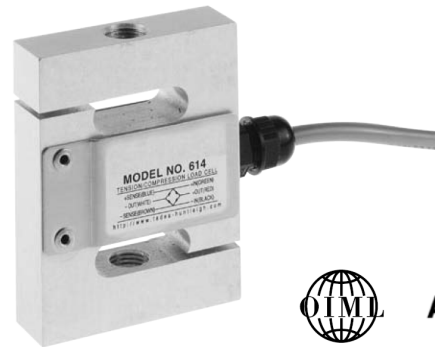
- Capacities 50–500 kg
- Anodized aluminum construction
- OIML R60 approved
- IP67 protection
- For use in tension or compression
- 6 wire (sense) circuit
- **Optional**
 - EEx ia IIC T4 hazardous area approval

APPLICATIONS

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

DESCRIPTION

Model 614 is a tension-compression load cell. Humidity resistant coating and shielded cables enable this load cell

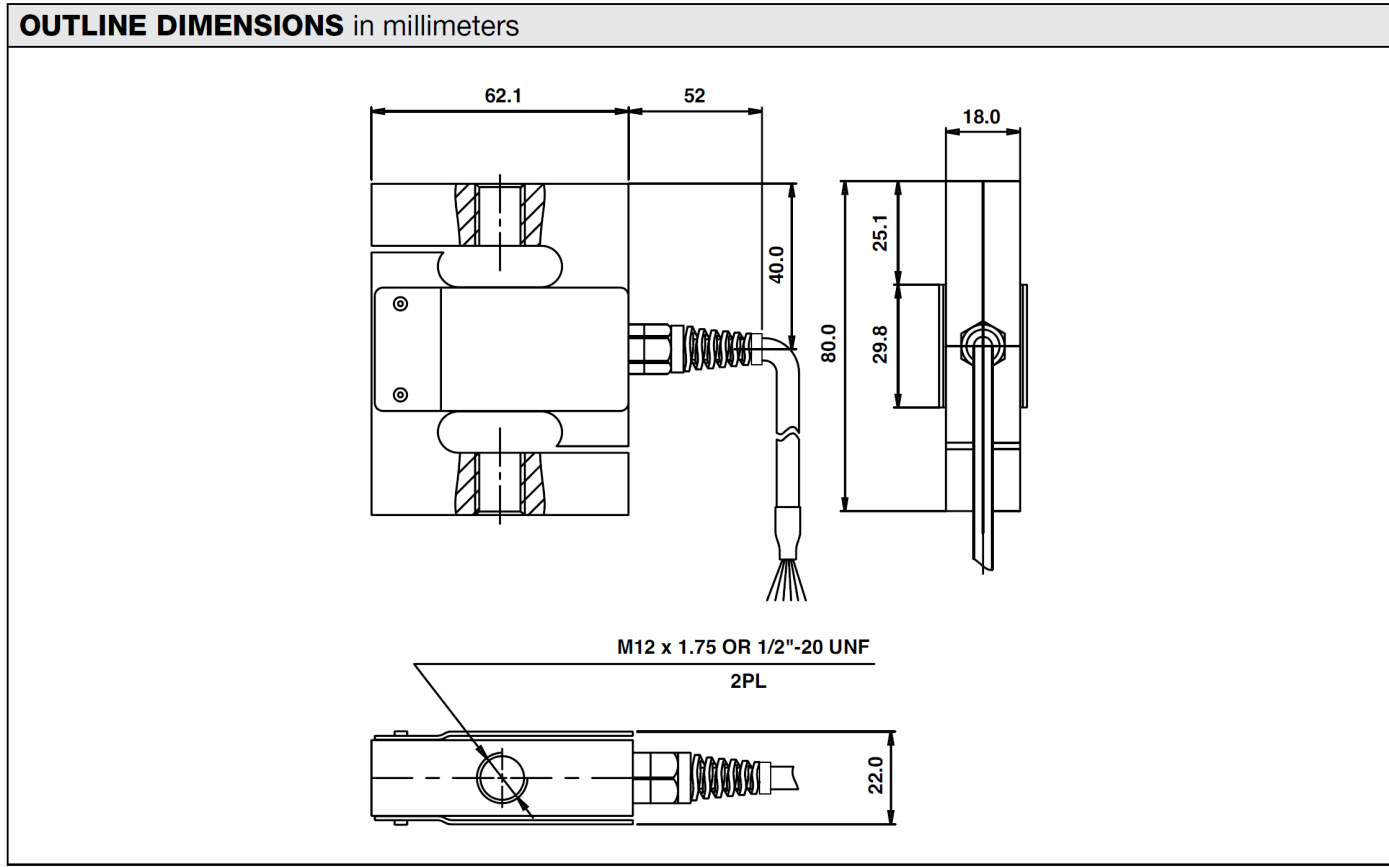


to be used in harsh environments while maintaining its operating specifications.

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.

Model 614 is made from aluminum.



| 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 | | MΩ |
| Cable length | 3.0 | | m |
| Cable type | 6-wire, braided PVC, dual floating screen | | Standard |
| Construction | Plated (anodized) aluminum | | |
| Environmental protection | IP67 | | |

* 50% utilization

** Y=8000 for capacities 50–200 kg. Y=12000 for capacities 300–500 kg

All specifications subject to change without notice.

Wiring Schematic Diagram (Balanced bridge configuration)

