

Loadcell Model 610

Product Specification



For use in: Waste Compactors, Cement/Lime Spreader Trucks, Fertiliser Spreaders, Tank/Silo Scales and Special Applications

PROUDLY AUSTRALIAN



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Assembly Numbers

29/BBB0610VB Loadcell only

29/BBB0610VU Loadcell, unitised with bearing plate (shown)

Structural Configuration

Double ended, rigid-mount bending beam

Compression loading

Bare Weight

4.6kg

Static Capacity

7,500kg

Dynamic Capacity

4,500kg

Safe Overload

150% of Static Capacity

Ultimate Overload

Minimum of 300% of Static Capacity

Loadcell Body Material

4340 alloy steel, heat treated to 180,000psi yield strength

Bearing Plate

21/63-00046, single piece weld-down, ASTM A514 Steel

Top Mounting Bolts(4)

$\frac{3}{4}$ "-16TPI x (Length dependent on mountings) Grade 8

Recommended torque: 470Nm(350ft/lb)

Tie Down Bolts(4)

90/882012 $\frac{3}{4}$ "-16TPI x 2" Grade 8

Recommended Torque: 470Nm(350ft/lb)

Connector

4 pin Military style, injection moulded

Cable

Custom 4 core with polyurethane jacket

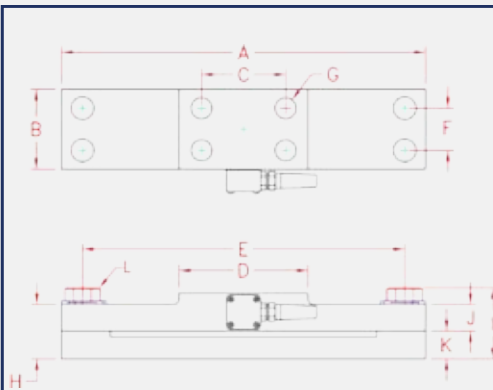
Electrical

Excitation: 15 volts (AC or DC)
5-10 volts recommended

Output: 0.5.mv/v @ 5,670kg

Impedence: 350 Ω +/- 1.0 Ω

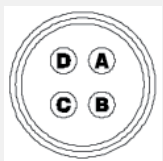
Isolation: 500M Ω at 50 volts



- A: 330mm
- B: 72mm
- C: 76mm
- D: 117mm
- E: 292mm
- F: 38mm
- G: 3/4" -16TPI x 20mm Deep
- H: 49mm
- I: 64mm
- J: 24mm
- K: 25mm
- L: 3/4"-TPI x 2" Grade 8

Connections

- A: Excitation +
- B: Signal +
- C: Signal -
- D: Excitation -



Mounting Requirements

Top Plate must be dead stiff and machined flat after welding.
 Bottom Mounting must be dead stiff.
 Bearing plate must be welded using 10mm fillet.
 Across ends and 100mm down each side towards centre. Also in centre both sides for 50mm.

Capacity

Maximum Dynamic Load	4,500kg (10,000 lb)
Maximum Static Load	7,500kg (15,000 lb)
Top bolt thread engagement into loadcell	Min: 16mm Max: 22 mm

Bolt Tensions

3/4" Top mounting bolts = 470Nm(350ft/lb)
 1-1/4" End mounting bolts = 470Nm(350ft/lb)

Coat all bolts with anti-seize

Precautions

Do not strike an Arc on the loadcell body with a welder. It is OK to use the loadcell to position the Mounting Bushes for tack welding only. Remove the loadcell to complete the welding procedure.
 Do not damage the cover plate as this protects delicate strain gauges.
 Take care to protect the loadcell connector/cable as this can not be replaced in the field.
 Fit protection for the loadcell connector from stones and foreign objects which may damage it.
 Do not damage or paint over the Part/Serial Number identification tag.

IMPORTANT

Loadcell must be mounted in accordance with Elphinstone instructions. Failure to do so may void warranty. Specifications subject to change without notice. These specifications supercede all previous specifications as of October 2006.

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