



Strainstall

THE WORLD of **load measurement and stress analysis**

Product Type 1590 Compression Load Cells



The adaptability of the Type 1590 Load Cell, coupled with the ease with which it can be applied, have made it one of the most popular and widely used sensors on the market.

- **Simple to Use**
- **Easily adaptable to a variety of applications**
- **Ideal for industrial vessel weighing**
- **Suitable for use in Hazardous Areas**

The 1590 is compatible with an extensive range of industrial applications and is available in a comprehensive set of load ratings within a standard outline dimension. It is also available in an all stainless steel construction.

This compression Load Cell can be used either individually or in sets, for weighing vessels, hoppers and silos etc. and has a dome top to minimise the effects of offset loads.

As with all our Load Cells, the 1590 can be used with a selection of junction boxes and instrumentation, available from Strainstall UK Limited. It is also suitable for use with Strainstall's hazardous area systems, full details available on request.

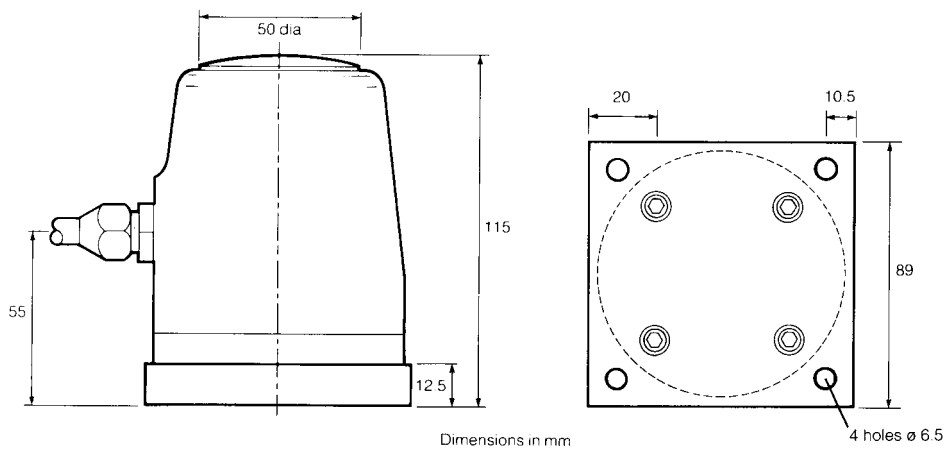
The series 1590 Load Cell is sealed and has a tough finish, providing reliability and durability and is supplied with a square base plate for mounting purposes. It is supplied with a full certificate of calibration.



Typical Specification

Rated Load	5, 8, 12, 20, 30, 40 tonne
Proof Load	150% of rated load
Ultimate Load	250% of rated load
Maximum Side Load	10% of rated load
Rated Output	1.5mV/V nominal. Cells supplied in sets will have outputs matched to $\pm 0.25\%$
Recommended Excitation Voltage	10V
Maximum Excitation Voltage	15V
Zero Balance	$\pm 2\%$ of rated load
Bridge Resistance	700 ohm nominal
Insulation Resistance	>2G.Ohm @ 100V
Accuracy	$\pm 0.1\%$ of output at rated load, maximum $\pm 0.18\%$. As calibrated in a BS EN ISO 7500-1 Grade 1 test machine traceable to National Standards.
Non-Repeatability	0.05% of rated load
Zero Temperature Coefficient	$\pm 0.01\%$ of rated load per $^{\circ}\text{C}$.
Span Temperature Co-efficient	$\pm 0.035\%$ of reading per $^{\circ}\text{C}$.
Maximum Operating Temperature Range	-20 to $+80^{\circ}\text{C}$.
Compensated Temperature Range	0 to $+60^{\circ}\text{C}$.
Electrical Connection	Standard 3 metres 4 core screened cable. Red +ve Supply. Green +ve Signal. Blue -ve Supply. Yellow -ve Signal.
Weight	From 2 - 3 Kgs depending on rating.
Environmental Sealing	Equivalent to IP67.

Note: Where particular requirements are critical or load cells of a higher specification are required, we would be delighted to assist.



Due to continuous development, Strainstall UK reserve the right to change specification without notice.

STRAINSTALL's team of experienced engineers operates from offices in Cowes, Bath and Aberdeen (UK) and Tønsberg (Norway). For further information, please contact:

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