



Product Type 1849 Tensile/Compressive Cells



The Type 1849 Load Cells eliminates the need for two cells by measuring both tensile and compressive forces.

- **Can be used in both tensile and compressive modes**
- **Easy to install**
- **Sealed against dust and water**
- **Suitable for use in Hazardous Areas**

This robust and compact sensor was originally designed to be used in a hydraulic ram test rig. Other common applications include container weighing and wire tension monitoring.

The 1849 is easily installed either by utilising the female threads at each end or by using a pair of self-aligning eye ends available as an option if required. When used in compression, care must be taken to apply the load axially.

The 1849 is environmentally sealed preventing the ingress of dust and water and is classed as simple apparatus allowing it to be used in hazardous areas with the company's intrinsically safe instrumentation. Strainstall can also supply instrumentation to provide anything from simple trip points to more sophisticated weighing and batching control systems, details of which are available on request.

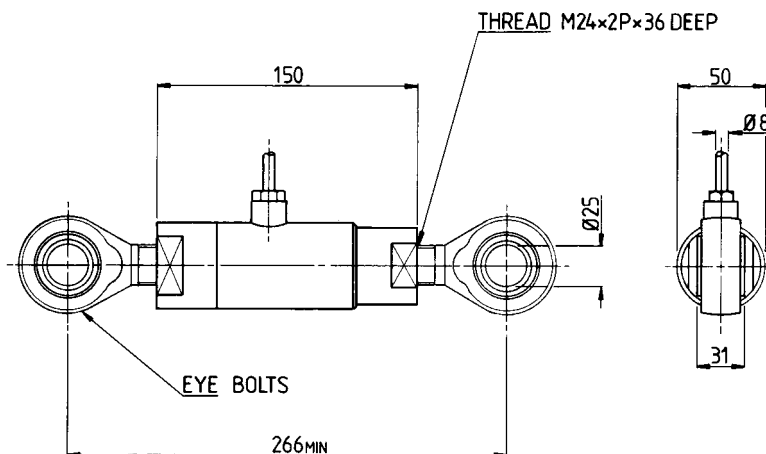
The cells are supplied with a full certificate of calibration.



Typical Specification

Rated Load	600, 1000, 1500, 2000, 2500, 4000, 6000, 10000 Kg
Proof Load	150% of rated load
Ultimate Load	300% 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. Nominal diameter 8mm. Red +ve Supply. Green +ve Signal. Blue -ve Supply. Yellow -ve Signal.
Weight	1.4 Kgs without eye ends
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.



Dimensions in mm.

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

STRAININSTALL'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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