



Strainstall

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

[www.strainstall.com](http://www.strainstall.com)

**Product**

**Type 5911 Riser Tension Load Cell**



Designed and manufactured to the highest standards by our experienced team, the Strainstall 5911 Riser Tension load cell provides reliable measurement of riser load and bending moment. It is constructed from high tensile stainless steel and rigorously tested to ensure it meets the most demanding of offshore conditions over many years.

- **High reliability, dual circuit measurement**
- **Sealed to IP68**
- **Designed for extended use with zero maintenance**
- **150% safe overload without zero shift**

Meticulous in its design, the strain gauges at the heart of the 5911 load cell are enclosed in a hermetically sealed chamber to ensure a long and stable life. The load cell is filled with inert gas, sealed with a glass to metal penetrator onto which the signal cable cores are terminated.

Connection to the data-handling system on the platform is via a low smoke HOFR cable secured to the load cell by a marine offshore-rated gland fitting

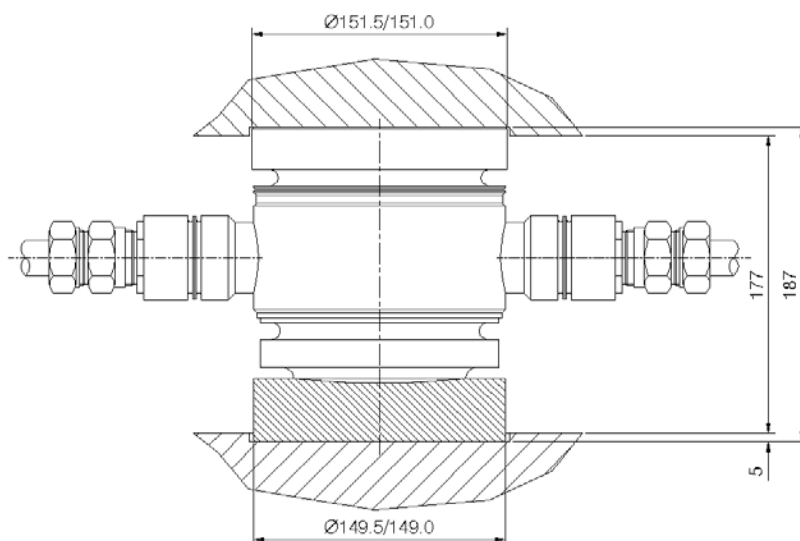
The 5911 incorporates fully independent dual strain gauge bridges and output cables for connection to the data handling system on the platform.

Once manufactured, each load cell undergoes extreme testing to ensure its quality before being calibrated to UK National standards. Witnessing, approval and certification by Classification Societies, such as ABS, DNV and LRS can be arranged.

## Typical Specification

Rated Load	up to 600 kips, higher to customer specification
Proof Load	150% of rated load
Ultimate Load	200% of rated load minimum
Rated Output	1.5mV/V nominal.
Recommended Excitation Voltage	10V
Maximum Excitation Voltage	15V
Zero Balance	± 2% of rated load
Bridge Configuration	2 independent strain gauge bridges
Bridge Resistance	700 ohm each full bridge nominal
Insulation Resistance	>0.5GΩ @ 100V
Non-Repeatability	0.05% of rated load
Zero Temperature Coefficient	±0.04% of rated load per °C.
Span Temperature Co-efficient	±0.02% of reading per °C.
Maximum Operating Temperature Range	0 to +80°C.
Storage Temperature Range	-30°C to +80°C.
Compensated Temperature Range	0 to +60°C.
Glands	Marine Offshore Rated
Cable	BS6883 IEC 332 LSOH Armoured Sheath – Low Smoke HOFR Type-B (SW 2) Zero Halogen
Material	Stainless Steel 17/4 PH
Environmental Sealing	Equivalent to IP68.

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



Typical Example of layout - Dimensions in mm

Due to continuous development, Straininstall UK reserve the right to change the 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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