



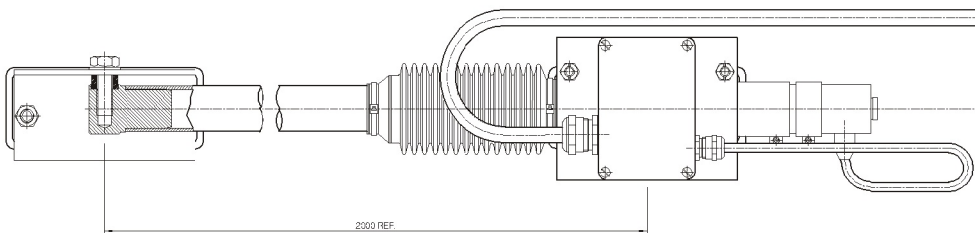
The long baseline strain gauge (LBSG) is used primarily on the deck of ships to measure the hull girder stresses. When coupled with a monitoring system, this enables the derivation of still water and dynamic bending moments and their respective time histories, relative to the gauge positions.

- **Linear Variable Differential Transformer (LVDT)**
- **Thermally matched to normal hull materials**
- **Simple and robust construction**
- **2.0m Operating Rod**
- **Suitable for use in Zone 1 Hazardous Area**
- **Protective cover - External Monitoring (GRP/Stainless)**  
**Internal Monitoring**

The long baseline strain gauge has been designed specifically for use on the open decks of ocean going ships including tankers, bulk carriers and FPSOs. Their low profile also enables them to be fitted below deck, such as on LNG carriers and containers ships. The long length of the sensor overcomes the effects of local stress conditions and the materials used enable the sensor to be decoupled from thermal effects. The on-deck suitability is provided by simple design and rugged construction, and the sensor itself has been developed from a sub-sea device, giving excellent service reliability.

## Typical Specification

Type	Strain transducer
Length	2000 mm
Displacement Range	$\pm 4$ mm
Linear Strain Range	$\pm 2000$ microstrain
Linearity	$\pm 5$ microstrain
Zero Adjustment	Mechanical
Operating Temperature	-35 to +70°C
Cable Entry	Glanded
Protection	IP67
Frequency Response	0 to 10 Hz
Resolution	Infinite
Temperature Error of Span	$\pm 5$ microstrain
Temperature Error of Zero	$\pm 5$ microstrain
Estimated Total Error Band	16 microstrain



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