

- Capacities 0-1kN to 0-100kN
- Fully submersible to an external pressure of up to 7MPa (70bar)
- Pressure Compensated Design
- Robust Construction
- Simple Installation
- High Performance
- High Sideload Tolerance

## STALC 9 Load Cell



### What is it?

The STALC 9 submersible load cell has been designed for measuring compressive loads from 0-1kN to 0-100kN and can be fitted into new or existing triaxial chambers.

The design features an internal pressure compensation system that eliminates zero offset changes when the load cell is subjected to external pressure changes. Being insensitive to cell confining pressure, the load cell can be used inside the triaxial chamber - measuring the load from within the chamber also eliminates the effects of piston friction.

### Technical Specification

- **Rated Capacities:** 0.5, 1, 2, 3, 4, 5, 8, 10, 12, 16, 20, 25, 32, 40, 50, 64, 100 kN
- **Submersible Pressure:** 7MPa
- **Rated Output:** 2.0 nominal mV/V
- **Non-linearity:** <math> < 0.05 \pm \% </math> of Full Scale
- **Hysteresis:** <math> < 0.1 \pm \% </math> of Full Scale
- **Temperature Range** Operating: -20 to + 80  
Compensated: 0 to 50
- **Temperature Effect** On Output: <math> < 0.01 </math>  
On Zero: <math> < 0.02 </math>
- **Safe Overload:** 150% of Rated Capacity
- **Ultimate Overload:** 300% of Rated Capacity
- **Excitation** Recommended: 10 Volts AC or DC  
Maximum: 15 Volts AC or DC
- **Input Impedance:** 750 nominal Ohms
- **Output Impedance:** 700 nominal Ohms
- **Insulation Impedance:** >2000 (bridge to ground) & >1000 (Shield to ground) Megaohms
- **Deflection at Rated Capacity:** <math> < 0.05 </math> mm
- **Weight:** 0.9kg
- **Construction:** Stainless Steel
- **Environmental Protection:** Fully submersible to 7000kPa
- **Axial Force Accuracy:** <math> < 0.1\% </math> FSO

Due to continued development, specifications may change without notice.