

## LOADCELL



Systel Load Cell Model-SIS 1800 Series is designed to measure uni-directional load in anchors and structural elements associated with many types of structure.

- Concrete Dams
- Cut Rock Slopes
- Deep Excavations
- Retaining Walls
- Bridges
- Cavern Linings & Tunnels

Suitable for portable readout equipment or automatic data acquisition.

Vibrating wire Load cell sensors High stability and sensitivity

Readings can be datalogger

Rugged waterproof construction

Accurately measures eccentric loading

Versatile design for use with tiebacks, rock bolts, struts or arch supports

Vibrating Wire Load Cell consists of a cylinder of high-strength steel with 3, or 6 vibrating wire strain gages located around the circumference of the cell. Loads applied to the cell are measured by the vibrating wire strain gages. The effects of uneven and eccentric loading are minimized by averaging the output of all 3, or 6 individual readings.

The Vibrating Wire Load cell consists of a high-strength, heat-treated steel cylinder, It consist of a set of vibrating wire gauges mounted parallel to each other equally spaced in a ring in an alloy steel cylindrical housing with three to six vibrating wire strain gauges located around its circumference .Loads applied to the cell are measured by the vibrating wire strain gauges and the reading are averaged to minimize the effects of uneven and eccentric loading. All model load cells are fitted with inbuilt thermistors to enable load reads to be corrected for temperature variation. The average sensitivity of these cells is 0.5% F.S.





The vibrating wire type load cell has proven long-term stability, and the housing and cable are permanently sealed for field conditions. The load cell is supplied with a standard connector mounted on the cable end a protection plug is fitted to the end of the cable to protect against dirt, moisture and damage .This load cell multiplexer unit enables rapid connection of all gauges to the readout box. Alternatively a multiplexer module can be used to automatically sum the outputs of the strain gauges. The total load can then be displayed by the readout unit in engineering units. Each load cell is supplied with a calibration certificate.

Working Load (kN)

500/1000/1500/2000/3000/3500/4000

Overall Dia (mm)

110/130/160/190/210/280/292

Centre Hole Dia (mm)

32/50/80/100/125/205/210

Height (mm)

90/120/120/130/140/140/150

SPECIFICATION

Rated Capacities 100 to 10,000 kN

Over Range 150% F.S.

Resolution 0.25% F.S.

Accuracy ±0.5% F.S.

Temperature Range –20°C to +60°C

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