



VIBRATING WIRE ANCHOR BOLT LOAD CELL

FEATURES

- * Accurate & reliable.
- * Long term stability.
- * Easy installation.
- * Rugged construction.
- * Hermetically sealed.
- * Negligible positioning effect.
- * Longer cable lengths.
- * Intrinsically safe certified by CMRI/DGMS Dhanbad.

APPLICATION

Hollow load cells are very reliable for tension load measurement in:

- * Rock bolts/ Anchor bolt in tunnel roof/ underground mine and wall.
- * Load testing of piles, drilled shafts.
- * Load in prestressing and other cables
- * General compression load applications.
- * In supports of underground excavation for example under vertical steel & wood posts.

DESCRIPTION

Vibrating wire Anchor bolt/ Hollow load cells are very useful instruments to measure tensile load in rock bolt and other typical measurements by minimizing positioning effect. These have very rugged construction and simple to install in place like on rock bolts, tie bolts, tension cable etc. Pretensions wires are positioned at equidistance vertically on the periphery of cylindrical cell of high strength stainless steel material. When a compressive load acts on the faces of load cell, the tension is reduced and simultaneously length of wire. This changes the natural frequency of wire. The readout unit Model SME 2460-S provides a low voltage pulse signal to a magnetic coil which in turn makes the wire to vibrate at its natural frequency. The readout unit selects the frequency corresponding to peak voltage generated in coil being the resonant frequency. It indicates the signal in terms of frequency, time period, or loads directly in engineering units.



ADVANTAGE

Multi gage system in load cells eliminates position effect to minimum average of loads provides accurate load measurement. The vibrating wire technology provides data unaffected by cable lengths, junction resistance and stray currents. Remote data can be taken as far as one km cable length without affecting the original data.

SPECIFICATIONS

Capacity	:	10 tones to 50 tones
Accuracy	:	±1% FSD standard or 0.5% on demand
Resolution	:	0.01%fsd
No. of gages	:	3 or 6
Intrinsically safe	:	<u>The load cell tested by CMRI Dhanbad as per IS/IEC 60079- 11:2006 for intrinsically safe use in gas group I atmospheres & approved by DGMS vide approval no. SA-4/2013.</u>

ACCESSORIES

- * Mounting plate
- * Readout unit Model SME 2460-S.

Due to continuous development program the specification and dimensions are subject to change without notice. Our engineers do undertake the work for development as per the customer's requirement.

Sensors & Measurements Enterprises

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