



ENCARDIO RITE



VIBRATING WIRE TYPE CENTRE HOLE LOAD CELL

MODEL ELC-32V

OVERVIEW

The Encardio-rite model ELC-32V is a precision engineered load cell with a central cylindrical hole. It is specially designed for civil engineering applications. It is available in capacities ranging from 250 kN to 3500 kN. Higher capacity load cells and those having an internal diameter different from the standard specified range are available on request.

The center hole load cell comprises of a cylinder of high strength martensitic stainless steel. It generally uses three vibrating wire strain gages mounted at 120° to each other to minimize the effect of uneven and eccentric loading. Load applied to the cell is measured individually by the vibrating wire strain gages using Encardio-rite model EDI-51V digital read-out unit for vibrating wire sensors. The average of the three readings is taken. Alternatively, the load cell can be connected to Encardio-rite model EDAS-10 data acquisition system for continuous monitoring.

If specifically required, the load cell can be provided with four or six vibrating wire strain gages.



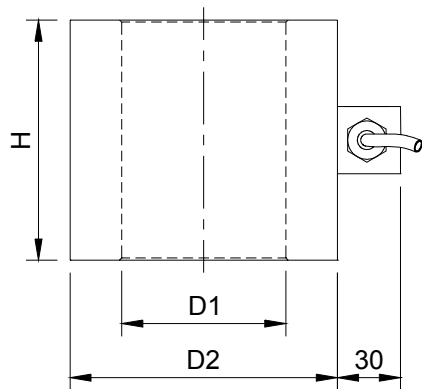
FEATURES

- ◆ Rugged & robust construction.
- ◆ Suitable for hostile & severe environment.
- ◆ Available in capacities of 250 kN to 3500 kN.
- ◆ Frequency signal stable upto long distance.
- ◆ Three vibrating wire strain gages incorporated to reduce positioning effect.
- ◆ Thermistor provided for temperature correlation.

APPLICATIONS

- ◆ To determine load in foundation anchors, rock bolts, tiebacks, cables or struts.
 - ◆ Proof testing and long term performance monitoring of different kind of anchor systems.
 - ◆ Compressive load measurement between structural members i.e. tunnel supports or at the junction between a beam and the top of a pile strut.
 - ◆ Used extensively for correlating data obtained from bore hole extensometers.
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DIMENSIONS



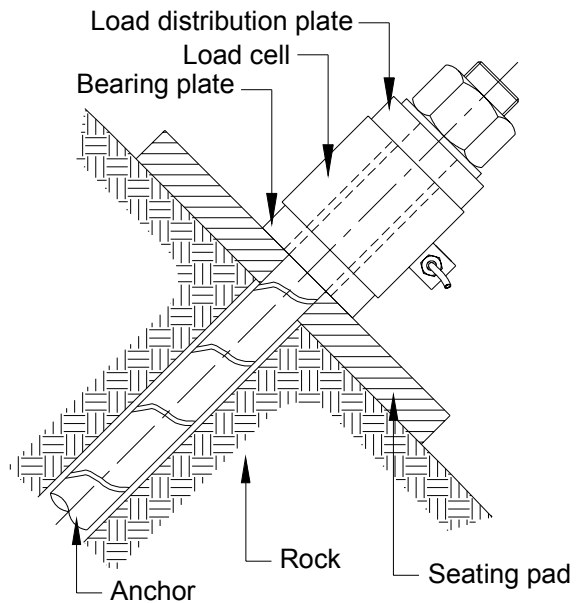
Capacity kN	D1 mm	D2 mm	H mm	Weight kg
250	27	58	75	1.5
500	52	88	85	3.0
1000	78	127	115	7.5
1500	102	160	120	12.0
2000	127	190	130	16.5
2000	152	210	130	17.5
3500	202	275	140	31.0

Capacity kN	Load distribution/bearing plates (each)			
ID mm	OD mm	T mm	Wt. kg	
250	27	60	23	0.5
500	52	95	30	1.2
1000	78	130	35	2.5
1500	102	165	42	4.5
2000	127	195	48	6.7
2000	152	215	48	7.0
3500	202	280	60	14.3

Other capacities and internal diameter available on request.

All specifications subject to change without prior notice.

TYPICAL INSTALLATION

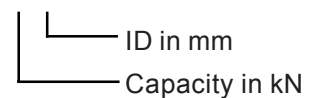


SPECIFICATIONS

Capacity (kN)	250, 500, 1000, 1500, 2000, 3500 or as specified
ID (mm)	0, 27, 52, 78, 102, 127, 152, 202
Over range capacity	150 %
Calibration accuracy	± 0.25 % fs
Non linearity	± 1 % fs
Operating temperature	-10 to 55 °C
Cable	Six core, 5 m standard length
Material of element	Martensitic stainless steel

ORDERING INFORMATION CODE

Model **ELC-32V-X/Y**



ENCARDIO-RITE ELECTRONICS PVT. LTD.

A-7 Industrial Estate, Talkatora Road, Lucknow, UP-226011, India
 Tel +91 (522) 2661044 Fax +91 (522) 2661043 E-mail sales@encardio.com
 Visit us at: www.encardio.com

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