

MODEL 30510 ROPE TENSION LOAD CELL

Description:

CE Certified 30510 load cell is strain gage based and is fully temperature compensated over 0 to 50 °C. It used in industrial applications where the tension in wire rope needs to be carefully and continuously monitored to prevent overload into the equipment. The load cell is conveniently clamped-on to the rope in existing condition. It is designed to handle rope diameter from 8mm to 80mm. Higher capacity can be provided on request.

Features

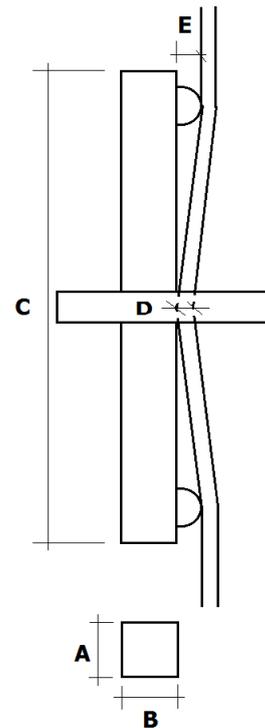
- ❖ **CE Rated** ❖ 0.1 Tf to 3.0 Tf capacities of load cells are offered for rope tension ranging from 1Tf to 30 Tf
- ❖ Complete environmental protection IP-65 class provided
- ❖ Standard output 1.0mV/V available
- ❖ Can be provided to accommodate multi rope applications - up to 4 ropes

Applications

- ❖ Elevator load monitor. ❖Specially designed for protecting cranes and hoists from overload.
- ❖ Tension measurement in stay ropes, suspension ropes and Rail way catenary ropes.
- ❖ Vehicle pull test. ❖Ship Bollard pull test.

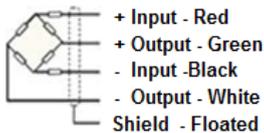
Performance Specification

Standard Capacities	1.0 to 30.0 Tf. of Rope Tension
Excitation Voltage	10 VDC- Maximum 15 VDC
Nominal Output	1.0 m V/ V +/- 0.5
Non - Linearity	< ± 5.0 % FSO for range up to 20% < ± 2.0 % FSO for range above 20%
Hysteresis	< ±0.1% FSO
Non-Repeatability	< ±0.1% FSO
Creep (30 minutes)	< ±0.05% FSO
Input Resistance	390 ± 20 Ohms
Output Resistance	350 ± 10 Ohms
Insulation Resistance (50 VDC)	> 1000 Mega Ohms
Cable Length (4 Core Screened)	5Mtrs.
Safe Overload of Rated Capacity	150%
Ultimate Overload of Rated Capacity	300%
Temp. Compensated Range	0-50 °C
Temperature Effect on Output	< 0.025% FSO/ °C
Temperature Effect on Zero	< 0.030% FSO/ °C
Deflection	< 0.4 mm at FSO
Finish & Construction	Electro less Ni plated Tool Steel
Environmental Protection Class	IP 65



Electrical Termination

Options



- + Input - Red
- + Output - Green
- Input - Black
- Output - White
- Shield - Floated

- * Compatible Instruments with Relay output, 4-20 mA or 0-2 Volt Output
- * Digital Version with RS-485 interface / USB output / Blue Tooth Telemetry / Wireless Telemetry
- * Software for Graphic, Tabulation and Reporting
- * Customization with customers dimensions

Rope Tension(Tf.)	Recommended Load Cell Capacity (Tf.)	Rope dia.-D	A	B	C	E
1/2/5	0.1/0.2/0.5	8-16	32	32	172	7.5
10	1	24-36	32	32	172	7.5
15	1.5	Up to 40	32	32	172	7.5
30	3	Up to 60	32	32	172	7.5

Specifications are subject to change.

All dimensions are in mm.



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ADI ARTECH
TRANSDUCERS PVT. LTD.
 (An ISO 9001:2015 Certified Company)

917/1, G.I.D.C. Estate, Makarpura, Vadodara - 390 010, Gujarat, INDIA

Mobile : +91-9374068998, 9879444551, 9054467370

Email : sales@adiartech.com, adiartech@adiartech.com

Website : www.adiartech.com