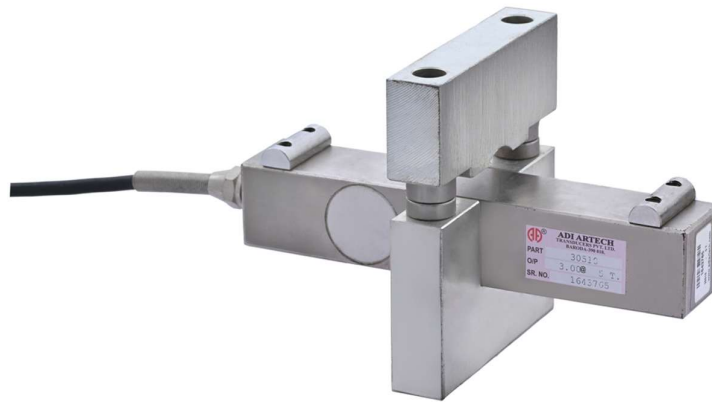




Description

30510 Load Cell is strain gauge based and is fully temperature compensated over 0 to 50°C. It is 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 8 mm to 80 mm. Higher capacity can be provided on request.

Applications

- Elevator Load Monitor
- Specially designed for protecting cranes and hoists from overload
- Tension Measurement in stay ropes, Suspension ropes and Railway catenary ropes
- Vehicle Pull Test
- Ship Bollard Pull Test

Key Features

Complete Environmental Protection – Meets IP 67

Electro less nickel-plated tool steel
Constructions against shock & overload

0.TF to 3.0 TF Capacities of load cells are offered for rope tension ranging from 1 TF to 30TF

Standardized output ($1.0 \text{ mV/V} \pm 0.5$) and customized output can be provided on request

Calibration in $\text{mV/V}/\Omega$

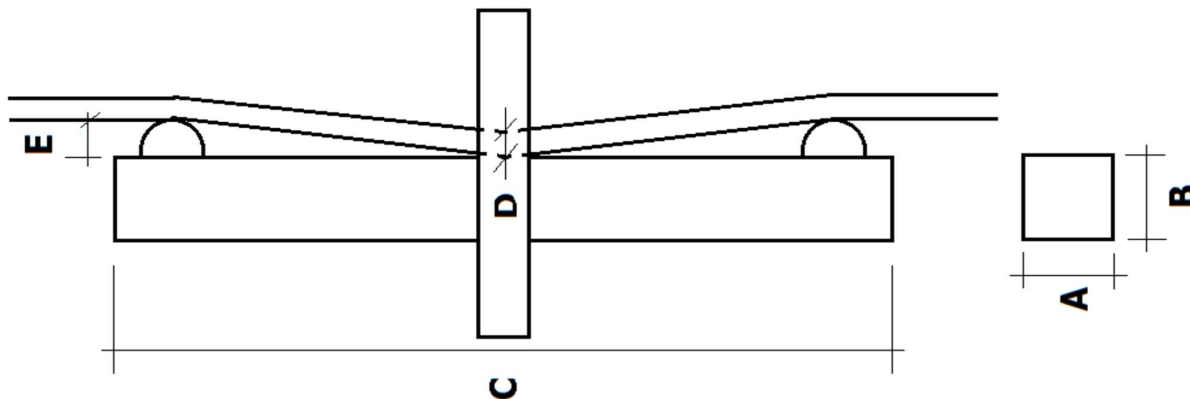
Can be Provided to accommodate multi rope applications – Up to 4 Ropes

Can be **customized** to suit customer's need

Technical Specifications

STANDARD CAPACITY		1.0 TF to 30.0 TF of Rope Tension
PERFORMANCE	Non - Linearity	< ± 5.0 % FSO for ranges up to 20% < ± 2.0 % FSO for ranges above 20%
	Hysteresis	< ± 0.1 % FSO
	Non-Repeatability	< ± 0.1 % FSO
	Creep (30 minutes)	< ± 0.05 % FSO
ELECTRICAL	Output	1.00 mV/V $\pm$ 0.5
	Excitation Voltage	Maximum 15 VDC (Suggested 5Vdc / 10 Vdc)
	Input Resistance	390 $\pm$ 20 Ω (Ohms)
	Output Resistance	350 $\pm$ 10 Ω (Ohms)
	Insulation Resistance	(100 VDC) > 1000 Mega Ω (Ohms)
STRUCTURE	Safe Overload Of Rated Capacity	150%
	Ultimate Overload of Rated Capacity	300%
	Allowable Side Load	50%
	Deflection	< 0.4 mm at FSO
	Finish Product	Electro less nickel-plated tool steel
	As per IS/IEC 60529:2001	IP 67
TEMP.	Operating Temperature	0°C to 60°C
	Compensated Temperature	10°C to 50°C
	Temperature Effect on Output	< 0.0025 % FSO/ °C
	Temperature Effect on Zero	< 0.0030 % FSO/ °C

Dimension (mm)



Rope Tension(TF)	Recommended Load Cell CAP.(TF)	Rope Dia.-D	A	B	C	E	CABLE
1/2/5	0.1/0.2/0.5	8-16	32	32	172	7.5	5 Meter
10	1	24-36	32	32	172	7.5	5 Meter
15	1.5	UP TO 40	32	32	172	7.5	5 Meter
30	3	UP TO 60	32	32	172	7.5	5 Meter

All dimensions are in mm.

Specifications are subject to change.

Electrical Termination

