

**Description**

Ultra Precision Strain Gage based 20410 Crane Load Cell is versatile, compact and rugged. It is used for tension measurements, Crane weighing. It can be used in tension mode only. Tension Loading can be applied through Dee / Bow Shackles. It is available in 2 Tf to 300 Tf capacities.

**Features**

- 2 to 300 TF Capacities available.
- High Alloy Tool Steel construction for resistance against shock and overload.
- Perpendicular hole design helps in minimizing external moments effects and improves safety & accuracy.
- It is light weight and portable.
- High Temperature version for foundry applications is available upon request.
- Can be designed to fit your dimensional needs.
- High Alloy Tool Steel construction provided for ruggedness.

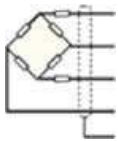
**Applications**

- To measure rope tension by inserting as a link in to the line.
- To measure towing force of the vehicles and Ships.
- Force Measurement Tension Dynamometer.
- Hanging & Crane Scale.
- Material handling equipments.
- Bollard Pull Test, Tug boats (Over Load detection weigh cable force testing drag for measurement)
- Cargo handling in Ship Yards.

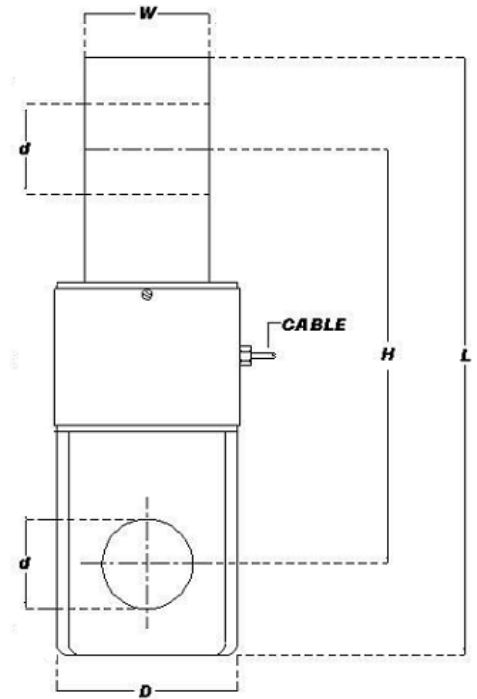
**Performance Specification**

Standard Capacities TF	2,3,5,10,12,15,17,20,25,30,40,50,80,100,125,200,250,300
Excitation Voltage	10 VDC- Maximum 15 VDC
Nominal Output	1.0 m V/ V
Non - Linearity	< ±0.15% FSO
Hysteresis	< ±0.25% FSO
Non-Repeatability	< ±0.1% FSO
Creep (30 minutes)	< ±0.1% FSO
Zero Balance	±1.0% FSO
Input Resistance	775 ± 15 Ohms
Output Resistance	700 ± 3 Ohms
Insulation Resistance (50 VDC)	> 1000 Mega Ohms
Cable Length (4 Core Screened)	5 Meters
Safe Overload of Rated Capacity	150%
Ultimate Overload of Rated Capacity	200%
Allowable Side Load	50%
Temp. Compensated Range	0-60°C
Temperature Effect on Output	< 0.0025% FSO/ °C
Temperature Effect on Zero	< 0.0030% FSO/ °C
Deflection	< 0.4 mm at FSO
Finish & Construction	Electroless Nickel Plated Tool Steel
Environmental Protection Class	Meets IP 67

**Electrical Termination**



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



CAP. TF.	d(Dia)	D(Dia)	W	H	L	Recommended Shackle	
						Crosby	Anchor
2	17	33	19	113	150	2T-G/S-209,	2T-SL-2130/209
3,5	23	48	26	103	150	3.25T, 4.75T-G/S-209,	3.25T, 4.75T-SL-2130/209
10,12	36	63	45	134	200	9.5T,12T-G/S-209,	9.5T,12T-SL-2130/209
15,17	42	78	58	150	240	17T-G/S-209,	17T- SL-2130/209
20,25,30	42	88	58	150	240	30T-G/S-2140	17T- SL-2130/209
40,50	59	115	72	195	320	55T-G/S-2140, 2160	35T- SL-2130
80	72	148	102	243	390	85T-G/S-2140	55T- SL-2130
100,125	84	168	124	287	460	120T- G/S-2140, 2160	85T- SL-2130
200	106	210	145	350	575	200T-G/S-2160	120T- SL-2130
250,300	135	254	180	465	810	250T - G/S-2140,300T-G/S-2160	Not available

Specification are subject to change.

All dimensions are in mm.

# MICROCONTROLLER BASED DIGITAL LOAD INDICATOR



## SPECIFICATIONS :

Indication	: 5 Digits with Auto Polarity Red LED Display of 12.5mm character height.
Input Calibration	: LOAD CELL .
Load Cell Excitation	: Instrument will provide 10 V DC. for Load cell excitation.
Range	: Please specify.
Indicating Accuracy	: $\pm 0.1\%$ of full scale.
Resolution	: 10000 count.
Open Sensor Indication	: Indicated by Data Field as 'SORRY'.
Zero & Tare	: Full Range Push Button Zero & Tare key provided.
Peak Hold / Normal	: At Power applied default will be <b>NORMAL</b> mode, Pressing this switch it will be convert to <b>PEAK HOLD</b> mode.
Kgf. / Newton	: At Power ON default will be <b>KGF</b> mode, Pressing this switch it will be convert to <b>NEWTON</b> mode.
Compression / Tension	: At Power ON default will be <b>COMPRESSION</b> mode while pressing this switch it will be convert to <b>TENSION</b> mode.
Size	: 92mm (w) x 92mm (h) panel cut out with 140mm depth. Bazel size 96mm (w) x 96mm (h) of ABS cover with MS powder coated box.