

## Shear Beam Load Cell

### FEATURES

- Capacities 250–2000 kg and 1000–4000 lbs
- Steel and stainless steel construction
- OIML R60 and NTEP approved
- IP67 protection
- **Optional**
  - EEx ia IIC T6 hazardous area approval
  - FM approval available



### APPLICATIONS

- Low profile platforms
- Pallet truck weighing
- Tank and silo weighing

### DESCRIPTION

Model 3410 is a low profile shear beam load cell designed for high accuracy platform scales, pallet scales and process weighing applications.

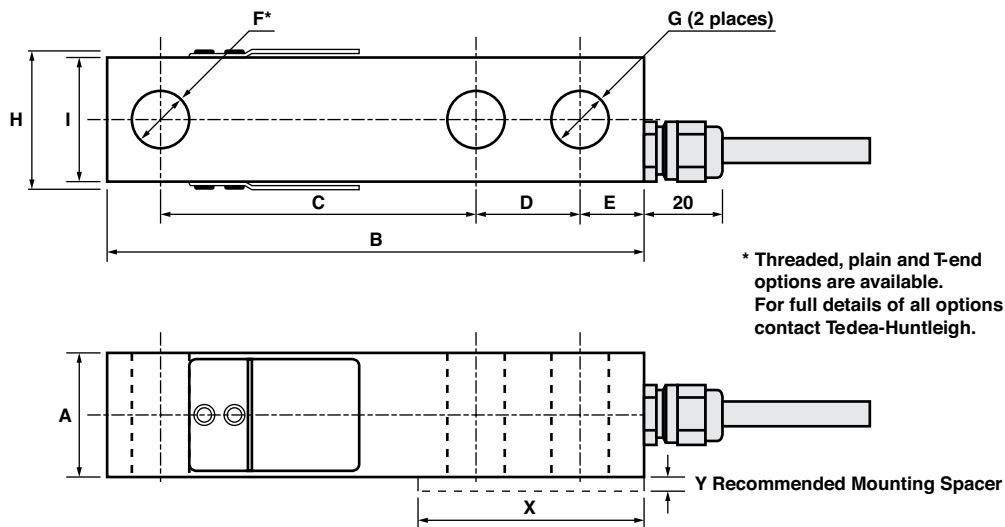
It has high immunity to shock or side loading and is available in 2 or 3 mV/V sensitivity. Approved to OIML,

NTEP standards. For hazardous environments this load cell is available with EEx ia IIC T6 level of European approval.

Nickel plating and full environmental sealing assures long-term reliability. A stainless steel option is available for the lb versions for use in harsh or corrosive environments.

The two additional sense wires feed back the voltage reaching the load cell. Complete compensation of changes in lead resistance due to temperature change and/or cable extension is achieved by feeding this voltage into the appropriate electronics.

### OUTLINE DIMENSIONS in millimeters



CAPACITY	A	B	C	D	E	ØF	ØG	H	I	X	Y
1000, 1500, 2500, 4000 lbs	30.5	130	76.2	25.4	16	Ø13.5	Ø13.5	34.0	30.5	57	4
250, 500, 1000 kg	30.5	130	76.2	25.4	16	M12*	Ø13.5	34.0	30.5	57	4
2000 kg	36	130	76.2	25.4	16	M12*	Ø13.5	34.0	30.5	57	4

\* Tapped M12 X 1.75 & counterbored Ø13.5 X 14.5 Deep

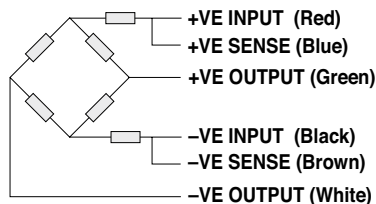
## Shear Beam Load Cell

SPECIFICATIONS				
PARAMETER	VALUE			UNIT
Rated capacity—R.C. ( $E_{max}$ )	250, 500, 1000, 2000			kg
Rated capacity—R.C. ( $E_{max}$ )	1000, 1500, 2500, 4000			lbs
NTEP/OIML accuracy class	NTEP	Non-Approved	C3	
Maximum no. of intervals (n)	3000 single 5000 multiple	1000	3000 <sup>(1)</sup>	
$Y = E_{max}/V_{min}$	6666	1400	10000	Maximum available
Rated output-R.O.	2.0 for kg and 3.0 for lbs			mV/V
Rated output tolerance	0.1			±% of rated output
Zero balance	2			±% of rated output
Zero return, 30 min.	0.0250	0.0300	0.0170	±% of applied load
Total error (per OIML R60)	0.0200	0.0500	0.0200	±% of rated output
Temperature effect on zero	0.0023	0.0100	0.0023	±% of rated output/°C
Temperature effect on output	0.0010	0.0030	0.0010	±% of applied load/°C
Temperature range	-10 to +40			°C
Temperature range, safe	-20 to +70			°C
Maximum safe central overload	150			% of R.C.
Ultimate central overload	300			% of R.C.
Excitation, recommended	10			VDC or VAC RMS
Excitation, maximum	15			VDC or VAC RMS
Input impedance	385±10			Ω
Output impedance	351±5			Ω
Insulation resistance	>2000			MΩ
Cable length	3.0—3410	6.0—3411		m
Cable type	6-wire, braided, polyurethane, floating screen			Standard
Construction	Nickel-plated alloy steel and stainless steel			
Environmental protection	IP67			
Recommended torque	136			N*m

\* 50% utilization

All specifications subject to change without notice.

### WIRING SCHEMATIC DIAGRAM



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