

Shear Beam Load Cell



FEATURES

- Capacities 300–5000 kg, 1000–5000 lbs
- Steel and stainless steel construction
- IP67 protection
- OIML R60 and NTEP approved

OPTIONAL FEATURE

- EEx ia IIC T6 hazardous area approval
- FM approval available

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.

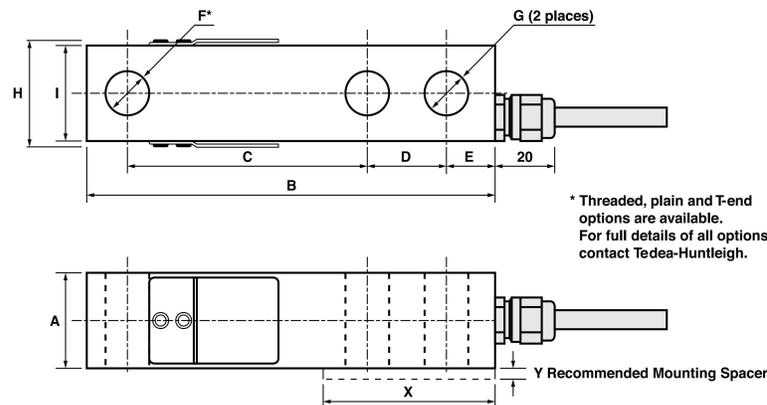
Nickel plating and full environmental sealing assures long-term reliability. A stainless steel option is available for the lb versions for use in harsh or corrosive environments.

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.

APPLICATIONS

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

OUTLINE DIMENSIONS in mm



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

All dimensions in mm

SPECIFICATIONS

PARAMETER	VALU				UNIT
Rated capacity—R.C. (E _{max})	300, 500, 750, 1000, 1200, 2000, 3000, 5000				kg
Rated capacity—R.C. (E _{max})	1000, 1500, 2500, 4000				lbs
NTEP/OIML accuracy class	NTEP	Non-Approved	C3	C4	
Maximum no. of intervals (n)	3000 single 5000 multiple	1000	3000 ¹	3000 ²	
Y = E _{max} /V _{min}	12500	1400	12000	20000	Maximum available 20000
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	0.0083	±% of applied load
Total error	0.0200	0.0500	0.0200	0.0100	±% of rated output/load
Temperature effect on zero	0.0023	0.0100	0.0023	0.0009	±% of rated output/°C
Temperature effect on output	0.0010	0.0030	0.0010	0.00058	±% of applied load/°C
Temperature range, compensated	-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	380±10				
Output impedance	350±5				
Insulation resistance	>2000				M
Cable length	5				m
Cable type	6-wire, braided, polyurethane, dual foating screen				Standard
Construction	Stainless steel				
Environmental protection	IP68				
Recommended torque	136.0 (3000 and 5000 kg—205.0)				N*m

* 50% utilization

All specifications subject to change without notice.

WIRING SCHEMATIC DIAGRAM

