

## Alloy Steel Shear Beam Load Cell



### FEATURES

- Capacity range: 5,000 - 10,000lbs
- Steel and stainless steel construction
- NTEP approved
- IP67 protection

### OPTIONAL FEATURE

- FM approval available

### DESCRIPTION

Model 3420 is a low profile shear beam load cell designed for high accuracy platform scales, pallet scales and process weighing applications.

It has a high immunity to shock or side loading, and is approved to NTEP standards. For hazardous environments this load cell is available with Factory Mutual approval.

Nickel plating and full environmental sealing assure long term reliability. A stainless

steel option is available 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 can be achieved by feeding this voltage into the appropriate electronics.

### APPLICATIONS

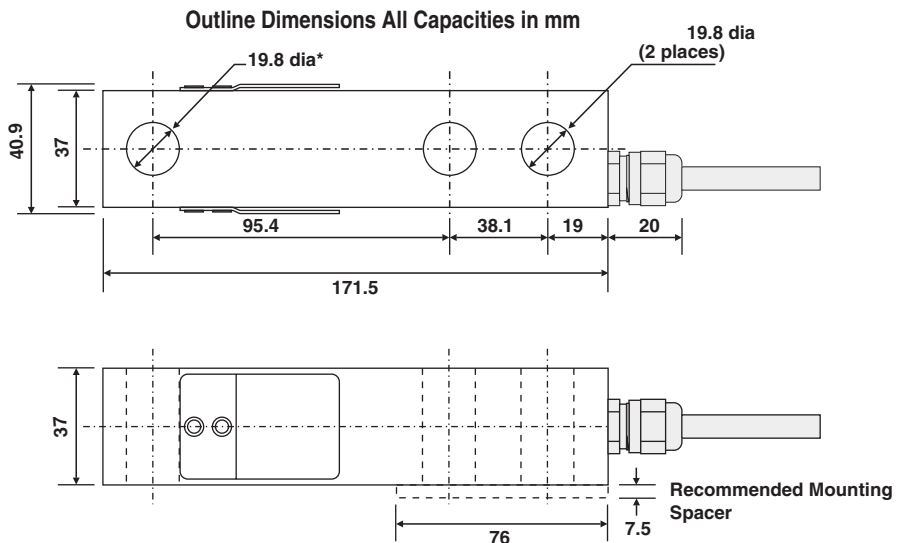
- Low profile platforms
- Pallet truck weighing
- Tank and silo weighing

### OUTLINE DIMENSIONS in millimeters

\*Threaded options are available  
For full details of all options  
contact Tedea-Huntleigh.

3420 plain, M18 or 3/4 - 16 UNF  
threaded mounting hole

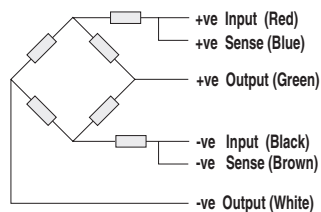
3421 - 3/4 - 16 UNF



## SPECIFICATIONS

PARAMETER	VALUE		UNIT
Rated capacity-R.C. ( $E_{max}$ )	5000, 7500, 10000		lbs
NTEP/OIML Accuracy class	NTEP	Non-Approved	
Maximum no. of intervals (n)	3000 single 5000 multiple	3000	
$Y = E_{max}/V_{min}$	6666	10000	
Rated output-R.O.	3.0		mV/V
Rated output tolerance	0.1		±% of rated output
Zero balance	2		±% of rated output
Zero Return, 30 min.	0.0250	0.0170	±% of applied load
Total Error (per OIML R60)	0.0200	0.0200	±% of rated output
Temperature effect on zero	0.0023	0.0023	±% of rated output/°C
Temperature effect on output	0.0010	0.0010	±% 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	385±10		Ohms
Output impedance	351±5		Ohms
Insulation resistance	>2000		Mega-Ohms
Cable length	3.0 mt. - 3420, 20 ft. - 3421		
Cable type	6 wire, braided, Polyurethane, floating screen		Standard
Construction	Nickel plated alloy steel		
Environmental protection	IP67		
Recommended torque	205		N*m

**Wiring Schematic Diagram**  
(Balanced temperature compensation)



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