

# Model 3420/21

## Shear Beam Load Cells



### Features

- Capacities: 2268 - 4536 kg
- Low profile for platform scale applications
- Nickel plated alloy steel construction
- 6 Wire (sense ) circuit
- IP67 protection
- Approved to NTEP and Factory Mutual

Model 3420/3421 are low profile shear beam load cells designed for high accuracy platform scales, pallet scales and process weighing applications. The model 3420 has a 0.78 inch (19.8) mm) diameter loading hole while the model 3421 has a 3/4-16 UNF threaded loading hole.

They have high immunity to shock or side loading, and provide 3 mV/V sensitivity and are approved to NTEP and Factory Mutual approval standards.

Nickel plating and full environmental sealing assure long term stability over the entire compensated temperature range. 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, is achieved by feeding this voltage into the appropriate electronics.

### Also Available from Tedeo-Huntleigh

Cellmates and Tank mounts are also available, see the Tedeo-Huntleigh Load Cell Accessory Catalog for full details.

For harsh industrial environments a fully welded hermetically sealed stainless steel load cell is available, designated model 3510.



EXCELLENCE IN LOAD CELLS

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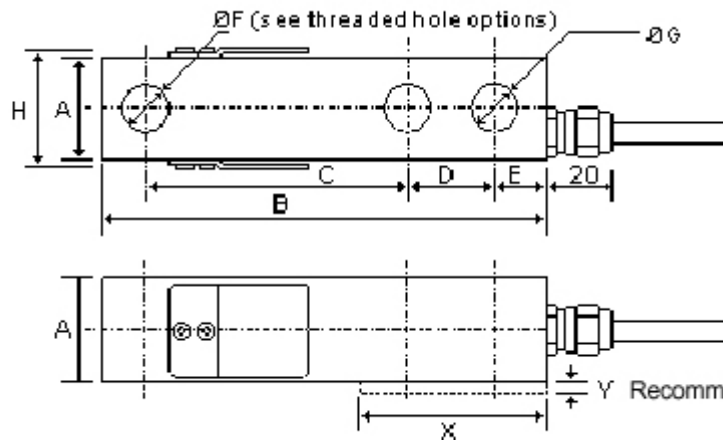
## Shear Beam Load Cells

GRADE	Z	E	F	C3	UNITS
Rated Capacities	2268, 3400, 4536				kg
Rated Output	3.0 ± 0.10%				mV/V
Total Error*	0.075	0.050	0.030	0.020	±% of Applied Load
Zero Return after 30 minutes	0.070	0.050	0.025	0.017	±% of Applied Load
Temperature Effect: On Output	0.007	0.0040	0.0014	0.0012	±% of Applied Load /°C
Temperature Effect: On Zero	0.015	0.0070	0.0035	0.0023	±% of Rated Load Output /°C
Zero Balance	3.0		2.0		±% of Rated Output
Temperature Range: Operating	-30 to +80				°C
Temperature Range: Compensated	-10 to +40				°C
Safe Overload	150				% of Rated Capacity
Ultimate Overload	300				% of Rated Capacity
Excitation: Recommended	10				Volts AC or DC
Excitation: Maximum	15				Volts AC or DC
Input Impedance	380±10				Ohms
Output Impedance	350±3				Ohms
Insulation Impedance	>2000				Mega Ohms
Deflection at Rated Capacity	<0.4				mm
Weight	1.75				kg
Construction	Electrolysis Nickel Plated Steel**				
Environmental Protection	IP67				
Cable	10 ft (Standard, Option 20 ft), 6 Wire Poly-urethane Jacket, Dual Floating Screen				
Approvals	NTEP and Factory Mutual				

\*Total Error - According to OIML R60

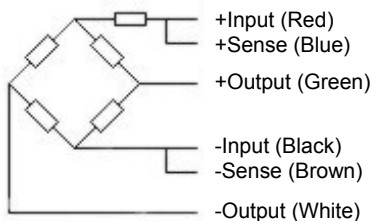
\*\*Stainless steel version available

### Outline Dimensions All Capacities (in mm)



**Hole Options (Dia F & G)**  
Available with counterbored mounting and/or loading holes.

### Wiring Schematic Diagram



MODEL	CAPACITY	A	B	C	D	E	ØF	ØG	H	X	Y
3420	5K, 7.5K, 10K	37	171.5	95.4	38.1	19	Ø19.8	Ø19.8	40.9	76	7.5
3421	5K, 7.5K, 10K	44.75	44.75	44.75	44.75	44.75	3/4-16	44.75	44.75	44.75	44.75