

## Alloy Steel Shear Beam Load Cell

### FEATURES

- Capacity range: 5,000–10,000 lbs
- Steel and stainless steel construction
- NTEP approved
- IP67 protection
- **Optional**
  - FM approval available

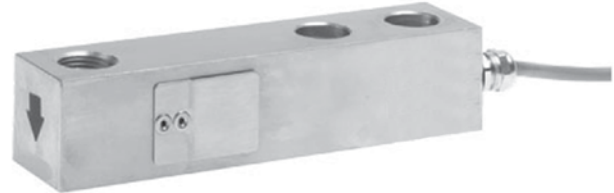
### APPLICATIONS

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

### 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.



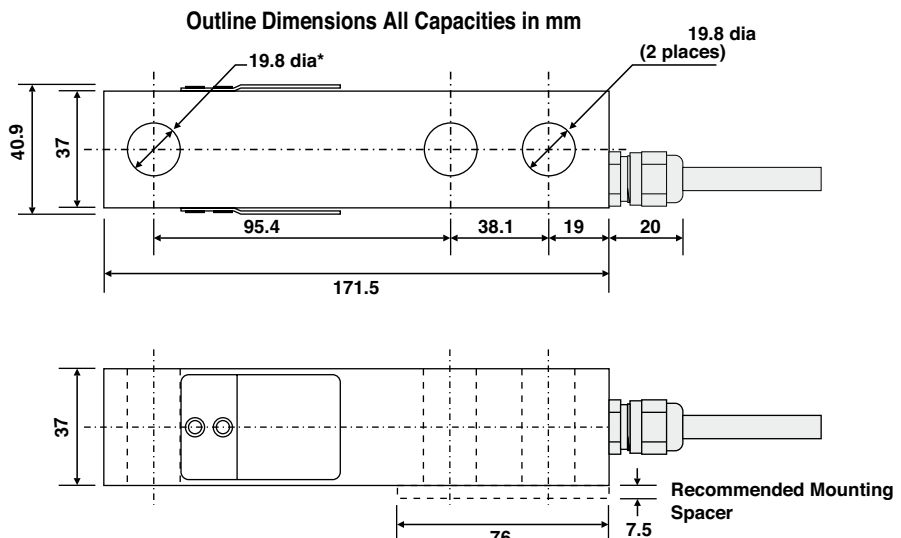
Nickel plating and full environmental sealing assure long-term reliability. A stainless steel option is available for use in harsh or corrosive environments.

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.

### OUTLINE DIMENSIONS in millimeters

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

3420 plain, M20 or 3/4 - 16 UNF  
threaded mounting hole  
3421 - 3/4 - 16 UNF

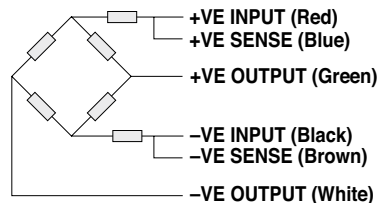


## Alloy Steel Shear Beam Load Cell

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		Ω
Output impedance	351±5		Ω
Insulation resistance	>2000		MΩ
Cable length	3.0m—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

All specifications subject to change without notice.

### Wiring Schematic Diagram (Balanced temperature compensation)



## Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay Precision Group"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify Vishay Precision Group's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

Vishay Precision Group makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, Vishay Precision Group disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on Vishay Precision Group's knowledge of typical requirements that are often placed on Vishay Precision Group products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of Vishay Precision Group.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay Precision Group products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay Precision Group for any damages arising or resulting from such use or sale. Please contact authorized Vishay Precision Group personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.