

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
- Spiral bending support on cable
- **Optional**
 - EEx ia IIC T6 hazardous area approval
 - FM and IECEx approvals available
 - EDOC option available; product appearance will differ from the photograph due to coating



APPLICATIONS

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



DESCRIPTION

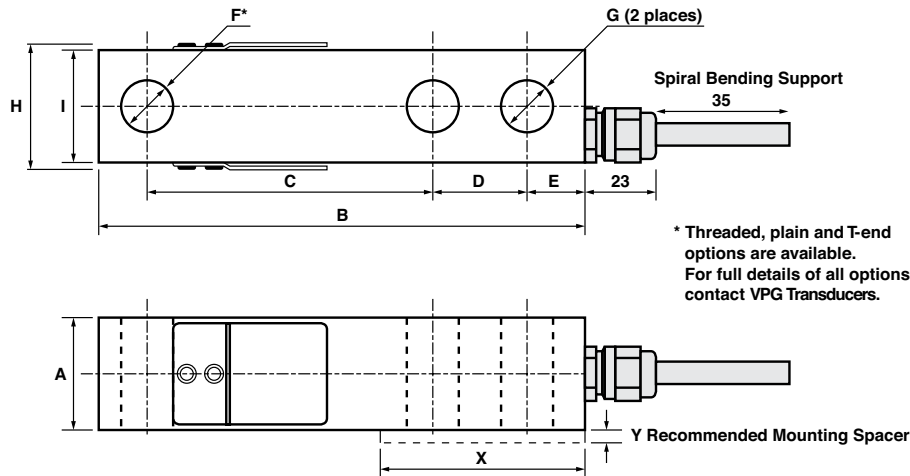
The Model 3410 is a low profile shear beam load cell designed for high accuracy platform scales, pallet scales and process weighing applications.

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



* Threaded, plain and T-end options are available. For full details of all options contact VPG Transducers.

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

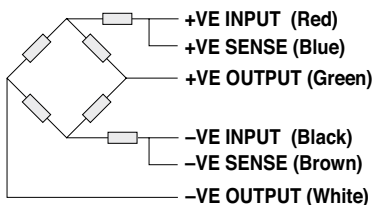
Shear Beam Load Cell

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 ⁽¹⁾	
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



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, "VPG"), 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 VPG's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

VPG 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, VPG 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 VPG's knowledge of typical requirements that are often placed on VPG 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. You should ensure you have the current version of the relevant information by contacting VPG prior to performing installation or use of the product, such as on our website at vpgsensors.com.

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

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

Copyright Vishay Precision Group, Inc., 2014. All rights reserved.