S-Beam Load Cell

FEATURES

- Rated capacities of 25 to 20,000 pounds 50 kilograms to 10 metric tons
- Designed for single or multiple load cell applications
- Constructed of high quality alloy tool steel
- Nickel plated for outstanding corrosion resistance
- *Sensorgage*™ sealed to IP67 standards
- Trade certified for NTEP Class III: 5000d, IIIL: 10000d and OIML R-60 3000d available
- Factory Mutual System Approved for Classes I, II, III; Divisions 1 and 2; Groups A through G. Also, non-incendive ratings (No barriers!).
- **Optional**
  - ❍ Stainless steel version is Model 60050

APPLICATIONS

- Tank, bin and hopper weighing
- Level and inventory monitoring
- Truck scale conversions
- Tension and compression measurements

Factory Mutual System Approved

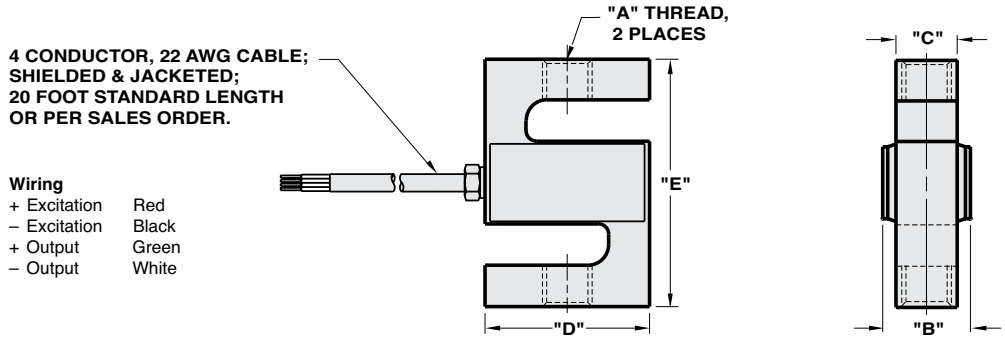


DESCRIPTION

Model 60001 is a tension-compression load cell with a humidity-resistant coating and shielded cables, which enable use in harsh environments while maintaining operating specifications. Additional sense wires compensate for changes in lead resistance due to temperature change and/or cable extension.

Ideally suited for lever conversions, hanging scales, force measurement and a wide range of other industrial applications. Nickel-plated for outstanding corrosion resistance.

OUTLINE DIMENSIONS in inches [millimeters]



CAPACITY	A	B	C	D	E	DEFLECTION	WEIGHT
25–200	1/4-28 UNF-2B	0.65	0.50	2.00	2.50	0.015–0.010	4.0
250–300	3/8-24 UNF-2B	0.75	0.50	2.00	3.00	0.010	4.0
500–2k	1/2-20 UNF-2B	1.00	0.75	2.00	3.00	0.010–0.012	6.5
2.5k–4k	1/2-20 UNF-2B	1.25	1.00	2.00	3.00	0.012	6.5
5k	3/4-16 UNF-2B	1.25	1.00	3.00	4.25	0.017	6.5
10k	3/4-16 UNF-2B	1.25	1.00	3.50	4.75	0.025	6.5
15k	1-14 UNF-2B	1.50	1.25	4.00	5.50	0.025	9.0
20k	1-1/4-12 UNF-2-B	2.25	2.00	5.00	7.00	0.025	9.0
[50–100 kg]	M8.0 x 1.25-6H	[16.5]	[12.7]	[50.8]	[63.5]	[0.03–0.004]	[0.8]
[250 kg–1T]	M12 x 1.75-6H	[25.4]	[19.1]	[50.8]	[76.0]	[0.004]	[1.8]
[2.5T]	M20 x 1.5-6H	[31.8]	[25.4]	[76.2]	[108.0]	[0.008]	[2.9]
[5T]	M20 x 1.5-6H	[31.8]	[25.4]	[88.9	[120.7]	[0.011]	[2.9]
[10T]	M30 x 2.0-6H	[57.2]	[50.8]	[127.0]	[177.8]	[0.011]	[4.0]

Capacities are in pounds [kg/T]. Deflection is ±10%. Certified drawings are available.

Model 60001

Sensortronics

VISHAY PRECISION GROUP

S-Beam Load Cell

SPECIFICATIONS					
PARAMETER	**VALUE**				**UNIT**
Rated capacity—R.C. (E_{max})	25, 50, 75, 100, 150, 200, 250, 300, 500, 750, 1k, 1.5k, 2k, 2.5k, 3k, 5k, 10k, 15k, 20k 50 kg, 100 kg, 250 kg, 500 kg, 1T, 2.5T, 5T, 10T*				lbs kg/metric tons
NTEP/OIML accuracy class	NTEP III	NTEP IIIL	Standard	OIML R60	
Maximum no. of intervals (n)	5000 single	10000 single		3000*	
Y = E_{max}/V_{min}	NTEP Cert. No. 86-043A1			6667	Maximum available
Rated output—R.O. lbs	3.0				mV/V
Rated output tolerance lbs	25–3k: +25 / –10 5k–20k: ±0.25				%
Rated output—R.O. kg	3.0				mV/V
Rated output tolerance kg	50 kg–1T: +25 / –10 2.5T–3T: ±0.25				%
Zero balance	1.0				±% FSO
Combined error	0.02	0.02	0.03	0.02	±% FSO
Non-repeatability	0.01				±% FSO
Creep error (30 minutes)	0.03	0.025	0.03	0.017	±% FSO
Temperature effect on zero	0.0010	0.0010	0.0015	0.0010	±% FSO/°F
Temperature effect on output	0.0008	0.0008	0.0008	0.0007	±% of load/°F
Compensated temperature range	14 to 104 (–10 to 40)				°F (°C)
Operating temperature range	0 to 150 (–18 to 65)				°F (°C)
Storage temperature range	–60 to 185 (–50 to 85)				°F (°C)
Safe sideload	30				% of R.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	343–450				Ω
Output impedance	349–355				Ω
Insulation resistance at 50 VDC	>1000				MΩ
Material	Nickel-plated alloy tool steel**				
Environmental protection	IP67				

Notes

* OIML approval 100–5k lbs and 50–2500 kg only
NTEP approval from 25–20k lbs only

** Stainless steel available–Model Number 60050

FSO–Full Scale Output

All specifications subject to change without notice.

INTERTECHNOLOGY INC.
1-800-465-1600
19 Waterman Ave.Toronto,Ont. M4B1Y2
Tel:416-445-5500 Fax: 416-445-1170
Toll Free: 1-800-465-1600
Email: sales@intertechnology.com
Website: www.intertechnology.com

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.