

# Single-Ended Load Beam

## FEATURES

- Capacities: 0.5 t, 1 t, 2 t, 5 t, 10 t, 1k lbs, 2k lbs, 5k lbs, and 10k lbs
- Fully welded, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, 4000d and NTEP 10000d
- Current calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells
- Digital version available (model SBC)
- **Optional**
  - ATEX- EEx ib IIC T6 hazardous area approval
  - FM approval available



## APPLICATIONS

- Platform scales
- Belt scales
- Pallet scales
- Overhead track scales
- On-board weighing
- Silo hopper weighing

## DESCRIPTION

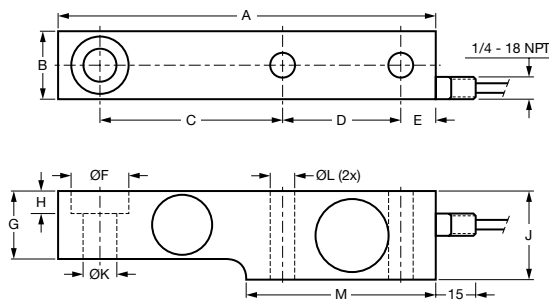
The SSB is a stainless steel single-ended shear beam type load cell.

This robust product is suitable for a wide range of platform scales, pallet scales, overhead track scales, and process weighing applications.

The fully welded construction and water block cable entry ensure that this product can be used successfully in harsh environments found in the food, chemical, and allied process industries.

This product meets the stringent Weights and Measures requirements throughout Europe and the USA.

## OUTLINE DIMENSIONS in millimeters [inches]



CAPACITY (kg)	500-2000		5000	
	mm	in	mm	in
A	203.2	8.00	235.0	9.25
B	36.5	1.44	47.5	1.87
C	98.4	3.87	123.8	0.50
D	63.5	2.50	66.7	2.63
E	19.1	0.75	20.6	0.81
F	30.2 <sup>+0.2/-0</sup>	1.19 <sup>+0.008/-0</sup>	41.3 <sup>+0.2/-0</sup>	1.63 <sup>+0.008/-0</sup>
G	36.5	1.44	47.6	1.87
H	11.9	0.47	15.8	0.62
J	47.6	1.87	69.9	2.75
K	17.5 H11	0.69 H11	25.5 H11	1 H11
L	14.0	0.55	22.0	0.87
M	101.6	4.00	111.2	4.38

For 10 t capacity, please consult factory

### Single-Ended Load Beam

SPECIFICATIONS						
PARAMETER	VALUE					UNIT
Standard capacities ( $E_{max}$ )	0.5, 1, 2, 5 <sup>(1)</sup>			2, 5 <sup>(1)</sup>		t
Accuracy class according to OIML R-60	NTEP III	Non-Approved	C3	C3MI8	C4	
Max. no. of verification intervals	10000		3000	3000	4000	
Min. verification interval ( $V_{min}=E_{max}/Y$ )			$E_{max}/10000$	$E_{max}/15,000$	$E_{max}/10000$	
MDLOR ( $Z=E_{max}/2*DR$ )			-	8000	-	
Min. verification interval, type MR			$E_{max}/20000$		$E_{max}/20000$	
Rated output (=S)	2					mV/V
Rated output tolerance	0.02					±mV/V
Zero balance	1.0					±% FSO
Combined error	0.0200	0.0500	0.0200	0.0200	0.0170	±% FSO
Non-repeatability	0.0100	0.0200	0.0100	0.0100	0.0090	±% FSO
Minimum dead load output return	0.0250	0.0500	0.0167	0.0063	0.0125	±% applied load
Creep error (30 minutes)		0.0600	0.0245	0.0245	0.0184	±% applied load
Creep error (20 minutes)	0.030	0.0200	0.0053	0.0053	0.0039	±% applied load
Temp. effect on min. dead load output	(0.001)	0.0250	0.0070	0.0050	0.0070	±% FSO/5°C (°F)
Temp. effect on min. dead load output, type MR			0.0035		0.0035	±% FSO/5°C
Temperature effect on sensitivity	(0.0008)	0.0250	0.0050	0.0050	0.0045	±% applied load/5°C(°F)
Minimum dead load	0					% $E_{max}$
Maximum safe over load	150					% $E_{max}$
Ultimate over load	300					% $E_{max}$
Maximum safe side load	100					% $E_{max}$
Deflection at $E_{max}$	0.5 max.					mm
Excitation voltage	5 to 15					V
Maximum excitation voltage	18					V
Input resistance	350±3.5					Ω
Output resistance	353±3					Ω
Insulation resistance	≥5000					MΩ
Compensated temperature range	-10 to +40					°C
Operating temperature range	-40 to +80					°C
Storage temperature range	-40 to +90					°C
Element material	Stainless steel 1.4542					
Sealing (DIN 40.050 / EN60.529)	IP66 & IP68					
SC-Version (current calibration)	Standard					
Recommended torque on fixation bolts	0.5-2 t: 110 / 5 t: 540					N*m

<sup>(1)</sup> For 10 t capacity please consult factory

FSO—Full Scale Output

SC-version: The rated output and the output resistance are balanced in such a way that the output current is calibrated to within 0.05% of a reference value. This allows easy parallel connection of the load cells.

All specifications subject to change without notice.



## 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](http://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.