

Single-Ended Beam Load Cell

FEATURES

- Capacities: 500–5000 kg, 1k–20k lbs.
- Low profile construction
- Certified to OIML R-60, 4000d and NTEP III, 5000 divisions
- Sealing: IP67 (DIN 40.050)
- Stainless steel construction
- Threaded load hole
- **Optional**
 - FM certified for use in potentially explosive atmospheres



APPLICATIONS

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

platform scales, overhead track scales, hopper scales, and process weighing applications.

Reliable sealing is ensured by the proprietary TRANSEAL potting compound and additional mechanical protection of the strain gage area.

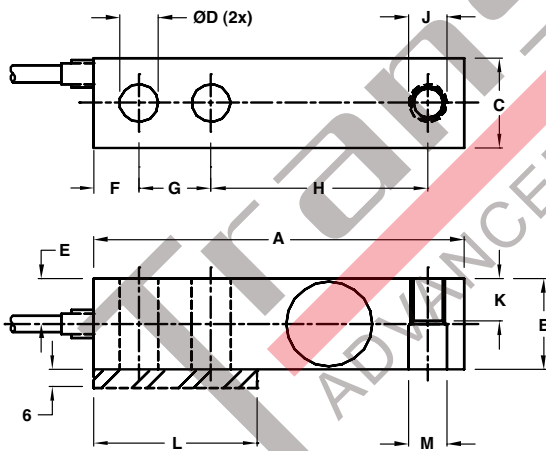
DESCRIPTION

The 9123 is a low profile single-ended shear beam type load cell. The 9123 is stainless steel.

Ease of installation is made possible through the use of a partially threaded hole to accept levelling feet, load buttons, or loading cables.

These products are suitable for small and medium

OUTLINE DIMENSIONS in millimeters



Capacity	Dimensions in mm		Dimensions in inches		
	0.5T–2T	5T	1k–4k	5k–15k	20k
A	130.0	171.5	5.12	6.75	8.75
B	31.5	37.8	1.23	1.45	1.95
C	31.8	38.1	1.23	1.45	1.95
ØD	13.5	20.7	0.53	0.78	1.06
E	15.7	19.1	0.62	0.72	0.98
F	15.7	19.1	0.62	0.75	1.00
G	25.4	38.1	1.00	1.50	2.00
H	76.2	95.3	3.00	3.75	4.75
J	M12x1.75-6H	M20x2.5-6H	½-20UNF-2B	¾-16UNF-2B	1-12UNF-2B
K	15.7	19.1	0.62	0.75	0.98
L	57.2	76.2	2.25	3.12	4.00
ØM	13.5	20.7	0.53	0.78	1.030

Cable specifications:

Cable length: 6m

- + Excitation Red
- Excitation Black
- + Output Green
- Output White
- Shield Transparent

Cable screen is not connected to load cell body. Performance may be affected if load cell cables are shortened.

Single-Ended Beam Load Cell

SPECIFICATIONS					
PARAMETER	VALUE				UNIT
Standard capacities (E _{max})	500, 1000, 2000, 5000 ⁽¹⁾				kg
Standard capacities (E _{max})	1k, 2.5k, 4k, 5k, 10k, 15k, 20k ⁽¹⁾				lbs
Accuracy class according to OIML R-60 /NTEP	NTEP III	Non-Approved	C3	C4	
Max. no. of verification intervals	5000		3000	4000	
Min. verification interval (V _{min} =E _{max} /Y)			E _{max} /6000	E _{max} /8000	
Min. verification interval, type MR			E _{max} /10000	E _{max} /18000	
Rated output (=S)	3				mV/V
Rated output tolerance	0.003				±mV/V
Zero balance	1.0				±% FSO
Combined error	0.0200	0.050	0.023	0.018	±% FSO
Minimum dead load output return	0.0250	0.050	0.017	0.013	±% applied load
Non-repeatability	0.0100	0.070	0.035	0.026	±% FSO
Creep error (30 minutes)		0.060	0.025	0.018	±% applied load
Temp. effect on min. dead load output	(0.0008)	0.0250	0.0120	0.0088	±% FSO/5°C (°F)
Temp. effect on min. dead load output, type MR			0.0070	0.0039	±% FSO/5°C
Temperature effect on sensitivity	(0.0010)	0.0250	0.0088	0.0065	% applied load/5°
Minimum dead load	0				% E _{max}
Maximum safe overload	150				% E _{max}
Ultimate overload	300				% E _{max}
Maximum safe side load	100				% E _{max}
Deflection at E _{max}	0.4 / 0.8 / 1.0 / 1.1 – kg 0.4 / 0.8 / 1.0 / 0.9 / 1.1 – lbs				mm
Excitation voltage	5 to 12				V
Maximum excitation voltage	15				V
Input resistance	350±3.5				Ω
Output resistance	350±3.5				Ω
Insulation resistance	≥5000				MΩ
Compensated temperature range	-10 to +40				°C
Operating temperature range	-40 to +80				°C
Storage temperature range	-50 to +90				°C
Element material	Stainless steel				
Sealing (DIN 40.050 / EN60.529)	IP67				
Recommended torque on fixation bolts	0.5–2T and 1k–4k lbs.: 149 5k lbs. and 5T and over: 271				N*m

⁽¹⁾ 5T and 10k lbs. are not approved by OIML

FSO— Full Scale Output

Correct mounting of the load cell is essential to ensure optimum performance.

Further information is available on request.

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.

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.