

## Single Ended Beam Load Cell



### FEATURES

- Capacities: 500 - 5000kg, 1K -10Klbs
- 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 FEATURE

- FM certified for use in potentially explosive atmosphere



### DESCRIPTION

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

These products are suitable for small and medium platform scales, overhead track scales, hopper scales and process weighing applications.

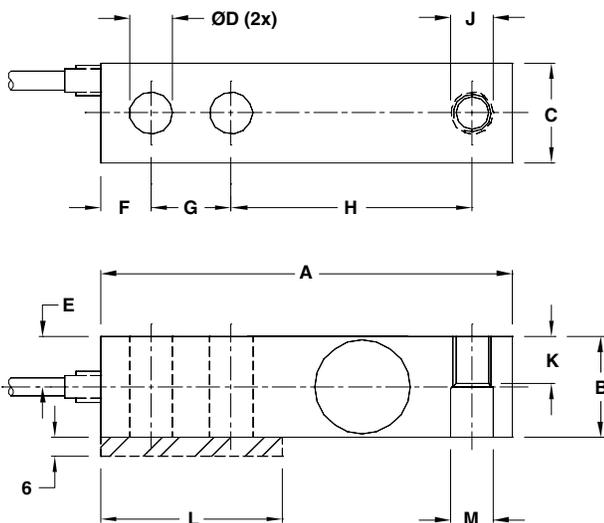
Reliable sealing is ensured by the proprietary TRANSEAL potting compound and additional mechanical protection of the strain gage area.

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

### APPLICATIONS

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

### OUTLINE DIMENSIONS in mm



#### Cable specifications:

- Cable length: 6 m
- 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.

Capacity	Dimensions in mm		Dimensions in inches	
	0.5t - 2t	5t	1K - 4K	5K - 10K
A	130.0	171.5	5.12	6.75
B	31.5	37.8	1.23	1.45
C	31.8	38.1	1.23	1.45
ØD	13.5	20.7	0.53	0.78
E	15.7	19.1	0.62	0.72
F	15.7	19.1	0.62	0.75
G	25.4	38.1	1.00	1.50
H	76.2	95.3	3.00	3.75
J	M12x1.75-6H	M20x2.5-6H	□-20UNF-2B	□-16UNF-2B
K	15.7	19.1	0.62	0.75
L	57.2	76.2	2.25	3.00
ØM	13.5	20.7	0.53	0.78

**SPECIFICATIONS**

PARAMETER	VALUE				UNIT
Standard capacities ( $E_{max}$ )	500, 1000, 2000, 5000*				kg
Standard capacities ( $E_{max}$ )	1K, 2.5K, 4K, 5K, 10K*				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				$\pm$ mV/V
Zero balance	1.0				$\pm$ % FSO
Combined error	0.0200	0.050	0.023	0.018	$\pm$ % FSO
Minimum dead load output return	0.0250	0.050	0.017	0.013	$\pm$ % applied load
Non-repeatability	0.0100	0.070	0.035	0.026	$\pm$ % FSO
Creep error (30 minutes)		0.060	0.025	0.018	$\pm$ % applied load
Temp. effect on min. dead load output	(0.0008)	0.0250	0.0120	0.0088	$\pm$ % FSO/5°C (°F)
Temp. effect on min. dead load output, type MR			0.0070	0.0039	$\pm$ % FSO/5°C
Temperature effect on sensitivity	(0.0010)	0.0250	0.0088	0.0065	% 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 $E_{max}$	0.4/ 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 $\pm$ 3.5				$\Omega$
Output resistance	350 $\pm$ 3.5				$\Omega$
Insulation resistance	$\geq$ 5000				M $\Omega$
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 & 1K - 4K: 149		5K & 5t and over: 271		N*m

\* 5t and 10K 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.

**VISHAY TRANSDUCERS (VT) SALES OFFICES**

**VT Americas**  
City of Industry, CA  
PH: +1-626-858-8899  
FAX: +1-626-332-3418  
vt.us@vishaymg.com

**VT Netherlands**  
Breda  
PH: +31-76-548-0700  
FAX: +31-76-541-2854  
vt.nl@vishaymg.com

**VMG UK**  
Basingstoke  
PH: +44-125-646-2131  
FAX: +44-125-647-1441  
vt.uk@vishaymg.com

**VMG Israel**  
Netanya  
PH: +972-9-863-8888  
FAX: +972-9-863-8800  
vt.il@vishaymg.com

**VMG Germany**  
Heilbronn  
PH: +49-7131-3901-260  
FAX: +49-7131-3901-2666  
vt.de@vishaymg.com

**VT China**  
Tianjin  
PH: +86-22-2835-3503  
FAX: +86-22-2835-7261  
vt.prc@vishaymg.com

**VMG France**  
Chartres  
PH: +33-2-37-33-31-20  
FAX: +33-2-37-33-31-29  
vt.fr@vishaymg.com

**VT Taiwan\***  
Taipei  
PH: +886-2-2696-0168  
FAX: +886-2-2696-4965  
vt.roc@vishaymg.com  
\*Asia except China



## Disclaimer

All product specifications and data are subject to change without notice.

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

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

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

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