

Single-Point Stainless Steel Load Cell

FEATURES

- Capacity range: 10–150 kg
- Stainless steel construction
- Single-point 400 × 400 mm platform
- Sealed to IP66
- Compact size: only 40 mm high
- OIML approved to C3 (20–100 kg) and NTEP Class III/5000
- Choice of mounting threads: 1/4-20 UNC or M6 × 12
- **Optional**
 - ATEX, FM and IECEx approvals available
 - Grounded version includes shield wire in load cell cable



APPLICATIONS

- Platform scales
- Bench scales
- Counting scales
- Grocery scales

DESCRIPTION

Model 1142 is a stainless steel single-point load cell suitable for direct mounting with platform, bench, counting, and a wide range of other scale applications. Small physical size, combined with high accuracy and low cost, makes 1142 load cells the perfect choice for new or retrofit scale construction.

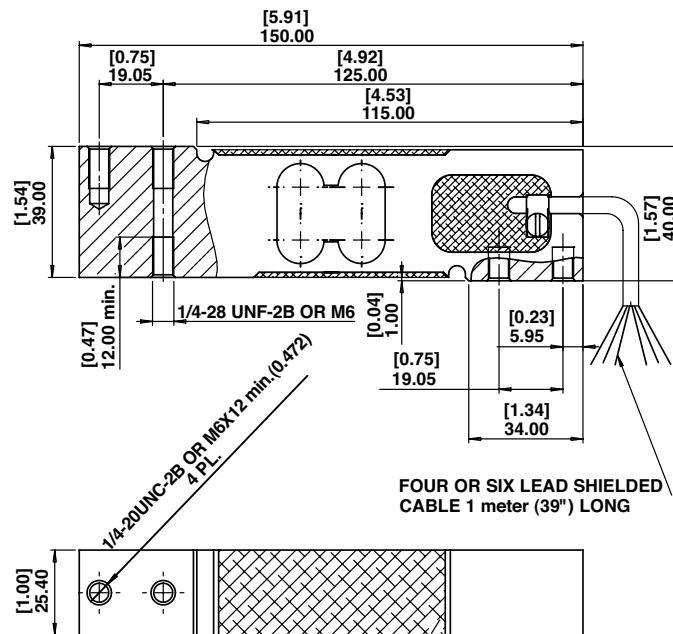
A humidity-resistant protective coating assures stable operation in damp environments over the entire compensated range and conforms to IP66 (IEC 60529).

Also available with ATEX approved version for hazardous areas.

The six-wire cable includes two sense wires that compensate for changes in lead resistance due to temperature changes and cable extension.

Model 1142 options offer a choice of bolt threads, 1/4-20 UNC or M6 × 12, and a grounded version that includes a “shield” wire in the load cell cable.

OUTLINE DIMENSIONS in millimeters [inches]



Single-Point Stainless Steel Load Cell

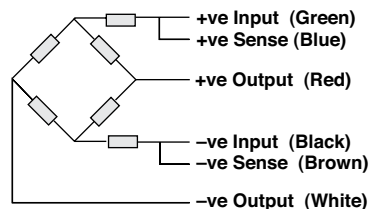
SPECIFICATIONS				
PARAMETER	VALUE			UNIT
Rated capacity—R.C. (E_{max})	10, 15, 20, 30, 50, 75, 100, 150**, 200**			kg
OIML accuracy class	Non-Approved	C3*		
NTEP accuracy class		III/5000		
Maximum no. of intervals (n)	1000	3000	5000 single	
$Y = E_{max}/V_{min}$	4000	15000	10000	Maximum available
Rated output—R.O.	2.0			mV/V
Rated output tolerance	0.2			±mV/V
Zero balance	0.2			±mV/V
Zero return, 30 min.	0.0500	0.0167	0.0100	±% of applied load
Total error	0.0300	0.0200	0.0200	±% of rated output
Temperature effect on zero	0.0070	0.0023	0.0014	±% of rated output/°C
Temperature effect on output	0.0030	0.0010	0.0010	±% of applied load/°C
Eccentric loading error	0.0074	0.0049	0.0042	±% of rated load/cm
Temperature range, compensated	-10 to +40			°C
Temperature range, safe	-30 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	415±15			Ω
Output impedance	350±3			Ω
Insulation resistance	>2000			MΩ
Cable length	1			m
Cable type	6-wire, PVC, single floating screen			Standard
Construction	Stainless steel			
Environmental protection	IP66			
Platform size (max.)	400 x 400			mm
Recommended torque	Up to 30 kg: 7.0 50 kg and up: 10.0			N*m

* 50% utilization

** 10, 15, 150, and 200 kg are not OIML approved

All specifications are subject to change without notice.

Wiring Schematic Diagram
(Balanced bridge temperature compensation)



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.



LOADCELLS | PRESSURE SENSORS | ELECTRONICS

Meer en Duin 64b Phone : +31 (0)88-4224440
2163 HC Lisse Fax : +31 (0)88-4224441
The Netherlands Email : info@stekon.nl