

Low Profile Aluminum Load Cell

FEATURES

- Capacities 1–200 kg
- Aluminum construction
- Single-point 400 x 400 mm platform
- OIML R60 and NTEP approved
- IP66 protection
- Available with metric and UNC threads
- Optional
 - o EEx ia IIC T4 hazardous area approval
 - o FM approval available
 - High stiffness version available for dynamic weighing applications

APPLICATIONS

- · Bench scales
- · Counting scales
- · Grocery scales

DESCRIPTION

Model 1042 is a low profile single-point load cell designed for direct mounting in weighing platforms.

Its small physical size, combined with high accuracy and low cost, makes this load cell ideally suited for retail, bench and counting scales.







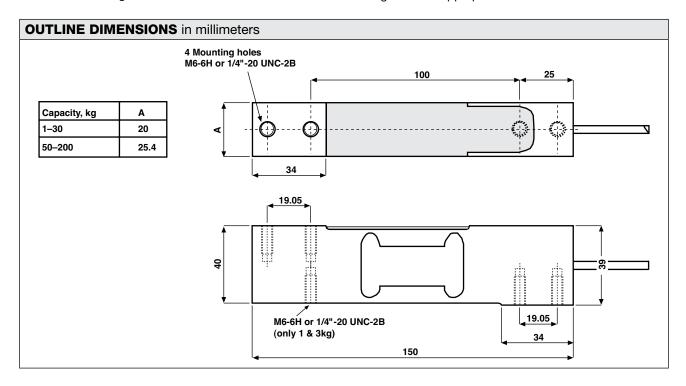




Capacities of 5 kg and above are supplied as standard in anodized aluminum. This high accuracy load cell is approved to NTEP and other stringent approval standards, including OIML R60.

A humidity resistant protective coating assures long-term stability over the entire compensated temperature range.

The two additional sense wires feed back the voltage reaching the load cell. Complete compensation of changes in lead resistance due to temperature change and/or cable extenstion, is achieved by feeding this voltage into the appropriate electronics.





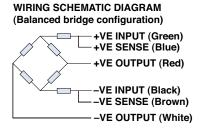
Low Profile Aluminum Load Cell

SPECIFICATIONS					
PARAMETER	VALUE				UNIT
Rated capacity—R.C. (Emax)	1, 3, 5, 7, 10, 15, 20, 30, 50, 75, 100, 150, 200***				kg
NTEP/OIML accuracy class	NTEP	Non-Approved	C3*	C6**	
Maximum no. of intervals (n)	5000 single	1000	3000	6000****	
Y = E _{max} /V _{min}	10000	1400	6000	10000	Maximum available 20000
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.	0.0330	0.0300	0.0170	0.0083	±% of applied load
Total error (per OIML R60)	0.0200	0.0500	0.0200	0.0100	±% of rated output
Temperature effect on zero	0.0023	0.0100	0.0023	0.0014	±% of rated output/°C
Temperature effect on output	0.0010	0.0030	0.0010	0.00058	±% of applied load/°C
Eccentric loading error	0.0049	0.0074	0.0049	0.0024	±% of rated load/cm
Temp. range, compensated	-10 to +40				°C
Temp. range, safe	–20 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±20				Ω
Output impedance	350±3				Ω
Insulation resistance	>2000				ΜΩ
Cable length	1****				m
Cable type	6 wire, PVC, single floating screen				Standard
Construction	Plated (anodize) aluminum				
Environmental protection	IP65				
Platform size (max)	400 x 400				mm
Recommended torque	Up to 30 kg: 7.0 35 kg and above: 10.0				N*m

^{* 50%} utilization

All specifications subject to change without notice.

WIRING SCHEMATIC DIAGRAM (Unbalanced bridge configuration) +VE INPUT (Green) +VE SENSE (Blue) +VE OUTPUT (Red) -VE INPUT (Black) -VE SENSE (Brown) -VE OUTPUT (White)



Document No.: 12010 Revision: 19 Dec 2014

^{** 60%} utilization

^{*** 1} kg is not approved by OIML, 150 and 200 kg are not approved by NTEP

^{**** 20-200} kg are of balanced bridge configuration, and have side cable entry

^{***** 6000} divisions from 20 kg to 100 kg



Legal Disclaimer Notice

Vishay Precision Group, Inc.

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.

Document No.: 63999 Revision: 15-Jul-2014