

Tension Compression Load Cell

FEATURES

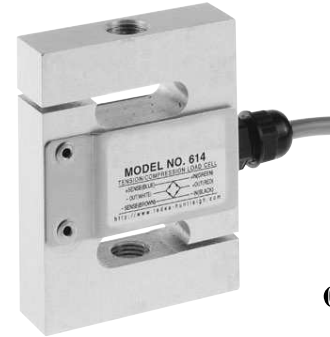
- Capacities 50–500 kg
- Anodized aluminum construction
- OIML R60 approved
- IP67 protection
- For use in tension or compression
- 6 wire (sense) circuit

APPLICATIONS

- Hopper (Tank weighing)
- Hybrid scales
- Belt weighing
- Lever arm conversions
- Material testing machines
- Vibrations filling equipment
- Dynamometers

DESCRIPTION

Model 614 is a tension-compression load cell. Humidity resistant coating and shielded cables enable this load cell to be used in harsh environments while maintaining its operating specifications.

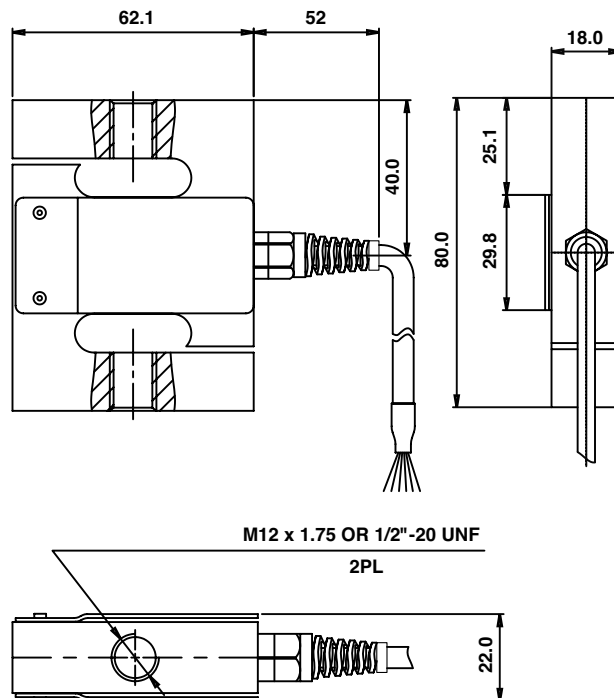


The additional sense wires compensate for changes in lead resistance due to temperature change and/or cable extension.

Ideally suited for lever conversions, hanging scales, force measurement and a wide range of other industrial applications.

Model 614 is made from aluminum.

OUTLINE DIMENSIONS in millimeters



Document No.: 12/040 Revision: 18-Oct-2016

Tension Compression Load Cell

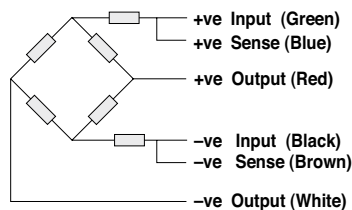
SPECIFICATIONS				
PARAMETER	VALUE			UNIT
Rated capacity—R.C. (E _{max})	50, 100, 150, 200, 300, 500			kg
Accuracy class	Non-Approved	C3*		
Maximum no. of intervals (n)	1000	3000		
Y = E _{max} /V _{min}	2500	8000	12000**	
Rated output—R.O.	2.0			mV/V
Rated output tolerance	0.2			±% mV/V
Zero balance	0.02			±% mV/V
Zero return, 30 min.	0.05	0.017		±% of applied load
Total error (per OIML R60)	0.05	0.020		±% of rated output
Temperature effect on zero	0.01	0.0023		±% of rated output/°C
Temperature effect on output	0.003	0.0012		±% of load/°C
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	3.0			m
Cable type	6-wire, braided PVC, dual floating screen			Standard
Construction	Plated (anodized) aluminum			
Environmental protection	IP67			

* 50% utilization

** Y=8000 for capacities 50–200 kg. Y=12000 for capacities 300–500 kg

All specifications are subject to change without notice.

Wiring Schematic Diagram (Balanced bridge configuration)



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