

Tension Compression Load Cells

FEATURES

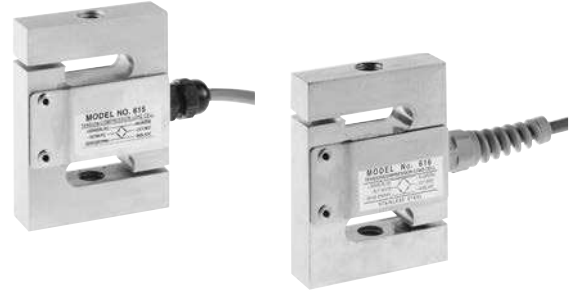
- Capacities 50–1000 kg
- Nickel-plated alloy steel (615) or stainless steel (616) construction
- Protection: Model 616—IP66; Model 615—IP67
- For use in tension or compression
- 6-wire (sense) circuit
- Output standardised to $\pm 0.1\%$

APPLICATIONS

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

DESCRIPTION

The Models 615 and 616 are tension compression load cells which share the same dimensions. Humidity-resistant coating and shielded cables enable these load cells to be used in harsh environments while maintaining their operating specifications.

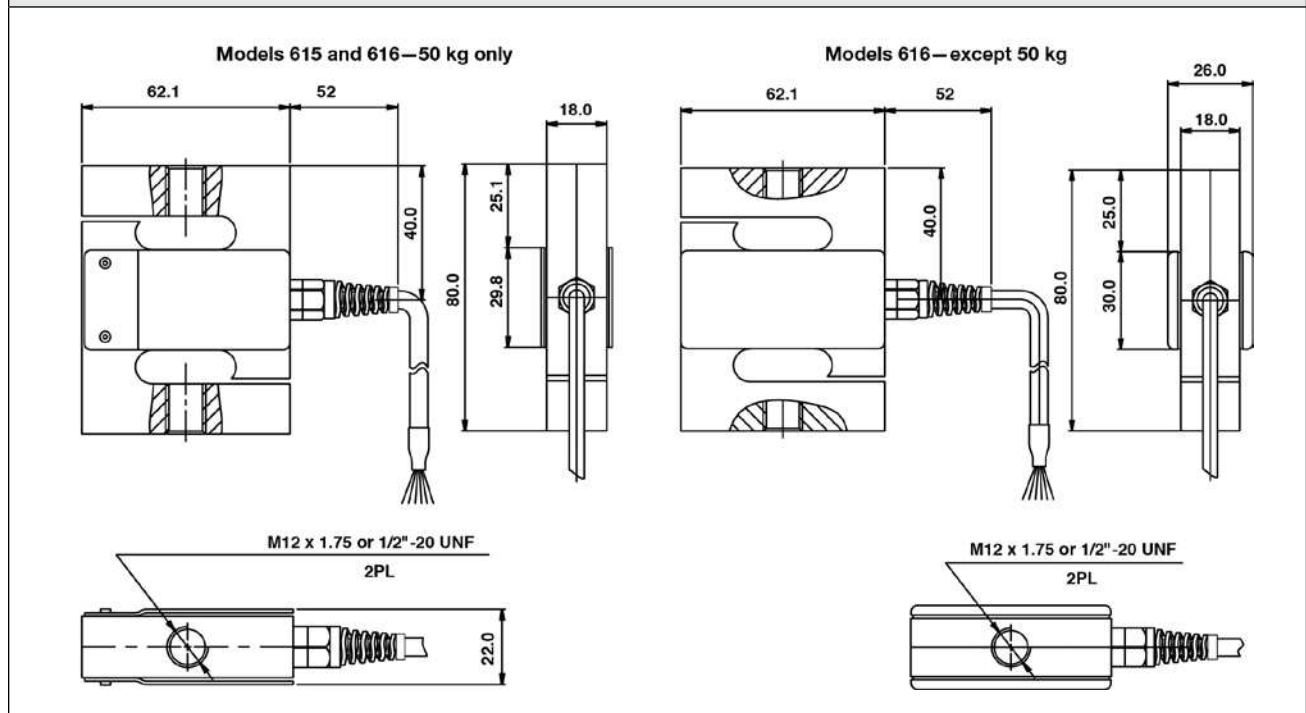


The additional sense wires compensate for changes in lead resistance due to temperature change and/or cable extension.

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

The Model 616 is made from stainless steel and has bonded covers for additional protection (except 50 kg). The Model 615 is an alternative, lower cost version made from alloy steel with riveted covers.

OUTLINE DIMENSIONS in millimeters

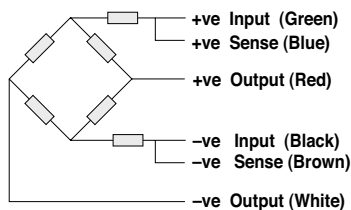


Tension Compression Load Cells

SPECIFICATIONS			
PARAMETER	VALUE		UNIT
Accuracy class	Non-Approved	G	
Maximum no. of intervals (n)	1000	3000	
Rated capacity—R.C. (E _{max})	50, 100, 150, 200, 300, 500, 750, 1000*		kg
Rated output—R.O.	2.0		mV/V
Rated output tolerance	0.002		±mV/V
Zero balance	0.2		±mV/V
Zero return, 30 min.	0.05	0.017	±% of applied load
Total error (per OIML R60)	0.05	0.02	±% of rated output
Temperature effect on zero	0.01	0.004	±% 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	400±20		Ω
Output impedance	350±3		Ω
Insulation resistance	>2000		MΩ
Cable length	3.0		m
Cable type	6-wire, PVC, braid shield		Standard
Construction	Model 615—alloy steel; Model 616—stainless steel		
Environmental protection	Model 616—IP66; Model 615—IP67		

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.