Vishay Tedea-Huntleigh



Tension Compression Load Cell



FEATURES

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

OPTIONAL FEATURE

• EEx ia IIC T4 hazardous area approval

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.

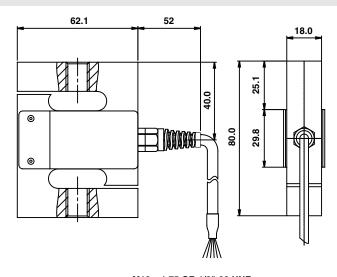
Ideally suited for lever conversions, hanging scales, force measurement and a wide range of other industrial applications.

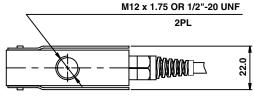
Model 614 is made from aluminum.

APPLICATIONS

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

OUTLINE DIMENSIONS in mm





All dimensions in mm

Document Number: 12040 Revision: 15-Jan-08



Tension Compression Load Cell

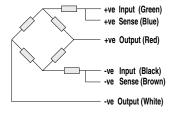
Vishay Tedea-Huntleigh

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			Ohms
Output impedance	350±3			Ohms
Insulation resistance	>2000			Mega-Ohms
Cable length	3.0			m
Cable type	6 wire, braided PVC, dual floating screen			Standard
Construction	Plated (Anodize) aluminum			
Environmental protection	IP67			

- 50% utilization
- ** Y=8000 for capacities 50-200kg. Y=12000 for capacities 300-500kg

Wiring Schematic Diagram (Balanced bridge configuration)



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

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

VT Netherlands

VMG UK Basingstoke

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

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

VMG Israel

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

Document Number: 12040 Revision: 15-Jan-08





Vishay

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.

Revision: 18-Jul-08

Document Number: 91000 www.vishay.com