

## Low Capacity Single Point Aluminum Load Cells



### FEATURES

- Capacities 5-100kg
- Aluminum construction
- Single point 400 x 400mm platform
- OIML R60 and NTEP approved
- IP65 protection
- Available with metric and UNC threads

### OPTIONAL FEATURES

- EEx ia IIC T4 - hazardous area approval
- FM approval available
- IP67 available

### DESCRIPTION

Models 1040 and 1041 are low profile single point load cells designed for direct mounting of low cost weighing platforms.

Their small physical size, combined with high accuracy and low cost, makes these load cells ideally suited for retail, bench and counting scales.

Available in anodized aluminum these high accuracy load cells are approved to NTEP and other stringent approval standards, including OIML R60. For hazardous environments this load cell has EEx ia IIC

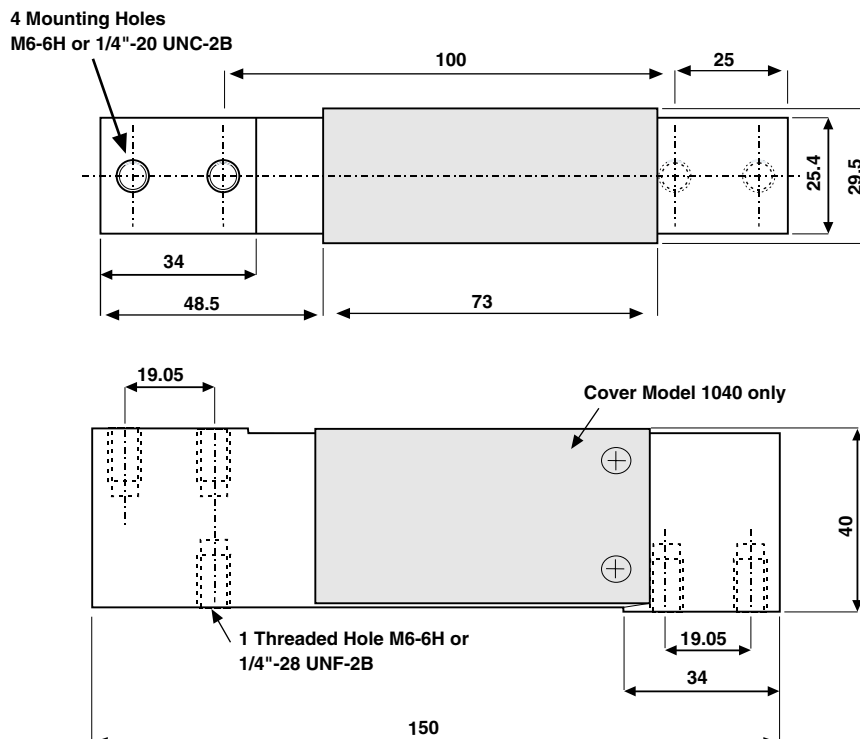
T4 level of approved option. An optional special humidity resistant protective coating assures long term stability over the entire compensated temperature range.

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 extension, is achieved by feeding this voltage into the appropriate electronics.

### APPLICATIONS

- Bench scales
- Counting scales
- Grocery scales

### OUTLINE DIMENSIONS in millimeters



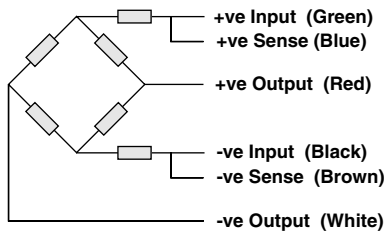


**SPECIFICATIONS**

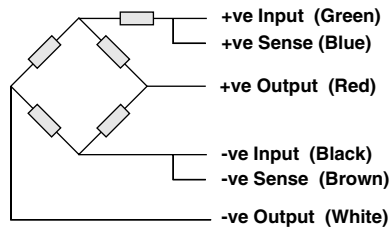
PARAMETER	VALUE			UNITS
	NTEP	Non Approved	C3*	
NTEP/OIML Accuracy class	NTEP	Non Approved	C3*	
Maximum no. of intervals (n)	5000 single	1000	3000	
Rated capacity-R.C. ( $E_{max}$ )	5, 7, 10, 15, 20, 30, 50, 75, 100			kg
Rated output-R.O.	2.0			mV/V
Rated output tolerance	0.2			±mV/V
Zero balance	0.2			+mV/V
Zero Return, 30 min.	0.0330	0.0300	0.0170	±% of applied load
Total Error	0.0200	0.0500	0.0200	±% of rated output
Temperature effect on zero	0.0023	0.0100	0.0023	±% of rated output/°C
$Y = E_{max}/V_{min}$	6000	1400	6000	
Temperature effect on output	0.0010	0.0030	0.0010	±% of applied load/°C
Eccentric loading error	0.0049	0.0074	0.0049	±% 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±15			Ohms
Output impedance	350±3			Ohms
Insulation resistance	>2000			Mega-Ohms
Cable length	1.0			m
Cable type	6wire, PVC, single floating screen			Standard
Construction	Plated (Anodized) aluminum 1040 Aluminum - 1041			
Environmental protection	IP65			
Platform size (max)	400 x 400			mm
Recommended torque	Up to 30kg: 7.0 50kg & up: 10.0			N*m

\* 50% utilization. Other utilization factors available upon request.

**Wiring Schematic Diagram**  
(1040 balanced bridge configuration)



**Wiring Schematic Diagram**  
(1041 unbalanced 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

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

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

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

**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



## 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.