

Low Capacity Single-Point Aluminum Load Cells

FEATURES

- Capacities 5–100 kg
- Aluminum construction
- Single-point 400 x 400 mm platform
- OIML R60 and NTEP approved
- IP65 protection
- Available with metric and UNC threads
- **Optional**
 - EEx ia IIC T4 - hazardous area approval
 - FM approval available
 - IP67 available



APPLICATIONS

- Bench scales
- Counting scales
- Grocery scales

DESCRIPTION

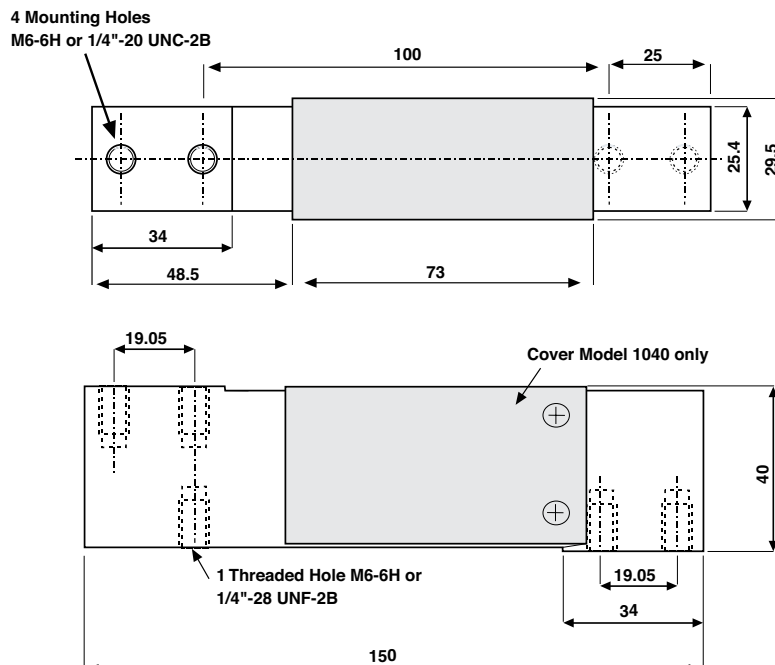
Models 1040 and 1041 are low profile single-point load cells designed for direct mounting of low cost weighing platforms.

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.

OUTLINE DIMENSIONS in millimeters



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SPECIFICATIONS				
PARAMETER	VALUE			UNIT
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	Maximum available 10000
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			Ω
Output impedance	350±3			Ω
Insulation resistance	>2000			MΩ
Cable length	1040: 1.0 1041: 0.5			m
Cable type	6 wire, 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 30 kg: 7.0 50 kg and up: 10.0			N*m

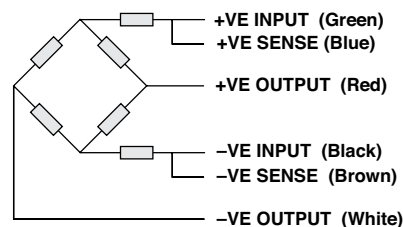
* 50% utilization. Other utilization factors available upon request.

** Available also in IP67

All specifications subject to change without notice.

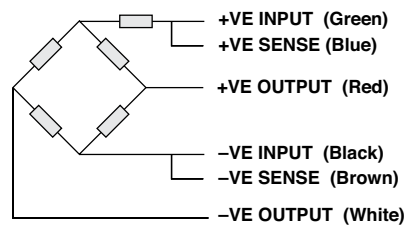
Wiring Schematic Diagram

(1040 Balanced bridge configuration)



Wiring Schematic Diagram

(1041 Unbalanced bridge configuration)



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