

Low Profile Aluminum Load Cell



ATEX



FEATURES

- Capacities 1- 250kg
- Aluminum construction
- Single point 400 x 400mm platform
- OIML R60 and NTEP approved
- IP66 protection
- Available with metric and UNC threads

OPTIONAL FEATURES

- EEx ia IIC T4 hazardous area approval
- FM approval available
- High stiffness version available for dynamic weighing applications

DESCRIPTION

Model 1042 is a low profile single point load cell designed for direct mounting in weighing platforms.

Its small physical size, combined with high accuracy and low cost, makes this load cell ideally suited for retail, bench and counting scales.

Capacities of 5kg and above are supplied as standard in anodized aluminum. This high accuracy load cell is approved to NTEP and other stringent approval standards, including OIML R60.

A 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.

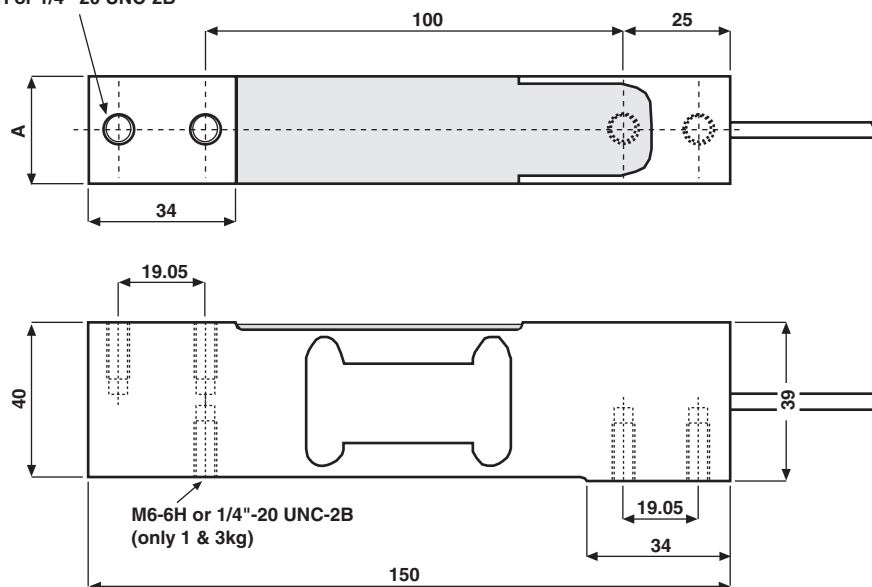
APPLICATIONS

- Bench scales
- Counting scales
- Grocery scales

OUTLINE DIMENSIONS in mm

Capacity, kg	A
1 - 30	20
50 - 250	25.4

4 Mounting holes
M6-6H or 1/4"-20 UNC-2B



SPECIFICATIONS

PARAMETER	VALUE				UNITS
Rated capacity-R.C. (E_{max})	1, 3, 5, 7, 10, 15, 20, 30, 50, 75, 100, 150, 250***				kg
NTEP/OIML Accuracy class	NTEP	Non-Approved	C3*	C6**	
Maximum no. of intervals (n)	5000 single	1000	3000	6000*****	
$Y = E_{max}/V_{min}$	10000	1400	6000	10000	Maximum available 20000
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	0.0083	±% of applied load
Total Error (per OIML R60)	0.0200	0.0500	0.0200	0.0100	±% of rated output
Temperature effect on zero	0.0023	0.0100	0.0023	0.0014	±% of rated output/°C
Temperature effect on output	0.001	0.0030	0.0010	0.00058	±% of applied load/°C
Eccentric loading error	0.0049	0.0074	0.0049	0.0024	±% of rated load/cm
Temperature range, compensated	-10 to +40				°C
Temperature 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±20				Ohms
Output impedance	350±3				Ohms
Insulation resistance	>2000				Mega-Ohms
Cable length	1****				m
Cable type	6wire, PVC, single floating screen				Standard
Construction	Plated (anodize) aluminum				
Environmental protection	IP66				
Platform size (max)	400 x 400				mm
Recommended torque	Up to 30kg: 7.0 35kg & above: 10.0				N*m

* 50% utilization

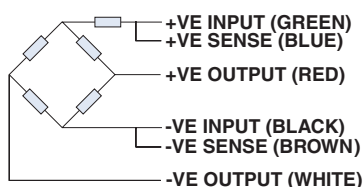
** 60% utilization

*** 1kg is not approved by OIML, 150 and 250kg are not approved by NTEP

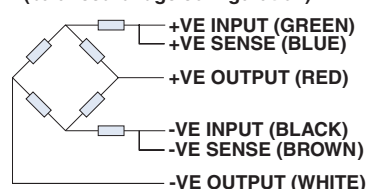
**** 20 - 250kg are of balanced bridge configuration, and have side cable entry

***** 6000 divisions from 20kg to 100kg

WIRING SCHEMATIC DIAGRAM
(unbalanced bridge configuration)



WIRING SCHEMATIC DIAGRAM
(balanced bridge configuration)



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