



PENKO Engineering BV

The Leading Experts In Weighing & Dosing

1kg-200kg **1042**

Low Profile Aluminum Load Cell

FEATURES

- Capacities 1–200 kg
- Aluminum construction
- Single-point 400 x 400 mm platform
- OIML R60 and NTEP approved
- IP66 protection
- Available with metric and UNC threads
- **Optional**
 - ATEX, FM, and IECEx approvals available
 - High stiffness version available for dynamic weighing applications



APPLICATIONS

- Bench scales
- Counting scales
- Grocery scales

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 5 kg 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.

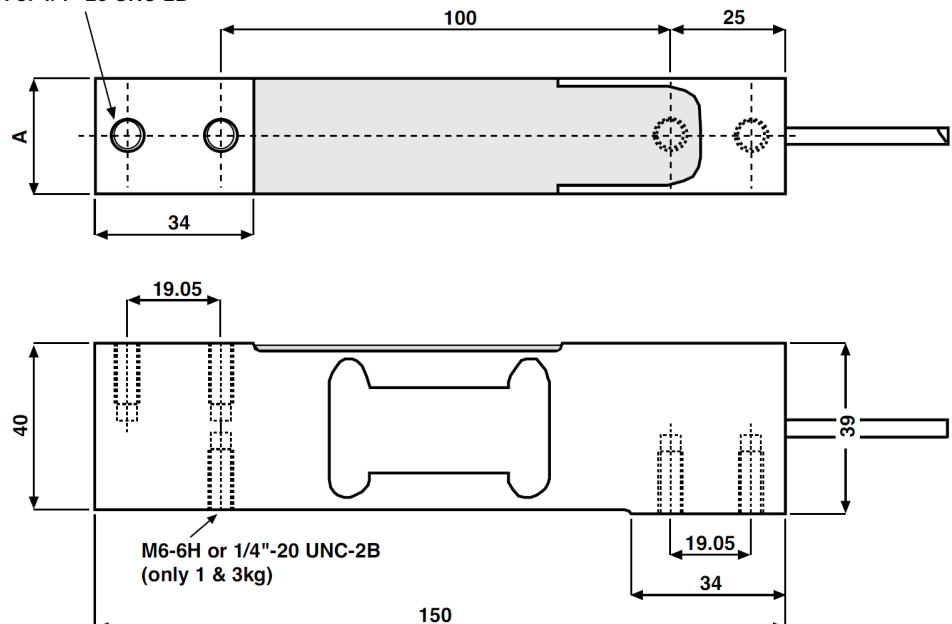
A humidity resistant protective coating assures long-term stability over the entire compensated temperature range.

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.

OUTLINE DIMENSIONS in millimeters

Capacity, kg	A
1–30	20
50–200	25.4

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



SPECIFICATIONS					
PARAMETER	VALUE				UNIT
Rated capacity – R.C. (E_{max})	1 ⁽¹⁾ , 3, 5, 7, 10, 15, 20, 30, 50, 75, 100, 150 ⁽¹⁾ , 200 ⁽¹⁾				kg
NTEP/OIML accuracy class	NTEP	Non-Approved	C3 ⁽²⁾	C6 ⁽³⁾	
Maximum no. of intervals (n)	5000 single	1000	3000	6000 ⁽⁴⁾	
$Y = E_{max}/V_{min}$	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.	0.0100	0.0500	0.0170	0.0083	±% of applied load
Total error (per OIML R60)	0.0200	0.0300	0.0200	0.0100	±% of rated output
Temperature effect on zero	0.0014	0.0100	0.0023	0.0014	±% of rated output/°C
Temperature effect on output	0.0010	0.0030	0.0010	0.00058	±% of applied load/°C
Eccentric loading error	0.0042	0.0074	0.0049	0.0024	±% of rated load/cm
Temp. range, compensated	-10 to +40				°C
Temp. 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±20				Ω
Output impedance	350±3				Ω
Insulation resistance	>2000				MΩ
Cable length	1 ⁽⁵⁾				m
Cable type	6 wire, PVC, single floating screen				Standard
Construction	Plated (anodize) aluminum				
Environmental protection	IP66				
Platform size (max)	400 x 400				mm
Recommended torque	Up to 30 kg: 7.0 35 kg and above: 10.0				N*m

⁽¹⁾ 1 kg and 200 kg not approved by OIML; 150 and 200 kg are not approved by NTEP.

⁽²⁾ 50% utilization.

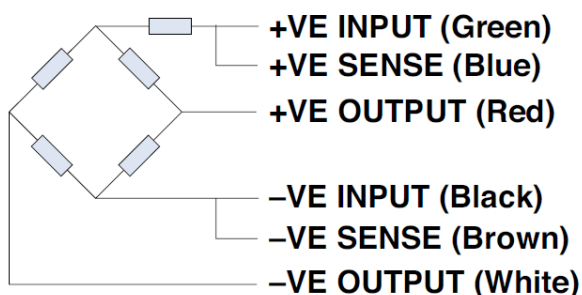
⁽³⁾ 60% utilization.

⁽⁴⁾ 6000 divisions from 20 kg to 100 kg.

⁽⁵⁾ Options: 4-wire cable; different cable lengths; side cable entry.

All specifications subject to change without notice.

WIRING SCHEMATIC DIAGRAM (Unbalanced bridge configuration)



WIRING SCHEMATIC DIAGRAM (Balanced bridge configuration)

