



# PENKO Engineering BV

The Leading Experts In Weighing & Dosing

3kg-200kg **1022**

## Aluminum Single-Point Load Cell

### FEATURES

- Capacities: 3–200 kg
- Only 22 mm high
- Aluminum construction
- Single-point 350 x 350 mm platform
- IP66 protection
- OIML R60 and NTEP approved
- **Optional**
  - ATEX, FM and IECEx approvals available
  - Symmetric configuration available



### APPLICATIONS

- Bench scales
- Counting scales
- Grocery scales

### DESCRIPTION

Model 1022 is a low profile single-point load cell designed for direct mounting in low cost weighing platforms.

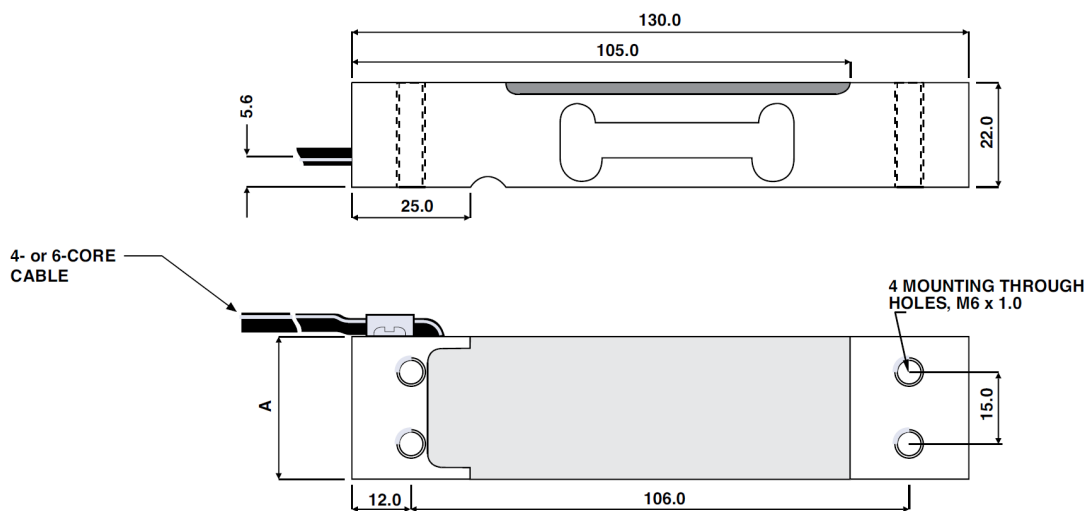
Its small physical size, combined with high accuracy and aluminum construction, makes this low cost load cell ideally suited for retail, bench and counting scales.



Using 1022 load cells simplifies scale construction, which results in significant parts and labor savings.

Model 1022 is available in a range of capacities, from 3 to 150 kg approved to OIML R60 (4000d), from 20 to 150 kg approved to OIML R60 (6000d), while 3 to 100 kg approved to NTEP (5000d, single). Environmental protection to IP66 is provided as standard. For hazardous environments, ATEX approved versions are available.

### OUTLINE DIMENSIONS in millimeters\*



CAPACITY	A
3, 5, 7 kg	25.4
10, 15, 20, 30, 35, 50, 75 kg	30.0
35, 100, 150, 200 kg	40.0

\* Double-sided bonding is available on request

SPECIFICATIONS					
PARAMETER	VALUE				UNIT
Rated capacity – R.C. ( $E_{max}$ )	3, 5, 7, 10, 15, 20, 30, 35, 50, 100, 150, 200***				kg
NTEP/OIML accuracy class	NTEP	Non-Approved	C3*	C4	
Maximum no. of intervals (n)	5000 single**	1000	3000	4000	
$Y = E_{max}/V_{min}$	10000	1400	6000	10000	Maximum available 12000
Rated output – R.O.	2.0				mV/V
Rated output tolerance	0.2				±mV/V
Zero balance	0.1				±mV/V
Zero return, 30 min.	0.01	0.05	0.0170	0.0125	±% of applied load
Total error (per OIML R60)	0.0200	0.03	0.0200	0.0150	±% 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	0.00075	±% of rated output/°C
Eccentric loading error	0.0057	0.0085	0.0057	0.0042	±% of rated load/cm
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				Ω
Output impedance	350±3				Ω
Insulation resistance	>2000				MΩ
Cable length	0.5, other lengths available				m
Cable type	4 or 6 wire, PVC, single floating screen or grounded to element body				Standard
Construction	Aluminum				
Environmental protection	IP66				
Platform size (max.)	350 × 350				mm
Recommended torque	Up to 30 kg: 7.0 35 kg and up: 10.0				N*m

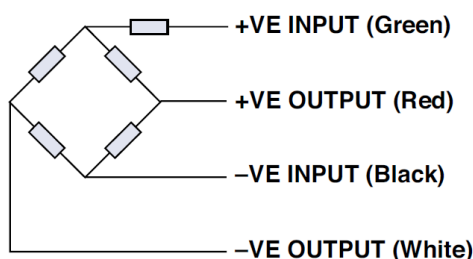
\* 50% utilization

\*\* Also available at 50% utilization

\*\*\* 150–200 kg are not approved by NTEP, 200 kg is not approved by OIML

All specifications subject to change without notice.

### WIRING SCHEMATIC DIAGRAM\*\*\*\* (Unbalanced bridge configuration)



\*\*\*\* Balanced bridge available with 6 sense wires