Aluminum Single-Point Load Cell

FEATURES

- Capacities: 3–90 kg
- Aluminum construction
- Single-point 400 x 400 mm platform
- NTEP approved (not applicable for 3 and 90 kg)
- IP65 protection
- Available with metric and UNC threads
- **Optional**
  - FM approval available
  - IP67 available



APPLICATIONS

- Bench scales
- Counting scales
- Grocery scales

DESCRIPTION

The Model 1010 is a single-point load cell designed for direct mounting of low cost, low capacity weighing platforms.

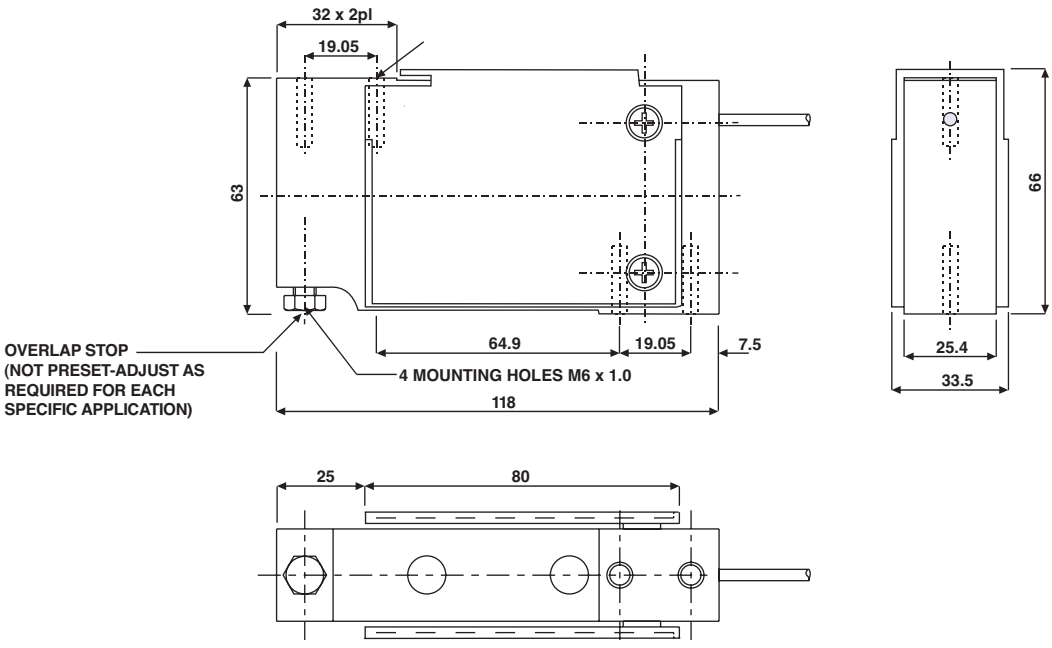
Its use in large platforms, combined with its high accuracy and low cost, makes this load cell ideally suited for a large range of weighing applications, including bench scales and counting scales.

A special humidity resistant protective coating is available which ensures long-term reliability.

Model 1010's built-in overload stop can provide mechanical protection against overloading.

The two additional sense wires feedback 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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Aluminum Single-Point Load Cell

SPECIFICATIONS			
PARAMETER	**VALUE***		**UNIT**
Rated capacity—R.C. (E_{max})	3**, 5, 7, 10, 15, 20, 30, 50, 90**		kg
NTEP/OIML accuracy class	NTEP	Non-Approved	
Maximum no. of intervals (n)	5000 single	3000	
Y = E_{max}/V_{min}	10000	10000	Maximum available
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	0.0170	±% of applied load
Total error (per OIML R60)	0.0200	0.0200	±% of rated output
Temperature effect on zero	0.0023	0.004	±% of rated output/°C
Temperature effect on output	0.001	0.0010	±% of applied load/°C
Eccentric loading error	Up to 30 kg—0.0049 Over 30 kg—0.0057		±% 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±15		Ω
Output impedance	350±3		Ω
Insulation resistance	>5000		MΩ
Cable length	1.0		m
Cable type	6 wire, PVC, single floating screen		Standard
Construction	Plated (anodize) aluminum		
Environmental protection	IP65***		
Maximum recommended platform size	Up to 30 kg—40 x 40 Over 30 kg—35 x 35		cm
Recommended torque	Up to 30 kg: 7.0 50 kg and up: 10.0		N-m

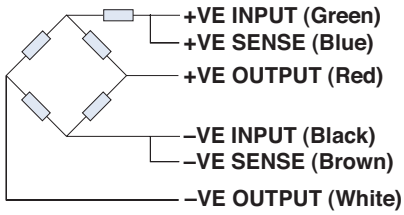
* 1010 is non-balanced load cell (non-balanced bridge), 1015 is balanced

** 3 and 90 kg capacity are not available with NTEP approval

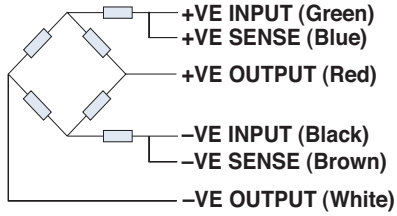
*** IP67 available upon request

All specifications are subject to change without notice.

WIRING SCHEMATIC DIAGRAM (1010)
(Unbalanced bridge configuration)



WIRING SCHEMATIC DIAGRAM (1015)
(Balanced temperature compensation)



CERTIFICATION MARKINGS

FM Approval markings (USA and Canada)
IS Class I, II, III, Division 1,
Groups A, B, C, D, E, F and G; T4
Ta = -25°C to +40°C

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