

Single-Point Stainless Steel Load Cell

FEATURES

- Capacity range: 10–150 kg
- Stainless steel construction
- Single-point 400 × 400 mm platform
- Sealed to IP66
- Compact size: only 40 mm high
- OIML approved to C3 (20–100 kg) and NTEP Class III/5000
- Choice of mounting threads: 1/4-20 UNC or M6 × 12
- **Optional**
 - ATEX, FM and IECEx approvals available
 - Grounded version includes shield wire in load cell cable



APPLICATIONS

- Platform scales
- Bench scales
- Counting scales
- Grocery scales

DESCRIPTION

Model 1142 is a stainless steel single-point load cell suitable for direct mounting with platform, bench, counting, and a wide range of other scale applications. Small physical size, combined with high accuracy and low cost, makes 1142 load cells the perfect choice for new or retrofit scale construction.

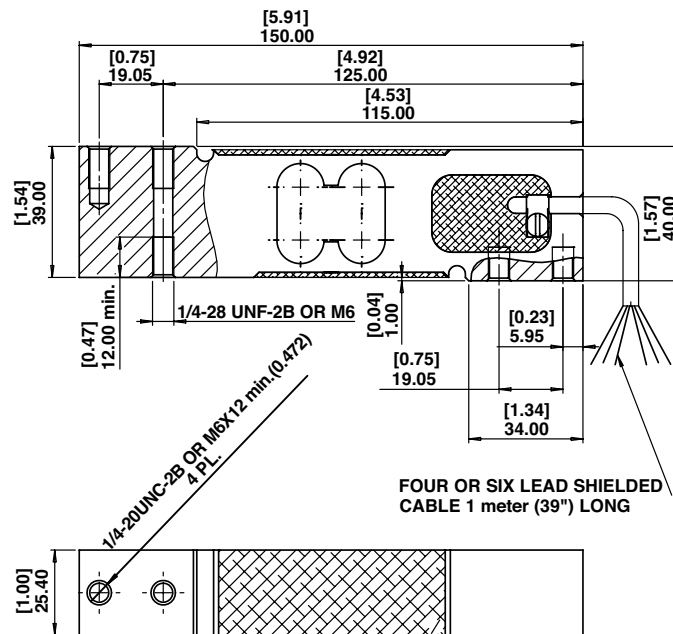
A humidity-resistant protective coating assures stable operation in damp environments over the entire compensated range and conforms to IP66 (IEC 60529).

Also available with ATEX approved version for hazardous areas.

The six-wire cable includes two sense wires that compensate for changes in lead resistance due to temperature changes and cable extension.

Model 1142 options offer a choice of bolt threads, 1/4-20 UNC or M6 × 12, and a grounded version that includes a “shield” wire in the load cell cable.

OUTLINE DIMENSIONS in millimeters [inches]



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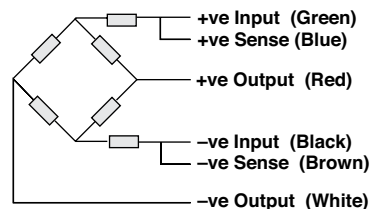
SPECIFICATIONS				
PARAMETER	VALUE			UNIT
Rated capacity—R.C. (E_{max})	10, 15, 20, 30, 50, 75, 100, 150**, 200**			kg
OIML accuracy class	Non-Approved	C3*		
NTEP accuracy class		III/5000		
Maximum no. of intervals (n)	1000	3000	5000 single	
$Y = E_{max}/V_{min}$	4000	15000	10000	Maximum available
Rated output—R.O.	2.0			mV/V
Rated output tolerance	0.2			±mV/V
Zero balance	0.2			±mV/V
Zero return, 30 min.	0.0500	0.0167	0.0100	±% of applied load
Total error	0.0300	0.0200	0.0200	±% of rated output
Temperature effect on zero	0.0070	0.0023	0.0014	±% of rated output/°C
Temperature effect on output	0.0030	0.0010	0.0010	±% of applied load/°C
Eccentric loading error	0.0074	0.0049	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	1			m
Cable type	6-wire, PVC, single floating screen			Standard
Construction	Stainless steel			
Environmental protection	IP66			
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

** 10, 15, 150, and 200 kg are not OIML approved

All specifications are subject to change without notice.

Wiring Schematic Diagram
(Balanced bridge temperature compensation)





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