

**SMT1142**

**STAINLESS STEEL SINGLE POINT LOAD CELL**



**FEATURES**

- Capacity range: 10 to 150kg
- Stainless steel construction
- Single point 400 x 400mm platform
- Sealed to IP66
- Compact size: only 40mm high
- OIML approved to C3 (20 - 100kg)
- Choice of mounting threads: 1/4-20 UNC or M6 x 12

**OPTIONAL FEATURES**

- EEx ia IIC T4 - ATEX hazardous area approval
- Grounded version includes shield wire in load cell cable

**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 is an ATEX 2G EEx ia IIC T4 approved version for hazardous areas.

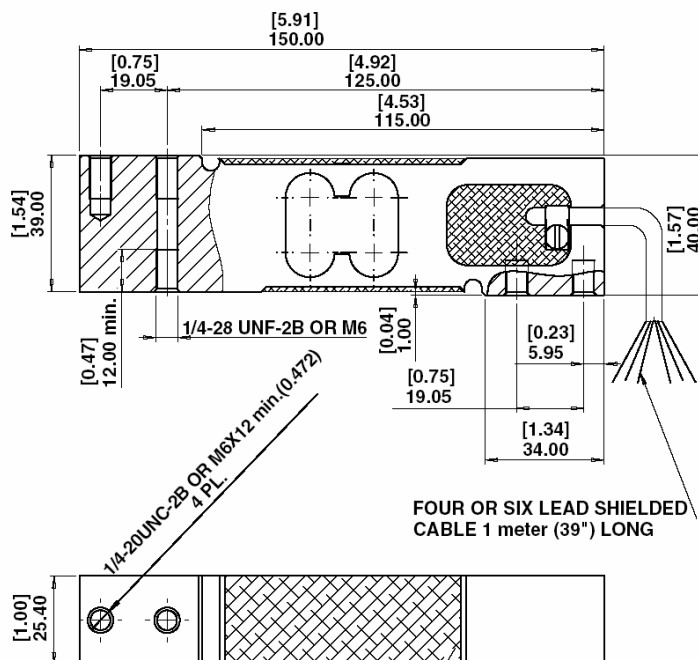
The six-wire cable includes two sense wires that compensate for changes in lead resistance due to temperature changes and cable extension.

Model 1142 options offer a choice of boltthreads, 1/4-20 UNC or M6 x 12, and a grounded version that includes a "shield" wire in the load cell cable.

**APPLICATIONS**

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

**OUTLINE DIMENSIONS** in millimeters



All DIMENSIONS IN mm [inches].

## SPECIFICATIONS

PARAMETER	VALUE		UNIT
Rated capacity-R.C. ( $E_{max}$ )	10, 15, 20, 30, 50, 75, 100, 150**		kg
OIML Accuracy class	Non-Approved	C3*	
Maximum no. of intervals (n)	1000	3000	
$Y = E_{max}/V_{min}$	4000	15000	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	±% of applied load
Total Error	0.0300	0.0200	±% of rated output
Temperature effect on zero	0.0070	0.0023	±% of rated output/°C
Temperature effect on output	0.0030	0.0010	±% of applied load/°C
Eccentric loading error	0.0074	0.0049	±% 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	385±10		Ohms
Output impedance	351±5		Ohms
Insulation resistance	>2000		Mega-Ohms
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 30kg: 7.0 50kg & up: 10.0		N*m

\* 50% utilization

\*\* 10, 15 & 150 are not approved

**Wiring Schematic Diagram**  
(Balanced bridge temperature compensation)

