

Single Point Load Cell



FEATURES

- Capacities: 50, 100, 150, 200, and 250 kg
- Certified to OIML R60, 3000d
- Industry standard mounting configuration
- Moment insensitive, platform size to 400 x 500 mm

DESCRIPTION

The 650 is an aluminium, single point load cell. Single point load cells eliminate the need for flexures and levers thus greatly simplifying scale design and reducing cost.

The 650 load cell is suitable for use in a wide range of medium capacity platform scales,

packaging machinery and general process weighing applications.

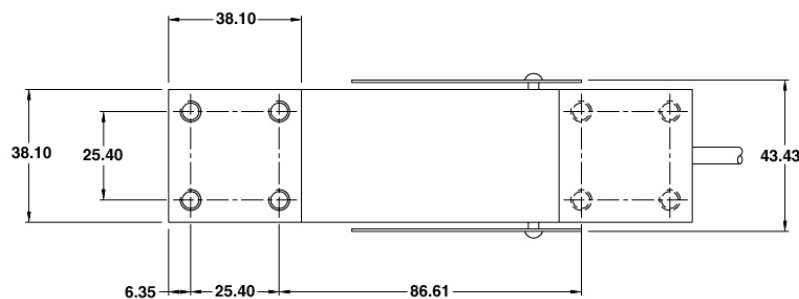
Full sealing ensures this product can be used in a variety of industrial applications.

This product meets the stringent Weights and Measures requirements throughout Europe.

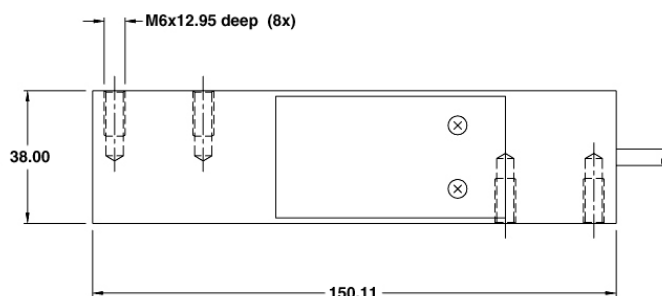
APPLICATIONS

- Platform scales
- Belt scales
- Packaging machines
- Single point hoppers

OUTLINE DIMENSIONS



Note: Dimensions in millimeters



Cable specifications:

Cable length: 1 meter

Excitation +	Green
Excitation -	Black
Output +	Red
Output -	White
Sense +	Blue
Sense -	Brown
Shield	Transparent

SPECIFICATIONS

Capacities	kg	50, 100, 150, 200, 250		
Accuracy Class According to OIML R-60 ³		D3 Industrial	Non-Approved	C3 ¹
Maximum Number of Verification Intervals	n_{IC}			3000
Minimum Verification Interval ($v_{min} = E_{max}/Y$)	v_{min}			$E_{max}/6000$
Minimum Verification Interval, Type MR	v_{min}			$E_{max}/10000$
Accuracy Class According to Type Designation ¹		D3	Non-Approved	C3
Combined Error	%FS	0.03	0.050	0.023
Hysteresis	%FS		0.050	0.017
Non-Repeatability	%FS	0.03	0.070	0.035
Minimum Dead Load Output Return	%FS		0.050	0.017
Temperature Effect on Minimum Dead Load Output	%FS _{nom} /5°C	0.0015%FS/°F	0.0250	0.0117
Temperature Effect on Minimum Dead Load Output, Type MR	%FS _{nom} /5°C			0.0070
Temperature Effect on Sensitivity	%FS/5°C	0.0008%Load/°F	0.0250	0.0088
Eccentric Load Error ² (Up to 160 mm)	%Load/mm		0.00074	0.00057
Maximum Platform Size	mm	400 x 500		
Safe Load Limit	%E _{max}	150		
Ultimate Load	%E _{max}	300		
Excitation Voltage	V	5 ... 15		
Maximum Excitation Voltage	V	18		
Rated Output	mV/V	2 ± 0.2		
Zero Balance	%FS _{nom}	≤ ± 4		
Input Resistance	Ω	400 ± 20		
Output Resistance	Ω	350 ± 3.5		
Insulation Resistance	MΩ	≥ 5000		
Compensated Temperature Range	°C	- 10 ... + 40		
Operating Temperature Range	°C	- 30 ... + 65		
Element Material		Aluminium		
Sealing (DIN 40.050 / EN 60.529)		IP67	IP63	
Recommended Torque on Fixation Bolts	Nm	10		

¹ The specified accuracies apply for the compensated temperature range.

² According to OIML R76: $E = 1/3 E_{max}$ at 160 mm from central load axis.

Correct mounting of the load cell is essential to ensure optimum performance. The maximum platform sizes given are those recommended to ensure that (a) the system meets Weights and Measures requirements and (b) damage is not done to the load cell through excessive torque. Overload stops should be set with loads placed **within the recommended** platform size.