



S251/S252

Miniature Platform Load Cell



The S251/S252* Miniature Platform Load Cell is a low profile, single point OEM load cell offering high accuracy at a reasonable price. Only 19mm high, the S251/S252 is ideal for medical instruments, low profile scales and other high resolution applications.

A 3000 Ω thin film strain gauge bridge provides extremely low power consumption for battery and current loop applications. Capacities range from 0.2 Kg to 10 Kg full scale.

Options on various specifications and mounting (end holes/ side holes) configurations are available.

Custom mechanical and electrical specifications are available for OEM requirements. Contact us to discuss your special requirements with an applications specialist.

For interface dimensions and basic performance specifications refer to the S251 outline drawing.

Ordering Information:

Specify the S251 load cell model and the capacity needed when inquiring.

Dimensions and specifications are subject to change without notice. Request current drawings before designing mounting interface requirements.

*Models S251 and S252 have different mounting holes.

Applications

- Medical instrumentation
- Bag weighing
- Counting/postal scales
- Check weighing
- Medical scales

Special Features

- Thin-film Strain Gauge
- Low power consumption
- Unsurpassed Stability
- Low Profile
- Flexible Mounting

Key Specifications

- 3,000 Ω Bridge
- 19H x 31.75L x 6.35W
- 0.01% repeatability
- <0.10%/year drift
- 200% Overload

Designed & manufactured by:

Strain Measurement Devices, Ltd.

The Old Airfield

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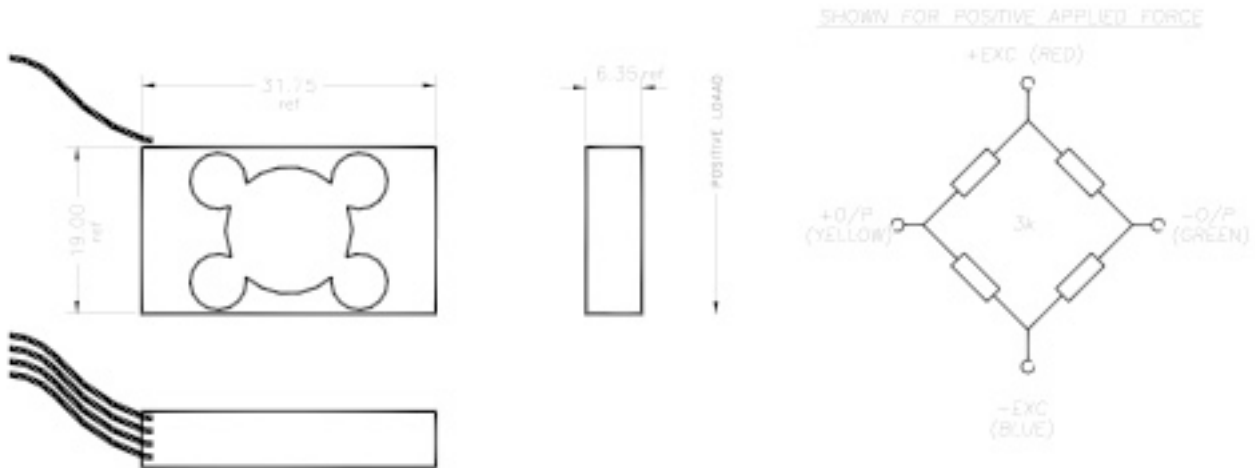


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Miniature Platform Load Cell

Schematic

(dimensions in mm)



Specification

Ranges:	0.2, 0.6, 1.0, 2.0, 5.0 & 10.0 Kgf
Maximum Load (Safe):	150% FSO at centre loading point
Maximum Load (Ultimate):	400% FSO at centre loading point without mechanical stop
Bridge Configuration:	4-wire closed bridge
Bridge Resistance:	3000Ω ±2%
Recommended Excitation Voltage:	10 V dc/ac (20 V max)
Insulation Resistance:	1000 MΩ @ 50 V dc
Full Scale Output (FSO)	2 mV/V nominal
Zero Balance:	±0.3 mV/V
Repeatability:	±0.01% FSO
Linearity:	±0.04% FSO
Hysteresis:	±0.02% FSO
Long Term Stability:	<0.1% FSO/year
Creep/Creep Recovery (30 min)	±0.05% FSO
Temperature Effect on Zero:	±0.03% FSO/°C [$\pm 0.004\%$ FSO/°C optional]
Temperature Effect on Span:	±0.025% Reading/°C [$\pm 0.002\%$ Reading/°C optional]
Operating Temperature:	-40 to +100°C [+150°C optional]
Body Material:	17-4 PH stainless steel (0.2 Kg range: Aluminium)
Cable (standard):	Stranded PTFE wire, 32 AWG, 500 mm long