

# Model 1004

## Single Point Load Cells

**NEW!**

### Features



- Capacities: 0.3 kg - 3 kg (0.6 lbs - 6 lbs)
- Aluminum construction
- Single point 200 mm x 200 mm
- IP66 protection
- Total error better than 0.0067% of rated output

Model 1004 is a very low capacity, very high precision single point load cell designed for direct mounting in low capacity scales and precision balances.

The unit is suitable for applications including jewelry scales, analytical balances, medical equipment, medical and pharmaceutical research and low level force measurement.

The model 1004 offers up to 30,000 divisions short term precision at stable room temperature. A special two-stage humidity resistant protective coating assures long term reliability.

An overload protection device should be included in the application design. A threaded hole is provided in the loading end of the load cell for this purpose.



EXCELLENCE IN LOAD CELLS

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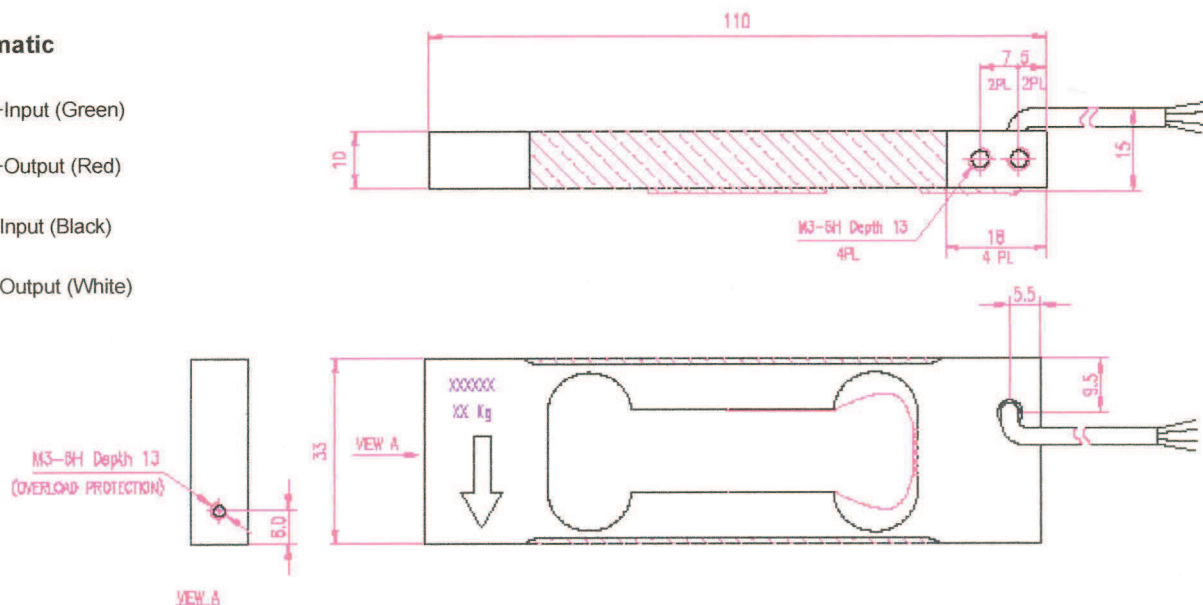
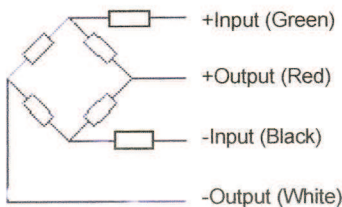
## Single Point Load Cells

GRADE	JW	UNITS
Rated Capacity	0.3, 0.6, 1.5, 3	kg
Rated Output	0.9 ±0.1	mV/V
Rated Output Tolerance	0.1	± mV/V
Zero Balance	0.04	± mV/V
Total Error (at constant room temperature)	0.0067	±% of Rated Output
Zero Return (creep) in 2 minutes	0.0033	±% of Applied Load
Temperature Effect: On Zero	0.004	±% of Rated Output/°C
Temperature Effect: On Output	0.002	±% of Applied Load/°C
Eccentric loading error	0.0033	±% of Load / cm
Maximum recommended platform size	20 by 20	cm
Temperature Effect: Compensated	+5 to +45	°C
Temperature Effect: Safe	-30 to +70	°C
Maximum Safe Static Overload (central loading)	150	% of Rated Capacity
Ultimate Static Overload (central loading)	250	% of Rated Capacity
Excitation: Recommended	10	VAC or VDC rms
Excitation: Maximum	15	VAC or VDC rms
Input Impedance	415 ± 20	Ohms
Output Impedance	350 ± 3	Ohms
Insulation Resistance	>2000	MegaOhms
Deflection of Rated Capacity (Central Loading)	<0.4	mm
Cable Length	0.4	m
Weight (nominal)	0.06	kg
Cable Type	0.4 m, 4-wire, 28 AWG, spiral shield, PVC jacket	
Color Code	+exc-grn, +sig-red -exc-blk, -sig-wht	
Construction	Aluminum	
Platform Size	200 x 200	mm
Compensation Circuit Type	Balanced	
Environmental Protection	IP66	
Outline Dimension Drawings	273.000.00-3	

**Recommended bolt fixing torque L 1.4nm (1.0 lbf.ft)**

**Outline Dimensions All Capacities (in mm)**

### Wiring Schematic



**ENS LYON**

TEDEA-HUNTLEIGH LOAD TEST DATA SHEET

~~~~~General Data~~~~~

RoHS



|               |          |                       |               |
|---------------|----------|-----------------------|---------------|
| Serial number | 18819588 | Calibration Mode      | Compression   |
| Model         | 1004     | Input Impedance       | 415+/-20 Ohms |
| Capacity(kg)  | 0.3      | Output Impedance      | 350+/-3 Ohms  |
| Thread Type   | METRIC   | Insulation Resistance | > 2 GOhms     |
| Grade         | HW       | Test Excitation       | 10 V dc       |

~~~~~BTH Metrology Data~~~~~

|                    |                       |                               |                      |
|--------------------|-----------------------|-------------------------------|----------------------|
| Zero Balance       | -0.0257 mv/v          | Platform Size                 | 20 x 20 cm           |
| Output @R.C.       | 0.8558 mv/v           | Eccentricity Test Load        | 300.0g               |
| Temperature Effect |                       | Eccentricity                  | <0.0033 %Load/cm     |
| on Zero            | < 0.0040 %R.O. /DEG C | Total Error                   | <0.0067 %R.O.        |
| on Span            | < 0.0020 %Load/DEG C  | Compensated Temperature Range | 5 To + 45 Degree C   |
| Zero Return        | < 0.0055 %Load(2MINS) | safe Temperature Range        | -30 To + 70 Degree C |

QA APPROVED