

# 8701 - Export super-precision load cell

## Description

A hermetically sealed load bearing unit operating in compression to produce a standard electrical output which is proportional to the applied load.

### Construction

100% stainless steel, natural finish.

### Capacities

50,000 lb (23 tonne)  
100,000 lb (45 tonne)

### Accuracy

5000d OIML.

## Examples of Use

- Road weighbridges
- Rail weighbridges
- Tank weighing
- Hopper weighing
- Process control

## Special Features

- 100% stainless steel construction.
- Outstanding repeatability.
- Surge arresters fitted internally to provide protection against lightning damage (See application note on lightning protection).



## Specification

### Environment

**Resistance to Dirt & Moisture**  
Hermetically sealed

**Storage Temperature Range**  
- 30° C to + 85° C.

**Operating Temperature Range**  
- 20° C to + 60° C.

**Calibrated Temperature Range**  
- 10° C to + 40° C.

## Export Packaging Dimensions

(All dimensions approximate)

**Number of Cells in a Box**  
Five.

**50,000 lb Load Cells**  
Gross weight: 34 kg.

Dimensions:  
864 mm x 381 mm x 356 mm.

**100,000 lb Load Cells**  
Gross weight: 52 kg.

Dimensions:  
1041 mm x 381 mm x 356 mm.

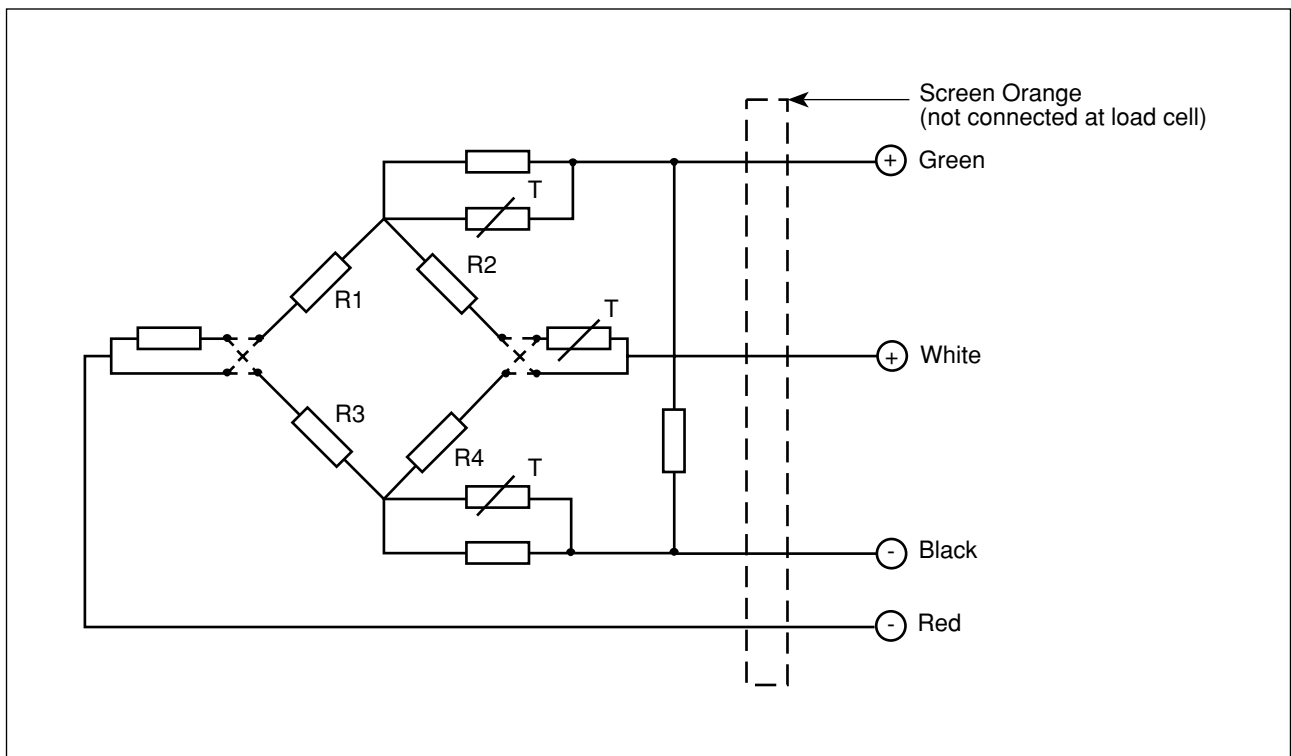
**Avery Berkel**

**Specification**

Excitation Electrical (Recommended)	15v, AC or DC
Excitation Electrical (Maximum)	20v, AC or DC
Terminal Resistance Input at 20°C	450 ohms ± 1%
Terminal Resistance Output at 20°C	480 ohms ± 5 ohms
Rated Output	1.75 mV/V ± 0.1%
Zero Balance	± 1% of Rated Output
Non-Linearity (Maximum)	0.1% of Rated Output
Repeatability	0.01% of Rated Output
Hysteresis (Maximum)	± 0.012% of Rated Output
30 min Creep and Zero Return (OIML R60)	± 0.012% of Rated Output
Temperature Effect on Rated Output (-10°C to + 40°C)	± 0.0008%/°C
Temperature Effect on Zero Balance(-10°C to + 40°C)	± 0.001%/°C
Overload Rating (without affecting Performance)	150% Rated Capacity
Overload Rating (Ultimate)	225% Rated Capacity
Insulation Resistance (Minimum)	5,000 megohms

**Electrical Termination**

4 core 7 x 0.12mm or equivalent.  
 Standard length 25 metres.  
 Outer tinned copper sheath.  
 (floating)  
 Overall sheath.  
 Input: Black - Green +  
 Output: Red - White +



Circuit Diagram.