

# Tension and Compression 'S' Beam LOAD CELL

## DBBSM Series



- Capacities 0-1kg to 0-30,000kg
- Sealed to IP65
- Robust Construction
- Simple Installation
- High Performance
- High Side Load Resistance
- 3 YEAR WARRANTY

### Options Available

Other Ranges Available on request

Equivalents to other manufacturers' available

Spherical Rod End Bearings & Load Buttons

Improved Environmental Sealing to IP67

Different Cable Lengths

Full range of mounting options available (consult factory)

Rationalised/Standardised Outputs Available

Internal Shunt Calibration facility

### DESCRIPTION

The DBBSM series of S-Beam load cells are designed for force measurement and weighing applications alike. Their ease of mounting makes them very attractive for use as a general purpose load cell.

There are many capacities available within the standard range, between 0-1kg and 0-30,000kg. Versions are also available in lbf and N (kN) ranges.

There are many options that are available to further enhance the usefulness of this series of load cells and assist the user by simplifying installation.

The DBBSM has been designed to for use in a wide variety of applications, the more popular being for Feedback Control in Tensile Testing Machines, Hopper and Tank weighing and general Force Measurement Applications. For more arduous applications an IP67 version is available.

As with all Applied Measurements products, the DBBSM can be supplied with any instrumentation from our extensive range, and be calibrated prior to despatch to give our customers a ready to use system.

*Transducer Specialists...*

## APPLIED MEASUREMENTS LIMITED

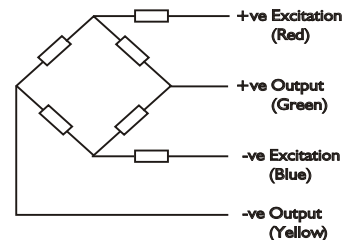
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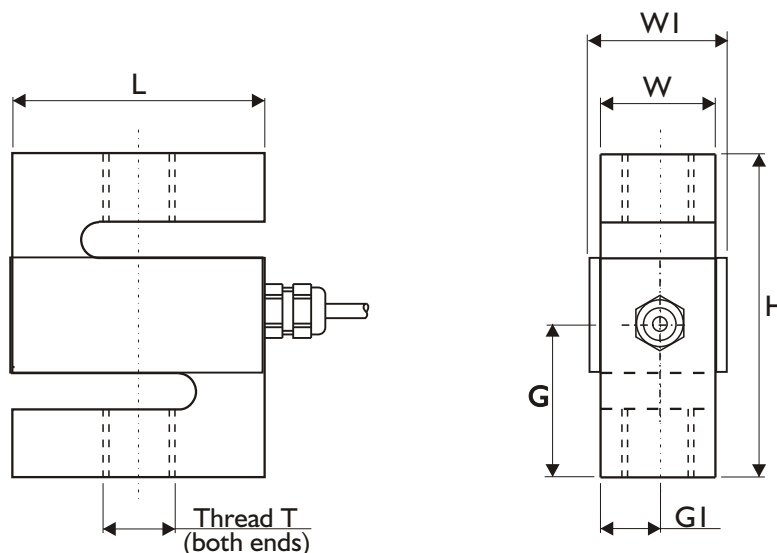
# SPECIFICATION

Wiring Schematic Diagram



CHARACTERISTICS	DBBSM	UNITS
Rated Capacities*:	1, 2, 5, 10, 25, 50, 100, 250, 500, 1000, 2500, 5000, 10000, 20000, 30000	kgf
Rated Output:	2.7 nominal (2.0 nominal on 10000kgf>)	mV/V
Non-Linearity:	<0.03	±% of Rated Output
Repeatability:	<0.02	±% of Rated Output
Hysteresis:	<0.02	% of Rated Output
Output Symmetry:	<0.10	±% of Rated Output
Zero Balance:	<1.0	±% of Rated Output
Temperature Range Operating:	-20 to +80	°C
Compensated:	0 to +70	°C
Temperature Effect On Output:	<0.005	±% of Applied Load/ °C
On Zero:	<0.005	±% of Rated Output/ °C
Safe Overload:	150	% of Rated Capacity
Ultimate Overload:	200	% of Rated Capacity
Excitation Recommended:	10	Volts AC or DC
Maximum:	15	Volts AC or DC
Input Impedance:	375	Ohms
Output Impedance:	350	Ohms
Insulation Impedance:	>500	Megaohms
Construction:	< 100kg Aluminium Alloy, > 100kg Stainless Steel	
Environmental Protection:	IP65 (IP67 optional)	
Cable:	2 Metre 4 Core Screened	

All dimensions in mm



CAPACITY (kgf)	H	L	W	WI	G	GI	Threads T
1, 2, 5, 10, 25	60	48	12.7	20	30	6.35	M8 x 1.25
50, 100, 250	70	48	18	25	35	9	M8 x 1.25
500, 1000	75	48	30	37	37.5	15	M12 x 1.75
2500, 5000	90	63	38	38	45	8	M16 x 2.0
10,000	145	138	55	N/A	72.5	27.5	M30 x 2.0
20,000, 30,000	190	190	75	N/A	95	37.5	M45 x 3.0

Note: On capacities over 10,000kg, cells will have rounded shoulders

