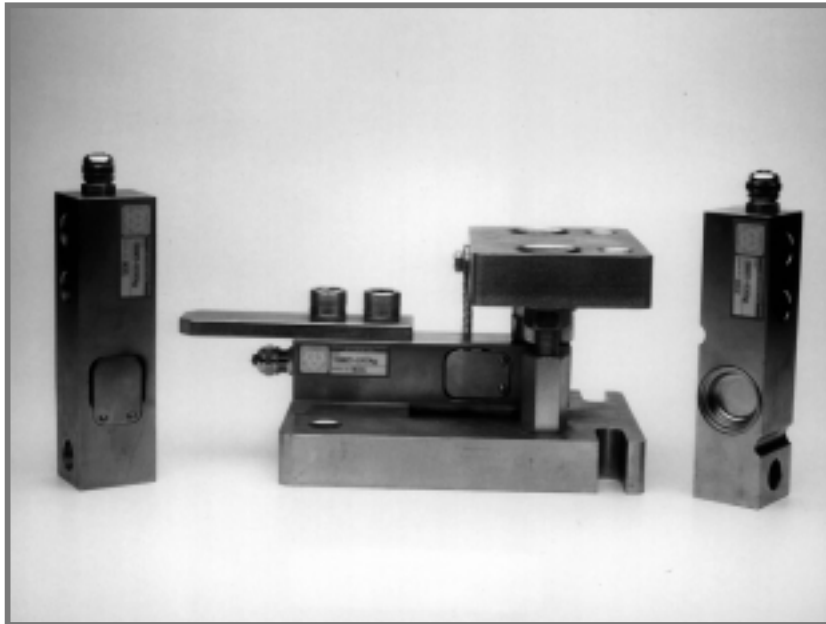


# Low Profile Stainless Steel & Alloy Steel Shear Beam **LOAD CELL**

## OSB Series



- Capacities 250kg to 5000kg
- Sealed to IP67 or IP68
- Robust Construction
- Sense wire facility
- **3 YEAR WARRANTY**

### Options Available

Different Cable Lengths

Full range of mounting options available, including:-

- Vessel/Tank mounting assembly
- Shock/Anti-Vibration mounting assembly
- Platform mounting assembly
- Load Button
- Base mounting spacer
- Spherical rod-end bearings

500VAC Certification

BASEEFA Certification

Low Cost Versions Available

### **DESCRIPTION**

Series OSB are a range of low profile shear beam load cells manufactured from stainless steel (OSBST) or alloy steel (OSBKT). Hermetically sealed against ingress of liquids the sensor's construction and polyurethane shielded cable enables it to function in harsh environments whilst maintaining its integrity.

The low profile, high accuracy and sealing makes this load cell ideal for applications such as low profile platforms, weighing & packing machines and conversion of mechanical scales. The stainless steel construction of the OSBST makes it highly suited for weighing applications such as food, pharmaceutical, brewing, or any application where the load cell needs to be washed down for hygienic purposes.

Sense wires allow the voltage reaching the load cell to be monitored, giving compensation for changes in the lead resistance due to temperature change and/or cable extension and is achieved by feeding this voltage into the appropriate electronics (please refer to the Instrumentation datasheets).

*Transducer Specialists...*

## **APPLIED MEASUREMENTS LIMITED**

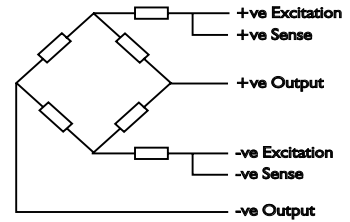
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# SPECIFICATION

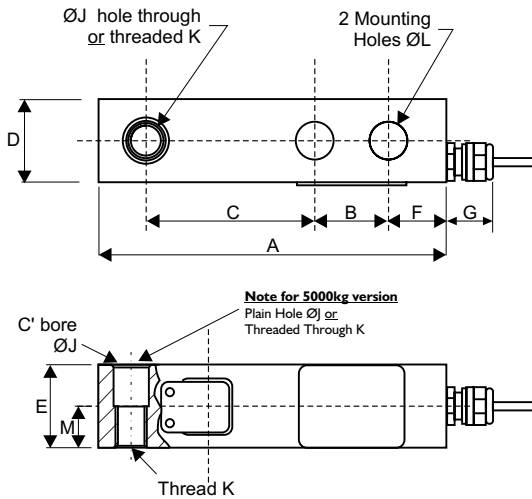
## Wiring Schematic Diagram



CHARACTERISTICS	OSBKT	OSBST	UNITS
<b>Rated Capacities:</b>	250, 500, 1000, 2000, 5000	500, 1000, 2000, 5000	kg
<b>Rated Output:</b>	2.0 ±0.1%	2.0 ±0.1%	mV/V
<b>Accuracy:</b>	<0.025	<0.030	±% of Applied Load
<b>Zero Return after 30 mins.:</b>	<0.025	<0.025	±% of Applied Load
<b>Zero Balance:</b>	<2.0	2.0	±% of Rated Output
<b>Temperature Range Operating:</b>	-30 to +80	-30 to +80	°C
<b>Compensated:</b>	-10 to +40	-10 to +40	°C
<b>Temperature Effect On Output:</b>	<0.0010	<0.0014	±% of Applied Load/°C
<b>On Zero:</b>	<0.0035	<0.0035	±% of Rated Output/°C
<b>Safe Overload:</b>	150	150	% of Rated Capacity
<b>Ultimate Overload:</b>	300	300	% of Rated Capacity
<b>Excitation Recommended:</b>	10	10	VAC or VDC
<b>Maximum:</b>	15	15	VAC or VDC
<b>Input Impedance:</b>	380 ± 10	420 ± 20	Ohms
<b>Output Impedance:</b>	350 ± 3	350 ± 3	Ohms
<b>Insulation Impedance:</b>	> 1000	> 1000	Megaohms
<b>Deflection at Rated Load:</b>	<0.4	<0.4	mm
<b>Weight:</b>	0.9 (250kg, 500kg & 1000kg) 1.1 (2000kg) 2.1 (5000kg)	0.9 (500kg, 1000kg & 2000kg) 1.9 (5000kg)	kg
<b>Construction:</b>	Nickel Plated Alloy Steel	Stainless Steel	
<b>Environmental Protection:</b>	IP67	IP68	
<b>Cable:</b>	5 Metre 6 Core Screened	5 Metre 6 Core Screened	

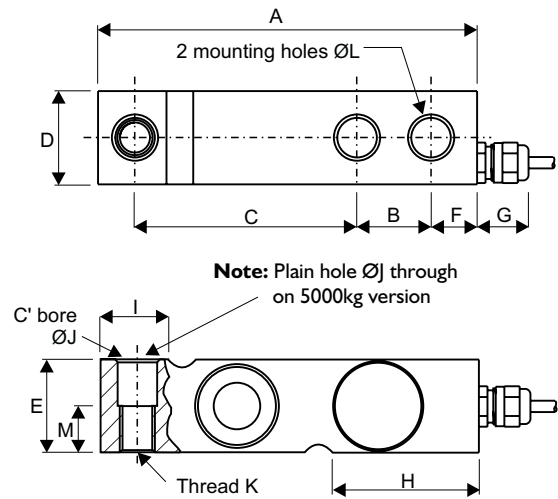
## OSBKT Outline Drawing

All dimensions in mm



## OSBST Outline Drawing

All dimensions in mm



MODEL	RANGE (kg)	A	B	C	D	E	F	G	H	I	ØJ	K	ØL	M
OSBKT	250, 500, 1000	130	25.4	76.2	30.5	30.5	16	19	-	-	13.5	M12 x 1.75	13.5	16
OSBKT	2000	130	25.4	76.2	30.5	36	16	19	-	-	13.5	M12 x 1.75	13.5	16
OSBKT	5000	171.5	38.1	95.25	38	48	19.05	19	-	-	20.5	M20 x 2.5	20.5	-
OSBST	500, 1000, 2000	130	25.4	76.2	32	32	15.8	18	50.5	23.5	13.5	M12 x 1.75	13.5	16
OSBST	5000	171.5	38.1	95.25	36.5	48	19	18	70	37	20.5	-	20.5	-

