

S-BEAM LOAD CELL & MONITORS

MSLC series

Introduction:

MLCTC series of precision strain gauge based load cells are available in (0.1 to 1000 kg), more than 20 different models virtually offering solution to force/torque measurement related to usury, organic/inorganic chemical, heavy electrical/mechanical industries, machine tools, non-conventional energy, solids state physics application and many uncountable defense/nuclear applications. Here strain gauge load cells convert the load acting on them into electrical signals. The gauges themselves are bonded onto a beam or structural member that deforms when weight is applied. In most cases, four strain gages are used to obtain maximum sensitivity and temperature compensation. Two of the gauges are usually in tension, and two in compression, and are wired with compensation adjustments. When weight is applied, the strain changes the electrical resistance of the gauges in proportion to the load. Other load cells are fading into obscurity, as strain gage load cells continue to increase their accuracy and lower their unit costs. Careful selection design topology ensures better controllability and reliability with additional integrated power/voltage and control/protection. Company offers tailor made solution to custom requirement.

Benefits:

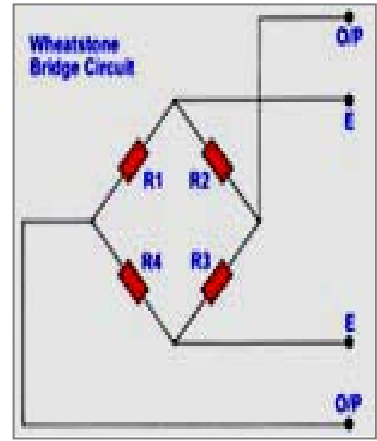
- Simple installation and operational compatibility.
- Consistent performance over large temperature range (80°C)
- Scaled directly in Volt/Ampere with repeatable accuracy.
- Auto zero offset without drift with ultra high input impedance...
- Facility of programming profile of display in six steps/ RS-232 interface.
- All standards din sizes and custom sizes.



MSLC- 00020



MSLC- 00500



MSLC-010

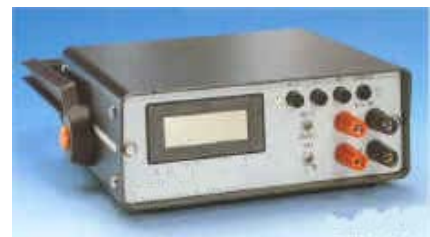
Electrical/Mechanical specifications OF S-BEAM LOAD CELL

FORCE 0.050 to 50000.0 K.g.

MODEL	Capacity [Kg]	A m.m.	B m.m.	C m.m.	D m.m.	E m.m.	Road end ball joint	XX	Metal
MSLC-00020	1-20	63.5	50.8	10.4	12.7	M6X1P	SRDB-1	XX	A.S.
MSLC-00100	20-100	76.2	50.8	12.7	19.0	M12X1.75P	SRDB-2	XX	A.S.
MSLC-00500	200-500	76.2	50.8	16.0	25.4	M12X1.75P	SRDB-3	XX	A.S.
MSLC-01000	1000	108.0	50.8	20.0	32.0	M20X1.5P	SRDB-4	XX	A.S.
MSLC-02000	2000	120.7	50.8	22.1	32.0	M24X2P	SRDB-5	XX	A.S.

General specification of signal conditioner/monitor:

Operating voltage 220 volts/110volts A.C or 12 volts D.C.
 Excitation current 0.0- 12 VOLTS/500 ma
 Regulation better than 0.5 % of measurement
 Accuracy 99.5% of set point
 Repeatability 100 percent
 Response time 0.05 -10.0 sec
 Interface Signal 0.0-20.0 m.volts D.C. (proportional to force)
 Step down ratio 1:100000
 Display 3/4/5/6 digit LED/LCDPM/Torque in 3½ & 4½ digit red glow LED/LCD display
 Protection: Over/under voltage & with power on Indication



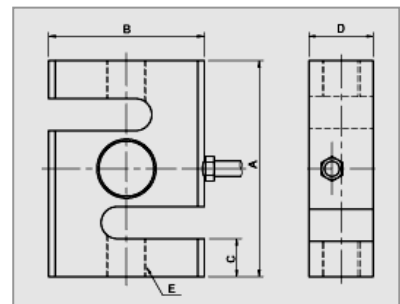
Force monitor/amplifier

General specification of Load cell:

Capacity: 1, 5, 20, 50, 100, 200, 1000, 2000, 3000, 5000 Kg
 Rated o/p: 3 mv/V
 Non linearity: 0.03%
 Hysteresis: 0.03%
 Creep error: 0, 02%
 Zero balance: 0.03%
 Compensated temp. Range: -20-80 °C .
 Operating temperature:-20-80 °C
 TCR: less than 0.1%
 Terminal o/p resistance: 350 ohm +/- 3.5ohm
 Terminal i/p resistance: 350 ohm +/- 5ohm
 Excitation voltage: 10 volts
 Protection class: IP65

Wiring:

Red: + exc White: -exc
 Green: +sig Blue: -sig
 Bare: gnd



Three numerals x 10 after MSLC indicate power of load cell and last two x 100 indicate rpm. Load cell with tailor specs are also available. Company offer tailor made software solution.

MOTORON SEMICONDUCTORS CORPORATION

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