

**FEATURES :**

- Resists fatigue failure
- Low failure rate
- Special structure designs
- Capacities to 2,000,000 lbs.
- Bending moment resistance up to 7,500,000 lb. inches
- Up to 450,000 lbs. of shear resistance

Lebow® fatigue-resistant load cells are the result of many years of design development. You will note from the specifications that these load cells are extremely resistant to extraneous bending and side loading forces. The structure virtually eliminates bending strains at the strain gage, minimizing the primary cause of load cell failure.

**PERFORMANCE SPECS :**

**3127, 3129 AND 3130**

SPECIFICATIONS	3127	3129	3130
<b>Output at rated capacity:</b> <i>millivolts per volt, nominal</i>	±2	±2	±2
<b>Nonlinearity:</b> <i>of rated output</i>	±0.2%	±0.2%	±0.2%
<b>Hysteresis:</b> <i>of rated output</i>	±0.2%	±0.2%	±0.2%
<b>Repeatability:</b> <i>of rated output</i>	±0.05%	±0.05%	±0.05%
<b>Zero balance:</b> <i>of rated output</i>	±1.0%	±1.0%	±1.0%
<b>Bridge resistance:</b> <i>ohms nominal</i>	700	350	700
<b>Temperature range, compensated:</b> °F	+70 to +170	+70 to +170	+70 to +170
<b>Temperature range, compensated:</b> °C	+21 to +77	+21 to +77	+21 to +77
<b>Temperature range, usable:</b> °F	-65 to +200	-65 to +200	-65 to +200
<b>Temperature range, usable:</b> °C	-54 to +93	-54 to +93	-54 to +93
<b>Temperature effect on output:</b> <i>of reading per °F</i>	±0.003%	±0.003%	±0.003%
<b>Temperature effect on output:</b> <i>of reading per °C</i>	±0.0054%	±0.0054%	±0.0054%
<b>Temperature effect on zero:</b> <i>of rated output per °F</i>	±0.003%	±0.003%	±0.003%
<b>Temperature effect on zero:</b> <i>of rated output per °C</i>	±0.0054%	±0.0054%	±0.0054%
<b>Excitation voltage, maximum:</b> <i>volts DC or AC rms</i>	20	20	20
<b>Insulation resistance, bridge/case:</b> <i>megohms at 50 VDC</i>	>5,000	>5,000	>5,000
<b>Number of bridges:</b>	1 or 2	1 or 2	1 or 2
<b>Fatigue life:</b> <i>0 to full fatigue load (cycles x 10<sup>6</sup>)</i>	100	100	100
<b>Fatigue life:</b> <i>full fatigue tension to full fatigue compression (cycles x 10<sup>6</sup>)</i>	50	50	50

**Note:** Calibration results are based on applied load being carried by center thread. Consult factory for alternative loading methods.

**MODEL 3129**

3129-112 (English)—Capacities available 150K, 200K and 300K lbs.



3129-121 (Metric)—Capacities available 750K, 1M and 1.5M Newtons

**MODEL 3130**

3130 (English)—Capacities available 500K, 800K and 1,000K lbs.



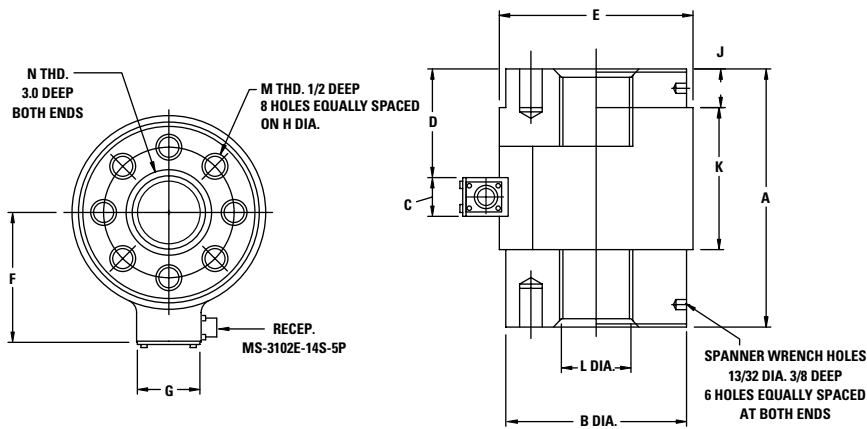
3130-131 (Metric)—Capacities available 2M, 3.5M and 5M Newtons  
Optional dual bridge not shown

**MODEL 3127**

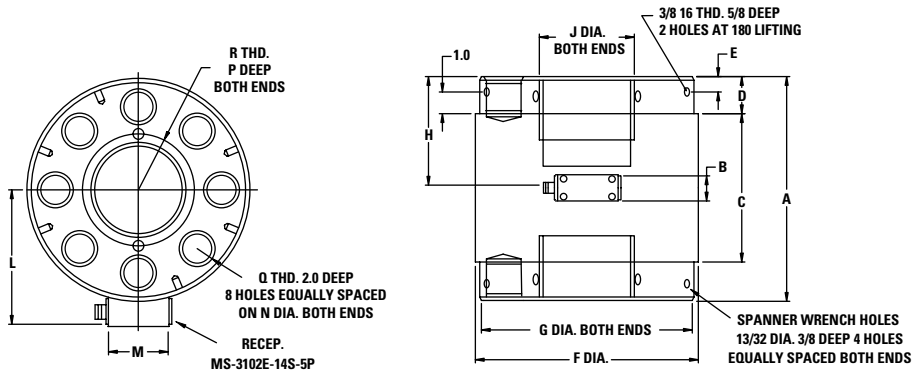
3127 (English)—Capacities available 2,000K lbs.



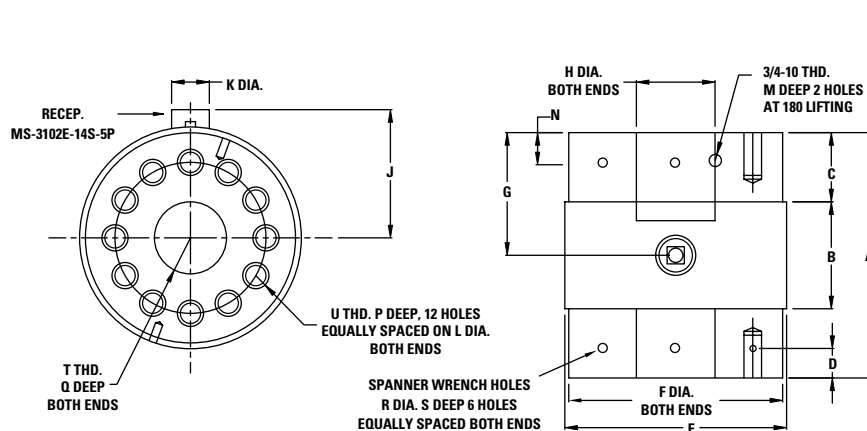
3127-118 (Metric)—Capacities available 10M Newtons  
Optional dual bridge not shown



	3129-112 IN.	3129-121 CM.
A	10	25.4
B	7	17.78
C	1.50	3.81
D	4.25	10.80
E	7.50	19.05
F	5	12.70
G	2.50	6.35
H	5	12.70
J	1.50	3.81
K	5.50	13.97
L	3.31	8.41
M	1-8	M27-2
N	3-12	M76-2



	3130 IN.	3130-131 CM.
A	12.50	31.75
B	1.50	3.81
C	7	17.78
D	2	5.08
E	0.75	1.91
F	12.75	32.29
G	12.25	31.12
H	6.25	15.88
J	5.25	13.34
K	1	2.54
L	7.82	19.86
M	2.50	6.35
N	9.50	24.15
P	3.50	8.89
Q	1.75-12	M42-3
R	5-8	M125-4



	3127 IN.	3127-118 CM.
A	22.50	57.15
B	8	20.32
C	6.50	16.51
D	2.50	6.35
E	17.63	44.78
F	17	43.18
G	11.25	28.58
H	6.50	16.51
J	9.75	24.77
K	3	7.62
L	12	30.48
M	1.50	3.81
N	2.50	6.35
P	3.50	8.89
Q	8.25	20.96
R	0.41	1.03
S	0.50	1.27
T	6-8	M150-4
U	1.75-12	M42-3

**SENSOR CHARACTERISTICS : 3129, 3130 AND 3127**

MODEL NUMBER	NOMINAL LOAD LIMIT CAPACITY F <sub>z</sub>		STATIC OVERLOAD CAPACITY % OF NOM. CAPACITY	FATIGUE CAPACITY % OF NOM. CAPACITY	STATIC EXTRANEOUS LOAD LIMITS			DEFLECTION AT NOM. LOAD LIMIT INCHES	RINGING FREQUENCY H <sub>z</sub>
	LBS.	NEWTONS			SHEAR F <sub>x</sub> OR F <sub>y</sub> LBS.	BENDING M <sub>x</sub> OR M <sub>y</sub> LB. INCHES	TORQUE M <sub>z</sub> LB. INCHES		
3129-112	150K	750K	150	75	40K	625K	150K	0.004	3,000
	200K	1M	150	75	55K	730K	260K	0.004	3,400
	300K	1.5M	150	75	65K	840K	236K	0.004	4,100
3130*	500K	2M	150	50	94K	4,530K	820K	0.006	2,500
	800K	3.5M	150	50	180K	5,450K	1,050K	0.006	3,100
	1,000K	5M	150	50	180K	6,110K	1,100K	0.006	3,600
3127*	2,000K	10M	100	50	450K	7,500K	1,500K	0.007	1,900

\*Please note: Models 3130 and 3127 can be calibrated to 500,000 lbs. compression only. Consult factory for alternative calibrations.



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