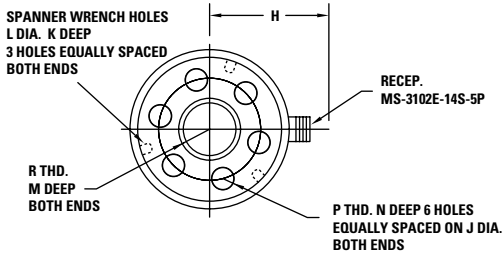


# MODEL 3156

Tension and compression 25,000 lbs. to 150,000 lbs.



3156 (English)—Capacities available 25K to 150K lbs.  
 3156-133 (Metric)—Capacities available 100K to 750K Newtons  
 Optional dual bridge not shown



	3156 IN.	3156-133 CM.
A	7	17.78
B	5.50	13.97
C	3.50	8.89
D	2.13	5.41
E	4.75	12.07
F	1.13	2.87
G	5.45	13.84
H	3.59	9.12
J	3.50	8.89
K	0.31	0.79
L	0.38	0.95
M	2	5.08
N	1.25	3.18
P	3/4-10	M20 x 2.5
R	2-12	M52 x 2

## FEATURES :

- Resists fatigue failure
- Minimized bending strains
- Dual bridges available on all models
- Standard of the industry
- Special structure design
- High resistance to side loads and bending moments

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 : 3156

### SPECIFICATIONS

<b>Output at rated capacity:</b> <i>millivolts per volt, nominal</i>	± 2
<b>Nonlinearity:</b> <i>of rated output</i>	± 0.2%
<b>Hysteresis:</b> <i>of rated output</i>	± 0.2%
<b>Repeatability:</b> <i>of rated output</i>	± 0.05%
<b>Zero balance:</b> <i>of rated output</i>	± 1.0%
<b>Bridge resistance:</b> <i>ohms nominal</i>	350
<b>Temperature range, compensated:</b> °F	+70 to +170
<b>Temperature range, compensated:</b> °C	+21 to +77
<b>Temperature range, usable:</b> °F	-65 to +200
<b>Temperature range, usable:</b> °C	-54 to +93
<b>Temperature effect on output:</b> <i>of reading per °F</i>	± 0.003%
<b>Temperature effect on output:</b> <i>of reading per °C</i>	± 0.0054%
<b>Temperature effect on zero:</b> <i>of rated output per °F</i>	± 0.003%
<b>Temperature effect on zero:</b> <i>of rated output per °C</i>	± 0.0054%
<b>Excitation voltage, maximum:</b> <i>volts DC or AC rms</i>	30
<b>Insulation resistance, bridge/case:</b> <i>megohms at 50 VDC</i>	>5,000
<b>Number of bridges:</b>	1 or 2
<b>Fatigue life:</b> <i>0 to full fatigue load (cycles x 10<sup>6</sup>)</i>	100
<b>Fatigue life:</b> <i>full fatigue tension to full fatigue compression (cycles x 10<sup>6</sup>)</i>	50

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

## SENSOR CHARACTERISTICS : 3156

MODEL NUMBER	NOMINAL LOAD LIMIT CAPACITY F <sub>2</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		
3156	25K	100K	150	100	2K	68K	10K	0.003	2,100
	50K	200K	150	100	6K	130K	20K	0.003	3,000
	100K	500K	150	100	10K	220K	85K	0.003	4,200
	150K	750K	150	100	20K	220K	85K	0.003	4,800