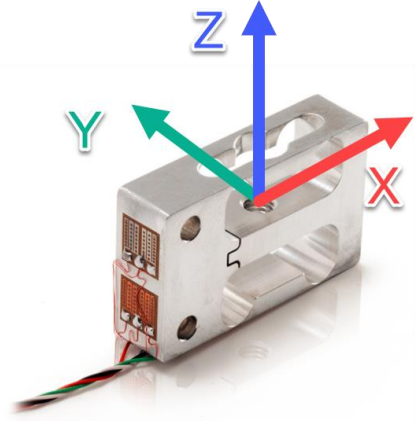


## Extraneous Load Factors

**Equation:**  $\sigma_{max} \geq AF_x + BF_y + CF_z + DM_x + EM_y + FM_z$



**Material:** 2024-T4 Aluminum

### Extraneous Load Coefficients:

Capacity (lb)	A	B	C	D	E	F
0.25	705	7040	45400	15500	1500	5360
0.50	550	4940	24700	11000	1160	4010
1.0	425	3400	12900	7600	900	2890

\*All Force and Moment to be calculated using lb and in-lb units

### $\sigma_{max}$ Table:

Material	Static Load (=60% Y.S.)	Fatigue (Non-Reversing Loads)	Fatigue (Full Reversing Loads)
2024-T4/T351	28,000	18,000	15,000*

\*Value is 75% of Fatigue Strength based on 10-20 x 10<sup>6</sup> cycles and allow for factors that influence Fatigue such as surface finish, stress concentrations, corrosion, temperature, and other variables for the production of the transducer, for infinite Fatigue Life (100 x 10<sup>6</sup>) use 75% of values shown.