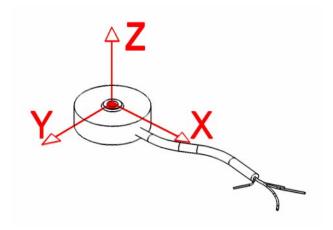


## **Deflection & Natural Frequency**



Model#	Capacity (lb)	Fz Deflection (in.)	Natural Frequency (Hz)	β
LLB250	100	0.0003	33,000	0.0026
	150	0.0003	41,700	0.0029
	250	0.0004	41,700	0.0029

<sup>\*</sup>FN results are based on calculation of deflection & weight scene on Sensor arm.

## Natural Frequency & Frequency Response Equation's:

Natural Frequency (FN) = 
$$3.13 \sqrt{\frac{1}{\frac{\beta}{Capacity}} \bullet Deflection}}$$
 (Hz)

Frequency Response with load (FR) = 
$$3.13 \sqrt{\frac{1}{\frac{\beta + AppliedLoad}{Capacity}}} \bullet Deflection$$
 (Hz)

\*Where eta values are obtained by Futek Engineers

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