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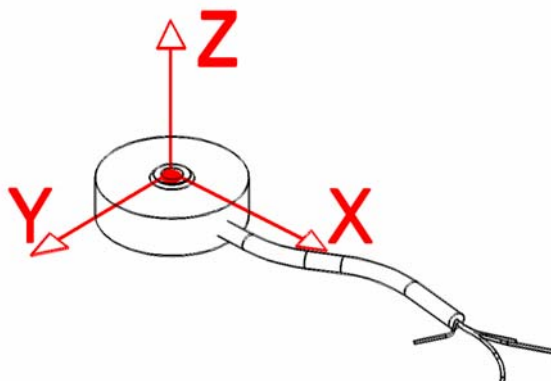
Model#	Capacity (lb)	Fz Deflection (in.)	Natural Frequency (Hz)	β
LLB250	100	0.0003	33,000	0.0026
	150	0.0003	41,700	0.0029
	250	0.0004	41,700	0.0029

*FN results are based on calculation of deflection & weight scene on Sensor arm.

Natural Frequency & Frequency Response Equation's:

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

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

*Where β values are obtained by Futek Engineers

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