Deflection & Natural Frequency
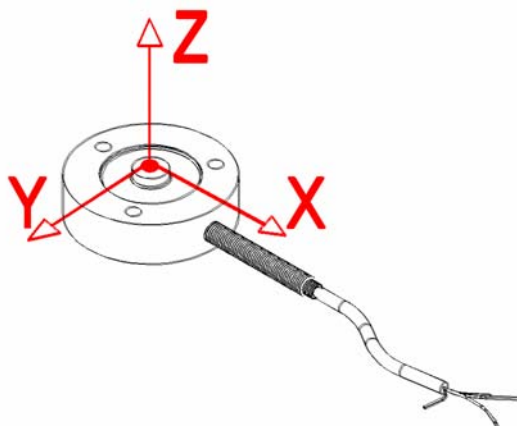
Model#	Capacity (lb)	Fz Deflection (in.)	Natural Frequency (Hz)	β
LLB350	25	0.0007	5,300	0.0110
	50	0.0005	8,600	0.0121
	100	0.0005	11,700	0.0124

*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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