FUTEK
ADVANCED SENSOR TECHNOLOGY, INC.

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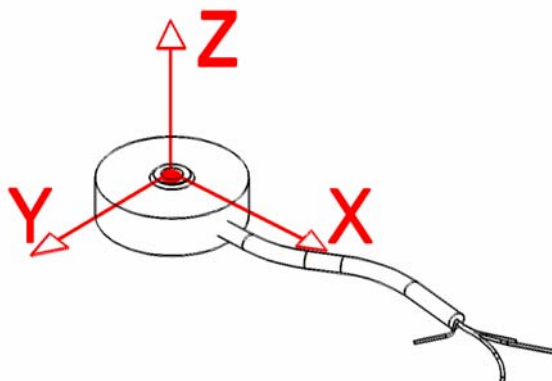
Model#	Capacity (lb)	Fz Deflection (in.)	Natural Frequency (Hz)	β
LLB250	100	0.0003	33,000	0.0026
	150	0.0003	41,700	0.0029
	250	0.0004	41,700	0.0029

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

Natural Frequency & Frequency Response Equation's:

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

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

*Where β values are obtained by Futek Engineers