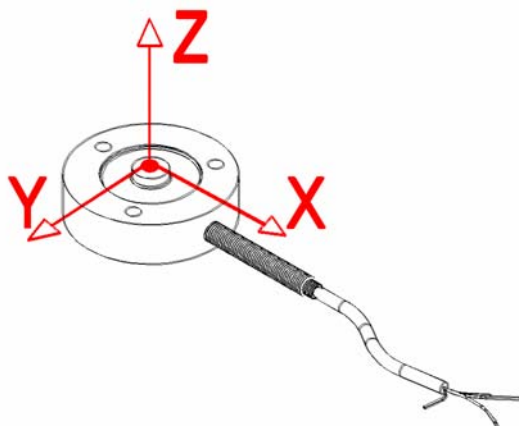


## Deflection & Natural Frequency



Model#	Capacity (lb)	Fz Deflection (in.)	Natural Frequency (Hz)	$\beta$
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:

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

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

\*Where  $\beta$  values are obtained by Futek Engineers