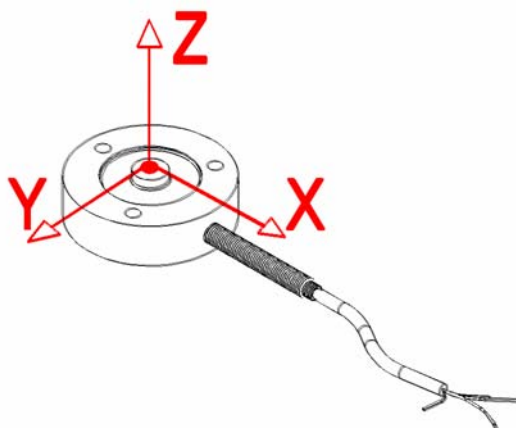


Deflection & Natural Frequency



| Material | Capacity (lb) | Deflection (in.) | Natural Frequency (Hz) | β |
|----------|---------------|------------------|------------------------|---------|
| (S.S.*) | 3,000 | 0.0013 | 22,400 | 0.0449 |
| | 5,000 | 0.0015 | 25,000 | 0.0513 |
| | 10,000 | 0.0018 | 27,800 | 0.0712 |

*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 β values are obtained by Futek Engineers