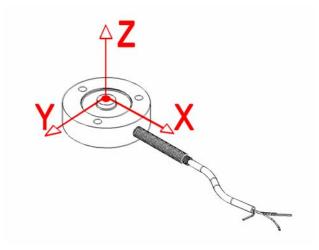


Deflection & Natural Frequency



Material	Capacity (Ib)	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:

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

*Where β values are obtained by Futek Engineers

This documentation was generated and completed to the best ability of FUTEK's Engineering Team using FEA Analysis, Empirical data and Multiple Testing Simulations. The information and recommendations on this document are presented in good faith and believed to be correct however, FUTEK Advanced Sensor Technology makes no representations or warranties as to the completeness or accuracy of the information.

Page 1 of 1