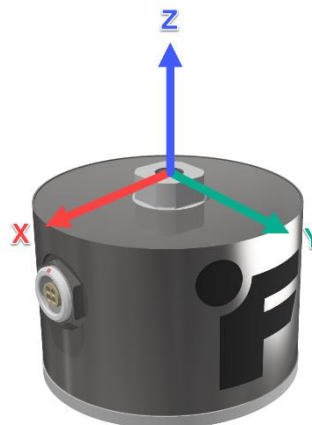


Extraneous Load Factors

Equation: $\sigma_{max} \geq AF_x + BF_y + CF_z + DM_x + EM_y + FM_z$



Extraneous Load Coefficients:

Item Number	Capacity [lb]	Material	A	B	C	D	E	F
FSH04620	25	2024-T4	249	249	308	265	265	196
FSH04621	50	17-4 PH H900	294	294	439	326	326	230
FSH04622	100	17-4 PH H900	294	294	439	326	326	230
FSH04623	250	17-4 PH H900	118	118	105	150	150	120
FSH04624	500	17-4 PH H900	118	118	105	150	150	120

*All Force and Moment to be calculated using lb and in-lb units

σ_{max} Table:

Material	Static Load (=60% Y.S.)	Fatigue (Non-Reversing Loads)	Fatigue (Full Reversing Loads)
2024-T4	28,000	18,000	15,000
17-4 PH H900	100,000	78,000	62,000*

*Value is 75% of Fatigue Strength based on $10^{-20} \times 10^6$ cycles and allow for factors that influence Fatigue such as surface finish, stress concentrations, corrosion, temperature and other variables during the production of the transducer, for runout life (100×10^6) use 75% of values shown.

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.