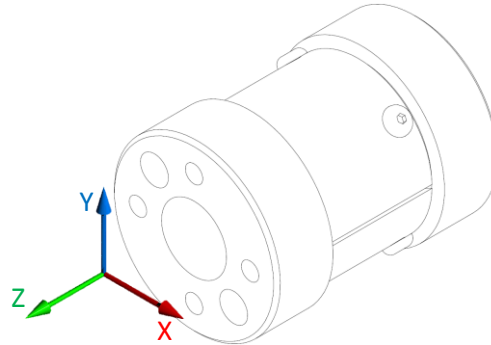


MODEL #TFF350

Extraneous Load Factors

Equation: $\sigma_{max} \geq (A)F_x + (B)F_y + (C)F_z + (D)M_x + (E)M_y + (F)M_z$



Material: Aluminum 2024-T4 (*AL)

Model #	Capacity (in-lb)	A [$\frac{1}{in^2}$]	B [$\frac{1}{in^2}$]	C [$\frac{1}{in^2}$]	D [$\frac{1}{in^3}$]	E [$\frac{1}{in^3}$]	F [$\frac{1}{in^3}$]
TFF350	500	77	77	12	58	58	36
	1300	40	40	7	31	31	18

σ_{max} Table

Material	Static Load (=60% Y.S.)	Fatigue (Non-Reversing Loads)	Fatigue (Full Reversing Loads)
2024-T4/T351	28,000 Psi	18,000 Psi	15,000 Psi

*Value is 75% of Fatigue Strength based on 10-20 x 10⁶ cycles and allow for factors that influence Fatigue such as surface finish, stress concentrations, corrosion, temperature and other variables for the production of the transducer, for infinite Fatigue Life (100 x 10⁶) use 75% of values shown.

Torsional Stiffness & Natural Frequency

Material	Capacity (in-lb)	Torsional Stiffness (in-lb/rad)	Natural Frequency (Hz)
2024-T4/T351	500	157,000	8,400
	1300	379,000	13,000

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