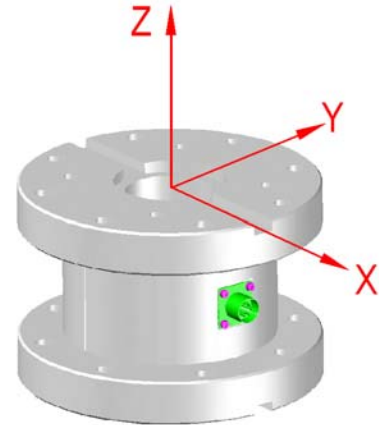


Extraneous Load Factors

Equation: $\sigma_{max} \geq (A)Fx +(B)Fy +(C)Fz +(D)Mx +(E)My +(F)Mz$



Material: 17-4 P.H. Stainless Steel (S.S.*)

Material	Capacity (in-lb)	A	B	C	D	E	F
(S.S.*)	20000	9.22	9.22	1.81	2.91	2.91	1.11
	50000	6.27	6.27	1.64	2.15	2.15	0.63
	100000	3.78	3.78	1.12	1.49	1.49	0.38

σ_{max} **Table**

Material	Static Load (=60% Y.S.)	Fatigue (Non Reversing Loads)	Fatigue (Full Reversing Loads)
17-4PH S.S	87,000	78,000	62,000*

*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.

Deflection

Material	Capacity (in-lb)	Torsional Stiffness (ft-lb/rad)
(S.S.*)	20000	364000
	50000	680000
	100000	978000

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