

Load (pounds)	Fractional Diameter (inches)	Decimal Diameter (inches)	Cross- Sectional Area (in^2)	Material	2014-T6 Aluminum	1045 Steel	Copper	Titanium Ti-6Al- 4V (Grade 5), Annealed
				Stress (psi)	Modulus of Elasticity (psi)	Modulus of Elasticity (psi)	Modulus of Elasticity (psi)	Modulus of Elasticity (psi)
					10000000	30000000	15000000	12000000
				Strain	Strain	Strain	Strain	Strain
120000	2	2.000000	3.141593	38197	0.0038	0.0013	0.0025	0.0032
	1 3/4	1.750000	2.405282	49890	0.0050	0.0017	0.0033	0.0042
	1 1/2	1.500000	1.767146	67906	0.0068	0.0023	0.0045	0.0057
	1 1/4	1.250000	1.227185	97785	0.0098	0.0033	0.0065	0.0081
	1	1.000000	0.785398	152789	0.0153	0.0051	0.0102	0.0127
	3/4	0.750000	0.441786	271624	0.0272	0.0091	0.0181	0.0226
	1/2	0.500000	0.196350	611155	0.0611	0.0204	0.0407	0.0509
	3/8	0.375000	0.110447	1086498	0.1086	0.0362	0.0724	0.0905
	1/4	0.250000	0.049087	2444620	0.2445	0.0815	0.1630	0.2037
	3/16	0.187500	0.027612	4345991	0.4346	0.1449	0.2897	0.3622
	1/8	0.125000	0.012272	9778480	0.9778	0.3259	0.6519	0.8149
	1/16	0.062500	0.003068	39113919	3.9114	1.3038	2.6076	3.2595
	1/32	0.031250	0.000767	156455675	15.6456	5.2152	10.4304	13.0380
	1/64	0.015625	0.000192	625822701	62.5823	20.8608	41.7215	52.1519