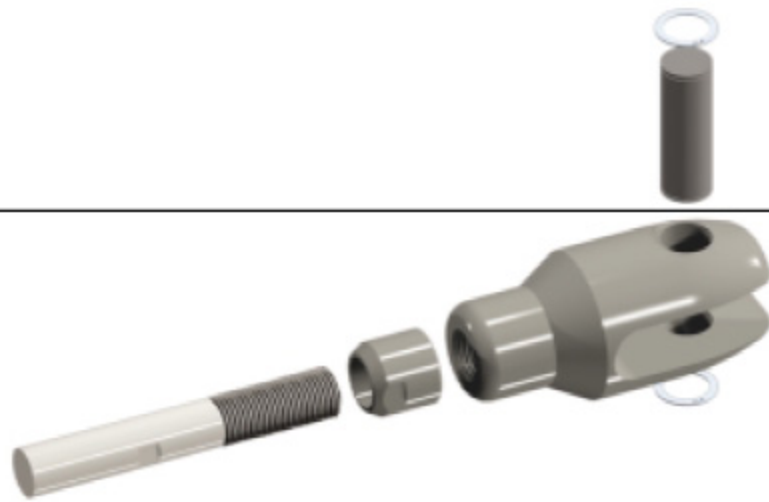


FT-600



Description:

Tensile Strength and Safety Factor:

Tensile strength or ultimate strength is the force required to break a given section. Tensile strengths are calculated by multiplying the area of the rod through the smallest section by the material strength. Stainless steel alloys typically have material strengths of 70 – 150 ksi (70,000 – 150,000 pounds per square inch). For more information about material selection, there is a table on page 35, which provides further descriptions of the properties of stainless steels.

Safety Factor:

When specifying, choose sizes to provide resistance to working loads multiplied by a safety factor at least 2.2 times the working load for static applications. For dynamic applications, multiply the working load by a minimum of 5 times. All Frontier Technologies fittings are designed to withstand the breaking strength of the associated rods.

Threaded Rod Tensile Strength (Tons)

Diameter	Type 304	Type 316B	Nitronic 50	17-4 H1150
0.50	8.4	10.6	11.5	12
0.75	18.8	23.9	25.8	27
1.00	31.1	42.4	45.9	49
1.25	48.6	-	63.5	76
1.50	63.6	-	91.4	107
1.75	86.6	-	124.5	153
2.00	113.1	-	162.6	191
2.50	176.7	-	254.0	305

Table shown reflects most common sizes. Metric diameters and other fractional sizes available. If larger fittings are required, we have in-house capability to accommodate fittings and rods or compression tubes to very large diameters. Call for engineering assistance or a quotation.