Nomenclature

Nominal Length: The length of the fastener that is directly below the head. Note that the height of the head is not included in this measurement.

Thread Length: The length of the fastener where helical threads are present.

Thread Pitch: The distance between two threads on the shaft of the fastener. This is typically measured in threads per inch (TPI). A higher value TPI indicates a smaller thread pitch.

Bearing Length: The length of the fastener where fully formed helical threads are present. Fully formed implies that the diameter of the thread is at its maximum specified value.

Thread Pitch

The thickness of the metal sheet utilized influences the required thread pitch.

As a general rule of thumb, thinner gauge material should be used in conjunction with fasteners with large thread pitch values, and thicker gauge material should be used in conjunction with fasteners with small thread pitch values.

Application Thickness

The application thickness refers to the total thickness of the assembly to be fastened. This includes the metal sheet, any voids or insulation, and the subconstruction. This value should not exceed the value provided for grip range. When no washer is utilized, the grip range is equal to the bearing length. However, the height of included washers will reduce this value.

Acceptable Thickness

Unacceptable Thickness