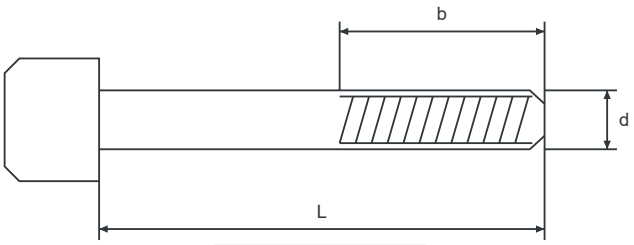
ASTM F3148 - Grade 144 structural assemblies

Fixed-spline assemblies: identify the bolt, nut, washer arrangement and installation requirements together.

ASTM F3148 - 17a(2024)

Technical drawing and dimensions to specify



Family selection guide. The drawing only identifies dimensions to specify; it does not identify a certified item, an available size range or a complete assembly. Final geometry and dimensions must match the approved drawing. For special assemblies request the complete system drawing; the hex-bolt schematic does not depict the installation mechanism.

Dimensional data for the request

Symbol	Required information	Units
d	Nominal thread and pitch	mm or inches, specify
L	Under-head length of the illustrated hex bolt	mm or inches, specify
b	Threaded length	mm or inches, specify

Attach the dimensional standard or drawing, tolerances, quantity and configuration. Mechanical properties and grades appear below; they are not geometric dimensions.

Selection and documentation

Specify the contractual standard and edition, grade, material, finish, matching components and tests. Confirm markings, batch, certificates and applicable instructions before ordering. This Dueemme guide does not replace the standard or connection design.

Standard reference: https://store.astm.org/f3148-17ar24.html

A complete assembly, not a generic bolt

Identify the entire system: bolt, nut, washers, dimensions, finish, equipment and installation procedure. Components with the same diameter are not automatically interchangeable.

Data required for supply

Technical field	Requirement
Rm min.	144 ksi
Configuration	Fixed-spline
Dimensions	Diameter, length and grip range of the selected system
Installation	Instructions and checks for the specific assembly

Do not infer equivalence between standards from tensile strength in ksi alone. Check the standard and proposed system for temperature, exposure and outdoor-use limitations.

Keep F3148 and F3125 distinct

The appearance of 144 ksi in the current F3125 title does not make the specifications interchangeable. Always state the full designation, edition and required system.

Configuration and installation

Provide type, dimensions, specified installation method or equipment, and required tests. Installation instructions or torque values are not derived from the grade alone.