

Bolt Weight Calculator

Estimate the weight of a bolt - or a full box of them - by diameter, length, and material. Handy for shipping, costing, and material take-offs.

How it works

Weight is computed from the shank as a cylinder: $\text{volume} = \pi/4 \times d^2 \times L$, multiplied by the material density (steel 0.283 lb/in³, stainless 0.289, brass 0.307, aluminum 0.098, titanium 0.163, nylon 0.041). The estimate covers the plain shank and ignores the head and threads, so real bolts weigh slightly more - add roughly 5-15% for the head depending on size. Length for imperial bolts is the shank length under the head; for metric bolts it is the nominal length.

For live values, use the interactive calculator: bookoffasteners.com/calculators/bolt-weight-calculator/

Reference values only — verify against the governing standard or manufacturer before use.