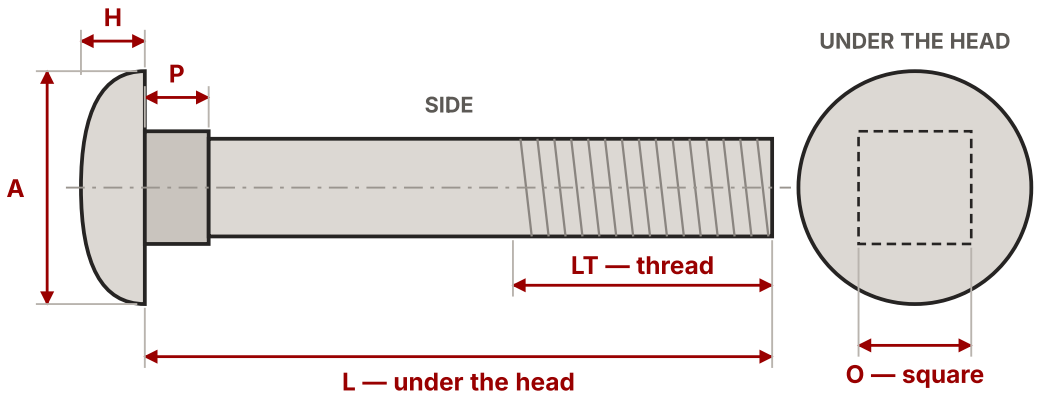
Carriage Bolt Dimensions

jandesupply.com/reference-carriage-bolt-dimensions.php

J & E Supply & FASTENER CO.

Head diameter and height, square neck size and minimum thread length for round head square neck carriage bolts, #10 to 1″. ASME B18.5.

A carriage bolt has a smooth, domed head and a **square neck** under it. The square keeps the bolt from turning as the nut is tightened — there's nothing on the head to put a wrench on. It's measured like any bolt with a head that sits on top: **from under the head** to the end.



Letters match the table columns: **A** head diameter, **H** head height, **O** square width, **P** square depth, **LT** thread length, **L** length.

Carriage bolts, round head square neck — ASME B18.5 (inches)

SIZE	HEAD DIA A MAX / MIN	HEAD H MAX / MIN	SQUARE O MAX / MIN	SQUARE DEPTH P MAX / MIN	THREAD LT MIN: TO 6″ LONG / LONGER
#10	.469 / —	.114 / .094	.199 / .185	.125 / .094	**.630″** / .880″
1/4″	.594 / .563	.145 / .125	.260 / .245	.156 / .125	**3/4″** / 1″
5/16″	.719 / .688	.176 / .156	.324 / .307	.187 / .156	**7/8″** / 1-1/8″
3/8″	.844 / .782	.208 / .188	.388 / .368	.219 / .188	**1″** / 1-1/4″
7/16″	.969 / .907	.239 / .219	.452 / .431	.250 / .219	**1-1/8″** / 1-3/8″
1/2″	1.094 / 1.032	.270 / .250	.515 / .492	.281 / .250	**1-1/4″** / 1-1/2″
5/8″	1.344 / 1.219	.344 / .313	.642 / .616	.344 / .313	**1-1/2″** / 1-3/4″
3/4″	1.594 / 1.469	.406 / .375	.768 / .741	.406 / .375	**1-3/4″** / 2″
7/8″	1.844 / 1.719	— / .438	.895 / .865	.469 / .438	**2″** / 2-1/4″
1″	2.094 / 1.969	.531 / .500	1.022 / .990	.531 / .500	**2-1/4″** / 2-1/2″

Thread length is a minimum: twice the diameter plus 1/4″ for bolts 6″ and shorter, plus 1/2″ for longer ones — shorter bolts are often threaded all the way. Threads are UNC. A dash: our two sources differ — give us a call at 405-670-1234.

The square neck

The square under the head keeps the bolt from turning while the nut is tightened; its size across the flats is **O** and its depth **P** in the table. Thread pitch and tap drill for each size are on the thread pitch chart; how to measure any bolt is on How to Measure a Bolt.

Quick answers

How is a carriage bolt measured?

From under the head to the end of the bolt — the domed head sits on top of the surface, so it isn't part of the length.

How big is the square neck on a 3/8" carriage bolt?

The square neck is .368–.388″ across the flats and .188–.219″ deep (ASME B18.5).

How big is the head on a 1/2" carriage bolt?

1.032–1.094″ across and .250–.270″ tall.

How long is the thread on a carriage bolt?

At least twice the diameter plus 1/4″ on bolts 6″ and shorter (a 1/2″ carriage bolt: 1-1/4″), and twice the diameter plus 1/2″ on longer ones.

Reference values drawn from the governing standards. For critical applications, confirm against the standard and the manufacturer's published data. Technical information disclaimer →