

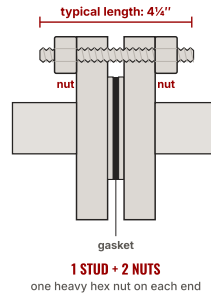
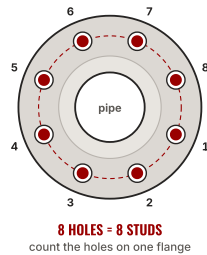
Flange Stud Bolt & Nut Chart

jandesupply.com/reference-flange-bolt-chart.php

How many studs and nuts it takes to make up a flanged joint — by size and pressure class, with stud diameter and length. ASME B16.5 raised-face flanges.

Bolting up a pair of flanges? This tells you **how many stud bolts** the joint takes, what **diameter** they are, a typical **length**, and **how many nuts** to grab. Pick the pressure class, find your pipe size, and you've got your count — handy for pulling a job or checking a count before you head out.

Nuts = two per stud. Flange stud bolts are threaded both ends and take a heavy hex nut on each — so a joint needs the stud count $\times 2$ in nuts. The chart does that math for you in the last column.



Example from the chart: 6" Class 150 — 8 studs, 3/4" diameter, 16 nuts, about 4 1/4" long. Same idea for every row: holes = studs, studs $\times 2$ = nuts.

ASME B16.5 — Class 150 (raised face)

PIPE SIZE (NPS)	STUD BOLTS	STUD DIA.	NUTS (2 / STUD)	TYPICAL LENGTH
1/2"	4	1/2"	8	2 1/2"
3/4"	4	1/2"	8	2 3/4"
1"	4	1/2"	8	3"
1 1/2"	4	1/2"	8	3 1/4"
2"	4	5/8"	8	3 1/2"
3"	4	5/8"	8	3 3/4"
4"	8	5/8"	16	4"
6"	8	3/4"	16	4 1/4"
8"	8	3/4"	16	4 1/2"
10"	12	7/8"	24	5"
12"	12	7/8"	24	5 1/4"
14"	12	1"	24	5 3/4"
16"	16	1"	32	6"
18"	16	1 1/8"	32	6 3/4"
20"	20	1 1/8"	40	7"
24"	20	1 1/4"	40	8"

Stud count and diameter per ASME B16.5. Lengths are typical for a raised-face joint with a spiral-wound gasket (ASTM A193 B7 stud + A194 2H nuts) and shift with facing and gasket — confirm before cutting to length.

Reading the chart

One flanged joint = two flanges bolted together. The stud count is the number of bolt holes the flange has; you run one stud through each, with a nut on both ends. So a 6" Class 150 joint takes **8 studs and 16 nuts**.

Higher pressure classes (600, 900, 1500, 2500) use more and larger studs — we stock them, but the counts and lengths differ from what's shown here. Bring us the flange class and size and we'll pull the right studs and nuts.

Need the studs themselves? We cut stud bolt and all-thread to length and carry the matching B7 studs and 2H nuts — just give us the joint. Not sure how to measure a flange's pipe size? See the note on pipe sizing.

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



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