

Strength Grade of Nut	Dimensional Style of Nut	Nominal Nut Size in.	Proof Load Stress ksi			Nut Hardness Rockwell	
			Non-Zinc Coated Nuts	Zinc Coated Nuts	Min	Max	
A563 Gr. A	hex	1/4 to 1-1/2	90	68	B68	C32	
	heavy hex	1/4 to 4	100	75			
	hex thick	1/4 to 1-1/2					
SAE Gr. 2	hex	1/4 to 1-1/2	90	-	-	C32	
A563 Gr. B	hex	1/4 to 1	120	90	B69	C32	
		1-1/8 to 1-1/2	105	79			
	heavy hex and hex thick	1/4 to 1	133	100	B69	C32	
		1-1/8 to 1-1/2	116	87			
SAE Gr. 5	hex	1/4 to 1	120	-	-	C32	
		1-1/8 to 1-1/2	105	-			
A563 Gr. C A563 Gr. C3	heavy hex	1/4 to 4	144	144	B78	C38	
A563 Gr. D A194 Gr. 2	hex	1/4 to 1-1/2	135	135	B84	C38	
	heavy hex	1/4 to 4	150	150			
A563 Gr. D	hex thick	1/4 to 1-1/2	150	150	B84	C38	
SAE Gr. 8	hex	1/4 to 5/8	150	-	C24	C32	
		3/4 to 1			C26	C34	
		1-1/8 to 1-1/2			C26	C36	
A563 Gr. DH A194 Gr. 2H	hex	1/4 to 1-1/2	150	150	C24	C38	
A563 Gr. DH A563 Gr. DH 3 A194 Gr. 2H	heavy hex	1/4 to 4	175	175	C24	C38	
A563 Gr. DH	hex thick	1/4 to 1-1/2	175	175	C24	C38	
See Notes 3			See Notes 4, 5, 6				

Notes:

3. Dimensions for all styles of nuts are covered in ASME/ANSI B 18.2.2, page D-2.

4. To compute the proof load, in pounds, for a nut, multiply the proof load stress value, ksi, as given in the table for the applicable strength grade, style, size and surface condition by 1000 and multiply this answer by the tensile stress area of the nut's screw thread as given in Tables 1, 2 and 3 of ASME 61.1, pages A-36 thru A-38.

5. Zinc coated nuts are nuts intended for use with externally threaded fasteners which are hot-dip; galvanized, mechanically galvanized, or have a plating or coating of sufficient thickness to necessitate that the nut thread be overlapped to provide assemblability.

6. Proof loads of slotted and jam nuts may be assumed to be 80 percent and 60 percent, respectively, of the proof loads of full thickness nuts of the same grade, size and basic dimensional style.