Reli-A-Pak® Bolt, Nut, & Gasket Sets by Reliable Fasteners, Inc.

ASTM A563

The ASTM A563 specification covers the chemical, mechanical, and dimensional requirements for carbon and alloy steel nuts for general structural and mechanical uses on bolts, studs, and other externally threaded parts. A563 nuts meet ASME/ ANSI B18.2.2 dimensions. Various nut styles exist including finished hex, heavy hex, square, jam, and coupling.

Grades				
Α	Low Carbon Steel / Finished or Heavy Hex			
В	Low Carbon Steel / Finished or Heavy Hex			
С	Carbon Steel / Quenched and Tempered / Heavy Hex			
D	Carbon Steel / Quenched and Tempered / Heavy Hex			
DH	Carbon Steel / Quenched and Tempered / Heavy Hex			
C3	Weathering Steel / Quenched and Tempered / Heavy Hex			
DH3	Weathering Steel / Quenched and Tempered / Heavy Hex			

Mechanical Properties										
Grade	Style	Size	Proof Load, ksi		Brinell		Rockwell			
			Black	Zinc	Hardness		Hardness			
Α	Finished Hex	1/4" - 1-1/2"	90	68	116	302	B68	C32		
	Heavy Hex	1/4" - 4"	100	75	116	302	B68	C32		
В	Heavy Hex	1/4" - 1"	133	100	121	302	B69	C32		
	Heavy Hex	1-1/8" - 1-1/2"	116	87	121	302	B69	C32		
C C3	Heavy Hex	1/4" - 4"	144	144	143	352	B78	C38		
D	Heavy Hex	1/4" - 4"	150	150	159	352	B84	C38		
DH DH3	Heavy Hex	1/4" - 4"	175	175	248	352	C24	C38		

This is only a partial description of this specification, and should not be used as the only source of data. For complete and up to date information, consult the current version of this specification.