



CAP SCREWS

Mechanical and Material Requirements For Grades 2, 5 & 8 Hex Head Cap Screws

Grade Designation	Products	Nominal Size Dia., In.	Full Size Bolts, Screws Studs, Sems		Machine Test Specimens of Bolts, Screws and Studs				Surface Hardness	Core Hardness		Grade Identification Marking L
			Proof Load (Stress) psi	Tensile Strength (Stress) Min., psi	Yield Strength (Stress) Min., psi	Tensile Strength (Stress) Min., psi	Elongation Min., %	Reduction of Area Min, %	Rockwell 30N Max.	Rockwell		
										Min.	Max.	
2	Bolts, Screws, Studs	1/4 thru 3/4	55,000	74,000	57,000	74,000	18	35	—	B80	B100	None
		Over 3/4 to 1-1/2	33,000	60,000	36,000	60,000	18	35	—	B70	B100	
5	Bolts, Screws, Studs	1/4 thru 3/4	85,000	120,000	92,000	120,000	14	35	54	C25	C34	
		Over 3/4 to 1-1/2	74,000	105,000	81,000	105,000	14	35	50	C19	C30	
8	Bolts, Screws, Studs	1/4 thru 1-1/2	120,000	150,000	130,000	150,000	12	35	58,6	C33	C39	

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