

# Hex Head Cap Screws

## Grade 2/5, Zinc

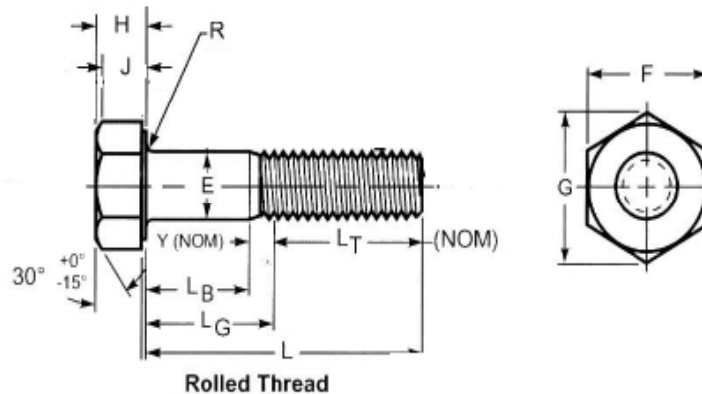
**Specification:** ASME B18.2.1

**Material & Mechanical Properties:** Grade 2 / 5 per SAE J429

**Thread Requirements:** ASME B1.1, UNC

**Finish:** Fe/Zn 3AN per ASTM F1941/F1941M

Hex Head Cap Screws feature a washer face under the head and a chamfered point, whereas a Hex Bolt does not have a washer face or chamfered threads.



Nominal Size or Basic Product Diameter (in)	E		F			G		H		J		L <sub>T</sub>		Y	Total Runout Bearing Surface (in)	
	Body Diameter (in)		Width Across Flats (in)			Width Across Corners (in)		Head Height (in)		Wrenching Height (in)		Thread Length (in)		Transition Thread Length (in)		
	Max	Min	Basic	Max	Min	Max	Min	Basic	Max	Min	Min	6" and less	Over 6"	Ref		
3/8	0.375	0.375	0.369	9/16	0.562	0.551	0.650	0.628	0.234	0.243	0.226	0.160	1.000	1.250	0.312	0.012
1/2	0.500	0.500	0.493	3/4	0.750	0.736	0.866	0.840	0.313	0.323	0.302	0.215	1.250	1.500	0.385	0.014
5/8	0.625	0.625	0.617	15/16	0.938	0.922	1.083	1.051	0.391	0.403	0.378	0.269	1.500	1.750	0.455	0.017
3/4	0.750	0.750	0.741	1-1/8	1.125	1.100	1.299	1.254	0.469	0.483	0.455	0.324	1.750	2.000	0.500	0.020
7/8	0.875	0.875	0.866	1 5/16	1.312	1.285	1.516	1.465	0.547	0.563	0.531	0.378	2.000	2.250	0.556	0.023

Identification Grade Mark	Specification	Fastener Description	Material	Nominal Size Range (in)	Mechanical Properties		
					Proof Load (psi)	Yield Strength Min (psi)	Tensile Strength Min (psi)
	SAE J429 Grade 2	Bolts & Cap Screws	Low or Medium Carbon Steel	1/4 thru 3/4 over 3/4 thru 1-1/2	55,000 33,000	57,000 36,000	74,000 60,000
	SAE J429 Grade 5	Bolts & Cap Screws	Medium Carbon Steel, Quenched & Tempered	1/4 thru 3/4 over 3/4 thru 1-1/2	85,000 74,000	92,000 81,000	120,000 105,000

GRADE 2			
SKU	Diameter (in)	L	Pack Qty
		Nominal Length (in)	
FNWCSG2Z3812	3/8	1/2	25
FNWCSG2Z3834		3/4	25
FNWCSG2Z381		1	25
FNWCSG2Z38114		1-1/4	25
FNWCSG2Z38112		1-1/2	25
FNWCSG2Z382		2	25
FNWCSG2Z38212		2-1/2	25
FNWCSG2Z383		3	25
FNWCSG2Z121	1/2	1	10
FNWCSG2Z12112		1-1/2	10
FNWCSG2Z122		2	10
FNWCSG2Z12212		2-1/2	4
FNWCSG2Z12234		2-3/4	4
FNWCSG2Z123		3	4
FNWCSG2Z58112		1-1/2	4
FNWCSG2Z58134		1-3/4	4
FNWCSG2Z582	5/8	2	4
FNWCSG2Z58214		2-1/4	4
FNWCSG2Z58212		2-1/2	4
FNWCSG2Z58234		2-3/4	4
FNWCSG2Z583		3	4
FNWCSG2Z58312		3-1/2	4
FNWCSG2Z584		4	4
FNWCSG2Z58412		4-1/2	2
FNWCSG2Z585	5	2	
FNWCSG2Z34134	3/4	1-3/4	4
FNWCSG2Z342		2	4
FNWCSG2Z34214		2-1/4	4
FNWCSG2Z34212		2-1/2	4
FNWCSG2Z34234		2-3/4	4
FNWCSG2Z343		3	4
FNWCSG2Z34314		3-1/4	2
FNWCSG2Z34312		3-1/2	2
FNWCSG2Z34334	3-3/4	2	
FNWCSG2Z344	7/8	4	2
FNWCSG2Z34412		4-1/2	2
FNWCSG2Z345		5	2
FNWCSG2Z34512		5-1/2	2
FNWCSG2Z78214		2-1/4	2
FNWCSG2Z78212		2-1/2	2
FNWCSG2Z78234		2-3/4	2
FNWCSG2Z783		3	2
FNWCSG2Z78312	3-1/2	2	
FNWCSG2Z78334	3-3/4	2	
FNWCSG2Z784	4	2	
FNWCSG2Z78412	4-1/2	2	
FNWCSG2Z78512	5-1/2	2	

GRADE 5			
SKU	Diameter (in)	L	Pack Qty
		Nominal Length (in)	
FNWCSG5Z381	3/8	1	25
FNWCSG5Z38114		1-1/4	25
FNWCSG5Z38112		1-1/2	25
FNWCSG5Z38212		2-1/2	25
FNWCSG5Z383		3	25
FNWCSG5Z384		4	25
FNWCSG5Z121	1/2	1	10
FNWCSG5Z12112		1-1/2	10
FNWCSG5Z122		2	10
FNWCSG5Z12212		2-1/2	4
FNWCSG5Z12312	5/8	3-1/2	4
FNWCSG5Z58112		1-1/2	4
FNWCSG5Z58134		1-3/4	4
FNWCSG5Z582		2	4
FNWCSG5Z58212		2-1/2	4
FNWCSG5Z58234		2-3/4	2
FNWCSG5Z583		3	2
FNWCSG5Z58312		3-1/2	4
FNWCSG5Z34134	3/4	1-3/4	4
FNWCSG5Z342		2	4
FNWCSG5Z34214		2-1/4	4
FNWCSG5Z34212		2-1/2	4
FNWCSG5Z343		3	4
FNWCSG5Z34312		3-1/2	2
FNWCSG5Z344	7/8	4	2
FNWCSG5Z34412		4-1/2	2
FNWCSG5Z78212		2-1/2	2
FNWCSG5Z783		3	2
FNWCSG5Z78312	3-1/2	2	
FNWCSG5Z784	4	2	