



Place Bolts are designed to provide a "locking" action between the head of the bolt and the material being clamped. The combination of the recessed groove on the bearing face of the head and the slots in the top of the head cause the head to flex as it's tightened. This creates a spring action in the head that provides additional elastic elongation that is not achieved by standard Hex Head Cap Screws.

PRODUCT ATTRIBUTES

Unique head design provides superior locking action in applications that experience extreme amounts of vibration

Available in grade 8 for added strength & durability Sizes range from 1/4" to 3/4" in diameter and from 1/2" to 4 1/4" in length

MARKETS FOR PLACE BOLTS

Diesel Engine Assemblies Transmission Assemblies

THIS PRODUCT IS OFTEN CALLED...

Type AA Hex Head Lock Bolt Type AA Locking Head Bolt



ADDITIONAL PRODUCT WE SUPPLY FOR HIGH VIBRATION APPLICATIONS

Hex Serrated Flange Screws
All Metal Lock Nuts
Nylon Insert Lock Nuts
All Metal Hex Flange Lock Nuts
Nylon Insert Hex Flange Lock Nuts
Lock Washers

AVAILABLE VALUE ADDED SERVICES

Bulk, full, and broken case quantities Secondary and rework services available Custom packaging services Custom plating and coating



The right part. The right quantity. On time. Every time.



GRADE 8 PLACE BOLTS

Place Bolts are manufactured in accordance with the latest revision of the following industry standards:

GM B-300.101 Dimensional Requirements
 SAE J429 Material and Strength Level
 ASME B1.1 Thread Requirements
 ASTM F788 Surface Discontinuities

ASME B18.18 Inspection and Quality Assurance

THREADS

Threads made to requirements of ASME B1.1 Unified Threads (UNC & UNF) Class 2A Thread acceptance per ASME B1.3, System 21

PLATING

Plain

Phos & Oil

MATERIAL AND PHYSICAL PROPERTIES

Grade 8



Chemical Composition:

CARE	ON (C)	PHOSPHORUS (P)	SULFUR (S)	BORON (B)			
Max	Min	Max	Max	Max			
0.55	0.25	0.025	0.025	0.003			

Alloy

SAE J429 GRADE 8 (CONTAINING ONE OR MORE OF THE FOLLOWING)

Mn, Cr, Mo, Ni, V, B

Hardness

GRADE 8

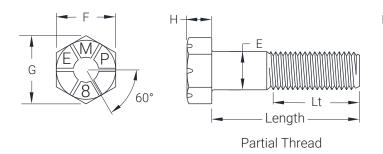
HRC 33/39

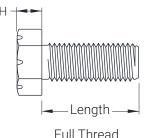
Tensile Strength

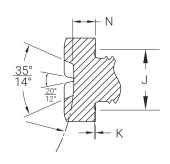
GRADE 8

150,000 psi min

DIMENSIONS FOR GRADE 8 PLACE BOLTS







BOLT DIAMETER	WIDTH ACROSS FLATS (F)		WIDTH ACROSS CORNERS (G)		THICKNESS (H)		BODY DIAMETER (E)		GROOVE DIAMETER (J)		GROOVE DEPTH (K)		HEAD RADIUS (R)		RECESS THICKNESS (N)	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1/4	0.438	0.428	0.505	0.488	0.135	0.125	0.250	0.245	0.317	0.307	0.007	0.004	2.00	1.50	0.110	0.090
5/16	0.500	0.489	0.577	0.557	0.198	0.188	0.312	0.306	0.396	0.386	0.013	0.010	2.00	1.50	0.145	0.125
3/8	0.562	0.551	0.650	0.628	0.260	0.250	0.375	0.369	0.474	0.464	0.013	0.010	2.00	1.50	0.185	0.165
7/16	0.625	0.612	0.722	0.698	0.291	0.281	0.438	0.431	0.536	0.526	0.013	0.010	2.00	1.50	0.205	0.185
1/2	0.750	0.736	0.866	0.840	0.327	0.312	0.500	0.493	0.630	0.620	0.013	0.010	2.00	1.50	0.220	0.200
9/16	0.812	0.798	0.938	0.910	0.390	0.375	0.562	0.617	0.693	0.683	0.013	0.010	2.00	1.50	0.260	0.240
5/8	0.875	0.860	1.010	0.980	0.390	0.375	0.625	0.617	0.750	0.740	0.013	0.010	3.50	3.00	0.290	0.270
3/4	1.000	0.983	1.155	1.121	0.458	0.438	0.750	0.741	0.875	0.965	0.013	0.010	3.85	3.38	0.335	0.315

^{*}The specifications shown on this sheet are not intended to be used in the production of parts. Earnest Machine is not responsible or liable in any manner for any production errors and we certify the information present on this specification sheet is correct to the best of our knowledge. ©2022 Earnest Machine Products