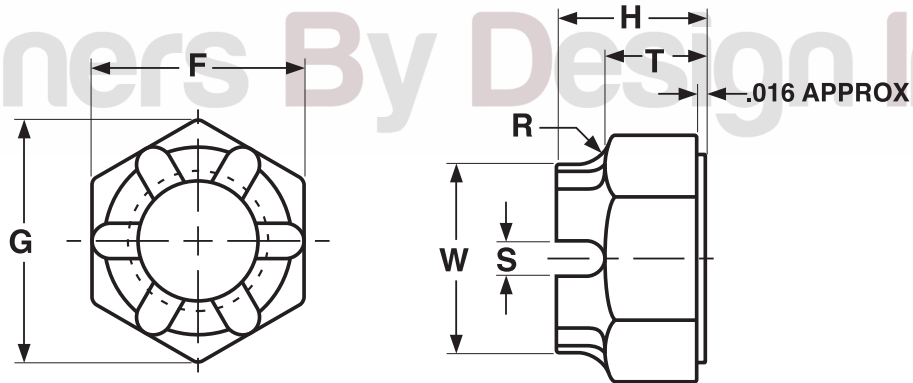


**HEX CASTLE** Carbon Steel

Fasteners By Design Inc.



HEX CASTLE NUTS																	ANSI B18.2.2 1970
Nominal Size or Basic Major Diameter of Thread	F			G			H			T			S		R	W	Runout of Bearing Surface FIR
	Width Across Flats			Width Across Corners			Thickness			Unslotted Thickness and Height of Flat			Width of Slot		Radius of Fillet	Diam. of Cylindri- cal Part	
	Basic	Max	Min	Max	Min	Basic	Max	Min	Nom	Max	Min	Max	Min	+0.10	Min	Max	
1/4	0.2500	7/16	0.438	0.428	0.505	0.488	9/32	0.288	0.274	3/16	0.20	0.18	0.10	0.07	0.094	0.371	0.015
5/16	0.3125	1/2	0.500	0.489	0.577	0.557	21/64	0.336	0.320	15/64	0.24	0.22	0.12	0.09	0.094	0.425	0.016
3/8	0.3750	9/16	0.562	0.551	0.650	0.628	13/32	0.415	0.398	9/32	0.29	0.27	0.15	0.12	0.094	0.478	0.017
7/16	0.4375	11/16	0.688	0.675	0.794	0.768	29/64	0.463	0.444	19/64	0.31	0.29	0.15	0.12	0.094	0.582	0.018
1/2	0.5000	3/4	0.750	0.736	0.866	0.840	9/16	0.573	0.552	13/32	0.42	0.40	0.18	0.15	0.125	0.637	0.019
9/16	0.5625	7/8	0.875	0.861	1.010	0.982	39/64	0.621	0.598	27/64	0.43	0.41	0.18	0.15	0.156	0.744	0.020
5/8	0.6250	15/16	0.938	0.922	1.083	1.051	23/32	0.731	0.706	1/2	0.51	0.49	0.24	0.18	0.156	0.797	0.021
3/4	0.7500	1-1/8	1.125	1.088	1.299	1.240	13/16	0.827	0.798	9/16	0.57	0.55	0.24	0.18	0.188	0.941	0.023
7/8	0.8750	1-5/16	1.312	1.269	1.516	1.447	29/32	0.922	0.890	21/32	0.67	0.64	0.24	0.18	0.188	1.097	0.025
1	1.0000	1-1/2	1.500	1.450	1.732	1.653	1	1.018	0.982	23/32	0.73	0.70	0.30	0.24	0.188	1.254	0.027
1-1/4	1.250	1-7/8	1.875	1.812	2.165	2.066	1-1/4	1.272	1.228	7/8	0.89	0.86	0.40	0.31	0.250	1.570	0.033

<b>Description</b>	Similar to a slotted nut with the following exception: the slots are cut into a cylindrical portion that is equal in length to the slot depth and slightly smaller in diameter than the hex width.
<b>Applications/ Advantages</b>	The slots are for the insertion of a cotter pin to secure the nut when used with a drilled shank fastener. The slotted and castle styles are both interchangeable with the slotted design now the preferred style.
<b>Material</b>	Carbon Steel  Nuts shall be made from a carbon steel which conforms to the following chemical composition requirements-- <i>Carbon:</i> 0.47% max.; <i>Phosphorus:</i> 0.12% max.; <i>Sulfur:</i> 0.23% max..
<b>Hardness</b>	Rockwell C32 maximum
<b>Proof Load</b>	-
<b>Plating</b>	See Appendix-A for plating information.

NOTE: There is no industry standard for Grade-5 Castle nut performance. These values are offered as a recommendation. Parts should be tested in actual applications before making final evaluations for suitability.

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