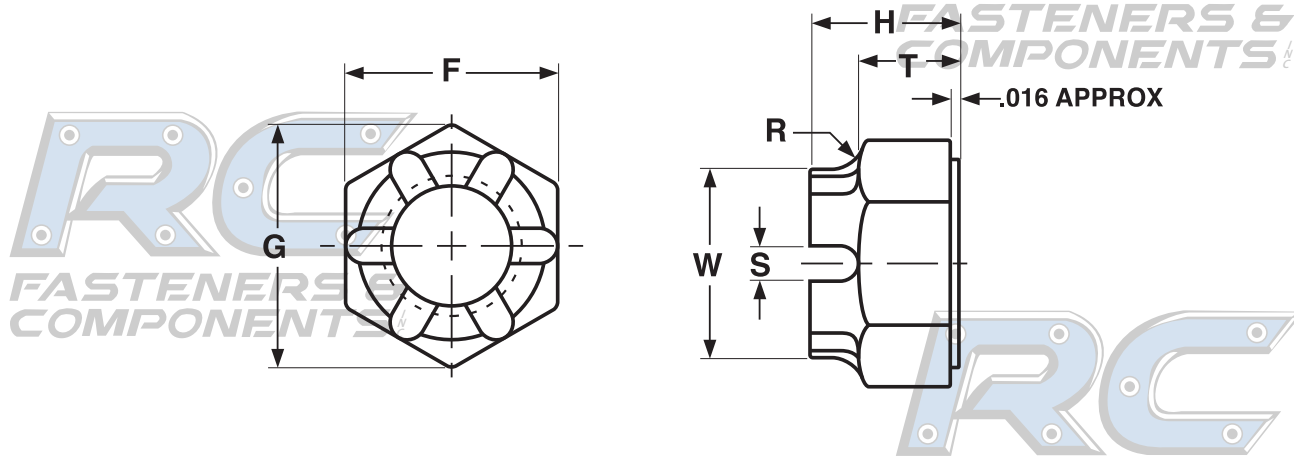


HEX CASTLE

Low Carbon & Grade-5 Steel



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	1.2500	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	

Description	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.	
Applications/ Advantages	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.	Offers same advantages as the low carbon castle nut but can be used with Grade-5 bolts and cap screws
Material	Low Carbon Steel Nuts shall be made from a low-carbon steel which conforms to the following chemical composition requirements-- Carbon: 0.47% max.; Phosphorus: 0.12% max.; Sulfur: 0.23% max..	Grade-5 SAE 1010 - 1022 steel
Hardness	Rockwell C32 maximum	Rockwell C32 maximum
Proof Load	-	70,000 psi. minimum*
Plating	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.