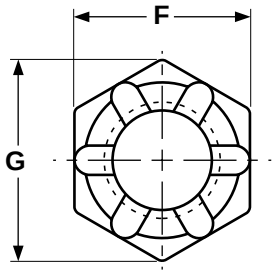

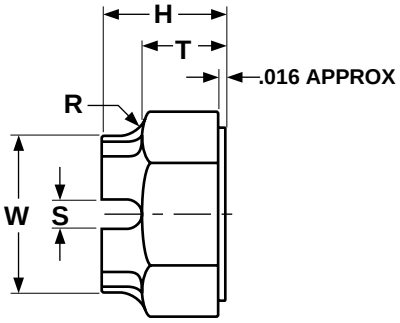

Hex Castle Nuts

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 Filet	Diam. of Cylindrical Part	
		Basic	Max	Min	Max	Min	Basic	Max	Min	Nom	Max	Min	Max	Min	+.010	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

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.
Material	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..
Hardness	Rockwell C32 maximum
Plating	See Appendix-A for plating information.