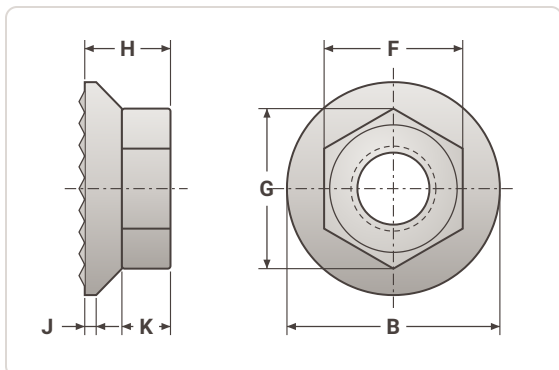




PRODUCT DATA SHEET

Serrated Flange Lock Nuts – Inch Series

1.0 Dimensions As per ASME B18.16.4 (inches)



- **Also known as:** Whiz nuts, Wiz nuts or serrated hex flange nuts.
- **Dimensions:** as per ASME B18.16.4 (serrated hex flange locknuts, #6–3/4"). Grade 5 mechanical properties as per IFI-145.
- **Locking:** serrations on the flange bearing face grip the work surface and resist loosening under vibration – no insert or washer needed.
- **F** = across flats **G** = across corners **B** = flange dia. **H** = overall thickness **K** = hex (wrenching) height **J** = flange thickness
- **Stocked in:** Grade 5 zinc plated steel and 18-8 stainless steel, UNC (coarse) and UNF (fine).

Nominal Size	F – Across Flats		G – Across Corners		B – Flange Dia.		H – Thickness		K – Hex Height	J – Flange Thick.	Stocked Thread Series	
	Max	Min	Max	Min	Max	Min	Max	Min			Zinc Plated	Stainless
#6	0.312	0.302	0.361	0.342	0.422	0.406	0.171	0.156	0.10	0.02	UNC	UNC
#8	0.344	0.334	0.397	0.381	0.469	0.452	0.203	0.187	0.13	0.02	UNC	UNC
#10	0.375	0.365	0.433	0.416	0.500	0.480	0.219	0.203	0.13	0.03	UNC / UNF	UNC / UNF
1/4	0.438	0.428	0.505	0.488	0.594	0.574	0.236	0.222	0.14	0.04	UNC / UNF	UNC / UNF
5/16	0.500	0.489	0.577	0.557	0.680	0.660	0.283	0.268	0.17	0.04	UNC / UNF	UNC / UNF
3/8	0.562	0.551	0.650	0.628	0.750	0.728	0.347	0.330	0.23	0.04	UNC / UNF	UNC / UNF
7/16	0.688	0.675	0.794	0.768	0.937	0.910	0.395	0.375	0.26	0.04	UNC / UNF	–
1/2	0.750	0.736	0.866	0.840	1.031	1.000	0.458	0.437	0.31	0.05	UNC / UNF	UNC
5/8	0.938	0.922	1.083	1.051	1.281	1.248	0.569	0.545	0.40	0.05	UNC / UNF	–
3/4	1.125	1.088	1.299	1.240	1.500	1.460	0.675	0.627	0.46	0.06	–	–

Dimensions in inches. Sizes without a stocked thread series are available on request – call or email for pricing.



2.0 Material & Mechanical Properties

Property	Grade 5 Zinc Plated Steel	18-8 Stainless Steel
Material	Grade 5 medium carbon steel (carbon 0.55% max, manganese 0.30% min, phosphorus 0.05% max, sulfur 0.15% max)	18-8 (304) stainless steel
Proof load stress	Coarse thread (UNC): 120,000 psi Fine thread (UNF): 109,000 psi	–
Hardness	Rockwell C32 max	Rockwell B70 to B85 (typical)
Use with	Grade 5 bolts and screws	18-8 stainless bolts and screws
Locking feature	Serrated flange bearing surface	Serrated flange bearing surface
Thread class of fit	2B (UNC / UNF)	2B (UNC / UNF)
RoHS / REACH	RoHS 3 (2015/863/EU) compliant REACH (EC 1907/2006) compliant	–

APPLICATION NOTES

- Also called Whiz nuts or Wiz nuts. The serrations on the bearing face dig into the mating surface when the nut is tightened, so it takes more torque to loosen the nut than to tighten it.
- The flange spreads the load over a larger area and spans oversized or slotted holes, so a separate washer and lock washer are usually not needed.
- Do not use with a washer under the flange – the serrations must grip the work surface to lock.
- The serrations mark the mating surface. Avoid them on finished or painted surfaces where marking is not acceptable, and on surfaces harder than the nut.
- Stainless steel nuts on stainless bolts can gall (seize) when tightened quickly. Tighten at a slow, even speed.

3.0 Surface Finish Zinc Plated / Stainless

Properties	Zinc Plated (Steel)	Stainless Steel (18-8)
Type	Trivalent zinc plated (RoHS)	Plain – no coating
Color	Silver / clear	Natural stainless
Corrosion resistance	Moderate – indoor or protected use	High – outdoor, wet and marine use

Disclaimer: The above is a compilation of data from various industry standards. The Nutty Company, Inc. has made every effort to present the data accurately. However, The Nutty Company, Inc. cannot be held liable for any claim traceable to any errors, typographical or otherwise, contained herein.



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