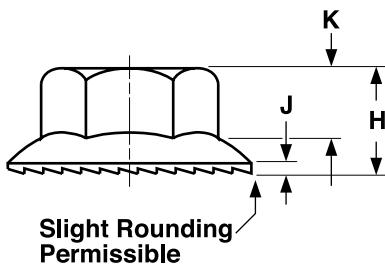
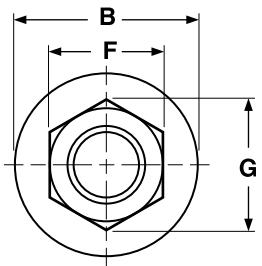


# SERRATED HEX FLANGE

## CASE HARDENED STEEL / 18-8 & 316 STAINLESS



## SERRATED HEX FLANGE LOCK NUTS

ASME B18.16.4-2008

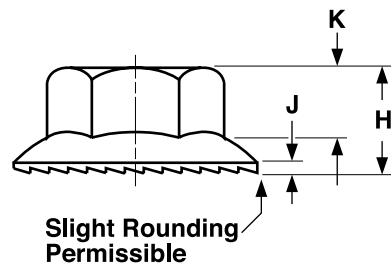
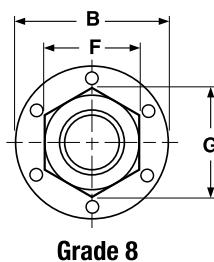
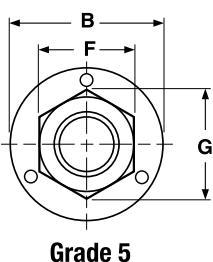
Nominal Size or Basic Major Diameter of Thread		F		G		B		H		K	J
		Width Across Flats		Width Across Corners		Flange Diameter		Nut Thickness		Wrenching Height	Flange Thickness
		Max	Min	Max	Min	Max	Min	Max	Min	Min	Min
4	0.112	0.250	0.241	0.289	0.275	0.386	0.370	0.160	0.147	-	0.02
6	0.138	0.312	0.302	0.361	0.342	0.422	0.406	0.171	0.156	0.10	0.02
8	0.164	0.344	0.334	0.397	0.381	0.469	0.452	0.203	0.187	0.13	0.02
10	0.190	0.375	0.365	0.433	0.416	0.500	0.480	0.219	0.203	0.13	0.03
12	0.216	0.438	0.428	0.505	0.488	0.594	0.574	0.236	0.222	0.14	0.04
1/4	0.250	0.438	0.428	0.505	0.488	0.594	0.574	0.236	0.222	0.14	0.04
5/16	0.313	0.500	0.489	0.577	0.557	0.680	0.660	0.283	0.268	0.17	0.04
3/8	0.375	0.562	0.551	0.650	0.628	0.750	0.728	0.347	0.330	0.23	0.04
7/16	0.438	0.688	0.675	0.794	0.768	0.937	0.910	0.395	0.375	0.26	0.04
1/2	0.500	0.750	0.736	0.866	0.840	1.031	1.000	0.458	0.437	0.31	0.05
9/16	0.563	0.875	0.861	1.010	0.982	1.188	1.155	0.506	0.483	0.35	0.05
5/8	0.625	0.938	0.922	1.083	1.051	1.281	1.248	0.569	0.545	0.40	0.05
3/4	0.750	1.125	1.088	1.299	1.240	1.500	1.460	0.675	0.627	0.46	0.06
7/8	0.875	1.179	1.166	1.361	1.295	1.682	-	0.786	0.742	-	0.11

\*ASME specification applies to #6 through 3/4" diameters.

Description	Hex nut with an enlarged circular base flaring out from the bottom of the nut. The bearing surface of the flange has serrations which displace material on the mating surface when the nut is wrenched into place, forming a connection which resists loosening.				
Applications/ Advantages	Requires a greater amount of torque to loosen than to tighten the nut. Will span oversized or poorly aligned holes. Flange provides a more uniform bearing-stress to clamp-force ratio than other low carbon lock nuts. Does not gall screw threads.			Stainless serrated flange nuts are typically used in environments subject to corrosive elements.	
Material	Steel		Stainless		
	Nuts shall be made from a carbon steel which conforms to the following chemical composition requirements-- Carbon: 0.47% max.; Phosphorus: 0.12% max.; Sulfur: 0.23% max.		18-8 stainless steel		316 stainless steel
Heat Treatment	Nuts are case hardened to the proper hardness to ensure the serrations will have sufficient gripping strength.		-		-
Hardness	Case Hardness: Rockwell HR15N 78 - 90		Rockwell B 70-85		Rockwell B95 max
Plating	Steel flange nuts are supplied in various finishes, including clear zinc, black zinc and black oxide.		Stainless flange nuts are usually provided without any additional plating.		

# SERRATED HEX FLANGE

## CASE HARDENED STEEL / 18-8 & 316 STAINLESS



## SERRATED HEX FLANGE LOCK NUTS - GRADES 5 & 8

ASME B18.16.4 &  
SAE J995\*

Nominal Size or Basic Major Diameter of Thread		F		G		B		H		K	J
		Width Across Flats		Width Across Corners		Flange Diameter		Nut Thickness		Wrenching Height	Flange Thickness
		Max	Min	Max	Min	Max	Min	Max	Min		
10	0.190	0.375	0.365	0.433	0.416	0.500	0.480	0.219	0.203	0.13	0.03
1/4	0.250	0.438	0.428	0.505	0.488	0.594	0.574	0.236	0.222	0.14	0.04
5/16	0.313	0.500	0.489	0.577	0.557	0.680	0.660	0.283	0.268	0.17	0.04
3/8	0.375	0.562	0.551	0.650	0.628	0.750	0.728	0.347	0.330	0.23	0.04
7/16	0.438	0.688	0.675	0.794	0.768	0.937	0.910	0.395	0.375	0.26	0.04
1/2	0.500	0.750	0.736	0.866	0.840	1.031	1.000	0.458	0.437	0.31	0.05
9/16	0.563	0.875	0.861	1.010	0.982	1.188	1.155	0.506	0.483	0.35	0.05
5/8	0.625	0.938	0.922	1.083	1.051	1.281	1.248	0.569	0.545	0.40	0.05
3/4	0.750	1.125	1.088	1.299	1.240	1.500	1.460	0.675	0.627	0.46	0.06

Description	Hex nut with an enlarged circular base flaring out from the bottom of the nut. The bearing surface of the flange has serrations which displace material on the mating surface when the nut is wrenching into place, forming a connection which resists loosening.	
Applications/Advantages	Requires a greater amount of torque to loosen than to tighten the nut. Will span oversized or poorly aligned holes. Flange provides a more uniform bearing-stress to clamp-force ratio than other low carbon lock nuts. Does not gall screw threads. Grade 5 nuts are designed to be used with Grade 5 screws and bolts; Grade 8 nuts are designed to be used with Grade 8 screws and bolts.	
Material	Grade 5	Grade 8
	Nuts shall be made from a carbon steel which conforms to the following chemical composition requirements-- Carbon: 0.55% max.; Manganese: 0.30% min.; Phosphorus: 0.05% max.; Sulfur: 0.15% max.	Nuts shall be made from a carbon steel which conforms to the following chemical composition requirements-- Carbon: 0.55% max.; Manganese: 0.30% min.; Phosphorus: 0.04% max.; Sulfur: 0.05% max.
Proof Load	Coarse thread: 120,000 psi.; Fine thread: 109,000 psi.	Coarse thread: 150,000 psi.; Fine thread: 150,000 psi.
Hardness	Rockwell 32 HRC max	
Plating	Grade 5 Flange Nuts are usually supplied in zinc finish	

\*Dimensions are to ASME B18.16.4; material and performance requirements are to SAE J995.