

FORMULAS FOR NUT DIMENSIONS

APPENDIX II

Nut Type	Nut Size	Width Across Flats		Nut Thickness		Width Across Corners Limits
		Basic	Tolerance (Minus)	Basic	Tolerance (Plus or Minus)	
Square	1/4 thru 5/8	$F = 1.500 D + 0.062$	$0.050 D$	$H = 0.875 D$	$0.016 D + 0.012$	Max G = 1.4142 (Max F) Min G = 1.373 (Min F) - 0.030
	3/4 thru 1-1/2	$F = 1.500 D$	$0.050 D$	$H = 0.875 D$	$0.016 D + 0.012$	
Hex Flat	1-1/8 thru 1-1/2	$F = 1.500 D$	$0.050 D$	$H = 0.875 D$	$0.016 D + 0.012$	Max G = 1.1547 (Max F) Min G = 1.14 (Min F)
Hex Flat Jam	1-1/8	$F = 1.500 D$	$0.050 D$	$H = 0.500 D + 0.062$	$0.016 D + 0.012$	Max G = 1.1547 (Max F) Min G = 1.14 (Min F)
	1-1/4 thru 1-1/2	$F = 1.500 D$	$0.050 D$	$H = 0.500 D + 0.125$	$0.016 D + 0.012$	
Hex and Hex Slotted	1/4	$F = 1.500 D + 0.062$	$0.015 D + 0.006$	$H = 0.875 D$	$0.015 D + 0.003$	Max G = 1.1547 (Max F) Min G = 1.14 (Min F)
	5/16 thru 5/8	$F = 1.500 D$	$0.015 D + 0.006$	$H = 0.875 D$	$0.015 D + 0.003$	
	3/4 thru 1-1/8	$F = 1.500 D$	$0.050 D$	$H = 0.875 D - 0.016$	$0.016 D + 0.012$	
	1-1/4 thru 1-1/2	$F = 1.500 D$	$0.050 D$	$H = 0.875 D - 0.031$	$0.016 D + 0.012$	
Hex Jam	1/4	$F = 1.500 D + 0.062$	$0.015 D + 0.006$	H = See Table	$0.015 D + 0.003$	Max G = 1.1547 (Max F) Min G = 1.14 (Min F)
	5/16 thru 5/8	$F = 1.500 D$	$0.015 D + 0.006$	H = See Table	$0.015 D + 0.003$	
	3/4 thru 1-1/8	$F = 1.500 D$	$0.050 D$	$H = 0.500 D + 0.047$	$0.016 D + 0.012$	
	1-1/4 thru 1-1/2	$F = 1.500 D$	$0.050 D$	$H = 0.500 D + 0.094$	$0.016 D + 0.012$	
Hex Thick, and Hex Thick Slotted	1/4	$F = 1.500 D + 0.062$	$0.015 D + 0.006$	H = See Table	$0.015 D + 0.003$	Max G = 1.1547 (Max F) Min G = 1.14 (Min F)
	5/16 thru 5/8	$F = 1.500 D$	$0.015 D + 0.006$	H = See Table	$0.015 D + 0.003$	
	3/4 thru 1-1/2	$F = 1.500 D$	$0.050 D$	H = See Table	$0.015 D + 0.003$	
Heavy Square	1/4 thru 1-1/2	$F = 1.500 D + 0.125$	$0.050 D$	$H = 1.000 D$	$0.016 D + 0.012^*$	Max G = 1.4142 (Max F) Min G = 1.373 (Min F) - 0.030
Heavy Hex Flat	1-1/8 thru 4	$F = 1.500 D + 0.125$	$0.050 D$	$H = 1.000 D$	$0.016 D + 0.012^*$	Max G = 1.1547 (Max F) Min G = 1.14 (Min F)
Heavy Hex Flat Jam	1/4 thru 1-1/8	$F = 1.500 D + 0.125$	$0.050 D$	$H = 0.500 D + 0.062$	$0.016 D + 0.012^{**}$	Max G = 1.1547 (Max F) Min G = 1.14 (Min F)
	1-1/4 thru 2-1/4	$F = 1.500 D + 0.125$	$0.050 D$	$H = 0.500 D + 0.125$	$0.016 D + 0.012^{**}$	
	2-1/2 thru 4	$F = 1.500 D + 0.125$	$0.050 D$	$H = 0.500 D + 0.250$	$0.016 D + 0.012^{**}$	
Heavy Hex and Heavy Hex Slotted	1/4 thru 1-1/8	$F = 1.500 D + 0.125$	$0.050 D$	$H = 1.000 D - 0.016$	$0.016 D + 0.012$	Max G = 1.1547 (Max F) Min G = 1.14 (Min F)
	1-1/4 thru 2	$F = 1.500 D + 0.125$	$0.050 D$	$H = 1.000 D - 0.031$	$0.016 D + 0.012$	
	2-1/4 thru 3	$F = 1.500 D + 0.125$	$0.050 D$	$H = 1.000 D - 0.047$	$0.016 D + 0.012$	
	3-1/4 thru 4	$F = 1.500 D + 0.125$	$0.050 D$	$H = 1.000 D - 0.062$	$0.016 D + 0.012$	
Heavy Hex Jam	1/4 thru 1-1/8	$F = 1.500 D + 0.125$	$0.050 D$	$H = 0.500 D + 0.047$	$0.016 D + 0.012$	Max G = 1.1547 (Max F) Min G = 1.14 (Min F)
	1-1/4 thru 2	$F = 1.500 D + 0.125$	$0.050 D$	$H = 0.500 D + 0.094$	$0.016 D + 0.012$	
	2-1/4	$F = 1.500 D + 0.125$	$0.050 D$	$H = 0.500 D + 0.078$	$0.016 D + 0.012$	
	2-1/2 thru 3	$F = 1.500 D + 0.125$	$0.050 D$	$H = 0.500 D + 0.203$	$0.016 D + 0.012$	
	3-1/4 thru 4	$F = 1.500 D + 0.125$	$0.050 D$	$H = 0.500 D + 0.188$	$0.016 D + 0.012$	
See Notes		1		2		

NOTES:

1. Adjusted to sixteenths.
2. 1/4 thru 1 in. sizes adjusted to sixty-fourths. 1-1/8 thru 2-1/2 in. sizes adjusted upward to thirty-seconds. 2-3/4 thru 4 in. sizes adjusted upward to sixteenths.
- * 3. Plus tolerance only. Minus tolerance adjusted so that minimum thickness is equal to minimum thickness of Heavy Hex Nut.
- **4. Plus tolerance only. Minus tolerance adjusted so that minimum thickness is equal to minimum thickness of Heavy Hex Jam Nut.
Where: D = Nominal nut size or basic diameter of the thread.
F = Width across flats.
G = Width across corners.