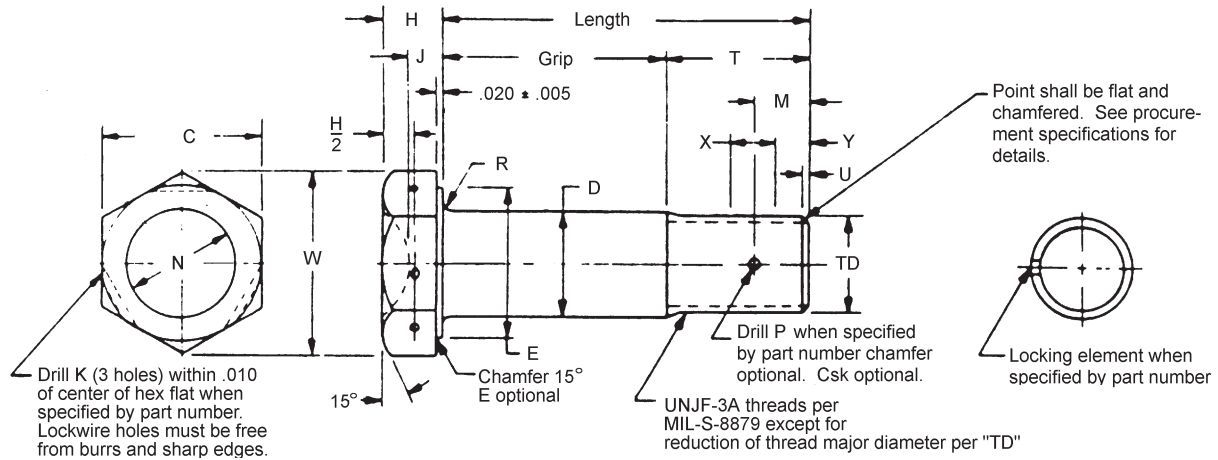


# NAS6303 - NAS6316 Series Specifications

**A 286 Stainless Steel**  
**Bolt, Hex Head, Close Tolerance**  
**160,000 PSI Short Thread**



Basic No.	Nominal Thread Size	C	D Diameter				E Dia Min	H	J	K Dia	M	N	P	R Rad	T	TD Dia	U Max	W Min	X	Y
			Unplated	Before Chrome Plating	Before Cad Plate or Al Coating	After Plating or Coating														
NAS 6303	.1900-32	.3760 .3670	.1895 .1890	.1850 .1845	.1887 .1881	.1895 .1885	.335	.125 .110	.088 .073	.056 .046	.174 .154	.18 .20	.080 .070	.020 .010	.323 .184 .181	.039	.410	.156	.094	
NAS 6304	.2500-28	.4390 .4290	.2495 .2490	.2450 .2445	.2487 .2481	.2495 .2485	.398	.140 .125	.098 .083	.056 .046	.180 .160	.24 .26	.086 .076	.020 .010	.370 .244 .241	.045	.480	.179	.107	
NAS 6305	.3125-24	.5020 .4920	.3120 .3115	.3075 .3070	.3112 .3106	.3120 .3110	.460	.171 .156	.119 .104	.080 .070	.192 .172	.30 .32	.086 .076	.020 .010	.438 .306 .302	.052	.552	.208	.125	
NAS 6306	.3750-24	.5640 .5540	.3745 .3740	.3700 .3695	.3737 .3731	.3745 .3735	.523	.203 .188	.140 .125	.080 .070	.193 .173	.37 .39	.116 .106	.025 .015	.454 .368 .364	.052	.623	.208	.125	
NAS 6307	.4375-20	.6900 .6780	.4370 .4365	.4325 .4320	.4362 .4356	.4370 .4360	.648	.234 .219	.161 .146	.080 .070	.209 .189	.43 .45	.116 .106	.025 .015	.528 .431 .426	.062	.764	.250	.150	
NAS 6308	.5000-20	.7520 .7410	.4995 .4990	.4950 .4945	.4987 .4981	.4995 .4985	.710	.265 .250	.182 .167	.080 .070	.208 .188	.49 .51	.116 .106	.030 .020	.528 .493 .488	.062	.836	.250	.150	
NAS 6309	.5625-18	.8770 .8650	.5615 .5610	.5570 .5565	.5607 .5601	.5615 .5605	.835	.296 .281	.203 .188	.080 .070	.217 .197	.55 .57	.151 .141	.035 .020	.594 .555 .550	.068	.978	.278	.167	
NAS 6310	.6250-18	.9400 .9280	.6240 .6235	.6195 .6190	.6232 .6226	.6240 .6230	.898	.327 .312	.223 .208	.080 .070	.217 .197	.61 .63	.151 .141	.040 .025	.626 .618 .612	.068	1.05	.278	.167	
NAS 6312	.7500-16	1.065 1.052	.7490 .7485	.7445 .7440	.7482 .7476	.7490 .7480	1.023	.390 .375	.265 .250	.080 .070	.232 .212	.74 .76	.151 .141	.045 .030	.666 .743 .737	.078	1.191	.312	.188	
NAS 6314	.8750-14	1.252 1.239	.8740 .8735	.8695 .8690	.8732 .8726	.8740 .8730	1.210	.453 .438	.307 .292	.080 .070	.251 .231	.87 .89	.151 .141	.050 .035	.759 .868 .861	.089	1.405	.357	.214	
NAS 6316	1.000-12	1.440 1.427	.9990 .9985	.9945 .9940	.9982 .9976	.9990 .9980	1.398	.515 .500	.348 .333	.080 .070	.274 .254	.99 1.01	.151 .141	.060 .045	.895 .993 .986	.104	1.619	.417	.250	

**Material:** A-286 per AMS 5731 or AMS 5737. Locking element - plastic per MIL-F-18240 and QPL 18240

**Heat Treat:** 160 ksi minimum ultimate tensile, 95 ksi minimum ultimate shear.

**Finish:** Unplated - Passivated to meet requirements of NAS4003  
 Cadmium plated - Cadmium plate per QQ-P-416, Type II, Class 2. Parts plated to Class 3 may be used until stock depleted. Embrittlement test per QQ-P-416 does not apply.  
 Chromium plated - Chromium plated per QQ-C-320. Class 2 on shank only. All other surfaces cadmium plated.  
 No chromium within .020 of line of tangency of head-to-shank fillet. Chromium in thread runout permitted.  
 Chromium plated bolts not available with grip dash number 1 or 2.

# NAS6303 - NAS6316 (Length ± .015)

CHART MAY ALSO BE USED FOR NAS6203 THROUGH NAS6216 LENGTH CALCULATIONS

Dash No.	Grip ± .010	NAS6303 1900-32	NAS6304 2500-28	NAS6305 3125-24	NAS6306 3750-24	NAS6307 4375-20	NAS6308 5000-20	NAS6309 5625-18	NAS6310 6250-18	NAS6312 7500-16	NAS6314 8750-14	NAS6316 1000-12
1	.062	.385	.432	.500	.516	.590	.590	.656	.688	.728	.821	.957
2	.125	.448	.495	.563	.579	.653	.653	.719	.751	.791	.884	1.020
3	.188	.511	.558	.626	.642	.716	.716	.782	.814	.854	.947	1.083
4	.250	.573	.620	.688	.704	.778	.778	.844	.876	.916	1.009	1.145
5	.312	.635	.682	.750	.766	.840	.840	.906	.938	.978	1.071	1.207
6	.375	.698	.745	.813	.829	.903	.903	.969	1.001	1.041	1.134	1.270
7	.438	.761	.808	.876	.892	.966	.966	1.032	1.064	1.104	1.197	1.333
8	.500	.823	.870	.938	.954	1.028	1.028	1.094	1.126	1.166	1.259	1.395
9	.562	.885	.932	1.000	1.016	1.090	1.090	1.156	1.188	1.228	1.321	1.457
10	.625	.948	.995	1.063	1.079	1.153	1.153	1.219	1.251	1.291	1.384	1.520
11	.688	1.011	1.058	1.126	1.142	1.216	1.216	1.282	1.314	1.354	1.447	1.583
12	.750	1.073	1.120	1.188	1.204	1.278	1.278	1.344	1.376	1.416	1.509	1.645
13	.812	1.135	1.182	1.250	1.266	1.340	1.340	1.406	1.438	1.478	1.571	1.707
14	.875	1.198	1.245	1.313	1.329	1.403	1.403	1.469	1.501	1.541	1.634	1.770
15	.938	1.261	1.308	1.376	1.392	1.466	1.466	1.532	1.564	1.604	1.697	1.833
16	1.000	1.323	1.370	1.438	1.454	1.528	1.528	1.594	1.626	1.666	1.759	1.895
17	1.062	1.385	1.432	1.500	1.516	1.590	1.590	1.656	1.688	1.728	1.821	1.957
18	1.125	1.448	1.495	1.563	1.579	1.653	1.653	1.719	1.751	1.791	1.884	2.020
19	1.188	1.511	1.558	1.626	1.642	1.716	1.716	1.782	1.814	1.854	1.947	2.083
20	1.250	1.573	1.620	1.688	1.704	1.778	1.778	1.844	1.876	1.916	2.009	2.145
21	1.312	1.635	1.682	1.750	1.766	1.840	1.840	1.906	1.938	1.978	2.071	2.207
22	1.375	1.698	1.745	1.813	1.829	1.903	1.903	1.969	2.001	2.041	2.134	2.270
23	1.438	1.761	1.808	1.876	1.892	1.966	1.966	2.032	2.064	2.104	2.197	2.333
24	1.500	1.823	1.870	1.938	1.954	2.028	2.028	2.094	2.126	2.166	2.259	2.395
25	1.562	1.885	1.932	2.000	2.016	2.090	2.090	2.156	2.188	2.228	2.321	2.457
26	1.625	1.948	1.995	2.063	2.079	2.153	2.153	2.219	2.251	2.291	2.384	2.520
27	1.688	2.011	2.058	2.126	2.142	2.216	2.216	2.282	2.314	2.354	2.447	2.583
28	1.750	2.073	2.120	2.188	2.204	2.278	2.278	2.344	2.376	2.416	2.509	2.645
29	1.812	2.135	2.182	2.250	2.266	2.340	2.340	2.406	2.438	2.478	2.571	2.707
30	1.875	2.198	2.245	2.313	2.329	2.403	2.403	2.469	2.501	2.541	2.634	2.770
31	1.938	2.261	2.308	2.376	2.392	2.466	2.466	2.532	2.564	2.604	2.697	2.833
32	2.000	2.323	2.370	2.438	2.454	2.528	2.528	2.594	2.626	2.666	2.759	2.895
34	2.125	2.448	2.495	2.563	2.579	2.653	2.653	2.719	2.751	2.791	2.884	3.020
36	2.250	2.573	2.620	2.688	2.704	2.778	2.778	2.844	2.876	2.916	3.009	3.145
38	2.375	2.698	2.745	2.813	2.829	2.903	2.903	2.969	3.001	3.041	3.134	3.270
40	2.500	2.823	2.870	2.938	2.954	3.028	3.028	3.094	3.126	3.166	3.259	3.395
42	2.625	2.948	2.995	3.063	3.079	3.153	3.153	3.219	3.251	3.291	3.384	3.520
44	2.750	3.073	3.120	3.188	3.204	3.278	3.278	3.344	3.376	3.416	3.509	3.645
46	2.875	3.198	3.245	3.313	3.329	3.403	3.403	3.469	3.501	3.541	3.634	3.770
48	3.000	3.323	3.370	3.438	3.454	3.528	3.528	3.594	3.626	3.666	3.759	3.895
50	3.125	3.448	3.495	3.563	3.579	3.653	3.653	3.719	3.751	3.791	3.884	4.020
52	3.250	3.573	3.620	3.688	3.704	3.778	3.778	3.844	3.876	3.916	4.009	4.145
54	3.375	3.698	3.745	3.813	3.829	3.903	3.903	3.969	4.001	4.041	4.134	4.270
56	3.500	3.823	3.870	3.938	3.954	4.028	4.028	4.094	4.126	4.166	4.259	4.395
58	3.625	3.948	3.995	4.063	4.079	4.153	4.153	4.219	4.251	4.291	4.384	4.520
60	3.750	4.073	4.120	4.188	4.204	4.278	4.278	4.344	4.376	4.416	4.509	4.645
62	3.875	4.198	4.245	4.313	4.329	4.403	4.403	4.469	4.501	4.541	4.634	4.770
64	4.000	4.323	4.370	4.438	4.454	4.528	4.528	4.594	4.626	4.666	4.759	4.895
66	4.125	4.448	4.495	4.563	4.579	4.653	4.653	4.719	4.751	4.791	4.884	5.020
68	4.250	4.573	4.620	4.688	4.704	4.778	4.778	4.844	4.876	4.916	5.009	5.145
70	4.375	4.698	4.745	4.813	4.829	4.903	4.903	4.969	5.001	5.041	5.134	5.270
72	4.500	4.823	4.870	4.938	4.954	5.028	5.028	5.094	5.126	5.166	5.259	5.395
74	4.625	4.948	4.995	5.063	5.079	5.153	5.153	5.219	5.251	5.291	5.384	5.520
76	4.750	5.073	5.120	5.188	5.204	5.278	5.278	5.344	5.376	5.416	5.509	5.645
78	4.875	5.198	5.245	5.313	5.329	5.403	5.403	5.469	5.501	5.541	5.634	5.770
80	5.000	5.323	5.370	5.438	5.454	5.528	5.528	5.594	5.626	5.666	5.759	5.895
82	5.125	5.448	5.495	5.563	5.579	5.653	5.653	5.719	5.751	5.791	5.884	6.020
84	5.250	5.573	5.620	5.688	5.704	5.778	5.778	5.844	5.876	5.916	6.009	6.145
86	5.375	5.698	5.745	5.813	5.829	5.903	5.903	5.969	6.001	6.041	6.134	6.270
88	5.500	5.823	5.870	5.938	5.954	6.028	6.028	6.094	6.126	6.166	6.259	6.395
90	5.625	5.948	5.995	6.063	6.079	6.153	6.153	6.219	6.251	6.291	6.384	6.520
92	5.750	6.073	6.120	6.188	6.204	6.278	6.278	6.344	6.376	6.416	6.509	6.645
94	5.875	6.198	6.245	6.313	6.329	6.403	6.403	6.469	6.501	6.541	6.634	6.770
96	6.000	6.323	6.370	6.438	6.454	6.528	6.528	6.594	6.626	6.666	6.759	6.895

Intermediate and longer lengths may be specified by use of whole grip dash numbers only. Nominal grip dimension equals grips grip dash number times 0.0625 (rounded to three decimal places). Nominal length equals nominal grip plus "T".