

Table 4. Standard Series and Selected Combinations† — Unified Screw Threads

Nominal Size, Threads per Inch, and Series Designation ^c	External ^a								Internal ^a						
	Class	Allow- ance	Major Diameter			Pitch Diameter		UNR Minor Diam. ^d Min. (Ref.)	Class	Minor Diameter		Pitch Diameter		Major Diameter	
			Max ^b	Min	Min ^d	Max ^b	Min			Min	Max				
0-80 UNF	2A	0.0005	0.0595	0.0563	—	0.0514	0.0496	0.0446	2B	0.0465	0.0514	0.0519	0.0542	0.0600	
	3A	0.0000	0.0600	0.0568	—	0.0519	0.0506	0.0451	3B	0.0465	0.0514	0.0519	0.0536	0.0600	
1-64 UNC	2A	0.0006	0.0724	0.0686	—	0.0623	0.0603	0.0538	2B	0.0561	0.0623	0.0629	0.0655	0.0730	
	3A	0.0000	0.0730	0.0692	—	0.0629	0.0614	0.0544	3B	0.0561	0.0623	0.0629	0.0648	0.0730	
1-72 UNF	2A	0.0006	0.0724	0.0689	—	0.0634	0.0615	0.0559	2B	0.0580	0.0635	0.0640	0.0665	0.0730	
	3A	0.0000	0.0730	0.0695	—	0.0640	0.0626	0.0565	3B	0.0580	0.0635	0.0640	0.0660	0.0730	
2-56 UNC	2A	0.0006	0.0854	0.0813	—	0.0738	0.0717	0.0642	2B	0.0667	0.0737	0.0744	0.0772	0.0860	
	3A	0.0000	0.0860	0.0819	—	0.0744	0.0728	0.0648	3B	0.0667	0.0737	0.0744	0.0765	0.0860	
2-64 UNF	2A	0.0006	0.0854	0.0816	—	0.0753	0.0733	0.0668	2B	0.0691	0.0753	0.0759	0.0786	0.0860	
	3A	0.0000	0.0860	0.0822	—	0.0759	0.0744	0.0674	3B	0.0691	0.0753	0.0759	0.0779	0.0860	
3-48 UNC	2A	0.0007	0.0983	0.0938	—	0.0848	0.0825	0.0734	2B	0.0764	0.0845	0.0855	0.0885	0.0990	
	3A	0.0000	0.0990	0.0945	—	0.0855	0.0838	0.0741	3B	0.0764	0.0845	0.0855	0.0877	0.0990	
3-56 UNF	2A	0.0007	0.0983	0.0942	—	0.0867	0.0845	0.0771	2B	0.0797	0.0865	0.0874	0.0902	0.0990	
	3A	0.0000	0.0990	0.0949	—	0.0874	0.0858	0.0778	3B	0.0797	0.0865	0.0874	0.0895	0.0990	
4-40 UNC	2A	0.0008	0.1112	0.1061	—	0.0950	0.0925	0.0814	2B	0.0849	0.0939	0.0958	0.0991	0.1120	
	3A	0.0000	0.1120	0.1069	—	0.0958	0.0939	0.0822	3B	0.0849	0.0939	0.0958	0.0982	0.1120	
4-48 UNF	2A	0.0007	0.1113	0.1068	—	0.0978	0.0954	0.0864	2B	0.0894	0.0968	0.0985	0.1016	0.1120	
	3A	0.0000	0.1120	0.1075	—	0.0985	0.0967	0.0871	3B	0.0894	0.0968	0.0985	0.1008	0.1120	
5-40 UNC	2A	0.0008	0.1242	0.1191	—	0.1080	0.1054	0.0944	2B	0.0979	0.1062	0.1088	0.1121	0.1250	
	3A	0.0000	0.1250	0.1199	—	0.1088	0.1069	0.0952	3B	0.0979	0.1062	0.1088	0.1113	0.1250	
5-44 UNF	2A	0.0007	0.1243	0.1195	—	0.1095	0.1070	0.0972	2B	0.1004	0.1079	0.1102	0.1134	0.1250	
	3A	0.0000	0.1250	0.1202	—	0.1102	0.1083	0.0979	3B	0.1004	0.1079	0.1102	0.1126	0.1250	
6-32 UNC	2A	0.0008	0.1372	0.1312	—	0.1169	0.1141	0.1000	2B	0.104	0.114	0.1177	0.1214	0.1380	
	3A	0.0000	0.1380	0.1320	—	0.1177	0.1156	0.1008	3B	0.1040	0.1140	0.1177	0.1204	0.1380	
1-40 UNF	2A	0.0008	0.1371	0.1321	—	0.1210	0.1184	0.1074	2B	0.111	0.119	0.1218	0.1252	0.1380	
	3A	0.0000	0.1380	0.1329	—	0.1218	0.1198	0.1082	3B	0.1110	0.1186	0.1218	0.1243	0.1380	
8-32 UNC	2A	0.0009	0.1631	0.1571	—	0.1428	0.1399	0.1259	2B	0.130	0.139	0.1437	0.1475	0.1640	
	3A	0.0000	0.1640	0.1580	—	0.1437	0.1415	0.1268	3B	0.1300	0.1389	0.1437	0.1465	0.1640	

8-36 UNF	2A	0.0008	0.1632	0.1577	—	0.1452	0.1424	0.1301	2B	0.134	0.142	0.1460	0.1496	0.1640
	3A	0.0000	0.1640	0.1585	—	0.1460	0.1439	0.1309	3B	0.1340	0.1416	0.1460	0.1487	0.1640
10-24 UNC	2A	0.0010	0.1890	0.1818	—	0.1619	0.1586	0.1394	2B	0.145	0.156	0.1629	0.1672	0.1900
	3A	0.0000	0.1900	0.1828	—	0.1629	0.1604	0.1404	3B	0.1450	0.1555	0.1629	0.1661	0.1900
10-28 UNS	2A	0.0010	0.1890	0.1825	—	0.1658	0.1625	0.1464	2B	0.151	0.160	0.1668	0.1711	0.1900
10-32 UNF	2A	0.0009	0.1891	0.1831	—	0.1688	0.1658	0.1519	2B	0.156	0.164	0.1697	0.1736	0.1900
	3A	0.0000	0.1900	0.1840	—	0.1697	0.1674	0.1528	3B	0.1560	0.1641	0.1697	0.1726	0.1900
10-36 UNS	2A	0.0009	0.1891	0.1836	—	0.1711	0.1681	0.1560	2B	0.160	0.166	0.1720	0.1759	0.1900
10-40 UNS	2A	0.0009	0.1891	0.1840	—	0.1729	0.1700	0.1592	2B	0.163	0.169	0.1738	0.1775	0.1900
10-48 UNS	2A	0.0008	0.1892	0.1847	—	0.1757	0.1731	0.1644	2B	0.167	0.172	0.1765	0.1799	0.1900
10-56 UNS	2A	0.0007	0.1893	0.1852	—	0.1777	0.1752	0.1681	2B	0.171	0.175	0.1784	0.1816	0.1900
12-24 UNC	2A	0.0010	0.2150	0.2078	—	0.1879	0.1845	0.1654	2B	0.171	0.181	0.1889	0.1933	0.2160
	3A	0.0000	0.2160	0.2088	—	0.1889	0.1863	0.1664	3B	0.1710	0.1807	0.1889	0.1922	0.2160
12-28 UNF	2A	0.0007	0.2150	0.2085	—	0.1918	0.1886	0.1724	2B	0.177	0.186	0.1928	0.1970	0.2160
	3A	0.0000	0.2160	0.2095	—	0.1928	0.1904	0.1734	3B	0.1770	0.1857	0.1928	0.1959	0.2160
12-32 UNEF	2A	0.0009	0.2151	0.2091	—	0.1948	0.1917	0.1779	2B	0.182	0.190	0.1957	0.1998	0.2160
	3A	0.0000	0.2160	0.2100	—	0.1957	0.1933	0.1788	3B	0.1820	0.1895	0.1957	0.1988	0.2160
12-36 UNS	2A	0.0009	0.2151	0.2096	—	0.1971	0.1941	0.1821	2B	0.186	0.192	0.1980	0.2019	0.2160
12-40 UNS	2A	0.0009	0.2151	0.2100	—	0.1989	0.1960	0.1835	2B	0.189	0.195	0.1998	0.2035	0.2160
12-48 UNS	2A	0.0008	0.2152	0.2107	—	0.2017	0.1991	0.1904	2B	0.193	0.198	0.2025	0.2059	0.2160
12-56 UNS	2A	0.0007	0.2153	0.2112	—	0.2037	0.2012	0.1941	2B	0.197	0.201	0.2044	0.2076	0.2160
1/4-20 UNC	1A	0.0011	0.2489	0.2367	—	0.2164	0.2108	0.1894	1B	0.196	0.207	0.2175	0.2228	0.2500
	2A	0.0011	0.2489	0.2408	0.2367	0.2164	0.2127	0.1894	2B	0.196	0.207	0.2175	0.2224	0.2500
	3A	0.0000	0.2500	0.2419	—	0.2175	0.2147	0.1905	3B	0.1960	0.2067	0.2175	0.2211	0.2500
1/4-24 UNS	2A	0.0011	0.2489	0.2417	—	0.2218	0.2181	0.1993	2B	0.205	0.215	0.2229	0.2277	0.2500
1/4-27 UNS	2A	0.0010	0.2490	0.2423	—	0.2249	0.2214	0.2049	2B	0.210	0.219	0.2259	0.2304	0.2500
1/4-28 UNF	1A	0.0010	0.2490	0.2392	—	0.2258	0.2208	0.2064	1B	0.211	0.220	0.2268	0.2333	0.2500
	2A	0.0010	0.2490	0.2425	—	0.2258	0.2225	0.2064	2B	0.211	0.220	0.2268	0.2311	0.2500
	3A	0.0000	0.2500	0.2435	—	0.2268	0.2243	0.2074	3B	0.2110	0.2190	0.2268	0.2300	0.2500
1/4-32 UNEF	2A	0.0010	0.2490	0.2430	—	0.2287	0.2255	0.2118	2B	0.216	0.224	0.2297	0.2339	0.2500
	3A	0.0000	0.2500	0.2440	—	0.2297	0.2273	0.2128	3B	0.2160	0.2229	0.2297	0.2328	0.2500

All dimensions in inches. † Use UNS threads only if Standard Series do not meet requirements (see p. 1635). See footnotes a, b, c, d, and e at end of table.

Table 4 (Continued). Standard Series and Selected Combination† — Unified Screw Threads

Nominal Size, Threads per Inch, and Series Designation ^c	External ^f							Internal ^f						
	Class	Allow- ance	Major Diameter			Pitch Diameter		UNR Minor Diam. ^g Max (Ref.)	Class	Minor Diameter		Pitch Diameter		Major Diameter
			Max ^b	Min	Min ^d	Max ^b	Min			Min	Max	Min	Max	Min
1/4-36 UNS	2A	0.0009	0.2491	0.2436	—	0.2311	0.2280	0.2161	2B	0.220	0.226	0.2320	0.2360	0.2500
1/4-40 UNS	2A	0.0009	0.2491	0.2440	—	0.2329	0.2300	0.2193	2B	0.223	0.229	0.2338	0.2376	0.2500
1/4-48 UNS	2A	0.0008	0.2492	0.2447	—	0.2357	0.2330	0.2243	2B	0.227	0.232	0.2365	0.2401	0.2500
1/4-56 UNS	2A	0.0008	0.2492	0.2451	—	0.2376	0.2350	0.2280	2B	0.231	0.235	0.2384	0.2417	0.2500
5/16-18 UNC	1A	0.0012	0.3113	0.2982	—	0.2752	0.2691	0.2452	1B	0.252	0.265	0.2764	0.2843	0.3125
	2A	0.0012	0.3113	0.3026	0.2982	0.2752	0.2712	0.2452	2B	0.252	0.265	0.2764	0.2817	0.3125
	3A	0.0000	0.3125	0.3038	—	0.2764	0.2734	0.2464	3B	0.2520	0.2630	0.2764	0.2803	0.3125
5/16-20 UN	2A	0.0012	0.3113	0.3032	—	0.2788	0.2748	0.2518	2B	0.258	0.270	0.2800	0.2852	0.3125
	3A	0.0000	0.3125	0.3044	—	0.2800	0.2770	0.2530	3B	0.2580	0.2680	0.2800	0.2839	0.3125
5/16-24 UNF	1A	0.0011	0.3114	0.3006	—	0.2843	0.2788	0.2618	1B	0.267	0.277	0.2854	0.2925	0.3125
	2A	0.0011	0.3114	0.3042	—	0.2843	0.2806	0.2618	2B	0.267	0.277	0.2854	0.2902	0.3125
	3A	0.0000	0.3125	0.3053	—	0.2854	0.2827	0.2629	3B	0.2670	0.2754	0.2854	0.2890	0.3125
5/16-27 UNS	2A	0.0010	0.3115	0.3048	—	0.2874	0.2839	0.2674	2B	0.272	0.281	0.2884	0.2929	0.3125
5/16-28 UN	2A	0.0010	0.3115	0.3050	—	0.2883	0.2849	0.2689	2B	0.274	0.282	0.2893	0.2937	0.3125
	3A	0.0000	0.3125	0.3060	—	0.2893	0.2867	0.2699	3B	0.2740	0.2807	0.2893	0.2926	0.3125
5/16-32 UNEF	2A	0.0010	0.3115	0.3055	—	0.2912	0.2880	0.2743	2B	0.279	0.286	0.2922	0.2964	0.3125
	3A	0.0000	0.3125	0.3065	—	0.2922	0.2898	0.2753	3B	0.2790	0.2847	0.2922	0.2953	0.3125
5/16-36 UNS	2A	0.0009	0.3116	0.3061	—	0.2936	0.2905	0.2785	2B	0.282	0.289	0.2945	0.2985	0.3125
5/16-40 UNS	2A	0.0009	0.3116	0.3065	—	0.2954	0.2925	0.2818	2B	0.285	0.291	0.2963	0.3001	0.3125
5/16-48 UNS	2A	0.0008	0.3117	0.3072	—	0.2982	0.2955	0.2869	2B	0.290	0.295	0.2990	0.3026	0.3125
3/8-16 UNC	1A	0.0013	0.3737	0.3595	—	0.3331	0.3266	0.2992	1B	0.307	0.321	0.3344	0.3429	0.3750
	2A	0.0013	0.3737	0.3643	0.3595	0.3331	0.3287	0.2992	2B	0.307	0.321	0.3344	0.3401	0.3750
	3A	0.0000	0.3750	0.3656	—	0.3344	0.3311	0.3095	3B	0.3070	0.3182	0.3344	0.3387	0.3750
3/8-18 UNS	2A	0.0013	0.3737	0.3650	—	0.3376	0.3333	0.3096	2B	0.315	0.328	0.3389	0.3445	0.3750
3/8-20 UN	2A	0.0012	0.3738	0.3657	—	0.3413	0.3372	0.3143	2B	0.321	0.332	0.3425	0.3479	0.3750
	3A	0.0000	0.3750	0.3669	—	0.3425	0.3394	0.3155	3B	0.3210	0.3297	0.3425	0.3465	0.3750
3/8-24 UNF	1A	0.0011	0.3739	0.3631	—	0.3468	0.3411	0.3243	1B	0.330	0.340	0.3479	0.3553	0.3750
	2A	0.0011	0.3739	0.3667	—	0.3468	0.3430	0.3243	2B	0.330	0.340	0.3479	0.3528	0.3750
3/8-24 UNF	3A	0.0000	0.3750	0.3678	—	0.3479	0.3450	0.3254	3B	0.3300	0.3372	0.3479	0.3516	0.3750
3/8-27 UNS	2A	0.0011	0.3739	0.3672	—	0.3498	0.3462	0.3298	2B	0.335	0.344	0.3509	0.3556	0.3750
3/8-28 UN	2A	0.0011	0.3739	0.3674	—	0.3507	0.3471	0.3313	2B	0.336	0.345	0.3518	0.3564	0.3750
	3A	0.0000	0.3750	0.3685	—	0.3518	0.3491	0.3324	3B	0.3360	0.3426	0.3518	0.3553	0.3750
3/8-32 UNEF	2A	0.0010	0.3740	0.3680	—	0.3537	0.3503	0.3368	2B	0.341	0.349	0.3547	0.3591	0.3750
	3A	0.0000	0.3750	0.3690	—	0.3547	0.3522	0.3378	3B	0.3410	0.3469	0.3547	0.3580	0.3750
3/8-36 UNS	2A	0.0010	0.3740	0.3685	—	0.3560	0.3528	0.3409	2B	0.345	0.352	0.3570	0.3612	0.3750
3/8-40 UNS	2A	0.0009	0.3741	0.3690	—	0.3579	0.3548	0.3443	2B	0.348	0.354	0.3588	0.3628	0.3750
0.390-27 UNS	2A	0.0011	0.3889	0.3822	—	0.3648	0.3612	0.3448	2B	0.348	0.354	0.3588	0.3628	0.3750
7/16-14 UNC	1A	0.0014	0.4361	0.4206	—	0.3897	0.3826	0.3511	1B	0.360	0.376	0.3911	0.4003	0.4375
	2A	0.0014	0.4361	0.4258	0.4206	0.3897	0.3850	0.3511	2B	0.360	0.376	0.3911	0.3972	0.4375
	3A	0.0000	0.4375	0.4272	—	0.3911	0.3876	0.3525	3B	0.3600	0.3717	0.3911	0.3957	0.4375
7/16-16 UN	2A	0.0014	0.4361	0.4267	—	0.3955	0.3909	0.3616	2B	0.370	0.384	0.3969	0.4028	0.4375
7/16-18 UNS	3A	0.0000	0.4375	0.4281	—	0.3969	0.3935	0.3630	3B	0.3700	0.3800	0.3969	0.4014	0.4375
	2A	0.0013	0.4362	0.4275	—	0.4001	0.3958	0.3701	2B	0.377	0.390	0.4014	0.4070	0.4375
7/16-20 UNF	1A	0.0013	0.4362	0.4240	—	0.4037	0.3975	0.3767	1B	0.383	0.395	0.4050	0.4131	0.4375
	2A	0.0013	0.4362	0.4281	—	0.4037	0.3995	0.3767	2B	0.383	0.395	0.4050	0.4104	0.4375
	3A	0.0000	0.4375	0.4294	—	0.4050	0.4019	0.3780	3B	0.3830	0.3916	0.4050	0.4091	0.4375
7/16-24 UNS	2A	0.0011	0.4364	0.4292	—	0.4093	0.4055	0.3868	2B	0.392	0.402	0.4104	0.4153	0.4375
7/16-27 UNS	2A	0.0011	0.4364	0.4297	—	0.4123	0.4087	0.3923	2B	0.397	0.406	0.4134	0.4181	0.4375
7/16-28 UNEF	2A	0.0011	0.4364	0.4299	—	0.4132	0.4096	0.3938	2B	0.399	0.407	0.4143	0.4189	0.4375
	3A	0.0000	0.4375	0.4310	—	0.4143	0.4116	0.3949	3B	0.3990	0.4051	0.4143	0.4178	0.4375
7/16-32 UN	2A	0.0010	0.4365	0.4305	—	0.4162	0.4128	0.3993	2B	0.404	0.411	0.4172	0.4216	0.4375
	3A	0.0000	0.4375	0.4315	—	0.4172	0.4147	0.4003	3B	0.4040	0.4094	0.4172	0.4205	0.4375
1/2-12 UNS	2A	0.0016	0.4984	0.4870	—	0.4443	0.4389	0.3992	2B	0.410	0.428	0.4459	0.4529	0.5000
	3A	0.0000	0.5000	0.4886	—	0.4459	0.4419	0.4008	3B	0.4100	0.4223	0.4459	0.4511	0.5000
	1A	0.0015	0.4985	0.4822	—	0.4485	0.4411	0.4069	1B	0.417	0.434	0.4500	0.4597	0.5000
1/2-13 UNC	2A	0.0015	0.4985	0.4876	0.4822	0.4485	0.4435	0.4069	2B	0.417	0.434	0.4500	0.4565	0.5000
	3A	0.0000	0.5000	0.4891	—	0.4500	0.4463	0.4084	3B	0.4170	0.4284	0.4500	0.4548	0.5000
1/2-14 UNS	2A	0.0015	0.4985	0.4882	—	0.4521	0.4471	0.4135	2B	0.423	0.438	0.4536	0.4601	0.5000

All dimensions in inches. † Use UNS threads only if Standard Series do not meet requirements (see p. 1635). See footnotes a, b, c, d, and e at end of table.

Table 4 (Continued). Standard Series and Selected Combinations† — Unified Screw Threads

Nominal Size, Threads per Inch, and Series Designation ^a	External ^b							Internal ^c						
	Class	Allowance ^d	Major Diameter			Pitch Diameter		UNR Minor Diam. ^e Max (Ref.)	Class	Minor Diameter		Pitch Diameter		Major Diameter
			Max ^b	Min	Min ^d	Max ^b	Min			Min	Max	Min	Max	Min
1/2-16 UN	2A	0.0014	0.4986	0.4892	—	0.4580	0.4533	0.4241	2B	0.432	0.446	0.4594	0.4655	0.5000
	3A	0.0000	0.5000	0.4906	—	0.4594	0.4559	0.4255	3B	0.4320	0.4419	0.4594	0.4640	0.5000
1/2-18 UNS	2A	0.0013	0.4987	0.4900	—	0.4626	0.4582	0.4326	2B	0.440	0.453	0.4639	0.4697	0.5000
1/2-20 UNF	1A	0.0013	0.4987	0.4865	—	0.4662	0.4598	0.4392	1B	0.446	0.457	0.4675	0.4759	0.5000
	2A	0.0013	0.4987	0.4906	—	0.4662	0.4619	0.4392	2B	0.446	0.457	0.4675	0.4731	0.5000
	3A	0.0000	0.5000	0.4919	—	0.4675	0.4643	0.4405	3B	0.4460	0.4537	0.4675	0.4717	0.5000
1/2-24 UNS	2A	0.0012	0.4988	0.4916	—	0.4717	0.4678	0.4492	2B	0.455	0.465	0.4729	0.4780	0.5000
1/2-27 UNS	2A	0.0011	0.4989	0.4922	—	0.4748	0.4711	0.4548	2B	0.460	0.469	0.4759	0.4807	0.5000
1/2-28 UNEF	2A	0.0011	0.4989	0.4924	—	0.4757	0.4720	0.4563	2B	0.461	0.470	0.4768	0.4816	0.5000
	3A	0.0000	0.5000	0.4935	—	0.4768	0.4740	0.4574	3B	0.4610	0.4676	0.4768	0.4804	0.5000
1/2-32 UN	2A	0.0010	0.4990	0.4930	—	0.4787	0.4752	0.4618	2B	0.466	0.474	0.4797	0.4842	0.5000
	3A	0.0000	0.5000	0.4940	—	0.4797	0.4771	0.4628	3B	0.4660	0.4719	0.4797	0.4831	0.5000
5/16-12 UNC	1A	0.0016	0.5609	0.5437	—	0.5068	0.4990	0.4617	1B	0.472	0.490	0.5084	0.5186	0.5625
	2A	0.0016	0.5609	0.5495	0.5437	0.5068	0.5016	0.4617	2B	0.472	0.490	0.5084	0.5152	0.5625
	3A	0.0000	0.5625	0.5511	—	0.5084	0.5045	0.4633	3B	0.4720	0.4843	0.5084	0.5135	0.5625
5/16-14 UNS	2A	0.0015	0.5610	0.5507	—	0.5146	0.5096	0.4760	2B	0.485	0.501	0.5161	0.5226	0.5625
5/16-16 UN	2A	0.0014	0.5611	0.5517	—	0.5205	0.5158	0.4866	2B	0.495	0.509	0.5219	0.5280	0.5625
	3A	0.0000	0.5625	0.5531	—	0.5219	0.5184	0.4880	3B	0.4950	0.5040	0.5219	0.5265	0.5625
5/16-18 UNF	1A	0.0014	0.5611	0.5480	—	0.5250	0.5182	0.4950	1B	0.502	0.515	0.5264	0.5353	0.5625
	2A	0.0014	0.5611	0.5524	—	0.5250	0.5205	0.4950	2B	0.502	0.515	0.5264	0.5323	0.5625
	3A	0.0000	0.5625	0.5538	—	0.5264	0.5230	0.4964	3B	0.5020	0.5106	0.5264	0.5308	0.5625
5/16-20 UN	2A	0.0013	0.5612	0.5531	—	0.5287	0.5245	0.5017	2B	0.508	0.520	0.5300	0.5355	0.5625
	3A	0.0000	0.5625	0.5544	—	0.5300	0.5268	0.5030	3B	0.5080	0.5162	0.5300	0.5341	0.5625
5/16-24 UNEF	2A	0.0012	0.5613	0.5541	—	0.5342	0.5303	0.5117	2B	0.517	0.527	0.5354	0.5405	0.5625
	3A	0.0000	0.5625	0.5553	—	0.5354	0.5325	0.5129	3B	0.5170	0.5244	0.5354	0.5392	0.5625
5/16-27 UNS	2A	0.0011	0.5614	0.5547	—	0.5373	0.5336	0.5173	2B	0.522	0.531	0.5384	0.5432	0.5625
5/16-28 UN	2A	0.0011	0.5614	0.5549	—	0.5382	0.5345	0.5188	2B	0.524	0.532	0.5393	0.5441	0.5625
	3A	0.0000	0.5625	0.5560	—	0.5393	0.5365	0.5199	3B	0.5240	0.5301	0.5393	0.5429	0.5625
5/16-32 UN	2A	0.0010	0.5615	0.5555	—	0.5412	0.5377	0.5243	2B	0.529	0.536	0.5422	0.5467	0.5625
	3A	0.0000	0.5625	0.5565	—	0.5422	0.5396	0.5253	3B	0.5290	0.5344	0.5422	0.5456	0.5625
5/8-11 UNC	1A	0.0016	0.6234	0.6052	—	0.5644	0.5561	0.5152	1B	0.527	0.546	0.5660	0.5767	0.6250
	2A	0.0016	0.6234	0.6113	0.6052	0.5644	0.5589	0.5152	2B	0.527	0.546	0.5660	0.5732	0.6250
	3A	0.0000	0.6250	0.6129	—	0.5660	0.5619	0.5168	3B	0.5270	0.5391	0.5660	0.5714	0.6250
5/8-12 UN	2A	0.0016	0.6234	0.6120	—	0.5693	0.5639	0.5242	2B	0.535	0.553	0.5709	0.5780	0.6250
	3A	0.0000	0.6250	0.6136	—	0.5709	0.5668	0.5258	3B	0.5350	0.5463	0.5709	0.5762	0.6250
5/8-14 UNS	2A	0.0015	0.6235	0.6132	—	0.5771	0.5720	0.5385	2B	0.548	0.564	0.5786	0.5852	0.6250
5/8-16 UN	2A	0.0014	0.6236	0.6142	—	0.5830	0.5782	0.5491	2B	0.557	0.571	0.5844	0.5906	0.6250
	3A	0.0000	0.6250	0.6156	—	0.5844	0.5808	0.5505	3B	0.5570	0.5662	0.5844	0.5890	0.6250
5/8-18 UNEF	1A	0.0014	0.6236	0.6105	—	0.5875	0.5805	0.5575	1B	0.565	0.578	0.5889	0.5980	0.6250
	2A	0.0014	0.6236	0.6149	—	0.5875	0.5828	0.5575	2B	0.565	0.578	0.5889	0.5949	0.6250
	3A	0.0000	0.6250	0.6163	—	0.5889	0.5854	0.5589	3B	0.5650	0.5730	0.5889	0.5934	0.6250
5/8-20 UN	2A	0.0013	0.6237	0.6156	—	0.5912	0.5869	0.5642	2B	0.571	0.582	0.5925	0.5981	0.6250
	3A	0.0000	0.6250	0.6169	—	0.5925	0.5893	0.5655	3B	0.5710	0.5787	0.5925	0.5967	0.6250
5/8-24 UNEF	2A	0.0012	0.6238	0.6166	—	0.5967	0.5927	0.5742	2B	0.580	0.590	0.5979	0.6031	0.6250
	3A	0.0000	0.6250	0.6178	—	0.5979	0.5949	0.5754	3B	0.5800	0.5869	0.5979	0.6018	0.6250
5/8-27 UNS	2A	0.0011	0.6239	0.6172	—	0.5998	0.5960	0.5798	2B	0.585	0.594	0.6009	0.6059	0.6250
5/8-28 UN	2A	0.0011	0.6239	0.6174	—	0.6007	0.5969	0.5813	2B	0.586	0.595	0.6018	0.6067	0.6250
	3A	0.0000	0.6250	0.6185	—	0.6018	0.5990	0.5824	3B	0.5860	0.5926	0.6018	0.6055	0.6250
5/8-32 UN	2A	0.0011	0.6239	0.6179	—	0.6036	0.6000	0.5867	2B	0.591	0.599	0.6047	0.6093	0.6250
	3A	0.0000	0.6250	0.6190	—	0.6047	0.6020	0.5878	3B	0.5910	0.5969	0.6047	0.6082	0.6250
11/16-12 UN	2A	0.0016	0.6859	0.6745	—	0.6318	0.6264	0.5867	2B	0.597	0.615	0.6334	0.6405	0.6875
	3A	0.0000	0.6875	0.6761	—	0.6334	0.6293	0.5883	3B	0.5970	0.6085	0.6334	0.6387	0.6875
11/16-16 UN	2A	0.0014	0.6861	0.6767	—	0.6455	0.6407	0.6116	2B	0.620	0.634	0.6469	0.6531	0.6875
	3A	0.0000	0.6875	0.6781	—	0.6469	0.6433	0.6130	3B	0.6200	0.6284	0.6469	0.6515	0.6875
11/16-20 UN*	2A	0.0013	0.6862	0.6781	—	0.6537	0.6494	0.6267	2B	0.633	0.645	0.6550	0.6606	0.6875
	3A	0.0000	0.6875	0.6794	—	0.6550	0.6518	0.6280	3B	0.6330	0.6412	0.6550	0.6592	0.6875
11/16-24 UNEF	2A	0.0012	0.6863	0.6791	—	0.6592	0.6552	0.6367	2B	0.642	0.652	0.6604	0.6656	0.6875
	3A	0.0000	0.6875	0.6803	—	0.6604	0.6574	0.6379	3B	0.6420	0.6494	0.6604	0.6643	0.6875
11/16-28 UN	2A	0.0011	0.6864	0.6799	—	0.6632	0.6594	0.6438	2B	0.649	0.657	0.6643	0.6692	0.6875
	3A	0.0000	0.6875	0.6810	—	0.6643	0.6615	0.6449	3B	0.6490	0.6551	0.6643	0.6680	0.6875
11/16-32 UN	2A	0.0011	0.6864	0.6804	—	0.6661	0.6625	0.6492	2B	0.654	0.661	0.6672	0.6718	0.6875
	3A	0.0000	0.6875	0.6815	—	0.6672	0.6645	0.6503	3B	0.6540	0.6594	0.6672	0.6707	0.6875

All dimensions in inches. † Use UNS threads only if Standard Series do not meet requirements (see p. 1635). See footnotes a, b, c, d, and e at end of table.

Table 4 (Continued). Standard Series and Selected Combinations† — Unified Screw Threads

Nominal Size, Threads per Inch, and Series Designation ^a	External ^b								Internal ^b					
	Class	Allow- ance	Major Diameter			Pitch Diameter		UNR Minor Diam. ^c Max (Ref.)	Class	Minor Diameter		Pitch Diameter		Major Diameter
			Max ^b	Min	Min ^d	Max ^b	Min			Min	Max			
3/4-10 UNC	1A	0.0018	0.7482	0.7288	—	0.6832	0.6744	0.6291	1B	0.642	0.663	0.6850	0.6965	0.7500
	2A	0.0018	0.7482	0.7353	0.7288	0.6832	0.6773	0.6291	2B	0.642	0.663	0.6850	0.6927	0.7500
	3A	0.0000	0.7500	0.7371	—	0.6850	0.6806	0.6309	3B	0.6420	0.6545	0.6850	0.6907	0.7500
3/4-12 UN	2A	0.0017	0.7483	0.7369	—	0.6942	0.6887	0.6491	2B	0.660	0.678	0.6959	0.7031	0.7500
	3A	0.0000	0.7500	0.7386	—	0.6959	0.6918	0.6508	3B	0.6600	0.6707	0.6959	0.7013	0.7500
3/4-14 UNS	2A	0.0015	0.7485	0.7382	—	0.7021	0.6970	0.6635	2B	0.673	0.688	0.7036	0.7103	0.7500
3/4-16 UNF	1A	0.0015	0.7485	0.7343	—	0.7079	0.7004	0.6740	1B	0.682	0.696	0.7094	0.7192	0.7500
	2A	0.0015	0.7485	0.7391	—	0.7079	0.7029	0.6740	2B	0.682	0.696	0.7094	0.7159	0.7500
	3A	0.0000	0.7500	0.7406	—	0.7094	0.7056	0.6755	3B	0.6820	0.6908	0.7094	0.7143	0.7500
3/4-18 UNS	2A	0.0014	0.7486	0.7399	—	0.7125	0.7079	0.6825	2B	0.690	0.703	0.7139	0.7199	0.7500
3/4-20 UNEF	2A	0.0013	0.7487	0.7406	—	0.7162	0.7118	0.6892	2B	0.696	0.707	0.7175	0.7232	0.7500
	3A	0.0000	0.7500	0.7419	—	0.7175	0.7142	0.6905	3B	0.6960	0.7037	0.7175	0.7218	0.7500
3/4-24 UNS	2A	0.0012	0.7488	0.7416	—	0.7217	0.7176	0.6992	2B	0.705	0.715	0.7229	0.7282	0.7500
3/4-27 UNS	2A	0.0012	0.7488	0.7421	—	0.7247	0.7208	0.7047	2B	0.710	0.719	0.7259	0.7310	0.7500
3/4-28 UN	2A	0.0012	0.7488	0.7423	—	0.7256	0.7218	0.7062	2B	0.711	0.720	0.7268	0.7318	0.7500
	3A	0.0000	0.7500	0.7435	—	0.7268	0.7239	0.7074	3B	0.7110	0.7176	0.7268	0.7305	0.7500
3/4-32 UN	2A	0.0011	0.7489	0.7429	—	0.7286	0.7250	0.7117	2B	0.716	0.724	0.7297	0.7344	0.7500
	3A	0.0000	0.7500	0.7440	—	0.7297	0.7270	0.7128	3B	0.7160	0.7219	0.7297	0.7333	0.7500
13/16-12 UN	2A	0.0017	0.8108	0.7994	—	0.7567	0.7512	0.7116	2B	0.722	0.740	0.7584	0.7656	0.8125
	3A	0.0000	0.8125	0.8011	—	0.7584	0.7543	0.7133	3B	0.7220	0.7329	0.7584	0.7638	0.8125
13/16-16 UN	2A	0.0015	0.8110	0.8016	—	0.7704	0.7655	0.7365	2B	0.745	0.759	0.7719	0.7782	0.8125
	3A	0.0000	0.8125	0.8031	—	0.7719	0.7683	0.7380	3B	0.7450	0.7533	0.7719	0.7766	0.8125
13/16-20 UNEF	2A	0.0013	0.8112	0.8031	—	0.7787	0.7743	0.7517	2B	0.758	0.770	0.7800	0.7857	0.8125
	3A	0.0000	0.8125	0.8044	—	0.7800	0.7767	0.7530	3B	0.7580	0.7662	0.7800	0.7843	0.8125
13/16-28 UN	2A	0.0012	0.8113	0.8048	—	0.7881	0.7843	0.7687	2B	0.774	0.782	0.7893	0.7943	0.8125
	3A	0.0000	0.8125	0.8060	—	0.7893	0.7864	0.7699	3B	0.7740	0.7801	0.7893	0.7930	0.8125
13/16-32 UN	2A	0.0011	0.8114	0.8054	—	0.7911	0.7875	0.7742	2B	0.779	0.786	0.7922	0.7969	0.8125
	3A	0.0000	0.8125	0.8065	—	0.7922	0.7895	0.7753	3B	0.7790	0.7844	0.7922	0.7958	0.8125
7/8-9 UNC	1A	0.0019	0.8731	0.8523	—	0.8009	0.7914	0.7408	1B	0.755	0.778	0.8028	0.8151	0.8750
	2A	0.0019	0.8731	0.8592	0.8523	0.8009	0.7946	0.7408	2B	0.755	0.778	0.8028	0.8110	0.8750
	3A	0.0000	0.8750	0.8611	—	0.8028	0.7981	0.7427	3B	0.7550	0.7681	0.8028	0.8089	0.8750
7/8-10 UNS	2A	0.0018	0.8732	0.8603	—	0.8082	0.8022	0.7542	2B	0.767	0.788	0.8100	0.8178	0.8750
7/8-12 UN	2A	0.0017	0.8733	0.8619	—	0.8192	0.8137	0.7741	2B	0.785	0.803	0.8209	0.8281	0.8750
	3A	0.0000	0.8750	0.8636	—	0.8209	0.8168	0.7758	3B	0.7850	0.7948	0.8209	0.8263	0.8750
7/8-14 UNF	1A	0.0016	0.8734	0.8579	—	0.8270	0.8189	0.7884	1B	0.798	0.814	0.8286	0.8392	0.8750
	2A	0.0016	0.8734	0.8631	—	0.8270	0.8216	0.7884	2B	0.798	0.814	0.8286	0.8356	0.8750
	3A	0.0000	0.8750	0.8647	—	0.8286	0.8245	0.7900	3B	0.7980	0.8068	0.8286	0.8339	0.8750
7/8-16 UN	2A	0.0015	0.8735	0.8641	—	0.8329	0.8280	0.7900	2B	0.807	0.821	0.8344	0.8407	0.8750
	3A	0.0000	0.8750	0.8656	—	0.8344	0.8308	0.8005	3B	0.8070	0.8158	0.8344	0.8391	0.8750
7/8-18 UNS	2A	0.0014	0.8736	0.8649	—	0.8375	0.8329	0.8075	2B	0.815	0.828	0.8389	0.8449	0.8750
7/8-20 UNEF	2A	0.0013	0.8737	0.8656	—	0.8412	0.8368	0.8142	2B	0.821	0.832	0.8425	0.8482	0.8750
	3A	0.0000	0.8750	0.8669	—	0.8425	0.8392	0.8155	3B	0.8210	0.8287	0.8425	0.8468	0.8750
7/8-24 UNS	2A	0.0012	0.8738	0.8666	—	0.8467	0.8426	0.8242	2B	0.830	0.840	0.8479	0.8532	0.8750
7/8-27 UNS	2A	0.0012	0.8738	0.8671	—	0.8497	0.8458	0.8297	2B	0.835	0.844	0.8509	0.8560	0.8750
7/8-28 UN	2A	0.0012	0.8738	0.8673	—	0.8506	0.8468	0.8312	2B	0.836	0.845	0.8518	0.8568	0.8750
	3A	0.0000	0.8750	0.8685	—	0.8518	0.8489	0.8324	3B	0.8360	0.8426	0.8518	0.8555	0.8750
7/8-32 UN	2A	0.0011	0.8739	0.8679	—	0.8536	0.8500	0.8367	2B	0.841	0.849	0.8547	0.8594	0.8750
	3A	0.0000	0.8750	0.8690	—	0.8547	0.8520	0.8378	3B	0.8410	0.8469	0.8547	0.8583	0.8750
15/16-12 UN	2A	0.0017	0.9358	0.9244	—	0.8817	0.8760	0.8366	2B	0.847	0.865	0.8834	0.8908	0.9375
	3A	0.0000	0.9375	0.9261	—	0.8834	0.8793	0.8383	3B	0.8470	0.8575	0.8834	0.8889	0.9375
15/16-16 UN	2A	0.0015	0.9360	0.9266	—	0.8954	0.8904	0.8615	2B	0.870	0.884	0.8969	0.9034	0.9375
	3A	0.0000	0.9375	0.9281	—	0.8969	0.8932	0.8630	3B	0.8700	0.8783	0.8969	0.9018	0.9375
15/16-20 UNEF	2A	0.0014	0.9361	0.9280	—	0.9036	0.8991	0.8766	2B	0.883	0.895	0.9050	0.9109	0.9375
	3A	0.0000	0.9375	0.9294	—	0.9050	0.9016	0.8780	3B	0.8830	0.8912	0.9050	0.9094	0.9375
15/16-28 UN	2A	0.0012	0.9363	0.9298	—	0.9131	0.9091	0.8937	2B	0.899	0.907	0.9143	0.9195	0.9375
	3A	0.0000	0.9375	0.9310	—	0.9143	0.9113	0.8949	3B	0.8990	0.9051	0.9143	0.9182	0.9375
15/16-32 UN	2A	0.0011	0.9364	0.9304	—	0.9161	0.9123	0.8992	2B	0.904	0.911	0.9172	0.9221	0.9375
	3A	0.0000	0.9375	0.9315	—	0.9172	0.9144	0.9003	3B	0.9040	0.9094	0.9172	0.9209	0.9375
1-8 UNC	1A	0.0020	0.9980	0.9755	—	0.9168	0.9067	0.8492	1B	0.865	0.890	0.9188	0.9320	1.0000
	2A	0.0020	0.9980	0.9830	0.9755	0.9168	0.9100	0.8492	2B	0.865	0.890	0.9188	0.9276	1.0000
	3A	0.0000	1.0000	0.9850	—	0.9188	0.9137	0.8512	3B	0.8650	0.8797	0.9188	0.9254	1.0000

All dimensions in inches. † Use UNS threads only if Standard Series do not meet requirements (see p. 1635). See footnotes a, b, c, d, and e at end of table.

Table 4 (Continued). Standard Series and Selected Combinations† — Unified Screw Threads

Nominal Size, Threads per Inch, and Series Designation ^a	External ^b								Internal ^b					
	Class	Allow- ance	Major Diameter			Pitch Diameter		UNR Minor Diam. ^c Max (Ref.)	Class	Minor Diameter		Pitch Diameter		Major Diameter
			Max ^b	Min	Min ^d	Max ^b	Min			Min	Max			
1-10 UNS	2A	0.0018	0.9982	0.9853	—	0.9332	0.9270	0.8792	2B	0.892	0.913	0.9350	0.9430	1.0000
1-12 UNF	1A	0.0018	0.9982	0.9810	—	0.9441	0.9353	0.8990	1B	0.910	0.928	0.9459	0.9573	1.0000
	2A	0.0018	0.9982	0.9868	—	0.9441	0.9382	0.8990	2B	0.910	0.928	0.9459	0.9535	1.0000
	3A	0.0000	1.0000	0.9886	—	0.9459	0.9415	0.9008	3B	0.9100	0.9198	0.9459	0.9516	1.0000
1-14 UNF	1A	0.0017	0.9983	0.9828	—	0.9519	0.9435	0.9132	1B	0.923	0.938	0.9536	0.9645	1.0000
	2A	0.0017	0.9983	0.9880	—	0.9519	0.9463	0.9132	2B	0.923	0.938	0.9536	0.9609	1.0000
	3A	0.0000	1.0000	0.9897	—	0.9536	0.9494	0.9149	3B	0.9230	0.9315	0.9536	0.9590	1.0000
1-16 UN	2A	0.0015	0.9985	0.9891	—	0.9579	0.9529	0.9240	2B	0.932	0.946	0.9594	0.9659	1.0000
	3A	0.0000	1.0000	0.9906	—	0.9594	0.9557	0.9255	3B	0.9320	0.9408	0.9594	0.9643	1.0000
1-18 UNS	2A	0.0014	0.9986	0.9899	—	0.9625	0.9578	0.9325	2B	0.940	0.953	0.9639	0.9701	1.0000
1-20 UNEF	2A	0.0014	0.9986	0.9905	—	0.9661	0.9616	0.9391	2B	0.946	0.957	0.9675	0.9734	1.0000
	3A	0.0000	1.0000	0.9919	—	0.9675	0.9641	0.9405	3B	0.9460	0.9537	0.9675	0.9719	1.0000
1-24 UNS	2A	0.0013	0.9987	0.9915	—	0.9716	0.9674	0.9491	2B	0.955	0.965	0.9729	0.9784	1.0000
1-27 UNS	2A	0.0012	0.9988	0.9921	—	0.9747	0.9707	0.9547	2B	0.960	0.969	0.9759	0.9811	1.0000
1-28 UN	2A	0.0012	0.9988	0.9923	—	0.9756	0.9716	0.9562	2B	0.961	0.970	0.9768	0.9820	1.0000
	3A	0.0000	1.0000	0.9935	—	0.9768	0.9738	0.9574	3B	0.9610	0.9676	0.9768	0.9807	1.0000
1-32 UN	2A	0.0011	0.9989	0.9929	—	0.9786	0.9748	0.9617	2B	0.966	0.974	0.9797	0.9846	1.0000
	3A	0.0000	1.0000	0.9940	—	0.9797	0.9769	0.9628	3B	0.9660	0.9719	0.9797	0.9834	1.0000
1 1/16-8 UN	2A	0.0020	1.0605	1.0455	—	0.9793	0.9725	0.9117	2B	0.927	0.952	0.9813	0.9902	1.0625
	3A	0.0000	1.0625	1.0475	—	0.9813	0.9762	0.9137	3B	0.9270	0.9422	0.9813	0.9880	1.0625
1 1/16-12 UN	2A	0.0017	1.0608	1.0494	—	1.0067	1.0010	0.9616	2B	0.972	0.990	1.0084	1.0158	1.0625
	3A	0.0000	1.0625	1.0511	—	1.0084	1.0042	0.9633	3B	0.9720	0.9823	1.0084	1.0139	1.0625
1 1/16-16 UN	2A	0.0015	1.0610	1.0516	—	1.0204	1.0154	0.9865	2B	0.995	1.009	1.0219	1.0284	1.0625
	3A	0.0000	1.0625	1.0531	—	1.0219	1.0182	0.9880	3B	0.9950	1.0033	1.0219	1.0268	1.0625
1 1/16-18 UNF	2A	0.0014	1.0611	1.0524	—	1.0250	1.0203	0.9950	2B	1.002	1.015	1.0264	1.0326	1.0625
	3A	0.0000	1.0625	1.0538	—	1.0264	1.0228	0.9964	3B	1.0020	1.0105	1.0264	1.0310	1.0625
1 1/16-20 UN	2A	0.0014	1.0611	1.0530	—	1.0286	1.0241	1.0016	2B	1.008	1.020	1.0300	1.0359	1.0625
	3A	0.0000	1.0625	1.0544	—	1.0300	1.0266	1.0030	3B	1.0080	1.0162	1.0300	1.0344	1.0625
1 1/16-28 UN	2A	0.0012	1.0613	1.0548	—	1.0381	1.0341	1.0187	2B	1.024	1.032	1.0393	1.0445	1.0625
	3A	0.0000	1.0625	1.0560	—	1.0393	1.0363	1.0199	3B	1.0240	1.0301	1.0393	1.0432	1.0625
1 1/8-7 UNC	1A	0.0022	1.1228	1.0982	—	1.0300	1.0191	0.9527	1B	0.970	0.998	1.0322	1.0463	1.1250
	2A	0.0022	1.1228	1.1064	1.0982	1.0300	1.0228	0.9527	2B	0.970	0.998	1.0322	1.0416	1.1250
	3A	0.0000	1.1250	1.1086	—	1.0322	1.0268	0.9549	3B	0.9700	0.9875	1.0322	1.0393	1.1250
1 1/8-8 UN	2A	0.0021	1.1229	1.1079	1.1004	1.0417	1.0348	0.9741	2B	0.990	1.015	1.0438	1.0528	1.1250
	3A	0.0000	1.1250	1.1100	—	1.0438	1.0386	0.9762	3B	0.9900	1.0047	1.0438	1.0505	1.1250
1 1/8-10 UNS	2A	0.0018	1.1232	1.1103	—	1.0582	1.0520	1.0042	2B	1.017	1.038	1.0600	1.0680	1.1250
1 1/8-12 UNF	1A	0.0018	1.1232	1.1060	—	1.0691	1.0601	1.0240	1B	1.035	1.053	1.0709	1.0826	1.1250
	2A	0.0018	1.1232	1.1118	—	1.0691	1.0631	1.0240	2B	1.035	1.053	1.0709	1.0787	1.1250
	3A	0.0000	1.1250	1.1136	—	1.0709	1.0664	1.0258	3B	1.0350	1.0448	1.0709	1.0768	1.1250
1 1/8-14 UNS	2A	0.0016	1.1234	1.1131	—	1.0770	1.0717	1.0384	2B	1.048	1.064	1.0786	1.0855	1.1250
1 1/8-16 UN	2A	0.0015	1.1235	1.1141	—	1.0829	1.0779	1.0490	2B	1.057	1.071	1.0844	1.0909	1.1250
	3A	0.0000	1.1250	1.1156	—	1.0844	1.0807	1.0505	3B	1.0570	1.0658	1.0844	1.0893	1.1250
1 1/8-18 UNEF	2A	0.0014	1.1236	1.1149	—	1.0875	1.0828	1.0575	2B	1.065	1.078	1.0889	1.0951	1.1250
	3A	0.0000	1.1250	1.1163	—	1.0889	1.0853	1.0589	3B	1.0650	1.0730	1.0889	1.0935	1.1250
1 1/8-20 UN	2A	0.0014	1.1236	1.1155	—	1.0911	1.0866	1.0641	2B	1.071	1.082	1.0925	1.0984	1.1250
3A	0.0000	1.1250	1.1169	—	1.0925	1.0891	1.0655	3B	1.0710	1.0787	1.0925	1.0969	1.1250	
1 1/8-24 UNS	2A	0.0013	1.1237	1.1165	—	1.0966	1.0924	1.0742	2B	1.080	1.090	1.0979	1.1034	1.1250
	2A	0.0012	1.1238	1.1173	—	1.1006	1.0966	1.0812	2B	1.086	1.095	1.1018	1.1070	1.1250
1 1/8-28 UN	3A	0.0000	1.1250	1.1185	—	1.1018	1.0988	1.0824	3B	1.0860	1.0926	1.1018	1.1057	1.1250
	2A	0.0021	1.1854	1.1704	—	1.1042	1.0972	1.0366	2B	1.052	1.077	1.1063	1.1154	1.1875
1 1/8-12 UN	3A	0.0000	1.1875	1.1725	—	1.1063	1.1011	1.0387	3B	1.0520	1.0672	1.1063	1.1131	1.1875
	2A	0.0017	1.1858	1.1744	—	1.1317	1.1259	1.0866	2B	1.097	1.115	1.1334	1.1409	1.1875
3A	0.0000	1.1875	1.1761	—	1.1334	1.1291	1.0883	3B	1.0970	1.1073	1.1334	1.1390	1.1875	
1 1/8-16 UN	2A	0.0015	1.1860	1.1766	—	1.1454	1.1403	1.1115	2B	1.120	1.134	1.1469	1.1535	1.1875
	3A	0.0000	1.1875	1.1781	—	1.1469	1.1431	1.1130	3B	1.1200	1.1283	1.1469	1.1519	1.1875
1 1/8-18 UNEF	2A	0.0015	1.1860	1.1773	—	1.1499	1.1450	1.1199	2B	1.127	1.140	1.1514	1.1577	1.1875
	3A	0.0000	1.1875	1.1788	—	1.1514	1.1478	1.1214	3B	1.1270	1.1355	1.1514	1.1561	1.1875
1 1/8-20 UN	2A	0.0014	1.1861	1.1780	—	1.1536	1.1489	1.1266	2B	1.133	1.145	1.1550	1.1611	1.1875
	3A	0.0000	1.1875	1.1794	—	1.1550	1.1515	1.1280	3B	1.1330	1.1412	1.1550	1.1595	1.1875
1 1/8-28 UN	2A	0.0012	1.1863	1.1798	—	1.1631	1.1590	1.1437	2B	1.149	1.157	1.1643	1.1696	1.1875
	3A	0.0000	1.1875	1.1810	—	1.1643	1.1612	1.1449	3B	1.1490	1.1551	1.1643	1.1683	1.1875

All dimensions in inches. † Use UNS threads only if Standard Series do not meet requirements (see p. 1635). See footnotes a, b, c, d, and e at end of table.

Table 4 (Continued). Standard Series and Selected Combinations† — Unified Screw Threads

Nominal Size, Threads per Inch, and Series Designation ^a	External ^b								Internal ^c					
	Class	Allow- ance	Major Diameter			Pitch Diameter		UNR Minor Diam." Max (Ref.)	Class	Minor Diameter		Pitch Diameter		Major Diameter
			Max ^b	Min	Min ^d	Max ^b	Min			Min	Max	Min	Max	
1/4-7 UNC	1A	0.0022	1.2478	1.2232	—	1.1550	1.1439	1.0777	1B	1.095	1.123	1.1572	1.1716	1.2500
	2A	0.0022	1.2478	1.2314	1.2232	1.1550	1.1476	1.0777	2B	1.095	1.123	1.1572	1.1668	1.2500
	3A	0.0000	1.2500	1.2336	—	1.1572	1.1517	1.0799	3B	1.0950	1.1125	1.1572	1.1644	1.2500
1/4-8 UN	2A	0.0021	1.2479	1.2329	1.2254	1.1667	1.1597	1.0991	2B	1.115	1.140	1.1688	1.1780	1.2500
	3A	0.0000	1.2500	1.2350	—	1.1688	1.1635	1.1012	3B	1.1150	1.1297	1.1688	1.1757	1.2500
1/4-10 UNS	2A	0.0019	1.2481	1.2352	—	1.1831	1.1768	1.1291	2B	1.142	1.163	1.1850	1.1932	1.2500
1/4-12 UNF	1A	0.0018	1.2482	1.2310	—	1.1941	1.1849	1.1490	1B	1.160	1.178	1.1959	1.2079	1.2500
	2A	0.0018	1.2482	1.2368	—	1.1941	1.1879	1.1490	2B	1.160	1.178	1.1959	1.2039	1.2500
	3A	0.0000	1.2500	1.2386	—	1.1959	1.1913	1.1508	3B	1.1600	1.1698	1.1959	1.2019	1.2500
1/4-14 UNS	2A	0.0016	1.2484	1.2381	—	1.2020	1.1966	1.1634	2B	1.173	1.188	1.2036	1.2106	1.2500
1/4-16 UN	2A	0.0015	1.2485	1.2391	—	1.2079	1.2028	1.1740	2B	1.182	1.196	1.2094	1.2160	1.2500
	3A	0.0000	1.2500	1.2406	—	1.2094	1.2056	1.1755	3B	1.1820	1.1908	1.2094	1.2144	1.2500
	2A	0.0015	1.2485	1.2398	—	1.2124	1.2075	1.1824	2B	1.190	1.203	1.2139	1.2202	1.2500
1/4-18 UNEF	3A	0.0000	1.2500	1.2413	—	1.2139	1.2103	1.1839	3B	1.1900	1.1980	1.2139	1.2186	1.2500
	2A	0.0014	1.2486	1.2405	—	1.2161	1.2114	1.1891	2B	1.196	1.207	1.2175	1.2236	1.2500
	3A	0.0000	1.2500	1.2419	—	1.2175	1.2140	1.1905	3B	1.1960	1.2037	1.2175	1.2220	1.2500
1/4-24 UNS	2A	0.0013	1.2487	1.2415	—	1.2216	1.2173	1.1991	2B	1.205	1.215	1.2229	1.2285	1.2500
1/4-28 UN	2A	0.0012	1.2488	1.2423	—	1.2256	1.2215	1.2062	2B	1.211	1.220	1.2268	1.2321	1.2500
	3A	0.0000	1.2500	1.2435	—	1.2268	1.2237	1.2074	3B	1.2110	1.2176	1.2268	1.2308	1.2500
	2A	0.0021	1.3104	1.2954	—	1.2292	1.2221	1.1616	2B	1.177	1.202	1.2313	1.2405	1.3125
5/16-8 UN	3A	0.0000	1.3125	1.2975	—	1.2313	1.2260	1.1637	3B	1.1770	1.1922	1.2313	1.2382	1.3125
	2A	0.0017	1.3108	1.2994	—	1.2567	1.2509	1.2116	2B	1.222	1.240	1.2584	1.2659	1.3125
	3A	0.0000	1.3125	1.3011	—	1.2584	1.2541	1.2133	3B	1.2220	1.2323	1.2584	1.2640	1.3125
5/16-16 UN	2A	0.0015	1.3110	1.3016	—	1.2704	1.2653	1.2365	2B	1.245	1.259	1.2719	1.2785	1.3125
	3A	0.0000	1.3125	1.3031	—	1.2719	1.2681	1.2380	3B	1.2450	1.2533	1.2719	1.2769	1.3125
	2A	0.0015	1.3110	1.3023	—	1.2749	1.2700	1.2449	2B	1.252	1.265	1.2764	1.2827	1.3125
5/16-18 UNEF	3A	0.0000	1.3125	1.3038	—	1.2764	1.2728	1.2464	3B	1.2520	1.2605	1.2764	1.2811	1.3125
	2A	0.0014	1.3111	1.3030	—	1.2786	1.2739	1.2516	2B	1.258	1.270	1.2800	1.2861	1.3125
	3A	0.0000	1.3125	1.3044	—	1.2800	1.2765	1.2530	3B	1.2580	1.2662	1.2800	1.2845	1.3125

5/16-28 UN	2A	0.0012	1.3113	1.3048	—	1.2881	1.2840	1.2687	2B	1.274	1.282	1.2893	1.2946	1.3125
	3A	0.0000	1.3125	1.3060	—	1.2893	1.2862	1.2699	3B	1.2740	1.2801	1.2893	1.2933	1.3125
3/8-6 UNC	1A	0.0024	1.3726	1.3453	—	1.2643	1.2523	1.1742	1B	1.195	1.225	1.2667	1.2822	1.3750
	2A	0.0024	1.3726	1.3544	1.3453	1.2643	1.2563	1.1742	2B	1.195	1.225	1.2667	1.2771	1.3750
	3A	0.0000	1.3750	1.3568	—	1.2667	1.2607	1.1766	3B	1.1950	1.2146	1.2667	1.2745	1.3750
3/8-8 UN	2A	0.0022	1.3728	1.3578	1.3503	1.2916	1.2844	1.2240	2B	1.240	1.265	1.2938	1.3031	1.3750
	3A	0.0000	1.3750	1.3600	—	1.2938	1.2884	1.2262	3B	1.2400	1.2547	1.2938	1.3008	1.3750
3/8-10 UNS	2A	0.0019	1.3731	1.3602	—	1.3081	1.3018	1.2541	2B	1.267	1.288	1.3100	1.3182	1.3750
3/8-12 UNF	1A	0.0019	1.3731	1.3559	—	1.3190	1.3096	1.2739	1B	1.285	1.303	1.3209	1.3332	1.3750
	2A	0.0019	1.3731	1.3617	—	1.3190	1.3127	1.2739	2B	1.285	1.303	1.3209	1.3291	1.3750
	3A	0.0000	1.3750	1.3636	—	1.3209	1.3162	1.2758	3B	1.2850	1.2948	1.3209	1.3270	1.3750
3/8-14 UNS	2A	0.0016	1.3734	1.3631	—	1.3270	1.3216	1.2884	2B	1.298	1.314	1.3286	1.3356	1.3750
3/8-16 UN	2A	0.0015	1.3735	1.3641	—	1.3329	1.3278	1.2990	2B	1.307	1.321	1.3344	1.3410	1.3750
	3A	0.0000	1.3750	1.3656	—	1.3344	1.3306	1.3005	3B	1.3070	1.3158	1.3344	1.3394	1.3750
3/8-18 UNEF	2A	0.0015	1.3735	1.3648	—	1.3374	1.3325	1.3074	2B	1.315	1.328	1.3389	1.3452	1.3750
	3A	0.0000	1.3750	1.3663	—	1.3389	1.3353	1.3089	3B	1.3150	1.3230	1.3389	1.3436	1.3750
3/8-20 UN	2A	0.0014	1.3736	1.3655	—	1.3411	1.3364	1.3141	2B	1.321	1.332	1.3425	1.3486	1.3750
	3A	0.0000	1.3750	1.3669	—	1.3425	1.3390	1.3155	3B	1.3210	1.3287	1.3425	1.3470	1.3750
3/8-24 UNS	2A	0.0013	1.3737	1.3665	—	1.3466	1.3423	1.3241	2B	1.330	1.340	1.3479	1.3535	1.3750
3/8-28 UN	2A	0.0012	1.3738	1.3673	—	1.3506	1.3465	1.3312	2B	1.336	1.345	1.3518	1.3571	1.3750
	3A	0.0000	1.3750	1.3685	—	1.3518	1.3487	1.3324	3B	1.3360	1.3426	1.3518	1.3558	1.3750
7/16-6 UN	2A	0.0024	1.4351	1.4169	—	1.3268	1.3188	1.2567	2B	1.257	1.288	1.3292	1.3396	1.4375
	3A	0.0000	1.4375	1.4193	—	1.3292	1.3232	1.2591	3B	1.2570	1.2771	1.3292	1.3370	1.4375
7/16-8 UN	2A	0.0022	1.4353	1.4203	—	1.3541	1.3469	1.2865	2B	1.302	1.327	1.3563	1.3657	1.4375
	3A	0.0000	1.4375	1.4225	—	1.3563	1.3509	1.2887	3B	1.3020	1.3172	1.3563	1.3634	1.4375
7/16-12 UN	2A	0.0018	1.4357	1.4243	—	1.3816	1.3757	1.3365	2B	1.347	1.365	1.3834	1.3910	1.4375
	3A	0.0000	1.4375	1.4261	—	1.3834	1.3790	1.3383	3B	1.3470	1.3573	1.3834	1.3891	1.4375
7/16-16 UN	2A	0.0016	1.4359	1.4265	—	1.3953	1.3901	1.3614	2B	1.370	1.384	1.3969	1.4037	1.4375
	3A	0.0000	1.4375	1.4281	—	1.3969	1.3930	1.3630	3B	1.3700	1.3783	1.3969	1.4020	1.4375
7/16-18 UNEF	2A	0.0015	1.4360	1.4273	—	1.3999	1.3949	1.3699	2B	1.377	1.390	1.4014	1.4079	1.4375
	3A	0.0000	1.4375	1.4288	—	1.4014	1.3977	1.3714	3B	1.3770	1.3855	1.4014	1.4062	1.4375
7/16-20 UN	2A	0.0014	1.4361	1.4280	—	1.4036	1.3988	1.3766	2B	1.383	1.395	1.4050	1.4112	1.4375
	3A	0.0000	1.4375	1.4294	—	1.4050	1.4014	1.3780	3B	1.3830	1.3912	1.4050	1.4096	1.4375
7/16-28 UN	2A	0.0013	1.4362	1.4297	—	1.4130	1.4088	1.3936	2B	1.399	1.407	1.4143	1.4198	1.4375
	3A	0.0000	1.4375	1.4310	—	1.4143	1.4112	1.3949	3B	1.3990	1.4051	1.4143	1.4184	1.4375

All dimensions in inches. † Use UNS threads only if Standard Series do not meet requirements (see p. 1635). See footnotes a, b, c, d, and e at end of table.

Table 4 (Continued). Standard Series and Selected Combinations† — Unified Screw Threads

Nominal Size, Threads per Inch, and Series Designation ^a	External ^b								Internal ^c					
	Class	Allow- ance	Major Diameter			Pitch Diameter		UNR Minor Diam. ^d Max (Ref.)	Class	Minor Diameter		Pitch Diameter		Major Diameter
			Max ^b	Min	Min ^d	Max ^b	Min			Min	Max	Min	Max	
1/2-6 UNC	1A	0.0024	1.4976	1.4703	—	1.3893	1.3772	1.2992	1B	1.320	1.350	1.3917	1.4075	1.5000
	2A	0.0024	1.4976	1.4794	1.4703	1.3893	1.3812	1.2992	2B	1.320	1.350	1.3917	1.4022	1.5000
	3A	0.0000	1.5000	1.4818	—	1.3917	1.3856	1.3016	3B	1.3200	1.3396	1.3917	1.3996	1.5000
1/2-8 UN	2A	0.0022	1.4978	1.4828	1.4753	1.4166	1.4093	1.3490	2B	1.365	1.390	1.4188	1.4283	1.5000
	3A	0.0000	1.5000	1.4850	—	1.4188	1.4133	1.3512	3B	1.3650	1.3797	1.4188	1.4259	1.5000
1/2-10 UNS	2A	0.0019	1.4981	1.4857	—	1.4331	1.4267	1.3791	2B	1.392	1.413	1.4350	1.4433	1.5000
1/2-12 UNF	1A	0.0019	1.4981	1.4809	—	1.4440	1.4344	1.3989	1B	1.410	1.428	1.4459	1.4584	1.5000
	2A	0.0019	1.4981	1.4867	—	1.4440	1.4376	1.3989	2B	1.410	1.428	1.4459	1.4542	1.5000
	3A	0.0000	1.5000	1.4886	—	1.4459	1.4411	1.4008	3B	1.4100	1.4198	1.4459	1.4522	1.5000
1/2-14 UNS	2A	0.0017	1.4983	1.4880	—	1.4519	1.4464	1.4133	2B	1.423	1.438	1.4536	1.4608	1.5000
1/2-16 UN	2A	0.0016	1.4984	1.4890	—	1.4578	1.4526	1.4239	2B	1.432	1.446	1.4594	1.4662	1.5000
	3A	0.0000	1.5000	1.4906	—	1.4594	1.4555	1.4255	3B	1.4320	1.4408	1.4594	1.4645	1.5000
1/2-18 UNEF	2A	0.0015	1.4985	1.4898	—	1.4624	1.4574	1.4324	2B	1.440	1.452	1.4639	1.4704	1.5000
	3A	0.0000	1.5000	1.4913	—	1.4639	1.4602	1.4339	3B	1.4400	1.4480	1.4639	1.4687	1.5000
1/2-20 UN	2A	0.0014	1.4986	1.4905	—	1.4661	1.4613	1.4391	2B	1.446	1.457	1.4675	1.4737	1.5000
	3A	0.0000	1.5000	1.4919	—	1.4675	1.4639	1.4405	3B	1.4460	1.4537	1.4675	1.4721	1.5000
1/2-24 UNS	2A	0.0013	1.4987	1.4915	—	1.4716	1.4672	1.4491	2B	1.455	1.465	1.4729	1.4787	1.5000
1/2-28 UN	2A	0.0013	1.4987	1.4922	—	1.4755	1.4713	1.4561	2B	1.461	1.470	1.4768	1.4823	1.5000
	3A	0.0000	1.5000	1.4935	—	1.4768	1.4737	1.4574	3B	1.4610	1.4676	1.4768	1.4809	1.5000
5/16-6 UN	2A	0.0024	1.5601	1.5419	—	1.4518	1.4436	1.3617	2B	1.382	1.413	1.4542	1.4648	1.5625
	3A	0.0000	1.5625	1.5443	—	1.4542	1.4481	1.3641	3B	1.3820	1.4021	1.4542	1.4622	1.5625
5/16-8 UN	2A	0.0022	1.5603	1.5453	—	1.4791	1.4717	1.4115	2B	1.427	1.452	1.4813	1.4909	1.5625
	3A	0.0000	1.5625	1.5475	—	1.4813	1.4758	1.4137	3B	1.4270	1.4422	1.4813	1.4885	1.5625
5/16-12 UN	2A	0.0018	1.5607	1.5493	—	1.5066	1.5007	1.4615	2B	1.472	1.490	1.5084	1.5160	1.5625
	3A	0.0000	1.5625	1.5511	—	1.5084	1.5040	1.4633	3B	1.4720	1.4823	1.5084	1.5141	1.5625
5/16-16 UN	2A	0.0016	1.5609	1.5515	—	1.5203	1.5151	1.4864	2B	1.495	1.509	1.5219	1.5287	1.5625
	3A	0.0000	1.5625	1.5531	—	1.5219	1.5180	1.4880	3B	1.4950	1.5033	1.5219	1.5270	1.5625
5/16-18 UNEF	2A	0.0015	1.5610	1.5523	—	1.5249	1.5199	1.4949	2B	1.502	1.515	1.5264	1.5329	1.5625
	3A	0.0000	1.5625	1.5538	—	1.5264	1.5227	1.4964	3B	1.5020	1.5105	1.5264	1.5312	1.5625
5/8-20 UN	2A	0.0014	1.5611	1.5530	—	1.5286	1.5238	1.5016	2B	1.508	1.520	1.5300	1.5362	1.5625
	3A	0.0000	1.5625	1.5544	—	1.5300	1.5264	1.5030	3B	1.5080	1.5162	1.5300	1.5346	1.5625
5/8-6 UN	2A	0.0025	1.6225	1.6043	—	1.5142	1.5060	1.4246	2B	1.445	1.475	1.5167	1.5274	1.6250
	3A	0.0000	1.6250	1.6068	—	1.5167	1.5105	1.4271	3B	1.4450	1.4646	1.5167	1.5247	1.6250
5/8-8 UN	2A	0.0022	1.6228	1.6078	1.6003	1.5416	1.5342	1.4784	2B	1.490	1.515	1.5438	1.5535	1.6250
	3A	0.0000	1.6250	1.6100	—	1.5438	1.5382	1.4806	3B	1.4900	1.5047	1.5438	1.5510	1.6250
5/8-10 UNS	2A	0.0019	1.6231	1.6102	—	1.5581	1.5517	1.5041	2B	1.517	1.538	1.5600	1.5683	1.6250
5/8-12 UN	2A	0.0018	1.6232	1.6118	—	1.5691	1.5632	1.5240	2B	1.535	1.553	1.5709	1.5785	1.6250
	3A	0.0000	1.6250	1.6136	—	1.5709	1.5665	1.5258	3B	1.5350	1.5448	1.5709	1.5766	1.6250
5/8-14 UNS	2A	0.0017	1.6233	1.6130	—	1.5769	1.5714	1.5383	2B	1.548	1.564	1.5786	1.5858	1.6250
5/8-16 UN	2A	0.0016	1.6234	1.6140	—	1.5828	1.5776	1.5489	2B	1.557	1.571	1.5844	1.5912	1.6250
	3A	0.0000	1.6250	1.6156	—	1.5844	1.5805	1.5505	3B	1.5570	1.5658	1.5844	1.5895	1.6250
5/8-18 UNEF	2A	0.0015	1.6235	1.6148	—	1.5874	1.5824	1.5574	2B	1.565	1.578	1.5889	1.5954	1.6250
	3A	0.0000	1.6250	1.6163	—	1.5889	1.5852	1.5589	3B	1.5650	1.5730	1.5889	1.5937	1.6250
5/8-20 UN	2A	0.0014	1.6236	1.6155	—	1.5911	1.5863	1.5641	2B	1.571	1.582	1.5925	1.5987	1.6250
	3A	0.0000	1.6250	1.6169	—	1.5925	1.5889	1.5655	3B	1.5710	1.5787	1.5925	1.5971	1.6250
5/8-24 UNS	2A	0.0013	1.6237	1.6165	—	1.5966	1.5922	1.5741	2B	1.580	1.590	1.5979	1.6037	1.6250
1 1/16-6 UN	2A	0.0025	1.6850	1.6668	—	1.5767	1.5684	1.4866	2B	1.507	1.538	1.5792	1.5900	1.6875
	3A	0.0000	1.6875	1.6693	—	1.5792	1.5730	1.4891	3B	1.5070	1.5271	1.5792	1.5873	1.6875
1 1/16-8 UN	2A	0.0022	1.6853	1.6703	—	1.6041	1.5966	1.5365	2B	1.552	1.577	1.6063	1.6160	1.6875
	3A	0.0000	1.6875	1.6725	—	1.6063	1.6007	1.5387	3B	1.5520	1.5672	1.6063	1.6136	1.6875
1 1/16-12 UN	2A	0.0018	1.6857	1.6743	—	1.6316	1.6256	1.5865	2B	1.597	1.615	1.6334	1.6412	1.6875
	3A	0.0000	1.6875	1.6761	—	1.6334	1.6289	1.5883	3B	1.5970	1.6073	1.6334	1.6392	1.6875
1 1/16-16 UN	2A	0.0016	1.6859	1.6765	—	1.6453	1.6400	1.6114	2B	1.620	1.634	1.6469	1.6538	1.6875
	3A	0.0000	1.6875	1.6781	—	1.6469	1.6429	1.6130	3B	1.6200	1.6283	1.6469	1.6521	1.6875
1 1/16-18 UNEF	2A	0.0015	1.6860	1.6773	—	1.6499	1.6448	1.6199	2B	1.627	1.640	1.6514	1.6580	1.6875
	3A	0.0000	1.6875	1.6788	—	1.6514	1.6476	1.6214	3B	1.6270	1.6355	1.6514	1.6563	1.6875
1 1/16-20 UN	2A	0.0015	1.6860	1.6779	—	1.6535	1.6487	1.6265	2B	1.633	1.645	1.6550	1.6613	1.6875
	3A	0.0000	1.6875	1.6794	—	1.6550	1.6514	1.6280	3B	1.6330	1.6412	1.6550	1.6597	1.6875
1 3/4-5 UNC	1A	0.0027	1.7473	1.7165	—	1.6174	1.6040	1.5092	1B	1.534	1.568	1.6201	1.6375	1.7500
	2A	0.0027	1.7473	1.7268	1.7165	1.6174	1.6085	1.5092	2B	1.534	1.568	1.6201	1.6317	1.7500
	3A	0.0000	1.7500	1.7295	—	1.6201	1.6134	1.5119	3B	1.5340	1.5575	1.6201	1.6288	1.7500

All dimensions in inches. † Use UNS threads only if Standard Series do not meet requirements (see p. 1635). See footnotes a, b, c, d, and e at end of table.

Table 4 (Continued). Standard Series and Selected Combinations† — Unified Screw Threads

Nominal Size, Threads per Inch, and Series Designation ^a	External ^b							Internal ^c						
	Class	Allow- ance	Major Diameter			Pitch Diameter		UNR Minor Diam. ^d Max (Ref.)	Class	Minor Diameter		Pitch Diameter		Major Diameter
			Max ^b	Min	Min ^d	Max ^b	Min			Min	Max	Min	Max	
1/4-6 UN	2A	0.0025	1.7475	1.7293	—	1.6392	1.6309	1.5491	2B	1.570	1.600	1.6417	1.6525	1.7500
	3A	0.0000	1.7500	1.7318	—	1.6417	1.6354	1.5516	3B	1.5700	1.5896	1.6417	1.6498	1.7500
1/4-8 UN	2A	0.0023	1.7477	1.7327	1.7252	1.6665	1.6590	1.5989	2B	1.615	1.640	1.6688	1.6786	1.7500
	3A	0.0000	1.7500	1.7350	—	1.6688	1.6632	1.6012	3B	1.6150	1.6297	1.6688	1.6762	1.7500
1/4-10 UNS	2A	0.0019	1.7481	1.7352	—	1.6831	1.6766	1.6291	2B	1.642	1.663	1.6850	1.6934	1.7500
1/4-12 UN	2A	0.0018	1.7482	1.7368	—	1.6941	1.6881	1.6490	2B	1.660	1.678	1.6959	1.7037	1.7500
	3A	0.0000	1.7500	1.7386	—	1.6959	1.6914	1.6508	3B	1.6600	1.6698	1.6959	1.7017	1.7500
1/4-14 UNS	2A	0.0017	1.7483	1.7380	—	1.7019	1.6963	1.6632	2B	1.673	1.688	1.7036	1.7109	1.7500
1/4-16 UN	2A	0.0016	1.7484	1.7390	—	1.7078	1.7025	1.6739	2B	1.682	1.696	1.7094	1.7163	1.7500
	3A	0.0000	1.7500	1.7406	—	1.7094	1.7054	1.6755	3B	1.6820	1.6908	1.7094	1.7146	1.7500
1/4-18 UNS	2A	0.0015	1.7485	1.7398	—	1.7124	1.7073	1.6824	2B	1.690	1.703	1.7139	1.7205	1.7500
1/4-20 UN	2A	0.0015	1.7485	1.7404	—	1.7160	1.7112	1.6890	2B	1.696	1.707	1.7175	1.7238	1.7500
	3A	0.0000	1.7500	1.7419	—	1.7175	1.7139	1.6905	3B	1.6960	1.7037	1.7175	1.7222	1.7500
1/16-6 UN	2A	0.0025	1.8100	1.7918	—	1.7017	1.6933	1.6116	2B	1.632	1.663	1.7042	1.7151	1.8125
	3A	0.0000	1.8125	1.7943	—	1.7042	1.6979	1.6141	3B	1.6320	1.6521	1.7042	1.7124	1.8125
1/16-8 UN	2A	0.0023	1.8102	1.7952	—	1.7290	1.7214	1.6614	2B	1.677	1.702	1.7313	1.7412	1.8125
	3A	0.0000	1.8125	1.7975	—	1.7313	1.7256	1.6637	3B	1.6770	1.6922	1.7313	1.7387	1.8125
1/16-12 UN	2A	0.0018	1.8107	1.7993	—	1.7566	1.7506	1.7115	2B	1.722	1.740	1.7584	1.7662	1.8125
	3A	0.0000	1.8125	1.8011	—	1.7584	1.7539	1.7133	3B	1.7220	1.7323	1.7584	1.7642	1.8125
1/16-16 UN	2A	0.0016	1.8109	1.8015	—	1.7703	1.7650	1.7364	2B	1.745	1.759	1.7719	1.7788	1.8125
	3A	0.0000	1.8125	1.8031	—	1.7719	1.7679	1.7380	3B	1.7450	1.7533	1.7719	1.7771	1.8125
1/16-20 UN	2A	0.0015	1.8110	1.8029	—	1.7785	1.7737	1.7515	2B	1.758	1.770	1.7800	1.7863	1.8125
	3A	0.0000	1.8125	1.8044	—	1.7800	1.7764	1.7530	3B	1.7580	1.7662	1.7800	1.7847	1.8125
1/8-6 UN	2A	0.0025	1.8725	1.8543	—	1.7642	1.7558	1.6741	2B	1.695	1.725	1.7667	1.7777	1.8750
	3A	0.0000	1.8750	1.8568	—	1.7667	1.7604	1.6766	3B	1.6950	1.7146	1.7667	1.7749	1.8750
1/8-8 UN	2A	0.0023	1.8727	1.8577	1.8502	1.7915	1.7838	1.7239	2B	1.740	1.765	1.7938	1.8038	1.8750
	3A	0.0000	1.8750	1.8600	—	1.7938	1.7881	1.7262	3B	1.7400	1.7547	1.7938	1.8013	1.8750
1/8-10 UNS	2A	0.0019	1.8731	1.8602	—	1.8081	1.8016	1.7541	2B	1.767	1.788	1.8100	1.8184	1.8750

1/8-12 UN	2A	0.0018	1.8732	1.8618	—	1.8191	1.8131	1.7740	2B	1.785	1.803	1.8209	1.8287	1.8750
	3A	0.0000	1.8750	1.8636	—	1.8209	1.8164	1.7758	3B	1.7850	1.7948	1.8209	1.8267	1.8750
1/8-14 UNS	2A	0.0017	1.8733	1.8630	—	1.8269	1.8213	1.7883	2B	1.798	1.814	1.8286	1.8359	1.8750
1/8-16 UN	2A	0.0016	1.8734	1.8640	—	1.8328	1.8275	1.7989	2B	1.807	1.821	1.8344	1.8413	1.8750
	3A	0.0000	1.8750	1.8656	—	1.8344	1.8304	1.8005	3B	1.8070	1.8158	1.8344	1.8396	1.8750
1/8-18 UNS	2A	0.0015	1.8735	1.8648	—	1.8374	1.8323	1.8074	2B	1.815	1.828	1.8389	1.8455	1.8750
1/8-20 UN	2A	0.0015	1.8735	1.8654	—	1.8410	1.8362	1.8140	2B	1.821	1.832	1.8425	1.8488	1.8750
	3A	0.0000	1.8750	1.8669	—	1.8425	1.8389	1.8155	3B	1.8210	1.8287	1.8425	1.8472	1.8750
1/16-6 UN	2A	0.0026	1.9349	1.9167	—	1.8266	1.8181	1.7365	2B	1.757	1.788	1.8292	1.8403	1.9375
	3A	0.0000	1.9375	1.9193	—	1.8292	1.8228	1.7391	3B	1.7570	1.7771	1.8292	1.8375	1.9375
1/16-8 UN	2A	0.0023	1.9352	1.9202	—	1.8540	1.8463	1.7864	2B	1.802	1.827	1.8563	1.8663	1.9375
	3A	0.0000	1.9375	1.9225	—	1.8563	1.8505	1.7887	3B	1.8020	1.8171	1.8563	1.8638	1.9375
1/16-12 UN	2A	0.0018	1.9357	1.9243	—	1.8816	1.8755	1.8365	2B	1.847	1.865	1.8834	1.8913	1.9375
	3A	0.0000	1.9375	1.9261	—	1.8834	1.8789	1.8383	3B	1.8470	1.8573	1.8834	1.8893	1.9375
1/16-16 UN	2A	0.0016	1.9359	1.9265	—	1.8953	1.8899	1.8614	2B	1.870	1.884	1.8969	1.9039	1.9375
	3A	0.0000	1.9375	1.9281	—	1.8969	1.8929	1.8630	3B	1.8700	1.8783	1.8969	1.9021	1.9375
1/16-20 UN	2A	0.0015	1.9360	1.9279	—	1.9035	1.8986	1.8765	2B	1.883	1.895	1.9050	1.9114	1.9375
	3A	0.0000	1.9375	1.9294	—	1.9050	1.9013	1.8780	3B	1.8830	1.8912	1.9050	1.9098	1.9375
2-4 1/2 UNC	1A	0.0029	1.9971	1.9641	—	1.8528	1.8385	1.7324	1B	1.759	1.795	1.8557	1.8743	2.0000
	2A	0.0029	1.9971	1.9751	1.9641	1.8528	1.8433	1.7324	2B	1.759	1.795	1.8557	1.8681	2.0000
	3A	0.0000	2.0000	1.9780	—	1.8557	1.8486	1.7353	3B	1.7590	1.7861	1.8557	1.8650	2.0000
2-6 UN	2A	0.0026	1.9974	1.9792	—	1.8891	1.8805	1.7990	2B	1.820	1.850	1.8917	1.9028	2.0000
	3A	0.0000	2.0000	1.9818	—	1.8917	1.8853	1.8016	3B	1.8200	1.8396	1.8917	1.9000	2.0000
2-8 UN	2A	0.0023	1.9977	1.9827	1.9752	1.9165	1.9087	1.8489	2B	1.865	1.890	1.9188	1.9289	2.0000
	3A	0.0000	2.0000	1.9850	—	1.9188	1.9130	1.8512	3B	1.8650	1.8797	1.9188	1.9264	2.0000
2-10 UNS	2A	0.0020	1.9980	1.9851	—	1.9330	1.9265	1.8790	2B	1.892	1.913	1.9350	1.9435	2.0000
2-12 UN	2A	0.0018	1.9982	1.9868	—	1.9441	1.9380	1.8990	2B	1.910	1.928	1.9459	1.9538	2.0000
	3A	0.0000	2.0000	1.9886	—	1.9459	1.9414	1.9008	3B	1.9100	1.9198	1.9459	1.9518	2.0000
2-14 UNS	2A	0.0017	1.9983	1.9880	—	1.9519	1.9462	1.9133	2B	1.923	1.938	1.9536	1.9610	2.0000
2-16 UN	2A	0.0016	1.9984	1.9890	—	1.9578	1.9524	1.9239	2B	1.932	1.946	1.9594	1.9664	2.0000
	3A	0.0000	2.0000	1.9906	—	1.9594	1.9554	1.9255	3B	1.9320	1.9408	1.9594	1.9646	2.0000
2-18 UNS	2A	0.0015	1.9985	1.9898	—	1.9624	1.9573	1.9324	2B	1.940	1.953	1.9639	1.9706	2.0000

All dimensions in inches. † Use UNS threads only if Standard Series do not meet requirements (see p. 1635). See footnotes a, b, c, d, and e at end of table.

Table 4 (Continued). Standard Series and Selected Combinations† — Unified Screw Threads

Nominal Size, Threads per Inch, and Series Designation ^a	External ^b							Internal ^c						
	Class	Allow- ance	Major Diameter			Pitch Diameter		UNR Minor Diam. ^d Max (Ref.)	Class	Minor Diameter		Pitch Diameter		Major Diameter
			Max ^b	Min	Min ^d	Max ^b	Min			Min	Max	Min		
2-20 UN	2A	0.0015	1.9985	1.9994	—	1.9660	1.9611	1.9390	2B	1.946	1.957	1.9675	1.9739	2.0000
	3A	0.0000	2.0000	1.9919	—	1.9675	1.9638	1.9405	3B	1.9460	1.9537	1.9675	1.9723	2.0000
2 1/16-16 UNS	2A	0.0016	2.0609	2.0515	—	2.0203	2.0149	1.9864	2B	1.995	2.009	2.0219	2.0289	2.0625
	3A	0.0000	2.0625	2.0531	—	2.0219	2.0179	1.9880	3B	1.9950	2.0033	2.0219	2.0271	2.0625
2 1/8-6 UN	2A	0.0026	2.1224	2.1042	—	2.0141	2.0054	1.9240	2B	1.945	1.975	2.0167	2.0280	2.1250
	3A	0.0000	2.1250	2.1068	—	2.0167	2.0102	1.9266	3B	1.9450	1.9646	2.0167	2.0251	2.1250
2 1/8-8 UN	2A	0.0024	2.1226	2.1076	2.1001	2.0414	2.0335	1.9738	2B	1.990	2.015	2.0438	2.0540	2.1250
	3A	0.0000	2.1250	2.1100	—	2.0438	2.0379	1.9762	3B	1.9900	2.0047	2.0438	2.0515	2.1250
2 1/8-12 UN	2A	0.0018	2.1232	2.1118	—	2.0691	2.0630	2.0240	2B	2.035	2.053	2.0709	2.0788	2.1250
	3A	0.0000	2.1250	2.1136	—	2.0709	2.0664	2.0258	3B	2.0350	2.0448	2.0709	2.0768	2.1250
2 1/8-16 UN	2A	0.0016	2.1234	2.1140	—	2.0828	2.0774	2.0489	2B	2.057	2.071	2.0844	2.0914	2.1250
	3A	0.0000	2.1250	2.1156	—	2.0844	2.0803	2.0505	3B	2.0570	2.0658	2.0844	2.0896	2.1250
2 1/8-20 UN	2A	0.0015	2.1235	2.1154	—	2.0910	2.0861	2.0640	2B	2.071	2.082	2.0925	2.0989	2.1250
	3A	0.0000	2.1250	2.1169	—	2.0925	2.0888	2.0655	3B	2.0710	2.0787	2.0925	2.0973	2.1250
2 3/16-16 UNS	2A	0.0016	2.1859	2.1765	—	2.1453	2.1399	2.1114	2B	2.120	2.134	2.1469	2.1539	2.1875
	3A	0.0000	2.1875	2.1781	—	2.1469	2.1428	2.1130	3B	2.1200	2.1283	2.1469	2.1521	2.1875
2 1/4-4 1/2 UNC	1A	0.0029	2.2471	2.2141	—	2.1028	2.0882	1.9824	1B	2.009	2.045	2.1057	2.1247	2.2500
	2A	0.0029	2.2471	2.2251	2.2141	2.1028	2.0931	1.9824	2B	2.009	2.045	2.1057	2.1183	2.2500
	3A	0.0000	2.2500	2.2280	—	2.1057	2.0984	1.9853	3B	2.0090	2.0361	2.1057	2.1152	2.2500
2 1/4-6 UN	2A	0.0026	2.2474	2.2292	—	2.1391	2.1303	2.0490	2B	2.070	2.100	2.1417	2.1531	2.2500
	3A	0.0000	2.2500	2.2318	—	2.1417	2.1351	2.0516	3B	2.0700	2.0896	2.1417	2.1502	2.2500
2 1/4-8 UN	2A	0.0024	2.2476	2.2326	2.2251	2.1664	2.1584	2.0988	2B	2.115	2.140	2.1688	2.1792	2.2500
	3A	0.0000	2.2500	2.2350	—	2.1688	2.1628	2.1012	3B	2.1150	2.1297	2.1688	2.1766	2.2500
2 1/4-10 UNS	2A	0.0020	2.2480	2.2351	—	2.1830	2.1765	2.1290	2B	2.142	2.163	2.1850	2.1935	2.2500
2 1/4-12 UN	2A	0.0018	2.2482	2.2368	—	2.1941	2.1880	2.1490	2B	2.160	2.178	2.1959	2.2038	2.2500
	3A	0.0000	2.2500	2.2386	—	2.1959	2.1914	2.1508	3B	2.1600	2.1698	2.1959	2.2018	2.2500
2 1/4-14 UNS	2A	0.0017	2.2483	2.2380	—	2.2019	2.1962	2.1633	2B	2.173	2.188	2.2036	2.2110	2.2500
2 1/4-16 UN	2A	0.0016	2.2484	2.2390	—	2.2078	2.2024	2.1739	2B	2.182	2.196	2.2094	2.2164	2.2500
	3A	0.0000	2.2500	2.2406	—	2.2094	2.2053	2.1755	3B	2.1820	2.1908	2.2094	2.2146	2.2500
2 1/4-18 UNS	2A	0.0015	2.2485	2.2398	—	2.2124	2.2073	2.1824	2B	2.190	2.203	2.2139	2.2206	2.2500
2 1/4-20 UN	2A	0.0015	2.2485	2.2404	—	2.2160	2.2111	2.1890	2B	2.196	2.207	2.2175	2.2239	2.2500
	3A	0.0000	2.2500	2.2419	—	2.2175	2.2137	2.1905	3B	2.1960	2.2037	2.2175	2.2223	2.2500
2 5/16-16 UNS	2A	0.0017	2.3108	2.3014	—	2.2702	2.2647	2.2363	2B	2.245	2.259	2.2719	2.2791	2.3125
	3A	0.0000	2.3125	2.3031	—	2.2719	2.2678	2.2380	3B	2.2450	2.2533	2.2719	2.2773	2.3125
2 3/8-6 UN	2A	0.0027	2.3723	2.3541	—	2.2640	2.2551	2.1739	2B	2.195	2.226	2.2667	2.2782	2.3750
	3A	0.0000	2.3750	2.3568	—	2.2667	2.2601	2.1766	3B	2.1950	2.2146	2.2667	2.2753	2.3750
2 3/8-8 UN	2A	0.0024	2.3726	2.3576	—	2.2914	2.2833	2.2238	2B	2.240	2.265	2.2938	2.3043	2.3750
	3A	0.0000	2.3750	2.3600	—	2.2938	2.2878	2.2262	3B	2.2400	2.2547	2.2938	2.3017	2.3750
2 3/8-12 UN	2A	0.0019	2.3731	2.3617	—	2.3190	2.3128	2.2749	2B	2.285	2.303	2.3209	2.3290	2.3750
	3A	0.0000	2.3750	2.3636	—	2.3209	2.3163	2.2758	3B	2.2850	2.2948	2.3209	2.3269	2.3750
2 3/8-16 UN	2A	0.0017	2.3733	2.3639	—	2.3327	2.3272	2.2988	2B	2.307	2.321	2.3344	2.3416	2.3750
	3A	0.0000	2.3750	2.3656	—	2.3344	2.3303	2.3005	3B	2.3070	2.3158	2.3344	2.3398	2.3750
2 3/8-20 UN	2A	0.0015	2.3735	2.3654	—	2.3410	2.3359	2.3140	2B	2.321	2.332	2.3425	2.3491	2.3750
	3A	0.0000	2.3750	2.3669	—	2.3425	2.3387	2.3155	3B	2.3210	2.3287	2.3425	2.3475	2.3750
2 7/16-16 UNS	2A	0.0017	2.4358	2.4264	—	2.3952	2.3897	2.3613	2B	2.370	2.384	2.3969	2.4041	2.4375
	3A	0.0000	2.4375	2.4281	—	2.3969	2.3928	2.3630	3B	2.3700	2.3783	2.3969	2.4023	2.4375
2 1/2-4 UNC	1A	0.0031	2.4969	2.4612	—	2.3345	2.3190	2.1992	1B	2.229	2.267	2.3376	2.3578	2.5000
	2A	0.0031	2.4969	2.4731	2.4612	2.3345	2.3241	2.1992	2B	2.229	2.267	2.3376	2.3511	2.5000
	3A	0.0000	2.5000	2.4762	—	2.3376	2.3298	2.2023	3B	2.2290	2.2594	2.3376	2.3477	2.5000
2 1/2-6 UN	2A	0.0027	2.4973	2.4791	—	2.3890	2.3800	2.2989	2B	2.320	2.350	2.3917	2.4033	2.5000
	3A	0.0000	2.5000	2.4818	—	2.3917	2.3850	2.3016	3B	2.3200	2.3396	2.3917	2.4004	2.5000
2 1/2-8 UN	2A	0.0024	2.4976	2.4826	2.4751	2.4164	2.4082	2.3488	2B	2.365	2.390	2.4188	2.4294	2.5000
	3A	0.0000	2.5000	2.4850	—	2.4188	2.4127	2.3512	3B	2.3650	2.3797	2.4188	2.4268	2.5000
2 1/2-10 UNS	2A	0.0020	2.4980	2.4851	—	2.4330	2.4263	2.3790	2B	2.392	2.413	2.4350	2.4437	2.5000
2 1/2-12 UN	2A	0.0019	2.4981	2.4867	—	2.4440	2.4378	2.3989	2B	2.410	2.428	2.4459	2.4540	2.5000
	3A	0.0000	2.5000	2.4886	—	2.4459	2.4413	2.4008	3B	2.4100	2.4198	2.4459	2.4519	2.5000
2 1/2-14 UNS	2A	0.0017	2.4983	2.4880	—	2.4519	2.4461	2.4133	2B	2.423	2.438	2.4536	2.4612	2.5000
2 1/2-16 UN	2A	0.0017	2.4983	2.4889	—	2.4577	2.4522	2.4238	2B	2.432	2.446	2.4594	2.4666	2.5000
	3A	0.0000	2.5000	2.4906	—	2.4594	2.4553	2.4255	3B	2.4320	2.4408	2.4594	2.4648	2.5000
2 1/2-18 UNS	2A	0.0016	2.4984	2.4897	—	2.4623	2.4570	2.4323	2B	2.440	2.453	2.4639	2.4708	2.5000
2 1/2-20 UN	2A	0.0015	2.4985	2.4904	—	2.4660	2.4609	2.4390	2B	2.446	2.457	2.4675	2.4741	2.5000
	3A	0.0000	2.5000	2.4919	—	2.4675	2.4637	2.4405	3B	2.4460	2.4537	2.4675	2.4725	2.5000

All dimensions in inches. † Use UNS threads only if Standard Series do not meet requirements (see p. 1635). See footnotes a, b, c, d, and e at end of table.