

inch

**Internal 內螺紋**

Size  
尺寸  
Ithread  
Designation 螺紋規  
格名稱

Size 尺寸	Ithread Designation 螺紋規 格名稱	Internal 內螺紋							Tap Drill Basic
		Class	Minor Dia		Pitch Dia		Major Dia		
			Min	Max	Min	Max	Min	Max	
0.0118	30-318 UNM	2B	0.0085	0.0100	0.0098	0.0103	0.0120		0.0083
0.0138	35-282 UNM	2B	0.0101	0.0117	0.0115	0.0121	0.0140		0.0096
0.0157	40-254 UNM	2B	0.0117	0.0134	0.0132	0.0138	0.0160		0.0110
0.0177	45-254 UNM	2B	0.0136	0.0154	0.0152	0.0158	0.0180		0.0124
0.0197	50-203 UNM	2B	0.0146	0.0166	0.0165	0.0172	0.0200		0.0138
0.021	0000-160 NS	2B	0.0169	0.0181	0.0169	0.0181	0.021		
0.0217	55-203 UNM	2B	0.0165	0.0186	0.0185	0.0192	0.0220		0.0150
0.0236	60-169 UNM	2B	0.0175	0.0198	0.0198	0.0206	0.0241		0.0165
0.0276	70-145 UNM	2B	0.0204	0.0231	0.0231	0.0239	0.0281		0.0197
0.0315	80-127 UNM	2B	0.0233	0.0263	0.0264	0.0273	0.0320		0.0220
0.034	000-120 NS	2B	0.0286	0.03	0.0286	0.03	0.034		
0.0354	90-113 UNM	2B	0.0262	0.0295	0.0297	0.0307	0.0361		0.0248
0.0394	100-102 UNM	2B	0.0291	0.0328	0.0330	0.0341	0.0401		0.0276
0.0433	110-102 UNM	2B	0.0331	0.0367	0.0369	0.0380	0.0440		0.0315
0.047	00-90 NS	2B	0.0398	0.0414	0.0398	0.0414	0.047		
	00-96 NS	2B	0.0402	0.0418	0.0402	0.0418	0.047		
0.0472	120-102 UNM	2B	0.0370	0.0406	0.0409	0.0420	0.0480		0.0354
0.0551	140-85 UNM	2B	0.0428	0.0471	0.0474	0.0487	0.0560		0.0386
0.06	0-80 UNF	2B	0.0465	0.0514	0.0519	0.0542	0.06		0.05
		3B	0.0465	0.0514	0.0519	0.0536	0.06		0.05
	0-72 UNF	2B	0.045	0.505	0.051	0.0535	0.06		0.05
		3B	0.045	0.505	0.051	0.0529	0.06		0.05
0.073	1-64 UNC	2B	0.0561	0.0623	0.0629	0.0655	0.073		0.06
		3B	0.0561	0.0623	0.0629	0.0648	0.073		0.06
	1-72 UNF	2B	0.058	0.0635	0.064	0.0665	0.073		0.062
		3B	0.058	0.0635	0.064	0.0659	0.073		0.062
0.086	2-56 UNC	2B	0.0667	0.0737	0.0744	0.0772	0.086		0.072
		3B	0.0667	0.0737	0.0744	0.0765	0.086		0.072
	2-64 UNF	2B	0.0691	0.0753	0.0759	0.0786	0.086		0.073
		3B	0.0691	0.0753	0.0759	0.0779	0.086		0.073
0.099	3-48 UNC	2B	0.0764	0.0845	0.0855	0.0885	0.099		0.082
		3B	0.0764	0.0845	0.0855	0.0877	0.099		0.082
	3-56 UNF	2B	0.0797	0.0865	0.0874	0.0902	0.099		0.084
		3B	0.0797	0.0865	0.0874	0.0895	0.099		0.084
0.112	4-40 UNC	2B	0.0849	0.0939	0.0958	0.0991	0.112		0.092
		3B	0.0849	0.0939	0.0958	0.0982	0.112		0.092
	4-48 UNF	2B	0.0894	0.0968	0.0985	0.1016	0.112		0.096
		3B	0.0894	0.0968	0.0985	0.1008	0.112		0.096
0.125	5-40 UNC	2B	0.0979	0.1062	0.1088	0.1121	0.125		0.105
		3B	0.0979	0.1062	0.1088	0.1113	0.125		0.105
	5-44 UNF	2B	0.1004	0.1079	0.1102	0.1134	0.125		0.108
		3B	0.1004	0.1079	0.1102	0.1126	0.125		0.108
0.138	6-32 UNC	2B	0.104	0.114	0.1177	0.1214	0.138		0.115
		3B	0.104	0.114	0.1177	0.1204	0.138		0.115
	6-40 UNF	2B	0.111	0.119	0.1218	0.1252	0.138		0.119
		3B	0.111	0.1186	0.1218	0.1243	0.138		0.119
0.164	8-32 UNC	2B	0.13	0.139	0.1437	0.1475	0.164		0.139
		3B	0.13	0.1389	0.1437	0.1465	0.164		0.139
	8-36 UNF	2B	0.134	0.142	0.146	0.1496	0.164		0.142
		3B	0.134	0.1416	0.146	0.1487	0.164		0.142
0.19	10-24 UNC	2B	0.145	0.156	0.1629	0.1672	0.19		0.155

		3B	0.145	0.1555	0.1629	0.1661	0.19		0.155
	10-28 UNS	2B	0.151	0.16	0.1668	0.1711	0.19		0.155
	10-32 UNF	2B	0.156	0.164	0.1697	0.1736	0.19		0.164
		3B	0.156	0.1641	0.1697	0.1726	0.19		0.164
	10-36 UNS	2B	0.16	0.166	0.172	0.1759	0.19		0.164
	10-40 UNS	2B	0.163	0.169	0.1738	0.1775	0.19		0.164
	10-48 UNS	2B	0.167	0.172	0.1765	0.1799	0.19		0.164
	10-56 UNS	2B	0.171	0.175	0.1784	0.1816	0.19		0.164
0.216	12-24 UNC	2B	0.171	0.181	0.1889	0.1933	0.216		0.181
		3B	0.171	0.1807	0.1889	0.1922	0.216		0.181
	12-28 UNF	2B	0.177	0.186	0.1928	0.197	0.216		0.186
		3B	0.177	0.1857	0.1928	0.1959	0.216		0.186
	12-32 UNEF	2B	0.182	0.19	0.1957	0.1998	0.216		0.19
		3B	0.182	0.1895	0.1957	0.1988	0.216		0.19
	12-36 UNS	2B	0.186	0.192	0.198	0.2019	0.216		0.19
	12-40 UNS	2B	0.189	0.195	0.1998	0.2035	0.216		0.19
	12-48 UNS	2B	0.193	0.198	0.2025	0.2059	0.216		0.19
	12-56 UNS	2B	0.197	0.201	0.2044	0.2076	0.216		0.19
0.25	1/4-20 UNC	1B	0.196	0.207	0.2175	0.2248	0.25		0.207
		2B	0.196	0.207	0.2175	0.2224	0.25		0.207
		3B	0.196	0.2067	0.2175	0.2211	0.25		0.207
	1/4-24 UNS	2B	0.205	0.215	0.2229	0.2277	0.25		0.207
	1/4-27 UNS	2B	0.21	0.219	0.2259	0.2304	0.25		0.207
	1/4-28 UNF	1B	0.211	0.22	0.2268	0.2333	0.25		0.22
		2B	0.211	0.22	0.2268	0.2311	0.25		0.22
		3B	0.211	0.219	0.2268	0.23	0.25		0.22
	1/4-32 UNEF	2B	0.216	0.224	0.2297	0.2339	0.25		0.224
		3B	0.216	0.2229	0.2297	0.2328	0.25		0.224
	1/4-36 UNS	2B	0.22	0.226	0.232	0.236	0.25		0.226
	1/4-40 UNS	2B	0.223	0.229	0.2338	0.2376	0.25		0.226
	1/4-48 UNS	2B	0.227	0.232	0.2365	0.2401	0.25		0.226
	1/4-56 UNS	2B	0.231	0.235	0.2384	0.2417	0.25		0.226
0.3125	5/16-18 UNC	1B	0.252	0.265	0.2764	0.2843	0.3125		0.266
		2B	0.252	0.265	0.2764	0.2817	0.3125		0.266
		3B	0.252	0.263	0.2764	0.2803	0.3125		0.266
	5/16-20 UN	2B	0.258	0.27	0.28	0.2852	0.3125		0.266
		3B	0.258	0.268	0.28	0.2839	0.3125		0.266
	5/16-24 UNF	1B	0.267	0.277	0.2854	0.2925	0.3125		0.277
		2B	0.267	0.277	0.2854	0.2902	0.3125		0.277
		3B	0.267	0.2754	0.2854	0.289	0.3125		0.277
	5/16-27 UNS	2B	0.272	0.281	0.2884	0.2929	0.3125		0.277
	5/16-28 UN	2B	0.274	0.282	0.2893	0.2937	0.3125		0.277
		3B	0.274	0.2807	0.2893	0.2926	0.3125		0.277
	5/16-32 UNEF	2B	0.279	0.286	0.2922	0.2964	0.3125		0.287
		3B	0.279	0.2847	0.2922	0.2953	0.3125		0.287
	5/16-36 UNS	2B	0.282	0.289	0.2945	0.2985	0.3125		0.289
	5/16-40 UNS	2B	0.285	0.291	0.2963	0.3001	0.3125		0.289
	5/16-48 UNS	2B	0.29	0.295	0.299	0.3026	0.3125		0.289
0.375	3/8-16 UNC	1B	0.307	0.321	0.3344	0.3429	0.375		0.32
		2B	0.307	0.321	0.3344	0.3401	0.375		0.32
		3B	0.307	0.3182	0.3344	0.3387	0.375		0.32
	3/8-18 UNS	2B	0.315	0.328	0.3389	0.3445	0.375		0.32
	3/8-20 UN	2B	0.321	0.332	0.3425	0.3479	0.375		0.32
		3B	0.321	0.3297	0.3425	0.3465	0.375		0.32
	3/8-24 UNF	1B	0.33	0.34	0.3479	0.3553	0.375		0.34
		2B	0.33	0.34	0.3479	0.3528	0.375		0.34

	3/8-24 UNF	3B	0.33	0.3372	0.3479	0.3516	0.375		0.34
	3/8-27 UNS	2B	0.335	0.344	0.3509	0.3556	0.375		0.34
	3/8-28 UN	2B	0.336	0.345	0.3518	0.3564	0.375		0.34
		3B	0.336	0.3426	0.3518	0.3553	0.375		0.34
	3/8-32 UNEF	2B	0.341	0.349	0.3547	0.3591	0.375		0.349
		3B	0.341	0.3469	0.3547	0.358	0.375		0.349
	3/8-36 UNS	2B	0.345	0.352	0.357	0.3612	0.375		0.351
	3/8-40 UNS	2B	0.348	0.354	0.3588	0.3628	0.375		0.351
0.39	0.390-27 UNS	2B	0.35	0.359	0.3659	0.3706	0.39		0.36
0.4375	7/16-14 UNC	1B	0.36	0.376	0.3911	0.4003	0.4375		0.378
		2B	0.36	0.376	0.3911	0.3972	0.4375		0.378
		3B	0.36	0.3717	0.3911	0.3957	0.4375		0.378
	7/16-16 UN	2B	0.37	0.384	0.3969	0.4028	0.4375		0.378
		3B	0.37	0.38	0.3969	0.4014	0.4375		0.378
	7/16-18 UNS	2B	0.377	0.39	0.4014	0.407	0.4375		0.378
	7/16-20 UNF	1B	0.383	0.395	0.405	0.4131	0.4375		0.395
		2B	0.383	0.395	0.405	0.4104	0.4375		0.395
		3B	0.383	0.3916	0.405	0.4091	0.4375		0.395
	7/16-24 UNS	2B	0.392	0.402	0.4104	0.4153	0.4375		0.395
	7/16-27 UNS	2B	0.397	0.406	0.4134	0.4181	0.4375		0.395
	7/16-28 UNEF	2B	0.399	0.407	0.4143	0.4189	0.4375		0.408
		3B	0.399	0.4051	0.4143	0.4178	0.4375		0.408
	7/16-32 UN	2B	0.404	0.411	0.4172	0.4216	0.4375		0.408
		3B	0.404	0.4094	0.4172	0.4205	0.4375		0.408
0.5	1/2-12 UNS	2B	0.41	0.428	0.4459	0.4529	0.5		0.428
		3B	0.41	0.4223	0.4459	0.4511	0.5		0.428
	1/2-13 UNC	1B	0.417	0.434	0.45	0.4597	0.5		0.428
		2B	0.417	0.434	0.45	0.4565	0.5		0.428
		3B	0.417	0.4284	0.45	0.4548	0.5		0.428
	1/2-14 UNS	2B	0.423	0.438	0.4536	0.4601	0.5		0.428
	1/2-16 UN	2B	0.432	0.446	0.4594	0.4655	0.5		0.428
		3B	0.432	0.4419	0.4594	0.464	0.5		0.428
	1/2-18 UNS	2B	0.44	0.453	0.4639	0.4697	0.5		0.428
	1/2-20 UNF	1B	0.446	0.457	0.4675	0.4759	0.5		0.458
		2B	0.446	0.457	0.4675	0.4731	0.5		0.458
		3B	0.446	0.4537	0.4675	0.4717	0.5		0.458
	1/2-24 UNS	2B	0.455	0.465	0.4729	0.478	0.5		0.458
	1/2-27 UNS	2B	0.46	0.469	0.4759	0.4807	0.5		0.458
	1/2-28 UNEF	2B	0.461	0.47	0.4768	0.4816	0.5		0.47
		3B	0.461	0.4676	0.4768	0.4804	0.5		0.47
	1/2-32 UN	2B	0.466	0.474	0.4797	0.4842	0.5		0.47
		3B	0.466	0.4719	0.4797	0.4831	0.5		0.47
0.5625	9/16-12 UNC	1B	0.472	0.49	0.5084	0.5186	0.5625		0.49
		2B	0.472	0.49	0.5084	0.5152	0.5625		0.49
		3B	0.472	0.4843	0.5084	0.5135	0.5625		0.49
	9/16-14 UNS	2B	0.485	0.501	0.5161	0.5226	0.5625		0.49
	9/16-16 UN	2B	0.495	0.509	0.5219	0.528	0.5625		0.49
		3B	0.495	0.504	0.5219	0.5265	0.5625		0.49
	9/16-18 UNF	1B	0.502	0.515	0.5264	0.5353	0.5625		0.515
		2B	0.502	0.515	0.5264	0.5323	0.5625		0.515
		3B	0.502	0.5106	0.5264	0.5308	0.5625		0.515
	9/16-20 UN	2B	0.508	0.52	0.53	0.5355	0.5625		0.515
		3B	0.508	0.5162	0.53	0.5341	0.5625		0.515
	9/16-24 UNEF	2B	0.517	0.527	0.5354	0.5405	0.5625		0.527
		3B	0.517	0.5244	0.5354	0.5392	0.5625		0.527
	9/16-27 UNS	2B	0.522	0.531	0.5384	0.5432	0.5625		0.527

	9/16-28 UN	2B	0.524	0.532	0.5393	0.5441	0.5625		0.533
		3B	0.524	0.5301	0.5393	0.5429	0.5625		0.533
	9/16-32 UN	2B	0.529	0.536	0.5422	0.5467	0.5625		0.533
		3B	0.529	0.5344	0.5422	0.5456	0.5625		0.533
0.625	5/8-11 UNC	1B	0.527	0.546	0.566	0.5767	0.625		0.546
		2B	0.527	0.546	0.566	0.5732	0.625		0.546
		3B	0.527	0.5391	0.566	0.5714	0.625		0.546
	5/8-12 UN	2B	0.535	0.553	0.5709	0.578	0.625		0.553
		3B	0.535	0.5463	0.5709	0.5762	0.625		0.553
	5/8-14 UNS	2B	0.548	0.564	0.5786	0.5852	0.625		0.553
	5/8-16 UN	2B	0.557	0.571	0.5844	0.5906	0.625		0.553
		3B	0.557	0.5662	0.5844	0.589	0.625		0.553
	5/8-18 UNF	1B	0.565	0.578	0.5889	0.598	0.625		0.579
		2B	0.565	0.578	0.5889	0.5949	0.625		0.579
		3B	0.565	0.573	0.5889	0.5934	0.625		0.579
	5/8-20 UN	2B	0.571	0.582	0.5925	0.5981	0.625		0.579
		3B	0.571	0.5787	0.5925	0.5967	0.625		0.579
	5/8-24 UNEF	2B	0.58	0.59	0.5979	0.6031	0.625		0.59
		3B	0.58	0.5869	0.5979	0.6018	0.625		0.59
	5/8-27 UNS	2B	0.585	0.594	0.6009	0.6059	0.625		0.59
	5/8-28 UN	2B	0.586	0.595	0.6018	0.6067	0.625		0.595
		3B	0.586	0.5926	0.6018	0.6055	0.625		0.595
	5/8-32 UN	2B	0.591	0.599	0.6047	0.6093	0.625		0.595
		3B	0.591	0.5969	0.6047	0.6082	0.625		0.595
0.6875	11/16-12 UN	2B	0.597	0.615	0.6334	0.6405	0.6875		0.616
		3B	0.597	0.6085	0.6334	0.6387	0.6875		0.616
	11/16-16 UN	2B	0.62	0.634	0.6469	0.6531	0.6875		0.616
		3B	0.62	0.6284	0.6469	0.6515	0.6875		0.616
	11/16-20 UN	2B	0.633	0.645	0.655	0.6606	0.6875		0.616
		3B	0.633	0.6412	0.655	0.6592	0.6875		0.616
	11/16-24 UNEF	2B	0.642	0.652	0.6604	0.6656	0.6875		0.652
		3B	0.642	0.6494	0.6604	0.6643	0.6875		0.652
	11/16-28 UN	2B	0.649	0.657	0.6643	0.6692	0.6875		0.652
		3B	0.649	0.6551	0.6643	0.668	0.6875		0.652
	11/16-32 UN	2B	0.654	0.661	0.6672	0.6718	0.6875		0.652
		3B	0.654	0.6594	0.6672	0.6707	0.6875		0.652
0.75	3/4-10 UNC	1B	0.642	0.663	0.685	0.6965	0.75		0.663
		2B	0.642	0.663	0.685	0.6927	0.75		0.663
		3B	0.642	0.6545	0.685	0.6907	0.75		0.663
	3/4-12 UN	2B	0.66	0.678	0.6959	0.7031	0.75		0.68
		3B	0.66	0.6707	0.6959	0.7013	0.75		0.68
	3/4-14 UNS	2B	0.673	0.688	0.7036	0.7103	0.75		0.68
	3/4-16 UNF	1B	0.682	0.696	0.7094	0.7192	0.75		0.697
		2B	0.682	0.696	0.7094	0.7159	0.75		0.697
		3B	0.682	0.6908	0.7094	0.7143	0.75		0.697
	3/4-18 UNS	2B	0.69	0.703	0.7139	0.7199	0.75		0.697
	3/4-20 UNEF	2B	0.696	0.707	0.7175	0.7232	0.75		0.707
		3B	0.696	0.7037	0.7175	0.7218	0.75		0.707
0.75	3/4-24 UNS	2B	0.705	0.715	0.7229	0.7282	0.75		0.707
	3/4-24 UNS	2B	0.71	0.719	0.7259	0.731	0.75		0.707
	3/4-28 UN	2B	0.711	0.72	0.7268	0.7318	0.75		0.72
		3B	0.711	0.7176	0.7268	0.7305	0.75		0.72
	3/4-32 UN	2B	0.716	0.724	0.7297	0.7344	0.75		0.72
		3B	0.716	0.7219	0.7297	0.7333	0.75		0.72
0.8125	13/16-10 UNC	2B	0.7045	0.7255	0.7475	0.759	0.8125		0.74
		3B	0.7045	0.7255	0.7475	0.7552	0.8125		0.74

	13/16-12 UN	2B	0.722	0.74	0.7584	0.7656	0.8125		0.74
		3B	0.722	0.7329	0.7584	0.7638	0.8125		0.74
	13/16-16 UN	2B	0.745	0.759	0.7719	0.7782	0.8125		0.759
		3B	0.745	0.7533	0.7719	0.7766	0.8125		0.759
	13/16-20 UNEF	2B	0.758	0.77	0.78	0.7857	0.8125		0.769
		3B	0.758	0.7662	0.78	0.7843	0.8125		0.796
	13/16-28 UN	2B	0.774	0.782	0.7893	0.7943	0.8125		0.796
		3B	0.774	0.7801	0.7893	0.793	0.8125		0.796
	13/16-32 UN	2B	0.779	0.786	0.7922	0.7969	0.8125		0.796
		3B	0.779	0.7844	0.7922	0.7958	0.8125		0.796
0.875	7/8-9 UNC	1B	0.755	0.778	0.8028	0.8151	0.875		0.78
		2B	0.755	0.778	0.8028	0.811	0.875		0.78
		3B	0.755	0.7681	0.8028	0.8089	0.875		0.78
	7/8-10 UNS	2B	0.767	0.788	0.81	0.8178	0.875		0.78
	7/8-12 UN	2B	0.785	0.803	0.8209	0.8281	0.875		0.805
		3B	0.785	0.7948	0.8209	0.8263	0.875		0.805
	7/8-14 UNF	1B	0.798	0.814	0.8286	0.8392	0.875		0.814
		2B	0.798	0.814	0.8286	0.8356	0.875		0.814
		3B	0.798	0.8068	0.8286	0.8339	0.875		0.814
	7/8-16 UN	2B	0.807	0.821	0.8344	0.8407	0.875		0.821
		3B	0.807	0.8158	0.8344	0.8391	0.875		0.821
	7/8-18 UNS	2B	0.815	0.828	0.8389	0.8449	0.875		0.821
	7/8-20 UNEF	2B	0.821	0.832	0.8425	0.8482	0.875		0.833
		3B	0.821	0.8287	0.8425	0.8468	0.875		0.833
	7/8-24 UNS	2B	0.83	0.84	0.8479	0.8532	0.875		0.833
	7/8-27 UNS	2B	0.835	0.844	0.8509	0.856	0.875		0.833
	7/8-28 UN	2B	0.836	0.845	0.8518	0.8568	0.875		0.845
		3B	0.836	0.8426	0.8518	0.8555	0.875		0.845
	7/8-32 UN	2B	0.841	0.849	0.8547	0.8594	0.875		0.845
		3B	0.841	0.8469	0.8547	0.8583	0.875		0.845
0.9375	15/16-9 UNC	2B	0.8175	0.8405	0.8653	0.8735	0.9375		0.865
		3B	0.8175	0.8306	0.8653	0.8714	0.9375		0.865
	15/16-12 UN	2B	0.847	0.865	0.8834	0.8908	0.9375		0.865
		3B	0.847	0.8575	0.8834	0.8889	0.9375		0.865
	15/16-16 UN	2B	0.87	0.884	0.8969	0.9034	0.9375		0.885
		3B	0.87	0.8783	0.8969	0.9018	0.9375		0.885
	15/16-20 UNEF	2B	0.883	0.895	0.905	0.9109	0.9375		0.895
		3B	0.883	0.8912	0.905	0.9094	0.9375		0.895
	15/16-28 UN	2B	0.899	0.907	0.9143	0.9195	0.9375		0.895
		3B	0.899	0.9051	0.9143	0.9182	0.9375		0.895
	15/16-32 UN	2B	0.904	0.911	0.9172	0.9221	0.9375		0.895
		3B	0.904	0.9094	0.9172	0.9209	0.9375		0.895
1	1-8 UNC	1B	0.865	0.89	0.9188	0.932	1		0.89
		2B	0.865	0.89	0.9188	0.9276	1		0.89
		3B	0.865	0.8797	0.9188	0.9254	1		0.89
	1-10 UNS	2B	0.892	0.913	0.935	0.943	1		0.93
	1-12 UNF	1B	0.91	0.928	0.9459	0.9573	1		0.93
		2B	0.91	0.928	0.9459	0.9535	1		0.93
		3B	0.91	0.9198	0.9459	0.9516	1		0.93
	1-14 UNS	1B	0.923	0.938	0.9536	0.9645	1		0.938
		2B	0.923	0.938	0.9536	0.9609	1		0.938
		3B	0.923	0.9315	0.9536	0.959	1		0.938
	1-16 UN	2B	0.932	0.946	0.9594	0.9659	1		0.947
		3B	0.932	0.9408	0.9594	0.9643	1		0.947
	1-18 UNS	2B	0.94	0.953	0.9639	0.9701	1		0.947
	1-20 UNEF	2B	0.946	0.957	0.9675	0.9734	1		0.947

		3B	0.946	0.9537	0.9675	0.9719	1		0.947
	1-24 UNS	2B	0.955	0.965	0.9729	0.9784	1		0.947
	1-27 UNS	2B	0.96	0.969	0.9759	0.9811	1		0.947
	1-28 UN	2B	0.961	0.97	0.9768	0.982	1		0.97
		3B	0.961	0.9676	0.9768	0.9807	1		0.97
	1-32 UN	2B	0.966	0.974	0.9797	0.9846	1		0.97
		3B	0.966	0.9719	0.9797	0.9834	1		0.97
1.0625	1 1/16-8 UN	2B	0.927	0.952	0.9813	0.9902	1.0625		0.99
		3B	0.927	0.9422	0.9813	0.988	1.0625		0.99
	1 1/16-8 UNC	2B	0.9115	0.9365	0.9658	0.9747	1.0625		0.99
	1 1/16-12 UNC	2B	0.972	0.99	1.0084	1.0158	1.0625		0.99
		3B	0.972	0.9823	1.0084	1.0139	1.0625		0.99
	1 1/16-16 UNC	2B	0.995	1.009	1.0219	1.0284	1.0625		1.059
		3B	0.995	1.0033	1.0219	1.0268	1.0625		1.059
	1 1/16-18 UNEF	2B	1.002	1.015	1.0264	1.0326	1.0625		1.015
		3B	1.002	1.0105	1.0264	1.031	1.0625		1.015
	1 1/16-20 UN	2B	1.008	1.02	1.03	1.0359	1.0625		1.015
		3B	1.008	1.0162	1.03	1.0344	1.0625		1.015
	1 1/16-28 UN	2B	1.024	1.032	1.0393	1.0445	1.0625		1.015
		3B	1.024	1.0301	1.0393	1.0432	1.0625		1.015
1.125	1 1/8-7 UNC	1B	0.97	0.998	1.0322	1.0463	1.125		1
		2B	0.97	0.998	1.0322	1.0416	1.125		1
		3B	0.97	0.9875	1.0322	1.0393	1.125		1
	1 1/8-8 UN	2B	0.99	1.015	1.0438	1.0528	1.125		1.015
		3B	0.99	1.0047	1.0438	1.0505	1.125		1.015
	1 1/8-8 UNC	2B	0.9690	0.9940	1.0228	1.0318	1.1250		1.015
	1 1/8-10 UNS	2B	1.017	1.038	1.06	1.068	1.125		1.015
	1 1/8-12 UNF	1B	1.035	1.053	1.0709	1.0826	1.125		1.055
		2B	1.035	1.053	1.0709	1.0787	1.125		1.055
		3B	1.035	1.0448	1.0709	1.0768	1.125		1.055
	1 1/8-14 UNS	2B	1.048	1.064	1.0786	1.0855	1.125		1.055
	1 1/8-16 UN	2B	1.057	1.071	1.0844	1.0909	1.125		1.07
		3B	1.057	1.0658	1.0844	1.0893	1.125		1.07
	1 1/8-18 UNEF	2B	1.065	1.078	1.0889	1.0951	1.125		1.078
		3B	1.065	1.073	1.0889	1.0935	1.125		1.078
	1 1/8-20 UN	2B	1.071	1.082	1.0925	1.0984	1.125		1.082
		3B	1.071	1.0787	1.0925	1.0969	1.125		1.082
	1 1/8-24 UNS	2B	1.08	1.09	1.0979	1.1034	1.125		1.082
	1 1/8-28 UN	2B	1.086	1.095	1.1018	1.107	1.125		1.095
		3B	1.086	1.0926	1.1018	1.1057	1.125		1.095
1.1875	1 3/16-8 UN	2B	1.052	1.077	1.1063	1.1154	1.1875		1.115
		3B	1.052	1.0672	1.1063	1.1131	1.1875		1.115
	1 3/16-12 UN	2B	1.097	1.115	1.1334	1.1409	1.1875		1.115
		3B	1.097	1.1073	1.1334	1.139	1.1875		1.115
	1 3/16-16 UN	2B	1.12	1.134	1.1469	1.1535	1.1875		1.135
		3B	1.12	1.1283	1.1469	1.1519	1.1875		1.135
	1 3/16-18 UNEF	2B	1.127	1.14	1.1514	1.1577	1.1875		1.14
		3B	1.127	1.1355	1.1514	1.1561	1.1875		1.14
	1 3/16-20 UN	2B	1.133	1.145	1.155	1.1611	1.1875		1.14
		3B	1.133	1.1412	1.155	1.1595	1.1875		1.14
	1 3/16-28 UN	2B	1.149	1.157	1.1643	1.1696	1.1875		1.14
		3B	1.149	1.1551	1.1643	1.1683	1.1875		1.14
1.25	1 1/4-7 UNC	1B	1.095	1.123	1.1572	1.1716	1.25		1.125
		2B	1.095	1.123	1.1572	1.1668	1.25		1.125
		3B	1.095	1.1125	1.1572	1.1644	1.25		1.125
	1 1/4-8 UN	2B	1.115	1.14	1.1688	1.178	1.25		1.14

		3B	1.115	1.1297	1.1688	1.1757	1.25		1.14
	1 1/4-8 UNC	2B	1.0648	1.0898	1.1186	1.1278	1.2500		1.14
	1 1/4-10 UNS	2B	1.142	1.163	1.185	1.1932	1.25		1.14
	1 1/4-12 UNF	1B	1.16	1.178	1.1959	1.2079	1.25		1.18
		2B	1.16	1.178	1.1959	1.2039	1.25		1.18
		3B	1.16	1.1698	1.1959	1.2019	1.25		1.18
	1 1/4-14 UNS	2B	1.173	1.188	1.2036	1.2106	1.25		1.18
	1 1/4-16 UN	2B	1.182	1.196	1.2094	1.216	1.25		1.197
		3B	1.182	1.1908	1.2094	1.2144	1.25		1.197
	1 1/4-18 UNEF	2B	1.19	1.203	1.2139	1.2202	1.25		1.203
		3B	1.19	1.198	1.2139	1.2186	1.25		1.203
	1 1/4-20 UN	2B	1.196	1.207	1.2175	1.2236	1.25		1.207
		3B	1.196	1.2037	1.2175	1.222	1.25		1.207
	1 1/4-24 UNS	2B	1.205	1.215	1.2229	1.2285	1.25		1.207
	1 1/4-28 UN	2B	1.211	1.22	1.2268	1.2321	1.25		1.207
		3B	1.211	1.2176	1.2268	1.2308	1.25		1.207
1.3125	1 5/16-8 UN	2B	1.177	1.202	1.2313	1.2405	1.3125		1.24
		3B	1.177	1.1922	1.2313	1.2382	1.3125		1.24
	1 5/16-12 UN	2B	1.222	1.24	1.2584	1.2659	1.3125		1.24
		3B	1.222	1.2323	1.2584	1.264	1.3125		1.24
	1 5/16-16 UN	2B	1.245	1.259	1.2719	1.2785	1.3125		1.26
		3B	1.245	1.2533	1.2719	1.2769	1.3125		1.26
	1 5/16-18 UNEF	2B	1.252	1.265	1.2764	1.2827	1.3125		1.265
		3B	1.252	1.2605	1.2764	1.2811	1.3125		1.265
	1 5/16-20 UN	2B	1.258	1.27	1.28	1.2861	1.3125		1.265
		3B	1.258	1.2662	1.28	1.2845	1.3125		1.265
	1 5/16-28 UN	2B	1.274	1.282	1.2893	1.2946	1.3125		1.265
		3B	1.274	1.2801	1.2893	1.2933	1.3125		1.265
1.375	1 3/8-6 UNC	1B	1.195	1.225	1.2667	1.2822	1.375		1.23
		2B	1.195	1.225	1.2667	1.2771	1.375		1.23
		3B	1.195	1.2146	1.2667	1.2745	1.375		1.23
	1 3/8-8 UN	2B	1.24	1.265	1.2938	1.3031	1.375		1.265
		3B	1.24	1.2547	1.2938	1.3008	1.375		1.265
	1 3/8-10 UNS	2B	1.267	1.288	1.31	1.3182	1.375		1.265
	1 3/8-12 UNF	1B	1.285	1.303	1.3209	1.3332	1.375		1.305
		2B	1.285	1.303	1.3209	1.3291	1.375		1.305
		3B	1.285	1.2948	1.3209	1.327	1.375		1.305
	1 3/8-14 UNS	2B	1.298	1.314	1.3286	1.3356	1.375		1.305
	1 3/8-16 UN	2B	1.307	1.321	1.3344	1.341	1.375		1.321
		3B	1.307	1.3158	1.3344	1.3394	1.375		1.321
	1 3/8-18 UNEF	2B	1.315	1.328	1.3389	1.3452	1.375		1.327
		3B	1.315	1.323	1.3389	1.3436	1.375		1.327
	1 3/8-20 UN	2B	1.321	1.332	1.3425	1.3486	1.375		1.327
		3B	1.321	1.3287	1.3425	1.347	1.375		1.327
	1 3/8-24 UNS	2B	1.33	1.34	1.3479	1.3535	1.375		1.327
	1 3/8-28 UN	2B	1.336	1.345	1.3518	1.3571	1.375		1.327
		3B	1.336	1.3426	1.3518	1.3558	1.375		1.327
1.4375	1 7/16-6 UN	2B	1.257	1.288	1.3292	1.3396	1.4375		1.365
		3B	1.257	1.2771	1.3292	1.337	1.4375		1.365
	1 7/16-8 UN	2B	1.302	1.327	1.3563	1.3657	1.4375		1.365
		3B	1.302	1.3172	1.3563	1.3634	1.4375		1.365
	1 7/16-12 UN	2B	1.347	1.365	1.3834	1.391	1.4375		1.365
		3B	1.347	1.3573	1.3834	1.3891	1.4375		1.365
	1 7/16-16 UN	2B	1.37	1.384	1.3969	1.4037	1.4375		1.385
		3B	1.37	1.3783	1.3969	1.402	1.4375		1.385
	1 7/16-18 UNEF	2B	1.377	1.39	1.4014	1.4079	1.4375		1.39

		3B	1.377	1.3855	1.4014	1.4062	1.4375		1.39
	1 7/16-20 UN	2B	1.383	1.395	1.405	1.4112	1.4375		1.39
		3B	1.383	1.3912	1.405	1.4096	1.4375		1.39
	1 7/16-28 UN	2B	1.399	1.407	1.4143	1.4198	1.4375		1.39
		3B	1.399	1.4051	1.4143	1.4184	1.4375		1.39
1.5	1 1/2-6 UNC	1B	1.32	1.35	1.3917	1.4075	1.5		1.355
		2B	1.32	1.35	1.3917	1.4022	1.5		1.355
		3B	1.32	1.3396	1.3917	1.3996	1.5		1.355
	1 1/2-8 UN	2B	1.365	1.39	1.4188	1.4283	1.5		1.39
		3B	1.365	1.3797	1.4188	1.4259	1.5		1.39
	1 1/2-10 UNS	2B	1.392	1.413	1.435	1.4433	1.5		1.39
	1 1/2-12 UNF	1B	1.41	1.428	1.4459	1.4584	1.5		1.43
		2B	1.41	1.428	1.4459	1.4542	1.5		1.43
		3B	1.41	1.4198	1.4459	1.4522	1.5		1.43
	1 1/2-14 UNS	2B	1.423	1.438	1.4536	1.4608	1.5		1.43
	1 1/2-16 UN	2B	1.432	1.446	1.4594	1.4662	1.5		1.447
		3B	1.432	1.4408	1.4594	1.4645	1.5		1.447
	1 1/2-18 UNEF	2B	1.44	1.452	1.4639	1.4704	1.5		1.453
		3B	1.44	1.448	1.4639	1.4687	1.5		1.453
	1 1/2-20 UN	2B	1.446	1.457	1.4675	1.4737	1.5		1.457
		3B	1.446	1.4537	1.4675	1.4721	1.5		1.457
	1 1/2-24 UNS	2B	1.455	1.465	1.4729	1.4787	1.5		1.457
	1 1/2-28 UN	2B	1.461	1.47	1.4768	1.4823	1.5		1.457
		3B	1.461	1.4676	1.4768	1.4809	1.5		1.457
	1 9/16-6 UN	2B	1.382	1.413	1.4542	1.4648	1.5625		1.5
		3B	1.382	1.4021	1.4542	1.4622	1.5625		1.5
1.5625	1 9/16-8 UN	2B	1.427	1.452	1.4813	1.4909	1.5625		1.5
		3B	1.427	1.4422	1.4813	1.4885	1.5625		1.5
	1 9/16-12 UN	2B	1.472	1.49	1.5084	1.516	1.5625		1.5
		3B	1.472	1.4823	1.5084	1.5141	1.5625		1.5
	1 9/16-16 UN	2B	1.495	1.509	1.5219	1.5287	1.5625		1.509
		3B	1.495	1.5033	1.5219	1.527	1.5625		1.509
	1 9/16-18 UNEF	2B	1.502	1.515	1.5264	1.5329	1.5625		1.515
		3B	1.502	1.5105	1.5264	1.5312	1.5625		1.515
	1 9/16-20 UN	2B	1.508	1.52	1.53	1.5362	1.5625		1.515
		3B	1.508	1.5162	1.53	1.5346	1.5625		1.515
1.625	1 5/8-6 UN	2B	1.445	1.475	1.5167	1.5274	1.625		1.51
		3B	1.445	1.4646	1.5167	1.5247	1.625		1.51
	1 5/8-8 UN	2B	1.49	1.515	1.5438	1.5535	1.625		1.515
		3B	1.49	1.5047	1.5438	1.551	1.625		1.515
	1 5/8-10 UNS	2B	1.517	1.538	1.56	1.5683	1.625		1.515
	1 5/8-12 UN	2B	1.535	1.553	1.5709	1.5785	1.625		1.554
		3B	1.535	1.5448	1.5709	1.5766	1.625		1.554
	1 5/8-14 UNS	2B	1.548	1.564	1.5786	1.5858	1.625		1.554
	1 5/8-16 UN	2B	1.557	1.571	1.5844	1.5912	1.625		1.57
		3B	1.557	1.5658	1.5844	1.5895	1.625		1.57
	1 5/8-18 UNEF	2B	1.565	1.578	1.5889	1.5954	1.625		1.579
		3B	1.565	1.573	1.5889	1.5937	1.625		1.579
	1 5/8-20 UN	2B	1.571	1.582	1.5925	1.5987	1.625		1.579
		3B	1.571	1.5787	1.5925	1.5971	1.625		1.579
	1 5/8-24 UNS	2B	1.58	1.59	1.5979	1.6037	1.625		1.579
1.6875	1 11/16-6 UN	2B	1.507	1.538	1.5792	1.59	1.6875		1.63
		3B	1.507	1.5271	1.5792	1.5873	1.6875		1.63
	1 11/16-8 UN	2B	1.552	1.577	1.6063	1.616	1.6875		1.63
		3B	1.552	1.5672	1.6063	1.6136	1.6875		1.63
	1 11/16-12 UN	2B	1.597	1.615	1.6334	1.6412	1.6875		1.63

		3B	1.597	1.6073	1.6334	1.6392	1.6875		1.63
	1 11/16-16 UN	2B	1.62	1.634	1.6469	1.6538	1.6875		1.635
		3B	1.62	1.6283	1.6469	1.6521	1.6875		1.635
	1 11/16-18 UNEF	2B	1.627	1.64	1.6514	1.658	1.6875		1.64
		3B	1.627	1.6355	1.6514	1.6563	1.6875		1.64
	1 11/16-20 UN	2B	1.633	1.645	1.655	1.6613	1.6875		1.64
		3B	1.633	1.6412	1.655	1.6597	1.6875		1.64
1.75	1 3/4-5 UNC	1B	1.534	1.568	1.6201	1.6375	1.75		1.57
		2B	1.534	1.568	1.6201	1.6317	1.75		1.57
		3B	1.534	1.5575	1.6201	1.6288	1.75		1.57
	1 3/4-6 UN	2B	1.57	1.6	1.6417	1.6525	1.75		1.57
		3B	1.57	1.5896	1.6417	1.6498	1.75		1.57
	1 3/4-8 UN	2B	1.615	1.64	1.6688	1.6786	1.75		1.64
		3B	1.615	1.6297	1.6688	1.6762	1.75		1.64
	1 3/4-10 UNS	2B	1.642	1.663	1.685	1.6934	1.75		1.64
	1 3/4-12 UN	2B	1.66	1.678	1.6959	1.7037	1.75		1.68
		3B	1.66	1.6698	1.6959	1.7017	1.75		1.68
	1 3/4-14 UNS	2B	1.673	1.688	1.7036	1.7109	1.75		1.68
	1 3/4-16 UN	2B	1.682	1.696	1.7094	1.7163	1.75		1.697
		3B	1.682	1.6908	1.7094	1.7146	1.75		1.697
	1 3/4-18 UNS	2B	1.69	1.703	1.7139	1.7205	1.75		1.697
	1 3/4-20 UN	2B	1.696	1.707	1.7175	1.7238	1.75		1.707
		3B	1.696	1.7037	1.7175	1.7222	1.75		1.707
1.8125	1 13/16-6 UN	2B	1.632	1.663	1.7042	1.7151	1.8125		1.76
		3B	1.632	1.6521	1.7042	1.7124	1.8125		1.76
	1 13/16-8 UN	2B	1.677	1.702	1.7313	1.7412	1.8125		1.76
		3B	1.677	1.6922	1.7313	1.7387	1.8125		1.76
	1 13/16-12 UN	2B	1.722	1.74	1.7584	1.7662	1.8125		1.76
		3B	1.722	1.7323	1.7584	1.7642	1.8125		1.76
	1 13/16-16 UN	2B	1.745	1.759	1.7719	1.7788	1.8125		1.76
		3B	1.745	1.7533	1.7719	1.7771	1.8125		1.76
	1 13/16-20 UN	2B	1.758	1.77	1.78	1.7863	1.8125		1.76
		3B	1.758	1.7662	1.78	1.7847	1.8125		1.76
1.875	1 7/8-6 UN	2B	1.695	1.725	1.7667	1.7777	1.875		1.765
		3B	1.695	1.7146	1.7667	1.7749	1.875		1.765
	1 7/8-8 UN	2B	1.74	1.765	1.7938	1.8038	1.875		1.765
		3B	1.74	1.7547	1.7938	1.8013	1.875		1.765
	1 7/8-10 UNS	2B	1.767	1.788	1.81	1.8184	1.875		1.765
	1 7/8-12 UN	2B	1.785	1.803	1.8209	1.8287	1.875		1.804
		3B	1.785	1.7948	1.8209	1.8267	1.875		1.804
	1 7/8-14 UNS	2B	1.798	1.814	1.8286	1.8359	1.875		1.804
	1 7/8-16 UN	2B	1.807	1.821	1.8344	1.8413	1.875		1.823
		3B	1.807	1.8158	1.8344	1.8396	1.875		1.823
	1 7/8-18 UNS	2B	1.815	1.828	1.8389	1.8455	1.875		1.823
	1 7/8-20 UN	2B	1.821	1.832	1.8425	1.8488	1.875		1.823
		3B	1.821	1.8287	1.8425	1.8472	1.875		1.823
1.9375	1 15/16-6 UN	2B	1.757	1.788	1.8292	1.8403	1.9375		1.88
		3B	1.757	1.7771	1.8292	1.8375	1.9375		1.88
	1 15/16-8 UN	2B	1.802	1.827	1.8563	1.8663	1.9375		1.88
		3B	1.802	1.8172	1.8563	1.8638	1.9375		1.88
	1 15/16-12 UN	2B	1.847	1.865	1.8834	1.8913	1.9375		1.88
		3B	1.847	1.8573	1.8834	1.8893	1.9375		1.88
	1 15/16-16 UN	2B	1.87	1.884	1.8969	1.9039	1.9375		1.885
		3B	1.87	1.8783	1.8969	1.9021	1.9375		1.885
	1 15/16-20 UN	2B	1.883	1.895	1.905	1.9114	1.9375		1.885
		3B	1.883	1.8912	1.905	1.9098	1.9375		1.885

2	2-4.5 UNC	1B	1.759	1.795	1.8557	1.8743	2	1.8
		2B	1.759	1.795	1.8557	1.8681	2	1.8
		3B	1.759	1.7861	1.8557	1.865	2	1.8
	2-6 UN	2B	1.82	1.85	1.8917	1.9028	2	1.89
		3B	1.82	1.8396	1.8917	1.9	2	1.89
	2-8 UN	2B	1.865	1.89	1.9188	1.9289	2	1.89
		3B	1.865	1.8797	1.9188	1.9264	2	1.89
	2-10 UNS	2B	1.892	1.913	1.935	1.9435	2	1.89
	2-12 UN	2B	1.91	1.928	1.9459	1.9538	2	1.93
		3B	1.91	1.9198	1.9459	1.9518	2	1.93
	2-14 UNS	2B	1.923	1.938	1.9536	1.961	2	1.93
	2-16 UN	2B	1.932	1.946	1.9594	1.9664	2	1.947
		3B	1.932	1.9408	1.9594	1.9646	2	1.947
	2-18 UNS	2B	1.94	1.953	1.9639	1.9706	2	1.947
	2-20 UN	2B	1.946	1.957	1.9675	1.9739	2	1.958
		3B	1.946	1.9537	1.9675	1.9723	2	1.958
2.0625	2 1/16-16 UNS	2B	1.995	2.009	2.0219	2.0289	2.0625	2.01
		3B	1.995	2.0033	2.0219	2.0271	2.0625	2.01
2.125	2 1/8-6 UN	2B	1.945	1.975	2.0167	2.028	2.125	2.015
		3B	1.945	1.9646	2.0167	2.0251	2.125	2.015
	2 1/8-8 UN	2B	1.99	2.015	2.0438	2.054	2.125	2.015
		3B	1.99	2.0047	2.0438	2.0515	2.125	2.015
	2 1/8-12 UN	2B	2.035	2.053	2.0709	2.0788	2.125	2.055
		3B	2.035	2.0448	2.0709	2.0768	2.125	2.055
	2 1/8-16 UN	2B	2.057	2.071	2.0844	2.0914	2.125	2.07
		3B	2.057	2.0658	2.0844	2.0896	2.125	2.07
	2 1/8-20 UN	2B	2.071	2.082	2.0925	2.0989	2.125	2.07
		3B	2.071	2.0787	2.0925	2.0973	2.125	2.07
2.1875	2 3/16-16 UNS	2B	2.12	2.134	2.1469	2.1539	2.1875	2.135
		3B	2.12	2.1283	2.1469	2.1521	2.1875	2.135
2.25	2 1/4-4.5 UNC	1B	2.009	2.045	2.1057	2.1247	2.25	2.045
		2B	2.009	2.045	2.1057	2.1183	2.25	2.045
		3B	2.009	2.0361	2.1057	2.1152	2.25	2.045
	2 1/4-6 UN	2B	2.07	2.1	2.1417	2.1531	2.25	2.045
		3B	2.07	2.0896	2.1417	2.1502	2.25	2.045
	2 1/4-8 UN	2B	2.115	2.14	2.1688	2.1792	2.25	2.14
		3B	2.115	2.1297	2.1688	2.1766	2.25	2.14
	2 1/4-10 UNS	2B	2.142	2.163	2.185	2.1935	2.25	2.14
	2 1/4-12 UN	2B	2.16	2.178	2.1959	2.2038	2.25	2.178
		3B	2.16	2.1698	2.1959	2.2018	2.25	2.178
	2 1/4-14 UNS	2B	2.173	2.188	2.2036	2.211	2.25	2.178
	2 1/4-16 UN	2B	2.182	2.196	2.2094	2.2164	2.25	2.197
		3B	2.182	2.1908	2.2094	2.2146	2.25	2.197
	2 1/4-18 UNS	2B	2.19	2.203	2.2139	2.2206	2.25	2.197
	2 1/4-20 UN	2B	2.196	2.207	2.2175	2.2239	2.25	2.207
		3B	2.196	2.2037	2.2175	2.2223	2.25	2.207
2.3125	2 5/16-16 UNS	2B	2.245	2.259	2.2719	2.2791	2.3125	2.26
		3B	2.245	2.2533	2.2719	2.2773	2.3125	2.26
2.375	2 3/8-6 UN	2B	2.195	2.226	2.2667	2.2782	2.375	2.3
		3B	2.195	2.2146	2.2667	2.2753	2.375	2.3
	2 3/8-8 UN	2B	2.24	2.265	2.2938	2.3043	2.375	2.3
		3B	2.24	2.2547	2.2938	2.3017	2.375	2.3
	2 3/8-12 UN	2B	2.285	2.303	2.3209	2.329	2.375	2.305
		3B	2.285	2.2948	2.3209	2.3269	2.375	2.305
	2 3/8-16 UN	2B	2.307	2.321	2.3344	2.3416	2.375	2.32
		3B	2.307	2.3158	2.3344	2.3398	2.375	2.32

	2 3/8-20 UN	2B	2.321	2.332	2.3425	2.3491	2.375		2.32
		3B	2.321	2.3287	2.3425	2.3475	2.375		2.32
2.4375	2 7/16-16 UNS	2B	2.37	2.384	2.3969	2.4041	2.4375		2.385
		3B	2.37	2.3783	2.3969	2.4023	2.4375		2.385
2.5	2 1/2-4 UNC	1B	2.229	2.267	2.3376	2.3578	2.5		2.265
		2B	2.229	2.267	2.3376	2.3511	2.5		2.265
		3B	2.229	2.2594	2.3376	2.3477	2.5		2.265
	2 1/2-6 UN	2B	2.32	2.35	2.3917	2.4033	2.5		2.265
		3B	2.32	2.3396	2.3917	2.4004	2.5		2.265
	2 1/2-8 UN	2B	2.365	2.39	2.4188	2.4294	2.5		2.39
		3B	2.365	2.3797	2.4188	2.4268	2.5		2.39
	2 1/2-10 UNS	2B	2.392	2.413	2.435	2.4437	2.5		2.39
	2 1/2-12 UN	2B	2.41	2.428	2.4459	2.454	2.5		2.43
		3B	2.41	2.4198	2.4459	2.4519	2.5		2.43
	2 1/2-14 UNS	2B	2.423	2.438	2.4536	2.4612	2.5		2.43
	2 1/2-16 UN	2B	2.432	2.446	2.4594	2.4666	2.5		2.447
		3B	2.432	2.4408	2.4594	2.4648	2.5		2.447
	2 1/2-18 UNS	2B	2.44	2.453	2.4639	2.4708	2.5		2.447
	2 1/2-20 UN	2B	2.446	2.457	2.4675	2.4741	2.5		2.5
		3B	2.446	2.4537	2.4675	2.4725	2.5		2.5
2.625	2 5/8-6 UN	2B	2.445	2.475	2.5167	2.5285	2.625		2.5
		3B	2.445	2.4646	2.5167	2.5255	2.625		2.5
	2 5/8-8 UN	2B	2.49	2.515	2.5438	2.5545	2.625		2.5
		3B	2.49	2.5047	2.5438	2.5518	2.625		2.5
	2 5/8-12 UN	2B	2.535	2.553	2.5709	2.579	2.625		2.555
		3B	2.535	2.5448	2.5709	2.5769	2.625		2.555
	2 5/8-16 UN	2B	2.557	2.571	2.5844	2.5916	2.625		2.571
		3B	2.557	2.5658	2.5844	2.5898	2.625		2.571
	2 5/8-20 UN	2B	2.571	2.582	2.5925	2.5991	2.625		2.571
		3B	2.571	2.5787	2.5925	2.5975	2.625		2.571
2.75	2 3/4-4 UNC	1B	2.479	2.517	2.5876	2.6082	2.75		2.515
		2B	2.479	2.517	2.5876	2.6013	2.75		2.515
		3B	2.479	2.5094	2.5876	2.5979	2.75		2.515
	2 3/4-6 UN	2B	2.57	2.6	2.6417	2.6536	2.75		2.515
		3B	2.57	2.5896	2.6417	2.6506	2.75		2.515
	2 3/4-8 UN	2B	2.615	2.64	2.6688	2.6796	2.75		2.639
		3B	2.615	2.6297	2.6688	2.6769	2.75		2.639
	2 3/4-10 UNS	2B	2.642	2.663	2.685	2.6937	2.75		2.639
	2 3/4-12 UN	2B	2.66	2.678	2.6959	2.704	2.75		2.68
		3B	2.66	2.6698	2.6959	2.7019	2.75		2.68
	2 3/4-14 UNS	2B	2.673	2.688	2.7036	2.7112	2.75		2.68
	2 3/4-16 UN	2B	2.682	2.696	2.7094	2.7166	2.75		2.697
		3B	2.682	2.6908	2.7094	2.7148	2.75		2.697
	2 3/4-18 UNS	2B	2.69	2.703	2.7139	2.7208	2.75		2.697
	2 3/4-20 UN	2B	2.696	2.707	2.7175	2.7241	2.75		2.697
		3B	2.696	2.7037	2.7175	2.7225	2.75		2.697
2.875	2 7/8-6 UN	2B	2.695	2.725	2.7667	2.7787	2.875		2.8
		3B	2.695	2.7146	2.7667	2.7757	2.875		2.8
	2 7/8-8 UN	2B	2.74	2.765	2.7938	2.8048	2.875		2.8
		3B	2.74	2.7547	2.7938	2.802	2.875		2.8
	2 7/8-12 UN	2B	2.785	2.803	2.8209	2.8291	2.875		2.8
		3B	2.785	2.7948	2.8209	2.8271	2.875		2.8
	2 7/8-16 UN	2B	2.807	2.821	2.8344	2.8417	2.875		2.821
		3B	2.807	2.8158	2.8344	2.8399	2.875		2.821
	2 7/8-20 UN	2B	2.821	2.832	2.8425	2.8493	2.875		2.821
		3B	2.821	2.8287	2.8425	2.8476	2.875		2.821

3	3-4 UNC	1B	2.729	2.767	2.8376	2.8585	3	2.765
		2B	2.729	2.767	2.8376	2.8515	3	2.765
		3B	2.729	2.7594	2.8376	2.848	3	2.765
	3-6 UN	2B	2.82	2.85	2.8917	2.9038	3	2.765
		3B	2.82	2.8396	2.8917	2.9008	3	2.765
	3-8 UN	2B	2.865	2.89	2.9188	2.9299	3	2.89
		3B	2.865	2.8797	2.9188	2.9271	3	2.89
	3-10 UNS	2B	2.892	2.913	2.935	2.9439	3	2.89
	3-12 UN	2B	2.91	2.928	2.9459	2.9541	3	2.93
		3B	2.91	2.9198	2.9459	2.9521	3	2.93
	3-14 UNS	2B	2.923	2.938	2.9536	2.9613	3	2.93
	3-16 UN	2B	2.932	2.946	2.9594	2.9667	3	2.947
		3B	2.932	2.9408	2.9594	2.9649	3	2.947
	3-18 UNS	2B	2.94	2.953	2.9639	2.9709	3	2.947
	3-20 UN	2B	2.946	2.957	2.9675	2.9743	3	2.947
		3B	2.946	2.9537	2.9675	2.9726	3	2.947
3.125	3 1/8-6 UN	2B	2.945	2.975	3.0167	3.0289	3.125	3.04
		3B	2.945	2.9646	3.0167	3.0259	3.125	3.04
	3 1/8-8 UN	2B	2.99	3.015	3.0438	3.055	3.125	3.04
		3B	2.99	3.0047	3.0438	3.0522	3.125	3.04
	3 1/8-12 UN	2B	3.035	3.053	3.0709	3.0791	3.125	3.05
		3B	3.035	3.0448	3.0709	3.0771	3.125	3.05
	3 1/8-16 UN	2B	3.057	3.071	3.0844	3.0917	3.125	3.071
		3B	3.057	3.0658	3.0844	3.0899	3.125	3.071
3.25	3 1/4-4 UNC	1B	2.979	3.017	3.0876	3.1088	3.25	3.019
		2B	2.979	3.017	3.0876	3.1017	3.25	3.019
		3B	2.979	3.0094	3.0876	3.0982	3.25	3.019
	3 1/4-6 UN	2B	3.07	3.1	3.1417	3.154	3.25	3.019
		3B	3.07	3.0896	3.1417	3.1509	3.25	3.019
	3 1/4-8 UN	2B	3.115	3.14	3.1688	3.1801	3.25	3.14
		3B	3.115	3.1297	3.1688	3.1773	3.25	3.14
	3 1/4-10 UNS	2B	3.142	3.163	3.185	3.1939	3.25	3.14
	3 1/4-12 UN	2B	3.16	3.178	3.1959	3.2041	3.25	3.18
		3B	3.16	3.1698	3.1959	3.2041	3.25	3.18
	3 1/4-14 UNS	2B	3.173	3.188	3.2036	3.2113	3.25	3.18
	3 1/4-16 UN	2B	3.182	3.196	3.2094	3.2167	3.25	3.197
		3B	3.182	3.1908	3.2094	3.2149	3.25	3.197
	3 1/4-18 UNS	2B	3.19	3.203	3.2139	3.2209	3.25	3.197
3.375	3 3/8-6 UN	2B	3.195	3.225	3.2667	3.2791	3.375	3.3
		3B	3.195	3.2146	3.2667	3.276	3.375	3.3
	3 3/8-8 UN	2B	3.24	3.265	3.2938	3.3052	3.375	3.3
		3B	3.24	3.2547	3.2938	3.3023	3.375	3.3
	3 3/8-12 UN	2B	3.285	3.303	3.3209	3.3293	3.375	3.3
		3B	3.285	3.2948	3.3209	3.3272	3.375	3.3
	3 3/8-16 UN	2B	3.307	3.321	3.3344	3.3419	3.375	3.32
		3B	3.307	3.3158	3.3344	3.34	3.375	3.32
3.5	3 1/2-4 UNC	1B	3.229	3.267	3.3376	3.3591	3.5	3.267
		2B	3.229	3.267	3.3376	3.3519	3.5	3.267
		3B	3.229	3.2594	3.3376	3.3484	3.5	3.267
	3 1/2-6 UN	2B	3.32	3.35	3.3917	3.4042	3.5	3.267
		3B	3.32	3.3396	3.3917	3.4011	3.5	3.267
	3 1/2-8 UN	2B	3.365	3.39	3.4188	3.4303	3.5	3.39
		3B	3.365	3.3797	3.4188	3.4274	3.5	3.39
	3 1/2-10 UNS	2B	3.392	3.413	3.435	3.444	3.5	3.39
	3 1/2-12 UN	2B	3.41	3.428	3.4459	3.4543	3.5	3.43
		3B	3.41	3.4198	3.4459	3.4522	3.5	3.43

	3 1/2-14 UNS	2B	3.423	3.438	3.4536	3.4615	3.5		3.43
	3 1/2-16 UN	2B	3.432	3.446	3.4594	3.4669	3.5		3.447
		3B	3.432	3.4408	3.4594	3.465	3.5		3.447
	3 1/2-18 UNS	2B	3.44	3.453	3.4639	3.4711	3.5		3.447
3.625	3 5/8-6 UN	2B	3.445	3.475	3.5167	3.5293	3.625		3.5
		3B	3.445	3.4646	3.5167	3.5262	3.625		3.5
	3 5/8-8 UN	2B	3.49	3.515	3.5438	3.5554	3.625		3.5
		3B	3.49	3.5047	3.5438	3.5525	3.625		3.5
	3 5/8-12 UN	2B	3.535	3.553	3.5709	3.5793	3.625		3.55
		3B	3.535	3.5448	3.5709	3.5772	3.625		3.55
	3 5/8-16 UN	2B	3.557	3.571	3.5844	3.5919	3.625		3.572
		3B	3.557	3.5658	3.5844	3.59	3.625		3.572
3.75	3 3/4-4 UNC	1B	3.479	3.517	3.5876	3.6094	3.75		3.52
		2B	3.479	3.517	3.5876	3.6021	3.75		3.52
		3B	3.479	3.5094	3.5876	3.5985	3.75		3.52
	3 3/4-6 UN	2B	3.57	3.6	3.6417	3.6544	3.75		3.52
		3B	3.57	3.5896	3.6417	3.6512	3.75		3.52
	3 3/4-8 UN	2B	3.615	3.64	3.6688	3.6805	3.75		3.64
		3B	3.615	3.6297	3.6688	3.6776	3.75		3.64
	3 3/4-10 UNS	2B	3.642	3.663	3.685	3.694	3.75		3.64
	3 3/4-12 UN	2B	3.66	3.678	3.6959	3.7043	3.75		3.68
		3B	3.66	3.6698	3.6959	3.7022	3.75		3.68
	3 3/4-14 UNS	2B	3.673	3.688	3.7036	3.7115	3.75		3.68
	3 3/4-16 UN	2B	3.682	3.696	3.7094	3.7169	3.75		3.697
		3B	3.682	3.6908	3.7094	3.715	3.75		3.697
	3 3/4-18 UNS	2B	3.69	3.703	3.7139	3.7211	3.75		3.697
3.875	3 7/8-6 UN	2B	3.695	3.725	3.7667	3.7795	3.875		3.8
		3B	3.695	3.7146	3.7667	3.7763	3.875		3.8
	3 7/8-8 UN	2B	3.74	3.765	3.7938	3.8056	3.875		3.8
		3B	3.74	3.7547	3.7938	3.8026	3.875		3.8
	3 7/8-12 UN	2B	3.785	3.803	3.8209	3.8294	3.875		3.805
		3B	3.785	3.7948	3.8209	3.8273	3.875		3.805
	3 7/8-16 UN	2B	3.807	3.821	3.8344	3.842	3.875		3.821
		3B	3.807	3.8158	3.8344	3.8401	3.875		3.821
4	4-4 UNC	1B	3.729	3.767	3.8376	3.8597	4		3.77
		2B	3.729	3.767	3.8376	3.8523	4		3.77
		3B	3.729	3.7594	3.8376	3.8487	4		3.77
	4-6 UN	2B	3.82	3.85	3.8917	3.9046	4		3.77
		3B	3.82	3.8396	3.8917	3.9014	4		3.77
	4-8 UN	2B	3.865	3.89	3.9188	3.9307	4		3.89
		3B	3.865	3.8797	3.9188	3.9277	4		3.89
	4-10 UNS	2B	3.892	3.913	3.935	3.9441	4		3.89
	4-12 UN	2B	3.91	3.928	3.9459	3.9544	4		3.93
		3B	3.91	3.9198	3.9459	3.9523	4		3.93
	4-14 UNS	2B	3.923	3.938	3.9536	3.9616	4		3.947
	4-16 UN	2B	3.932	3.946	3.9594	3.967	4		3.947
		3B	3.932	3.9408	3.9594	3.9651	4		3.947

























