

Metric Internal Thread Pitch Diameter Chart

- Metric threads Standard series-Internal Threads Only(Class 6H)

Basic Thread Designation	Nominal OD	Pitch	Major Dia	Min Pitch Dia	Max Pitch Dia	Min Minor Dia	Max Minor Dia
M1.6x0.35	1.6	0.35	1.600	1.373	1.458	1.221	1.321
M2x0.4	2.0	0.40	2.000	1.740	1.830	1.567	1.679
M2.5x0.45	2.5	0.45	2.500	2.208	2.303	2.013	2.138
M3x0.5	3.0	0.50	3.000	2.675	2.775	2.459	2.599
M3.5x0.6	3.5	0.60	3.500	3.110	3.222	2.850	3.010
M4x0.7	4.0	0.70	4.000	3.545	3.663	3.242	3.422
M5x0.8	5.0	0.80	5.000	4.480	4.605	4.134	4.334
M6x1	6.0	1.00	6.000	5.350	5.500	4.917	5.153
M8x1.25	8.0	1.25	8.000	7.188	7.348	6.647	6.912
M8x1	8.0	1.00	8.000	7.350	7.500	6.917	7.153
M10x1.5	10.0	1.50	10.000	9.026	9.206	8.376	8.676
M10x1.25	10.0	1.25	10.000	9.118	9.348	8.647	8.912
M10x0.75	10.0	0.75	10.000	9.513	9.645	9.188	9.378
M12x1.75	12.0	1.75	12.000	10.863	11.063	10.106	10.441
M12x1.5	12.0	1.50	12.000	11.026	11.216	10.376	10.676
M12x1.25	12.0	1.25	12.000	11.188	11.368	10.647	10.921
M12x1	12.0	1.00	12.000	11.350	11.510	10.917	11.153
M14x2	14.0	2.00	14.000	12.701	12.913	11.835	12.210
M14x1.5	14.0	1.50	14.000	13.026	13.216	12.376	12.676
M15x1	15.0	1.00	15.000	14.350	14.510	13.917	14.153
M16x2	16.0	2.00	16.000	14.701	14.913	13.835	14.210
M16x1.5	16.0	1.50	16.000	15.026	15.216	14.376	14.676
M17x1	17.0	1.00	17.000	16.350	16.510	15.917	16.153
M18x1.5	18.0	1.50	18.000	17.026	17.216	16.376	16.676
M20x2.5	20.0	2.50	20.000	18.376	18.600	17.294	17.744
M20x1.5	20.0	1.50	20.000	19.026	19.216	18.376	18.676
M20x1	20.0	1.00	20.000	19.350	19.510	18.917	19.153
M22x2.5	22.0	2.50	22.000	20.376	20.600	19.294	19.744
M22x1.5	22.0	1.50	22.000	21.026	21.216	20.376	20.676
M24x3	24.0	3.00	24.000	22.051	22.316	20.752	21.252
M24x2	24.0	2.00	24.000	22.701	22.925	21.835	22.210
M25x1.5	25.0	1.50	25.000	24.026	24.226	23.376	23.676
M27x3	27.0	3.00	27.000	25.051	25.316	23.752	24.252
M27x2	27.0	2.00	27.000	25.701	25.925	24.835	25.210
M30x3.5	30.0	3.50	30.000	27.727	28.007	26.211	26.771
M30x2	30.0	2.00	30.000	28.701	29.925	27.835	28.210
M30x1.5	30.0	1.50	30.000	29.026	29.226	28.376	28.676
M33x2	33.0	2.00	33.000	31.701	31.925	30.835	31.210
M35x1.5	35.0	1.50	35.000	34.026	34.226	33.376	33.676
M36x4	36.0	4.00	36.000	33.402	33.702	31.670	32.270
M36x2	36.0	2.00	36.000	34.701	34.925	33.835	34.210
M39x2	39.0	2.00	39.000	37.701	37.925	36.835	37.210

Metric External Thread Pitch Diameter Chart

- Metric threads Standard series-External Threads Only(Class 6g)

Designation	Nominal OD	Pitch	Max Major Dia	Min Major Dia	Max Pitch Dia	Min Pitch Dia	Minor Dia
M1.6x0.35	1.6	0.35	1.581	1.496	1.354	1.291	1.202
M2x0.4	2.0	0.40	1.981	1.886	1.721	1.654	1.548
M2.5x0.45	2.5	0.45	2.480	2.380	2.188	2.117	1.993
M3x0.5	3.0	0.50	2.980	2.874	2.655	2.580	2.439
M3.5x0.6	3.5	0.60	3.479	3.354	3.089	3.004	2.829
M4x0.7	4.0	0.70	3.978	3.838	3.523	3.433	3.220
M5x0.8	5.0	0.80	4.976	4.826	4.456	4.361	4.110
M6x1	6.0	1.00	5.974	5.794	5.324	5.212	4.891
M8x1.25	8.0	1.25	7.972	7.760	7.160	7.042	6.619
M8x1	8.0	1.00	7.974	7.794	7.324	7.212	6.891
M10x1.5	10.0	1.50	9.968	9.732	8.994	8.862	8.344
M10x1.25	10.0	1.25	9.972	9.760	7.160	9.042	8.619
M10x0.75	10.0	0.75	9.978	9.838	9.491	9.391	9.166
M12x1.75	12.0	1.75	11.966	11.701	10.829	10.679	10.027
M12x1.5	12.0	1.50	11.968	11.732	10.994	10.854	10.344
M12x1.25	12.0	1.25	11.972	11.760	11.160	11.028	10.619
M12x1	12.0	1.00	11.974	11.794	11.324	11.206	10.891
M14x2	14.0	2.00	13.962	13.682	12.663	12.503	11.797
M14x1.5	14.0	1.50	13.968	13.732	12.994	12.854	12.344
M15x1	15.0	1.00	14.974	14.794	14.324	14.206	13.891
M16x2	16.0	2.00	15.962	15.682	14.663	14.503	13.797
M16x1.5	16.0	1.50	15.968	15.732	14.994	14.854	14.344
M17x1	17.0	1.00	16.974	16.794	16.324	16.206	15.891
M18x1.5	18.0	1.50	17.968	17.732	16.994	16.854	16.344
M20x2.5	20.0	2.50	19.958	19.623	18.334	18.164	17.252
M20x1.5	20.0	1.50	19.968	19.732	18.994	18.854	18.344
M20x1	20.0	1.00	19.974	19.794	19.324	19.206	18.891
M22x2.5	22.0	2.50	21.958	21.623	20.334	20.164	19.252
M22x1.5	22.0	1.50	21.968	21.732	20.994	20.854	20.344
M24x3	24.0	3.00	23.952	23.577	22.003	21.803	20.704
M24x2	24.0	2.00	23.962	23.682	22.663	22.493	21.797
M25x1.5	25.0	1.50	24.968	24.732	23.994	23.844	23.344
M27x3	27.0	3.00	26.952	26.577	25.003	24.803	23.744
M27x2	27.0	2.00	26.962	26.682	25.663	25.493	24.797
M30x3.5	30.0	3.50	29.947	29.522	27.674	27.462	26.158
M30x2	30.0	2.00	29.962	29.682	28.663	28.490	27.797
M30x1.5	30.0	1.50	29.968	29.732	28.994	28.844	28.344
M33x2	33.0	2.00	32.962	32.682	31.663	31.493	30.797
M35x1.5	35.0	1.50	34.968	34.732	33.994	33.844	33.344
M36x4	36.0	4.00	35.940	35.465	33.342	33.118	31.610
M36x2	36.0	2.00	35.962	35.682	34.663	34.493	33.797
M39x2	39.0	2.00	38.962	38.682	37.663	37.493	36.797

ANSI & Unified Internal Thread Pitch Diameter Chart

- Inch threads standard series-Internal Threads Only(American National & Unified series)

Nominal Size	Go Basic					Nominal Size	Go Basic				
		Cl. 2	Cl. 3	CL. 2B	Cl. 3B			Cl. 2	Cl. 3	CL. 2B	Cl. 3B
0-80NF,UNF	.0519	.0536	.0532	.0542	.0536	9/16-24NEF,UNEF	.5354	.5394	.5382	.5405	.5392
1-64NC,UNC	.0629	.0648	.0643	.0655	.0648	5/8-11NC,UNC	.5660	.5719	.5702	.5732	.5714
1-72NF,UNF	.0640	.0658	.0653	.0665	.0659	5/8-18NF,UNF	.5889	.5930	.5919	.5949	.5934
2-56NC,UNC	.0744	.0764	.0759	.0772	.0765	5/8-24NEF,UNEF	.5979	.6020	.6008	.6031	.6018
2-64NF,UNF	.0759	.0778	.0773	.0786	.0779	11/16-24NEF,UNEF	.6604	.6645	.6633	.6656	.6643
3-48NC,UNC	.0855	.0877	.0871	.0885	.0877	3/4-10NC,UNC	.6850	.6914	.6895	.6927	.6907
3-56NF,UNF	.0874	.0894	.0889	.0902	.0895	3/4-16NF,UNF	.7094	.7139	.7126	.7159	.7143
4-40NC,UNC	.0958	.0982	.0975	.0991	.0982	3/4-20NEF,UNEF	.7175	.7221	.7207	.7232	.7218
4-48NF,UNF	.0985	.1007	.1001	.1016	.1008	13/16-20NEF,UNEF	.7800	.7846	.7832	.7857	.7843
5-40NV,UNC	.1088	.1112	.1105	.1121	.1113	7/8-9NC,UNC	.8028	.8098	.8077	.8110	.8089
5-44NF,UNF	.1102	.1125	.1118	.1134	.1126	7/8-14NF,UNF	.8286	.8335	.8322	.8356	.8339
6-32NC,UNC	.1177	.1204	.1196	.1214	.1204	7/8-20NEF,UNEF	.8425	.8472	.8458	.8482	.8468
6-40NF,UNF	.1218	.1242	.1235	.1252	.1243	15/16-20NEF,UNEF	.9050	.9097	.9083	.9109	.9094
8-32NC,UNC	.1437	.1464	.1456	.1475	.1465	1"-8NC,UNC	.9188	.9264	.9242	.9276	.9254
8-36NF,UNF	.1460	.1485	.1478	.1496	.1487	1"-12N,UNF	.9459	.9515	.9499	.9535	.9516
10-24NC,UNC	.1629	.1662	.1653	.1672	.1661	1"-14NS,UNS	.9536	.9585	.9572	.9609	.9590
10-32NF,UNF	.1697	.1724	.1716	.1736	.1726	1"-20NEF,UNEF	.9675	.9723	.9709	.9734	.9719
12-24NC,UNC	.1889	.1922	.1913	.1933	.1922	11/16-12N,UN	1.0084	1.0140	1.0124	1.0158	1.0139
12-28NF,UNF	.1928	.1959	.1950	.1970	.1959	11/16-18NEF,UNEF	1.0264	1.0315	1.0300	1.0326	1.0310
12-32NEF,UNEF	.1957	.1988	.1979	.1998	.1988	11/8-7NC,UNC	1.0322	1.0407	1.0381	1.0416	1.0393
1/4-20NC,UNC	.2175	.2211	.2201	.2224	.2211	11/8-12NF,UNF	1.0709	1.0765	1.0749	1.0787	1.0768
1/4-28NF,UNF	.2268	.2299	.2290	.2311	.2300	11/8-18NEF,UNEF	1.0889	1.0941	1.0925	1.0951	1.0935
1/4-32NEF,UNEF	.2297	.2329	.2319	.2339	.2328	13/16-12N,UN	1.1334	1.1390	1.1374	1.1409	1.1390
5/16-18NC,UNC	.2764	.2805	.2749	.2871	.2903	13/16-18NEF,UNEF	1.1514	1.1566	1.1550	1.1577	1.1561
5/16-24NF,UNF	.2854	.2887	.2878	.2902	.2890	11/4-7NC,UNC	1.1572	1.1657	1.1631	1.1668	1.1644
5/16-32NEF,UNEF	.2922	.2955	.2945	.2964	.2953	11/4-12NF,UNF	1.1959	1.2015	1.1999	1.2039	1.2019
3/8-16NC,UNC	.3344	.3389	.3376	.3401	.3387	11/4-18NEF,UNEF	1.2139	1.2192	1.2176	1.2202	1.2186
3/8-24NF,UNF	.3479	.3512	.3503	.3528	.3516	15/16-12N,UN	1.2584	1.2640	1.2624	1.2659	1.2640
3/8-32NEF,UNEF	.3547	.3581	.3571	.3591	.3580	15/16-18NEF,UNEF	1.2764	1.2817	1.3281	1.2827	1.2811
7/16-14NC,UNC	.3911	.3960	.3947	.3972	.3957	13/8-6NC,UNC	1.2667	1.2768	1.2738	1.2771	1.2745
7/16-20NF,UNF	.4050	.4086	.4076	.4101	.4091	13/8-12NF,UNF	1.3209	1.3265	1.3249	1.3291	1.3270
7/16-28NEF,UNEF	.4143	.4719	.4168	.4189	.4178	13/8-18NEF,UNEF	1.3389	1.3443	1.3427	1.3452	1.3436
1/2-12N,UN	.4459	.4515	.4499	.4529	.4511	17/16-12N,UN	1.3834	1.3890	1.3874	1.3910	1.3891
1/2-13NC,UNC	.4500	.4552	.4637	.4565	.4548	17/16-18NEF,UNEF	1.4014	1.4068	1.4052	1.4079	1.4062
1/2-20NF,UNF	.4675	.4711	.4701	.4731	.4717	11/2-6NC,UNC	1.3917	1.4018	1.3988	1.4022	1.3996
1/2-28NEF,UNEF	.4768	.4805	.4794	.4816	.4804	11/2-112NF,UNF	1.4459	1.4515	1.4499	1.4542	1.4522
9/16-12NC,UNC	.5084	.5140	.5124	.5152	.5135	11/2-18NEF,UNEF	1.4639	1.4694	1.4677	1.4704	1.4687
9/16-18NF,UNF	.5264	.5305	.5294	.5323	.5308	Fed.Std. H-28-1957, Part1/ANSI B1.1-1997					

ANSI & Unified External Thread Pitch Diameter Chart

- Inch threads standard series-External Threads Only(American National & Unified series)

Normal Size	GO			NO GO		GO		NO GO		Normal Size	GO			NO GO		GO		NO GO	
	CL2.3	CL2	CL3	CL2A	CL3A	CL2A	CL3A				CL2.3	CL2	CL3	CL2A	CL3A	CL2A	CL3A		
0-80NF,UNF	.0519	.0502	.0506	.0542	.0536	.0542	.0536	9/16-24NEF,UNEF	.5354	.5314	.5326	.5354	.5342	.5303	.5325				
1-64NC,UNC	.0629	.0610	.0615	.0655	.0648	.0655	.0648	5/8-11NC,UNC	.5660	.5601	.5618	.5660	.5644	.5589	.5619				
1-72NF,UNF	.0640	.0622	.0627	.0665	.0659	.0665	.0659	5/8-18NF,UNF	.5889	.5848	.5859	.5889	.5875	.5828	.5854				
2-56NC,UNC	.0744	.0724	.0729	.0772	.0765	.0772	.0765	5/8-24NEF,UNEF	.5979	.5938	.5950	.5979	.5967	.5927	.5949				
2-64NF,UNF	.0759	.0740	.0745	.0786	.0779	.0786	.0779	11/16-24NEF,UNEF	.6604	.6563	.6575	.6604	.6592	.6552	.6574				
3-48NC,UNC	.0855	.0833	.0839	.0885	.0877	.0885	.0877	3/4-10NC,UNC	.6850	.6786	.6805	.6850	.6832	.6773	.6806				
3-56NF,UNF	.0874	.0854	.0859	.0902	.0895	.0902	.0895	3/4-16NF,UNF	.7094	.7049	.7062	.7094	.7079	.7029	.7056				
4-40NC,UNC	.0958	.0934	.0941	.0991	.0982	.0991	.0982	3/4-20NEF,UNEF	.7175	.7129	.7143	.7175	.7162	.7118	.7142				
4-48NF,UNF	.0985	.0963	.0969	.1016	.1008	.1016	.1008	13/16-20NEF,UNEF	.7800	.7754	.7768	.7800	.7787	.7743	.7767				
5-40NV,UNC	.1088	.1064	.1071	.1121	.1113	.1121	.1113	7/8-9NC,UNC	.8028	.7958	.7979	.8028	.8009	.7946	.7981				
5-44NF,UNF	.1102	.1079	.1086	.1134	.1126	.1134	.1126	7/8-14NF,UNF	.8286	.8237	.8250	.8286	.8270	.8216	.8245				
6-32NC,UNC	.1177	.1150	.1158	.1214	.1204	.1214	.1204	7/8-20NEF,UNEF	.8425	.8378	.8392	.8425	.8412	.8368	.8392				
6-40NF,UNF	.1218	.1194	.1201	.1252	.1243	.1252	.1243	15/16-20NEF,UNEF	.9050	.9003	.9017	.9050	.9036	.8991	.9016				
8-32NC,UNC	.1437	.1410	.1418	.1475	.1465	.1475	.1465	1"-8NC,UNC	.9188	.9112	.9134	.9188	.9168	.9100	.9137				
8-36NF,UNF	.1460	.1435	.1442	.1496	.1487	.1496	.1487	1"-12N,UNF	.9459	.9403	.9419	.9459	.9441	.9382	.9415				
10-24NC,UNC	.1629	.1596	.1605	.1672	.1661	.1672	.1661	1"-14NS,UNS	.9536	.9487	.9500	.9536	.9519	.9463	.9494				
10-32NF,UNF	.1697	.1670	.1678	.1736	.1726	.1736	.1726	1"-20NEF,UNEF	.9675	.9627	.9641	.9675	.9661	.9616	.9641				
12-24NC,UNC	.1889	.1856	.1865	.1933	.1922	.1933	.1922	11/16-12N,UN	1.0084	1.0028	1.0044	1.0084	1.0067	1.0010	1.0042				
12-28NF,UNF	.1928	.1897	.1906	.1970	.1959	.1970	.1959	11/16-18NEF,UNEF	1.0264	1.0213	1.0228	1.0264	1.0250	1.0203	1.0228				
12-32NEF,UNEF	.1957	.1926	.1935	.1998	.1988	.1998	.1988	11/8-7NC,UNC	1.0322	1.0237	1.0263	1.0322	1.0300	1.0228	1.0268				
1/4-20NC,UNC	.2175	.2139	.2149	.2224	.2211	.2224	.2211	11/8-12NF,UNF	1.0709	1.0653	1.0669	1.0709	1.0691	1.0631	1.0664				
1/4-28NF,UNF	.2268	.2237	.2246	.2311	.2300	.2311	.2300	11/8-18NEF,UNEF	1.0889	1.0837	1.0853	1.0889	1.0875	1.0828	1.0853				
1/4-32NEF,UNEF	.2297	.2265	.2275	.2339	.2328	.2339	.2328	13/16-12N,UN	1.1334	1.1278	1.1294	1.1334	1.1317	1.1259	1.1291				
5/16-18NC,UNC	.2764	.2723	.2734	.2871	.2903	.2871	.2903	13/16-18NEF,UNEF	1.1514	1.1462	1.1478	1.1514	1.1499	1.1450	1.1478				
5/16-24NF,UNF	.2854	.2821	.2930	.2902	.2890	.2902	.2890	11/4-7NC,UNC	1.1572	1.1487	1.1513	1.1572	1.1550	1.1476	1.1517				
5/16-32NEF,UNEF	.2922	.2889	.2899	.2964	.2953	.2964	.2953	11/4-12NF,UNF	1.1959	1.1903	1.1919	1.1959	1.1941	1.1879	1.1913				
3/8-16NC,UNC	.3344	.3299	.3312	.3401	.3387	.3401	.3387	11/4-18NEF,UNEF	1.2139	1.2086	1.2102	1.2139	1.2124	1.2075	1.2103				
3/8-24NF,UNF	.3479	.3446	.3455	.3528	.3516	.3528	.3516	15/16-12N,UN	1.2584	1.2528	1.2544	1.2584	1.2567	1.2509	1.2541				
3/8-32NEF,UNEF	.3547	.3513	.3523	.3591	.3580	.3591	.3580	15/16-18NEF,UNEF	1.2764	1.2711	1.2727	1.2764	1.2749	1.2700	1.2728				
7/16-14NC,UNC	.3911	.3862	.3875	.3972	.3957	.3972	.3957	13/8-6NC,UNC	1.2667	1.2566	1.2596	1.2667	1.2643	1.2563	1.2607				
7/16-20NF,UNF	.4050	.4014	.4024	.4101	.4091	.4101	.4091	13/8-12NF,UNF	1.3209	1.3153	1.3169	1.3209	1.3190	1.3127	1.3162				
7/16-28NEF,UNEF	.4143	.4107	.4118	.4189	.4178	.4189	.4178	13/8-18NEF,UNEF	1.3389	1.3335	1.3351	1.3389	1.3374	1.3325	1.3353				
1/2-12N,UN	.4459	.4403	.4419	.4529	.4511	.4529	.4511	17/16-12N,UN	1.3834	1.3778	1.3794	1.3834	1.3816	1.3757	1.3790				
1/2-13NC,UNC	.4500	.4448	.4463	.4565	.4548	.4565	.4548	17/16-18NEF,UNEF	1.4014	1.3960	1.3976	1.4014	1.3999	1.3949	1.3977				
1/2-20NF,UNF	.4675	.4639	.4649	.4731	.4717	.4731	.4717	11/2-6NC,UNC	1.3917	1.3816	1.3846	1.3917	1.3893	1.3812	1.3856				
1/2-28NEF,UNEF	.4768	.4731	.4742	.4816	.4804	.4816	.4804	11/2-112NF,UNF	1.4459	1.4403	1.4419	1.4459	1.4440	1.4376	1.4411				
9/16-12NC,UNC	.5084	.5028	.5044	.5152	.5135	.5152	.5135	11/2-18NEF,UNEF	1.4639	1.4584	1.4601	1.4639	1.4624	1.4574	1.4602				
9/16-18NF,UNF	.5264	.5223	.5234	.5323	.5308	.5323	.5308	Fed.Std. H-28-1957, Part1/ANSI B1.1-1997											