

# METRIC

## Pitch Diameter Chart

STANDARD SERIES METRIC THREADS — EXTERNAL THREADS ONLY (CLASS 6g)  
Reference: ANSI-B1.13-1989 and/or FED-STD H28/21

BASIC THREAD DESIGNATION	DIMENSIONS IN MILLIMETERS							DIMENSIONS IN INCHES						
	NOMINAL O.D.	PITCH	MAJOR DIA.		PITCH DIA.		MINOR DIA.  (FLAT ROOT) MAX.	NOMINAL O.D.	THREADS PER INCH	MAJOR DIA.		PITCH DIA.		MINOR DIA.  (FLAT ROOT) MAX.
			MAX.	MIN.	MAX. G0	MIN. LO				MAX.	MIN.	MAX. G0	MIN.	
M1.6x0.35	1.6	0.35	1.581	1.496	1.354	1.291	1.202	.06299	72.57	.06224	.05890	.05331	.05083	.04732
M2x0.4	2.0	0.40	1.981	1.886	1.721	1.654	1.548	.07874	63.50	.07799	.07425	.06776	.06512	.06094
M2.5x0.45	2.5	0.45	2.480	2.380	2.188	2.117	1.993	.09843	56.44	.09764	.09370	.08614	.08335	.07846
M3x0.5	3.0	0.50	2.980	2.874	2.655	2.580	2.439	.11811	50.80	.11732	.11315	.10453	.10157	.09602
M3.5x0.6	3.5	0.60	3.479	3.354	3.089	3.004	2.829	.13780	42.33	.13697	.13205	.12161	.11827	.11138
M4x0.7	4.0	0.70	3.978	3.838	3.523	3.433	3.220	.15748	36.29	.15661	.15110	.13870	.13516	.12677
M5x0.8	5.0	0.80	4.976	4.826	4.456	4.361	4.110	.19685	31.75	.19591	.19000	.17543	.17169	.16181
M6x1	6.0	1.00	5.974	5.794	5.324	5.212	4.891	.23622	25.40	.23520	.22811	.20961	.20520	.19256
M8x1.25	8.0	1.25	7.972	7.760	7.160	7.042	6.619	.31496	20.32	.31386	.30551	.28189	.27724	.26059
M8x1	8.0	1.00	7.974	7.794	7.324	7.212	6.891	.31496	25.40	.31394	.30685	.28835	.28394	.27130
M10x1.5	10.0	1.50	9.968	9.732	8.994	8.862	8.344	.39370	16.93	.39244	.38315	.35409	.34890	.32850
M10x1.25	10.0	1.25	9.972	9.760	9.160	9.042	8.619	.39370	20.32	.39260	.38425	.36063	.35598	.33933
M10x0.75	10.0	0.75	9.978	9.838	9.491	9.391	9.166	.39370	33.87	.39283	.38732	.37366	.36972	.36087
M12x1.75	12.0	1.75	11.966	11.701	10.829	10.679	10.072	.47244	14.51	.47110	.46067	.42634	.42043	.39654
M12x1.5	12.0	1.50	11.968	11.732	10.994	10.854	10.344	.47244	16.93	.47118	.46189	.43283	.42732	.40724
M12x1.25	12.0	1.25	11.972	11.760	11.160	11.028	10.619	.47244	20.32	.47134	.46299	.43937	.43417	.41807
M12x1	12.0	1.00	11.974	11.794	11.324	11.206	10.891	.47244	25.40	.47142	.46433	.44583	.44118	.42878
M14x2	14.0	2.00	13.962	13.682	12.663	12.503	11.797	.55118	12.70	.54969	.53866	.49854	.49224	.46445
M14x1.5	14.0	1.50	13.968	13.732	12.994	12.854	12.344	.55118	16.93	.54992	.54063	.51157	.50606	.48598
M15x1	15.0	1.00	14.974	14.794	14.324	14.206	13.891	.59055	25.40	.58953	.58244	.56394	.55929	.54689
M16x2	16.0	2.00	15.962	15.682	14.663	14.503	13.797	.62992	12.70	.62843	.61740	.57728	.57098	.54319
M16x1.5	16.0	1.50	15.968	15.732	14.994	14.854	14.344	.62992	16.93	.62866	.61937	.59031	.58480	.56472
M17x1	17.0	1.00	16.974	16.794	16.324	16.206	15.891	.66929	25.40	.66827	.66118	.64268	.63803	.62563
M18x1.5	18.0	1.50	17.968	17.732	16.994	16.854	16.344	.70866	16.93	.70740	.69811	.66906	.66354	.64346
M20x2.5	20.0	2.50	19.958	19.623	18.334	18.164	17.252	.78740	10.16	.78575	.77256	.72181	.71512	.67921
M20x1.5	20.0	1.50	19.968	19.732	18.994	18.854	18.344	.78740	16.93	.78614	.77685	.74780	.74228	.72220
M20x1	20.0	1.00	19.974	19.794	19.324	19.206	18.891	.78740	25.40	.78638	.77929	.76079	.75614	.74374
M22x2.5	22.0	2.50	21.958	21.623	20.334	20.164	19.252	.86614	10.16	.86449	.85130	.80055	.79386	.75795
M22x1.5	22.0	1.50	21.968	21.732	20.994	20.854	20.344	.86614	16.93	.86488	.85559	.82654	.82102	.80094
M24x3	24.0	3.00	23.952	23.577	22.003	21.803	20.704	.94488	8.47	.94299	.92823	.86626	.85839	.81512
M24x2	24.0	2.00	23.962	23.682	22.663	22.493	21.797	.94488	12.70	.94339	.93236	.89224	.88555	.85815
M25x1.5	25.0	1.50	24.968	24.732	23.994	23.844	23.344	.98425	16.93	.98299	.97370	.94465	.93874	.91906
M27x3	27.0	3.00	26.952	26.577	25.003	24.803	23.744	1.06299	8.47	1.06110	1.04634	.98437	.97650	.93480
M27x2	27.0	2.00	26.962	26.682	25.663	25.493	24.797	1.06299	12.70	1.06150	1.05047	1.01035	1.00366	.97626
M30x3.5	30.0	3.50	29.947	29.522	27.674	27.462	26.158	1.18110	7.26	1.17902	1.16228	1.08953	1.08118	1.02984
M30x2	30.0	2.00	29.962	29.682	28.663	28.493	27.797	1.18110	12.70	1.17961	1.16858	1.12846	1.12177	1.09437
M30x1.5	30.0	1.50	29.968	29.732	28.994	28.844	28.344	1.18110	16.93	1.17984	1.17055	1.14150	1.13559	1.11591
M33x2	33.0	2.00	32.962	32.682	31.663	31.493	30.797	1.29921	12.70	1.29772	1.28669	1.24657	1.23988	1.21248
M35x1.5	35.0	1.50	34.968	34.732	33.994	33.844	33.344	1.37795	16.93	1.37669	1.36740	1.33835	1.33244	1.31276
M36x4	36.0	4.00	35.940	35.465	33.342	33.118	31.610	1.41732	6.35	1.41496	1.39626	1.31268	1.30386	1.24449
M36x2	36.0	2.00	35.962	35.682	34.663	34.493	33.797	1.41732	12.70	1.41583	1.40480	1.36469	1.35799	1.33059
M39x2	39.0	2.00	38.962	38.682	37.663	37.493	36.797	1.53543	12.70	1.53394	1.52291	1.48280	1.47610	1.44870

# METRIC

## Pitch Diameter Chart

STANDARD SERIES METRIC THREADS — INTERNAL (Nut) THREADS ONLY (CLASS 6H)  
Reference: ANSI-B1.13-1989 and/or FED-STD H28/21

BASIC THREAD DESIGNATION	DIMENSIONS IN MILLIMETERS							DIMENSIONS IN INCHES						
	NOMINAL O.D.	PITCH	MAJOR DIA.	PITCH DIA.		MINOR DIA.		NOMINAL O.D.	THREADS PER INCH	MAJOR DIA.	PITCH DIA.		MINOR DIA.	
			MIN. (MUST CLEAR)	MIN. GO	MAX. HI	MIN.	MAX.			MIN. (MUST CLEAR)	MIN. GO	MAX. HI	MIN.	MAX.
M1.6x0.35	1.6	0.35	1.600	1.373	1.458	1.221	1.321	.06299	72.57	.06299	.05406	.05740	.04807	.05201
M2x0.4	2.0	0.40	2.000	1.740	1.830	1.567	1.679	.07874	63.50	.07874	.06850	.07205	.06169	.06610
M2.5x0.45	2.5	0.45	2.500	2.208	2.303	2.013	2.138	.09843	56.44	.09843	.08693	.09067	.07925	.08417
M3x0.5	3.0	0.50	3.000	2.675	2.775	2.459	2.599	.11811	50.80	.11811	.10531	.10925	.09681	.10232
M3.5x0.6	3.5	0.60	3.500	3.110	3.222	2.850	3.010	.13780	42.33	.13780	.12244	.12685	.11220	.11850
M4x0.7	4.0	0.70	4.000	3.545	3.663	3.242	3.422	.15748	36.29	.15748	.13957	.14421	.12764	.13472
M5x0.8	5.0	0.80	5.000	4.480	4.605	4.134	4.334	.19685	31.75	.19685	.17638	.18130	.16276	.17063
M6x1	6.0	1.00	6.000	5.350	5.500	4.917	5.153	.23622	25.40	.23622	.21063	.21654	.19358	.20287
M8x1.25	8.0	1.25	8.000	7.188	7.348	6.647	6.912	.31496	20.32	.31496	.28299	.28929	.26169	.27213
M8x1	8.0	1.00	8.000	7.350	7.500	6.917	7.153	.31496	25.40	.31496	.28937	.29528	.27232	.28161
M10x1.5	10.0	1.50	10.000	9.026	9.206	8.376	8.676	.39370	16.93	.39370	.35535	.36244	.32976	.34157
M10x1.25	10.0	1.25	10.000	9.188	9.348	8.647	8.912	.39370	20.32	.39370	.36173	.36803	.34043	.35087
M10.0.75	10.0	0.75	10.000	9.513	9.645	9.188	9.378	.39370	33.87	.39370	.37453	.37972	.36173	.36921
M12x1.75	12.0	1.75	12.000	10.863	11.063	10.106	10.441	.47244	14.51	.47244	.42768	.43555	.39787	.41106
M12x1.5	12.0	1.50	12.000	11.026	11.216	10.376	10.676	.47244	16.93	.47244	.43409	.44157	.40850	.42031
M12x1.25	12.0	1.25	12.000	11.188	11.368	10.647	10.912	.47244	20.32	.47244	.44047	.44756	.41917	.42961
M12x1	12.0	1.00	12.000	11.350	11.510	10.917	11.153	.47244	25.40	.47244	.44685	.45315	.42980	.43909
M14x2	14.0	2.00	14.000	12.701	12.913	11.835	12.210	.55118	12.70	.55118	.50004	.50839	.46594	.48071
M14x1.5	14.0	1.50	14.000	13.026	13.216	12.376	12.676	.55118	16.93	.55118	.51283	.52031	.48724	.49906
M15x1	15.0	1.00	15.000	14.350	14.510	13.917	14.153	.59055	25.40	.59055	.56496	.57126	.54791	.55720
M16x2	16.0	2.00	16.000	14.701	14.913	13.835	14.210	.62992	12.70	.62992	.57878	.58713	.54469	.55945
M16x1.5	16.0	1.50	16.000	15.026	15.216	14.376	14.676	.62992	16.93	.62992	.59157	.59906	.56598	.57780
M17x1	17.0	1.00	17.000	16.350	16.510	15.917	16.153	.66929	25.40	.66929	.64370	.65000	.61886	.63594
M18x1.5	18.0	1.50	18.000	17.026	17.216	16.376	16.676	.70866	16.93	.70866	.67031	.67780	.64472	.65654
M20x2.5	20.0	2.50	20.000	18.376	18.600	17.294	17.744	.78740	10.16	.78740	.72346	.73228	.68087	.69858
M20x1.5	20.0	1.50	20.000	19.026	19.216	18.376	18.676	.78740	16.93	.78740	.74906	.75654	.72346	.73528
M20x1	20.0	1.00	20.000	19.350	19.510	18.917	19.153	.78740	25.40	.78740	.76181	.76811	.74476	.75406
M22x2.5	22.0	2.50	22.000	20.376	20.600	19.294	19.744	.86614	10.16	.86614	.80220	.81102	.75961	.77732
M22x1.5	22.0	1.50	22.000	21.026	21.216	20.376	20.676	.86614	16.93	.86614	.82780	.83528	.80220	.81402
M24x3	24.0	3.00	24.000	22.051	22.316	20.752	21.252	.94488	8.47	.94488	.86815	.87858	.81701	.83669
M24x2	24.0	2.00	24.000	22.701	22.925	21.835	22.210	.94488	12.70	.94488	.89374	.90256	.85965	.87441
M25x1.5	25.0	1.50	25.000	24.026	24.226	23.376	23.676	.98425	16.93	.98425	.94591	.95378	.92031	.93213
M27x3	27.0	3.00	27.000	25.051	25.316	23.752	24.252	1.06299	8.47	1.06299	.98626	.99669	.93512	.95480
M27x2	27.0	2.00	27.000	25.701	25.925	24.835	25.210	1.06299	12.70	1.06299	1.01185	1.02067	.97776	.99252
M30x3.5	30.0	3.50	30.000	27.727	28.007	26.211	26.771	1.18110	7.26	1.18110	1.09161	1.10264	1.03193	1.05398
M30x2	30.0	2.00	30.000	28.701	28.925	27.835	28.210	1.18110	12.70	1.18110	1.12996	1.13878	1.09587	1.11063
M30x1.5	30.0	1.50	30.000	29.026	29.226	28.376	28.676	1.18110	16.93	1.18110	1.14276	1.15063	1.11717	1.12898
M33x2	33.0	2.00	33.000	31.701	31.925	30.835	31.210	1.29921	12.70	1.29921	1.24807	1.25689	1.21398	1.22874
M35x1.5	35.0	1.50	35.000	34.026	34.226	33.376	33.676	1.37795	16.93	1.37795	1.33961	1.34748	1.31402	1.32559
M36x4	36.0	4.00	36.000	33.402	33.702	31.670	32.270	1.41732	6.35	1.41732	1.31504	1.32685	1.24685	1.27047
M36x2	36.0	2.00	36.000	34.701	34.925	33.835	34.210	1.41732	12.70	1.41732	1.36618	1.37500	1.33209	1.34685
M39x2	39.0	2.00	39.000	37.701	37.925	36.835	37.210	1.53543	12.70	1.53543	1.48429	1.49311	1.45020	1.46496