



Metric table

Dimensions in: millimeters - inches

Nominal thread Ø	Pitch P	Bolt thread 6g						Nut thread 6H		Pitch Ø D ₂				Minor Ø D ₁	
		Major Ø d		Pitch Ø d ₂		Minor Ø d ₁		Major Ø D		min.		max.		min.	max.
		max.	min.	max.	min.	max.	min.	min.	max.	min.	max.	min.	max.	min.	max.
M 5	0.5 0.02	4.980 0.196	4.874 0.199	4.655 0.183	4.580 0.180	4.367 0.172	4.273 0.168	5.000 0.197		4.675 0.184	4.775 0.188	4.459 0.176	4.599 0.181		
M 6	0.5 0.02	5.980 0.235	5.874 0.231	5.655 0.223	5.570 0.219	5.367 0.211	5.263 0.207	6.000 0.236		5.675 0.223	5.787 0.228	5.459 0.215	5.599 0.220		
M 8	0.5 0.02	7.980 0.314	7.874 0.310	7.655 0.301	7.570 0.298	7.367 0.290	7.263 0.286	8.000 0.315		7.675 0.302	7.787 0.307	7.459 0.294	7.599 0.299		
M 10	0.5 0.02	9.980 0.393	9.874 0.389	9.655 0.380	9.570 0.378	9.367 0.369	9.263 0.365	10.000 0.394		9.675 0.381	9.787 0.385	9.459 0.372	9.599 0.378		
M 12	0.5 0.02	11.980 0.472	11.874 0.467	11.655 0.459	11.565 0.455	11.367 0.448	11.258 0.443	12.000 0.472		11.675 0.460	11.793 0.464	11.459 0.451	11.599 0.457		
M 6	0.75 0.03	5.975 0.235	5.838 0.230	5.491 0.216	5.391 0.212	5.058 0.199	4.929 0.194	6.000 0.236		5.513 0.217	5.645 0.222	5.188 0.204	5.378 0.212		
M 8	0.75 0.03	7.978 0.314	7.838 0.309	7.491 0.295	7.391 0.291	7.058 0.278	6.929 0.273	8.000 0.315		7.513 0.296	7.645 0.301	7.188 0.283	7.378 0.291		
M 10	0.75 0.03	9.978 0.393	9.838 0.387	9.491 0.374	9.391 0.370	9.058 0.357	8.929 0.352	10.000 0.394		9.513 0.375	9.645 0.380	9.188 0.362	9.378 0.369		
M 12	0.75 0.03	11.978 0.472	11.838 0.466	11.491 0.452	11.385 0.448	11.058 0.435	10.923 0.430	12.000 0.472		11.513 0.453	11.653 0.459	11.188 0.441	11.378 0.448		
M 16	0.75 0.03	15.978 0.630	15.838 0.624	15.491 0.610	15.385 0.606	15.058 0.593	14.923 0.576	16.000 0.630		15.513 0.611	15.653 0.616	15.188 0.598	15.378 0.605		
M 8	1 0.04	7.974 0.314	7.794 0.307	7.324 0.288	7.212 0.284	6.747 0.266	6.596 0.260	8.000 0.315	Not specified	7.350 0.289	7.500 0.295	6.917 0.272	7.153 0.282		
M 10	1 0.04	9.974 0.393	9.794 0.386	9.324 0.367	9.212 0.363	8.747 0.344	8.596 0.338	10.000 0.394		9.350 0.368	9.500 0.374	8.917 0.351	9.153 0.360		
M 12	1 0.04	11.974 0.471	11.794 0.464	11.324 0.446	11.206 0.441	10.747 0.423	10.590 0.417	12.000 0.472		11.350 0.447	11.510 0.453	10.917 0.430	11.153 0.439		
M 16	1 0.04	15.974 0.629	15.794 0.622	15.324 0.603	15.206 0.599	14.747 0.581	14.590 0.574	16.000 0.630		15.350 0.604	15.510 0.610	14.917 0.587	15.153 0.597		
M 20	1 0.04	19.974 0.786	19.794 0.779	19.324 0.761	19.206 0.756	18.747 0.738	18.590 0.732	20.000 0.787		19.350 0.762	19.510 0.768	18.918 0.745	19.153 0.754		
M 12	1.5 0.06	11.968 0.471	11.732 0.462	10.994 0.431	10.854 0.427	10.128 0.399	9.930 0.391	12.000 0.472		11.026 0.434	11.216 0.442	10.376 0.409	10.676 0.420		
M 14	1.5 0.06	13.968 0.550	13.732 0.541	12.994 0.512	12.854 0.506	12.128 0.477	11.930 0.470	14.000 0.551		13.026 0.513	13.216 0.520	12.376 0.487	12.676 0.499		
M 16	1.5 0.06	15.968 0.629	15.732 0.619	14.994 0.590	14.854 0.585	14.128 0.556	13.930 0.548	16.000 0.630		15.026 0.592	15.216 0.599	14.376 0.566	14.676 0.578		
M 18	1.5 0.06	17.968 0.707	17.732 0.698	16.994 0.669	16.854 0.664	16.128 0.635	15.930 0.627	18.000 0.709		17.026 0.670	17.216 0.678	16.376 0.645	16.676 0.657		
M 20	1.5 0.06	19.968 0.786	19.732 0.778	18.994 0.748	18.854 0.742	18.128 0.714	17.930 0.706	20.000 0.787		19.026 0.749	19.216 0.757	18.376 0.723	18.676 0.735		

Nominal thread Ø	Pitch P	Bolt thread 6g						Nut thread 6H					
		Major Ø d		Pitch Ø d ₂		Minor Ø d ₁		Major Ø D		Pitch Ø D ₂		Minor Ø D ₁	
		max.	min.	max.	min.	max.	min.	min.	max.	min.	max.	min.	max.
M 22	1.5 <i>0.06</i>	21.968 <i>0.865</i>	21.732 <i>0.856</i>	20.994 <i>0.827</i>	20.854 <i>0.821</i>	20.128 <i>0.792</i>	19.930 <i>0.785</i>	22.000 <i>0.866</i>	Not specified	21.026 <i>0.828</i>	21.216 <i>0.835</i>	20.376 <i>0.802</i>	20.676 <i>0.814</i>
M 26	1.5 <i>0.06</i>	25.968 <i>1.022</i>	25.732 <i>1.013</i>	24.994 <i>0.984</i>	24.844 <i>0.978</i>	24.128 <i>0.950</i>	23.920 <i>0.942</i>	26.000 <i>1.024</i>		25.026 <i>0.985</i>	25.226 <i>0.993</i>	24.376 <i>0.960</i>	24.676 <i>0.971</i>
M 27	1.5 <i>0.06</i>	26.968 <i>1.062</i>	26.732 <i>1.052</i>	25.994 <i>1.023</i>	25.844 <i>1.017</i>	25.128 <i>0.989</i>	24.920 <i>0.981</i>	27.000 <i>1.063</i>		26.026 <i>1.025</i>	26.226 <i>1.033</i>	25.376 <i>0.999</i>	25.676 <i>1.011</i>
M 30	1.5 <i>0.06</i>	29.968 <i>1.180</i>	29.732 <i>1.171</i>	28.994 <i>1.141</i>	28.844 <i>1.136</i>	28.128 <i>1.107</i>	27.920 <i>1.099</i>	30.000 <i>1.181</i>		29.026 <i>1.143</i>	29.226 <i>1.151</i>	28.376 <i>1.117</i>	28.676 <i>1.129</i>
M 35	1.5 <i>0.06</i>	34.968 <i>1.377</i>	34.732 <i>1.367</i>	33.994 <i>1.338</i>	33.844 <i>1.332</i>	33.128 <i>1.304</i>	32.920 <i>1.296</i>	35.000 <i>1.378</i>		34.026 <i>1.340</i>	34.226 <i>1.348</i>	33.376 <i>1.314</i>	33.676 <i>1.326</i>
M 40	1.5 <i>0.06</i>	39.968 <i>1.574</i>	39.732 <i>1.564</i>	38.991 <i>1.535</i>	38.844 <i>1.529</i>	38.128 <i>1.501</i>	37.920 <i>1.493</i>	40.000 <i>1.575</i>		39.026 <i>1.537</i>	39.226 <i>1.544</i>	38.376 <i>1.511</i>	38.676 <i>1.523</i>
M 20	2 <i>0.08</i>	19.962 <i>0.786</i>	19.682 <i>0.775</i>	18.663 <i>0.735</i>	18.503 <i>0.728</i>	17.508 <i>0.689</i>	17.271 <i>0.680</i>	20.000 <i>0.787</i>		18.701 <i>0.736</i>	18.913 <i>0.745</i>	17.835 <i>0.702</i>	18.210 <i>0.717</i>
M 24	2 <i>0.08</i>	23.962 <i>0.943</i>	23.682 <i>0.932</i>	22.663 <i>0.892</i>	22.493 <i>0.892</i>	21.508 <i>0.847</i>	21.261 <i>0.837</i>	24.000 <i>0.945</i>		22.701 <i>0.894</i>	22.925 <i>0.903</i>	21.835 <i>0.860</i>	22.210 <i>0.874</i>
M 30	2 <i>0.08</i>	29.962 <i>1.180</i>	29.682 <i>1.169</i>	28.663 <i>1.129</i>	28.493 <i>1.122</i>	27.508 <i>1.083</i>	27.261 <i>1.073</i>	30.000 <i>1.181</i>		28.701 <i>1.130</i>	28.925 <i>1.139</i>	27.835 <i>1.096</i>	28.210 <i>1.111</i>
M 36	2 <i>0.08</i>	35.962 <i>1.416</i>	35.682 <i>1.405</i>	34.663 <i>1.365</i>	34.493 <i>1.358</i>	33.508 <i>1.319</i>	33.261 <i>1.309</i>	36.000 <i>1.417</i>		34.701 <i>1.366</i>	34.925 <i>1.375</i>	33.835 <i>1.332</i>	34.210 <i>1.347</i>
M 42	2 <i>0.08</i>	41.962 <i>1.652</i>	41.682 <i>1.641</i>	40.663 <i>1.601</i>	40.493 <i>1.594</i>	39.508 <i>1.555</i>	39.261 <i>1.546</i>	42.000 <i>1.654</i>		40.701 <i>1.602</i>	40.925 <i>1.611</i>	39.835 <i>1.568</i>	40.210 <i>1.583</i>

Description

The limit dimensions for standard threads given in the table correspond to the

- tolerance field **6g** for bolt threads
- tolerance field **6H** for nut threads.

The metric steel / metal threads specified in this catalog are based on these tolerance fields.

For threads with surface or heat treatments (e.g. sandblasting, powder coating, zinc plating, tempering, etc.), it may not be possible to comply with the listed tolerance fields in individual cases for process-related reasons. However, this does not have any negative impact on the function since the threads will still fit the corresponding screws or nuts.

For threads in plastic standard parts (without steel or metallic thread insert), these tolerances can usually not be maintained for manufacturing reasons.

