

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1478

TAPPING SCREW THREAD

DIMENSIONS IN MILLIMETRES AND INCHES

1st EDITION

October 1970

COPYRIGHT RESERVED

The copyright of ISO Recommendations and ISO Standards belongs to ISO Member Bodies. Reproduction of these documents, in any country, may be authorized therefore only by the national standards organization of that country, being a member of ISO.

For each individual country the only valid standard is the national standard of that country.

Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

TAPPING SCREW THREAD

DIMENSIONS IN MILLIMETRES AND INCHES

1. SCOPE

This ISO Recommendation specifies dimensions in millimetres and inches of thread and thread ends for tapping screws.

2. DIMENSIONS

Principal dimensions are given in the Table opposite. The millimetre dimensions are direct arithmetic conversions of the inch dimensions.

No extrusion of excess metal beyond the apex of the point resulting from thread rolling should be permissible; a slight rounding or truncation of the point of the cone end (type AB) is desirable.

The nominal sizes of series I should be preferred.

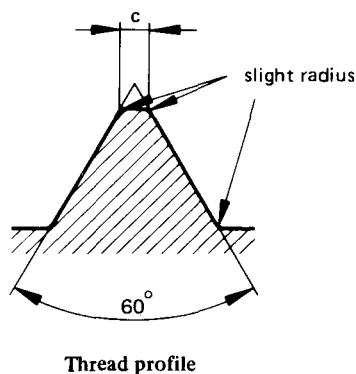
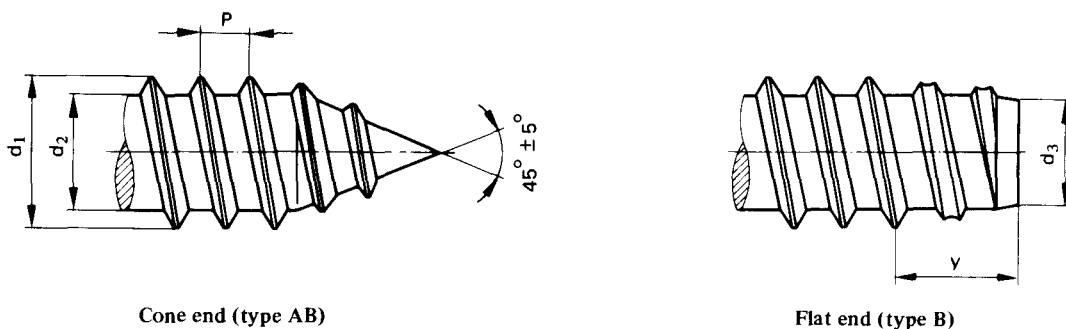


TABLE - Principal dimensions

Dimensions in millimetres and inches

Nominal size	Series I		2		4		6		8		10		14 ($\frac{1}{4}$)		
	Series II		0	1	3	5	7				12		16 ($\frac{5}{16}$)		
d_1	max.	mm	1.52	1.90	2.24	2.57	2.90	3.30	3.53	3.91	4.22	4.80	5.46	6.25	8.00
		in	0.060	0.075	0.088	0.101	0.114	0.130	0.139	0.154	0.166	0.189	0.215	0.246	0.315
	min.	mm	1.45	1.83	2.13	2.46	2.79	3.20	3.43	3.78	4.09	4.65	5.31	6.10	7.82
		in	0.057	0.072	0.084	0.097	0.110	0.126	0.135	0.149	0.161	0.183	0.209	0.240	0.308
d_2	max.	mm	0.91	1.24	1.63	1.90	2.18	2.39	2.64	2.92	3.10	3.58	4.17	4.88	6.20
		in	0.036	0.049	0.064	0.075	0.086	0.094	0.104	0.115	0.122	0.141	0.164	0.192	0.244
	min.	mm	0.84	1.17	1.52	1.80	2.08	2.29	2.51	2.77	2.95	3.43	3.99	4.70	5.99
		in	0.033	0.046	0.060	0.071	0.082	0.090	0.099	0.109	0.116	0.135	0.157	0.185	0.236
d_3	max.	mm	0.79	1.12	1.47	1.73	2.01	2.21	2.41	2.67	2.84	3.30	3.86	4.55	5.84
		in	0.031	0.044	0.058	0.068	0.079	0.087	0.095	0.105	0.112	0.130	0.152	0.179	0.230
	min.	mm	0.69	1.02	1.37	1.60	1.88	2.08	2.26	2.51	2.69	3.12	3.68	4.34	5.64
		in	0.027	0.040	0.054	0.063	0.074	0.082	0.089	0.099	0.106	0.123	0.145	0.171	0.222
P	mm	0.53	0.61	0.79	0.91	1.06	1.27	1.27	1.34	1.41	1.59	1.81	1.81	2.12	
	in	0.021	0.024	0.031	0.036	0.042	0.050	0.050	0.053	0.056	0.063	0.072	0.072	0.083	
Thread per inch			48	42	32	28	24	20	20	19	18	16	14	14	12
c	max.	mm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.15	0.15	0.15
		in	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.006	0.006	0.006
Short screws	max.	mm	1.07	1.22	1.57	1.80	2.11	2.54	2.54	2.67	2.82	3.18	3.63	3.63	4.24
		in	0.042	0.048	0.062	0.071	0.083	0.100	0.100	0.105	0.111	0.125	0.143	0.143	0.167
	min.	mm	0.79	0.91	1.19	1.37	1.60	1.90	1.90	2.01	2.11	2.39	2.72	2.72	3.18
		in	0.031	0.036	0.047	0.054	0.063	0.075	0.075	0.079	0.083	0.094	0.107	0.107	0.125
Long screws	max.	mm	1.32	1.52	1.98	2.26	2.64	3.18	3.18	3.35	3.53	3.96	4.55	4.55	5.28
		in	0.052	0.060	0.078	0.089	0.104	0.125	0.125	0.132	0.139	0.156	0.179	0.179	0.208
	min.	mm	1.07	1.22	1.57	1.80	2.11	2.54	2.54	2.67	2.82	3.18	3.63	3.63	4.24
		in	0.042	0.048	0.062	0.071	0.083	0.100	0.100	0.105	0.111	0.125	0.143	0.143	0.167

NOTE. - The limit between short and long length screws is given in the dimensional tables of the different types of tapping screws.