

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1478

TAPPING SCREW THREAD

DIMENSIONS IN MILLIMETRES AND INCHES

1st EDITION

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TAPPING SCREW THREAD

DIMENSIONS IN MILLIMETRES AND INCHES

1. SCOPE

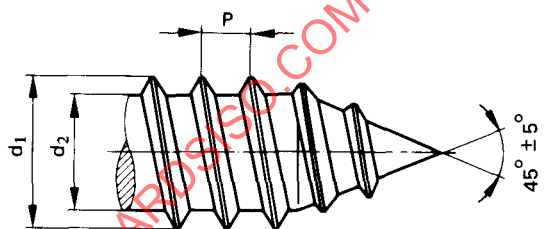
This ISO Recommendation specifies dimensions in millimetres and inches of thread and thread ends for tapping screws.

2. DIMENSIONS

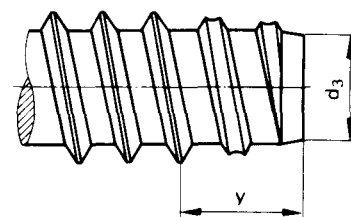
Principal dimensions are given in the Table opposite. The millimetre dimensions are direct arithmetic conversions of the inch dimensions.

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.

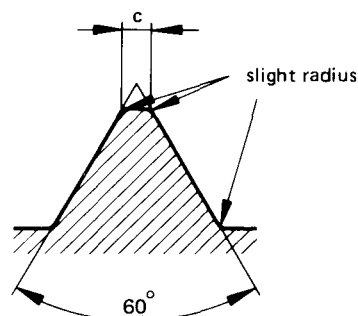
The nominal sizes of series I should be preferred.



Cone end (type AB)



Flat end (type B)



Thread profile

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	max.	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
	min.	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
	min.	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.