

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1481

SLOTTED PAN HEAD TAPPING SCREWS

DIMENSIONS IN MILLIMETRES AND INCHES

1st EDITION

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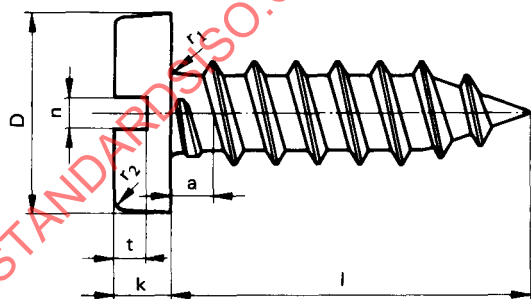
1. SCOPE

This ISO Recommendation specifies dimensions in millimetres and inches of slotted pan head screws, and provides a system of standard lengths, i.e. recommended combinations of thread size and nominal length.

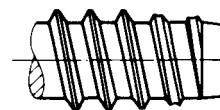
2. DIMENSIONS

Principal dimensions are given in the Table opposite. For thread dimensions and thread ends see ISO Recommendation R 1478, *Tapping screw thread — Dimensions in millimetres and inches*.

Nominal sizes of series I should be preferred.



Cone end (type AB)



$a \leq P$ (Pitch)

Flat end (type B)

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($\frac{5}{16}$)	
<i>D</i>	max.	mm	2.95	3.61	4.24	4.90	5.56	6.22	6.86	7.52	8.18	9.47	10.80	12.50	15.62		
		in	0.116	0.142	0.167	0.193	0.219	0.245	0.270	0.296	0.322	0.373	0.425	0.492	0.615		
	min.	mm	2.64	3.30	3.94	4.57	5.21	5.87	6.50	7.14	7.77	9.07	10.34	12.01	15.09		
		in	0.104	0.130	0.155	0.180	0.205	0.231	0.256	0.281	0.306	0.357	0.407	0.473	0.594		
<i>k</i>	max.	mm	0.99	1.17	1.35	1.52	1.73	1.90	2.08	2.26	2.44	2.79	3.18	3.66	4.52		
		in	0.039	0.046	0.053	0.060	0.068	0.075	0.082	0.089	0.096	0.110	0.125	0.144	0.178		
	min.	mm	0.79	0.97	1.14	1.30	1.47	1.65	1.83	2.01	2.16	2.51	2.84	3.30	4.11		
		in	0.031	0.038	0.045	0.051	0.058	0.065	0.072	0.079	0.085	0.099	0.112	0.130	0.162		
<i>n</i>	min.	mm	0.41	0.48	0.58	0.69	0.79	0.89	0.99	0.99	1.14	1.27	1.42	1.63	1.83		
		in	0.016	0.019	0.023	0.027	0.031	0.035	0.039	0.039	0.045	0.050	0.056	0.064	0.072		
	max.	mm	0.58	0.66	0.79	0.89	0.99	1.09	1.22	1.22	1.37	1.52	1.70	1.90	2.13		
		in	0.023	0.026	0.031	0.035	0.039	0.043	0.048	0.048	0.054	0.060	0.067	0.075	0.084		
<i>t</i>	min.	mm	0.36	0.46	0.56	0.66	0.76	0.86	0.94	1.04	1.14	1.35	1.55	1.78	2.16		
		in	0.014	0.018	0.022	0.026	0.030	0.034	0.037	0.041	0.045	0.053	0.061	0.070	0.085		
	max.	mm	0.56	0.69	0.79	0.91	1.02	1.14	1.27	1.37	1.47	1.73	1.96	2.21	2.69		
		in	0.022	0.027	0.031	0.036	0.040	0.045	0.050	0.054	0.058	0.068	0.077	0.87	0.106		
<i>r</i> ₁	mm	0.23	0.28	0.33	0.38	0.43	0.48	0.53	0.58	0.63	0.71	0.81	0.94	1.19			
	in	0.009	0.011	0.013	0.015	0.017	0.019	0.021	0.023	0.025	0.028	0.032	0.037	0.047			
<i>r</i> ₂	max.	mm	0.5	0.6	0.8	1	1.2	1.2	1.4	1.4	1.6	1.8	2	2.5	3.2		
	in	0.02	0.024	0.031	0.04	0.047	0.047	0.055	0.055	0.063	0.071	0.079	0.098	0.125			
Nominal length <i>l</i>			Standard lengths														
mm		in															
3.2		$\frac{1}{8}$															
4.5		$\frac{3}{16}$															
6.5		$\frac{1}{4}$															
9.5		$\frac{3}{8}$															
13		$\frac{1}{2}$															
16		$\frac{5}{8}$															
19		$\frac{3}{4}$															
22		$\frac{7}{8}$															
25		1															
32		1 $\frac{1}{4}$															
38		1 $\frac{1}{2}$															
45		1 $\frac{3}{4}$															
50		2															

The standard lengths are given between the stepped solid lines (———).

The upper stepped solid line (———) is the limit of the minimum practical length for both types.

Flat end tapping screws (type B) with lengths above the stepped broken line (— — —) are short screws and those below this stepped line are long screws, in accordance with ISO Recommendation R 1478.