

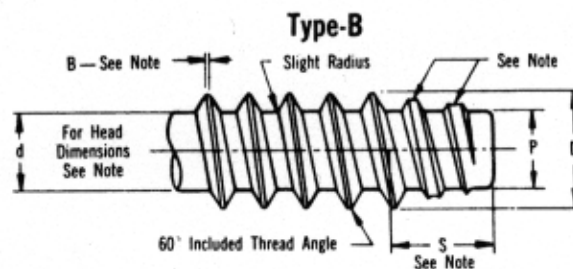
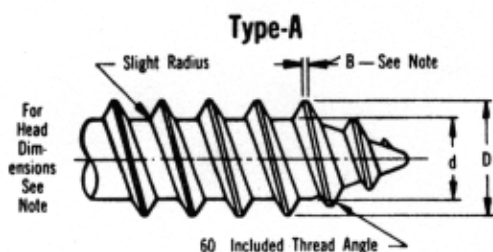
Thread Dimensions Tapping Screws

American Standard

- Type-A GIMLET POINT
- Type-B BLUNT POINT

GENERAL DATA

1. **BEARING SURFACE.** The bearing surface of tapping screw heads shall be at right angles to the body within 2 degrees . . . except flat and oval heads.
2. **SLOT DEPTH.** The depth of slots is measured from the highest part of the head to the intersection at the bottom of the slot.
3. **ECCENTRICITY.** The heads of tapping screws shall not be eccentric with the body beyond a tolerance of 3% of the maximum diameter.
4. **SCREW LENGTH.** Length of tapping screws shall be measured from the outside diameter of the bearing surface of the head to the extreme point parallel to the axis of the screw.
5. **LENGTH TOLERANCE.** Length of Type-A tapping screws up to 1 in. shall have a tolerance not beyond $\pm 1/32$ in. and $\pm 3/64$ in. on longer lengths. Type-B tapping screws tolerance shall be $+ .000$ and $- 1/32$ in. on lengths from $1/4$ in. to $3/4$ in. and $+ .000$ to $- 3/64$ in. on lengths over $3/4$ in. to $1 1/2$ in. Lengths over $1 1/2$ in. shall have a tolerance of $+ .000$ and $- 1/16$ in.
6. **THREAD LENGTH.** Tapping screws of all types shall be threaded as close to the head as is practical.
7. **FINISH.** Tapping screws are regularly furnished case hardened.



Nominal Size	Threads Per Inch	D		d	
		Major Diameter		Minor Diameter	
		Max.	Min.	Max.	Min.
2	32	.088	.084	.061	.056
3	28	.101	.097	.076	.071
4	24	.114	.110	.083	.078
5	20	.130	.126	.095	.090
6	18	.141	.136	.102	.096
7	16	.158	.152	.114	.108
8	15	.168	.162	.123	.116
10	12	.194	.188	.133	.126
12	11	.221	.215	.162	.155
14	10	.254	.248	.185	.178
5/16	12	.315	.308	.244	.236

A reasonable bluntness of the point is permissible.
All dimensions given in inches.

Nominal Size	Threads Per Inch	D		d		P	
		Major Diameter		Minor Diameter		Point Diameter	
		Max.	Min.	Max.	Min.	Max.	Min.
2	32	.088	.084	.064	.060	.058	.054
3	28	.101	.097	.075	.071	.068	.063
4	24	.114	.110	.086	.082	.079	.074
5	20	.130	.126	.094	.090	.087	.082
6	20	.139	.135	.104	.099	.095	.089
7	19	.154	.149	.115	.109	.105	.099
8	18	.166	.161	.122	.116	.112	.106
10	16	.189	.183	.141	.135	.130	.126
12	14	.215	.209	.164	.157	.152	.145
1/4	14	.246	.240	.192	.185	.179	.171
5/16	12	.315	.308	.244	.236	.230	.222

All dimensions given in inches.
Tapered threads have unfinished crests.
Taper length, S, is 2 to 2 1/2 times the pitch of the thread.

Note: Head Dimensions are identical to those For Machine Screws
All dimensions are given in inches. Up to and including size No. 8 maximum crest of thread (B) equals 0.004 in. Over Size No. 8 maximum crest of thread equals 0.008 in.



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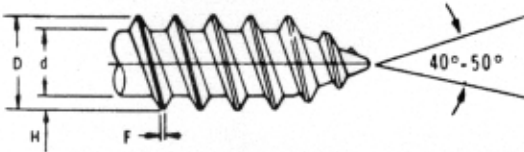
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Thread Dimensions Tapping Screws

American Standard

- Type-AB THREAD FORMING SCREWS
- Type-F THREAD CUTTING SCREW
- Type-U DRIVE SCREW

Type AB THREAD FORMING SCREW



This recently developed, and designated Type AB, thread forming, tapping screw is a combination of the standard Type-A sheet metal screw and the Type B thread forming screw. The new Type AB is interchangeable with the current Type B since the thread is similar but the point resembles the gimlet Type A.

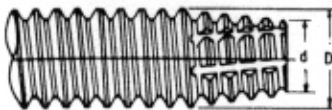
The new Type AB will, with few exceptions also fit holes in existing products intended for Type A tapping screws.

General Data For Type AB Tapping Screws is same as for Type A and Type B. . . See Page 43

Nominal Size	Threads Per Inch	D Major Diameter		d Minor Diameter		H Thread Depth	F Flat Max
		Max	Min	Max	Min		
0	48	.060	.057	.036	.033	.0120	.004
1	42	.075	.072	.049	.046	.0130	
2	32	.088	.084	.064	.060	.0120	
3	28	.101	.097	.075	.071	.0130	
4	24	.114	.110	.086	.082	.0140	.006
5	20	.130	.126	.094	.090	.0180	
6	20	.139	.135	.104	.099	.0178	
7	19	.154	.149	.115	.109	.0198	
8	18	.166	.161	.122	.116	.0223	.006
10	16	.189	.183	.141	.135	.0240	
12	14	.215	.209	.164	.157	.0258	
1/4	14	.246	.240	.192	.185	.0273	
5/16	12	.315	.308	.244	.236	.0358	

A reasonable bluntness of the point is permissible.
All dimensions are given in inches.

Type F THREAD CUTTING SCREW



The Type F is a self threading screw for use in brittle type materials. As the screw is turned into a hole a machine screw thread is cut, removing the material rather than merely displacing it. It is suitable for use in sheet metals, plywood, plastics, etc.

General Data For Type F Tapping Screw is same as for Type A and Type B. . . See Page 43

Nominal Size	Threads Per Inch	D Major Diameter			P Point Diameter	
		Basic	Max	Min	Max	Min
2	56	0.0860	0.0860	0.0820	0.067	0.061
2	64	0.0860	0.0860	0.0822	0.070	0.064
3	48	0.0990	0.0990	0.0946	0.077	0.070
3	56	0.0990	0.0990	0.0950	0.080	0.074
4	40	0.1120	0.1120	0.1072	0.086	0.077
4	48	0.1120	0.1120	0.1076	0.090	0.083
5	40	0.1250	0.1250	0.1202	0.099	0.090
5	44	0.1250	0.1250	0.1204	0.101	0.093
6	32	0.1380	0.1380	0.1326	0.106	0.095
6	40	0.1380	0.1380	0.1332	0.112	0.103
8	32	0.1640	0.1640	0.1586	0.132	0.121
8	36	0.1640	0.1640	0.1590	0.135	0.125
10	24	0.1900	0.1900	0.1834	0.147	0.133
10	32	0.1900	0.1900	0.1846	0.158	0.147
12	24	0.2160	0.2160	0.2094	0.173	0.159
12	28	0.2160	0.2160	0.2098	0.179	0.167
1/4	20	0.2500	0.2500	0.2428	0.198	0.181
1/4	28	0.2500	0.2500	0.2438	0.213	0.201
5/16	18	0.3125	0.3125	0.3043	0.255	0.236
5/16	24	0.3125	0.3125	0.3059	0.269	0.255
3/8	16	0.3750	0.3750	0.3660	0.310	0.289
3/8	24	0.3750	0.3750	0.3684	0.332	0.318

Type-U DRIVE SCREW



Thread forming drive screw is hammered or forced into hole. Multiple thread with no point. Difficult to remove and ideal for permanent fastening.

Nominal Size	A Diameter		D Diameter		F Diameter		H		Recommended Drill No
	Max	Min	Max	Min	Max	Min	Max	Min	
00	.060	.057	.099	.090	.049	.046	.034	.026	55 (.052)
0	.075	.072	.127	.118	.063	.060	.049	.041	51 (.067)
2	.100	.097	.162	.146	.083	.080	.069	.059	44 (.086)
4	.116	.112	.211	.193	.096	.092	.086	.075	37 (.104)
6	.140	.136	.260	.240	.116	.112	.103	.091	31 (.120)
8	.167	.162	.309	.287	.136	.132	.120	.107	27 (.144)
10	.182	.177	.359	.334	.150	.146	.137	.123	20 (.161)
12	.212	.206	.408	.382	.177	.173	.153	.139	11 (.191)
14	.242	.236	.457	.429	.202	.198	.170	.155	2 (.221)