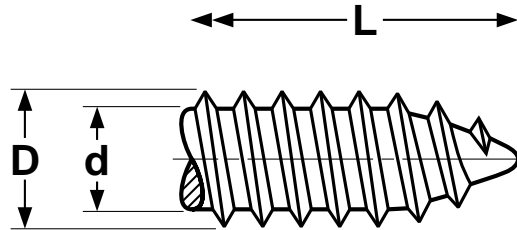


# Self-Tapping Screws *Thread Forming*

## Type-AB



### THREADS FOR SELF-TAPPING SCREWS TYPE AB

ASME  
B18.6.4-1998

| Nominal Size or Basic Screw Diameter |       | Threads Per Inch | D                     |      | d              |      | L                              |           | Minimum Torsional Strength, lb.- in. (STEEL SCREWS ONLY) |
|--------------------------------------|-------|------------------|-----------------------|------|----------------|------|--------------------------------|-----------|--|
|                                      |       |                  | Major Diameter        |      | Minor Diameter |      | Minimum Practical Screw Length |           |  |
|                                      |       |                  | Max                   | Min  | Max            | Min  | 90° Heads                      | Csk Heads |  |
| 2                                    | .0860 | 32               | .088                  | .082 | .064           | .060 | 3/16                           | 7/32      | 4  |
| 3                                    | .0990 | 28               | .101                  | .095 | .075           | .071 | 3/16                           | 1/4       | 9  |
| 4                                    | .1120 | 24               | .114                  | .108 | .086           | .082 | 7/32                           | 9/32      | 13   |
| 5                                    | .1250 | 20               | .130                  | .123 | .094           | .090 | 1/4                            | 5/16      | 18   |
| 6                                    | .1380 | 20               | .139                  | .132 | .104           | .099 | 9/32                           | 11/32     | 24   |
| 7                                    | .1510 | 19               | .154                  | .147 | .115           | .109 | 5/16                           | 3/8       | 30   |
| 8                                    | .1640 | 18               | .166                  | .159 | .122           | .116 | 5/16                           | 3/8       | 39   |
| 10                                   | .1900 | 16               | .189                  | .182 | .141           | .135 | 3/8                            | 7/16      | 56   |
| 12                                   | .2160 | 14               | .215                  | .208 | .164           | .157 | 7/16                           | 21/32     | 88   |
| 1/4                                  | .2500 | 14               | .246                  | .237 | .192           | .185 | 1/2                            | 19/32     | 142  |
| 5/16                                 | .3125 | 12               | .315                  | .306 | .244           | .236 | 5/8                            | 3/4       | 290  |
| 3/8                                  | .3750 | 12               | .380                  | .371 | .309           | .299 | 3/4                            | 29/32     | 590  |
| <b>Tolerance on Length</b>           |       |                  | Up to 1" Incl.: ±0.03 |      |                |      | Over 1": ±0.05                 |           |  |

|  |  |
|--|--|
| <b>Description</b>                     | A thread forming tapping screw with spaced threads and a gimlet point  |
| <b>Applications/ Advantages</b>        | For self starting in thin metal or resin-filled plywood. Recommended over a Type-A, particularly in brittle materials. |
| <b>Material</b>                        | <b>Steel:</b> AISI 1016 - 1024 or equivalent steel.<br><b>Stainless:</b> 18-8 stainless steel.                         |
| <b>Heat Treatment (Steel only)</b>     | Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.                                    |
| <b>Surface Hardness</b>                | <b>Steel:</b> Rockwell C45 minimum   |
| <b>Case Depth (Steel only)</b>         | No. 4 thru 6 diameter: .002 - .007<br>No. 8 thru 12 diameter: .004 - .009<br>1/4" and larger: .005 - .011              |
| <b>Core Hardness (after tempering)</b> | <b>Steel:</b> Rockwell C28 - 38  |
| <b>Plating</b>                         | See Appendix-A for plating information.  |