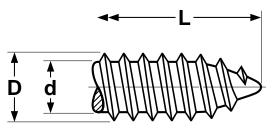
## Self-Tapping Screws Thread Forming



| THREADS FOR SELF-TAPPING SCREWS TYPE AB ASME<br>B18.6.4-1998 |       |                     |                     |                       |                     |      |  |       |   |
|--|-------|---------------------|---------------------|-----------------------|---------------------|------|--|-------|---|
| Nominal Size or<br>Basic Screw Diameter                      |       | Threads<br>Per Inch | D<br>Major Diameter |                       | d<br>Minor Diameter |      | L<br>Minimum Practical<br>Screw Length |       | Minimum<br>Torsional<br>Strength,<br>Ib in.<br>(STEEL |
|  |       |                     |                     |                       |                     |      |  |       |   |
|  |       |                     | 2                   | .0860                 | 32                  | .088 | .082                                   | .064  | .060  |
| 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   |
| Tolerance on Length  |       |                     |                     | Up to 1" Incl.: ±0.03 |                     |      | Over 1": ±0.05                         |       |   |
|  |       |                     |                     | •                     |                     |      |  |       |   |

| Description                        | A thread forming tapping screw with spaced threads and a gimlet point  |  |  |  |  |
|------------------------------------|--|--|--|--|--|
| Applications/<br>Advantages        | For self starting in thin metal or resin-filled plywood. Recommended over a Type-A, particularly in brittle materials. |  |  |  |  |
| Material                           | Steel: AISI 1016 - 1024 or equivalent steel.<br>Stainless: 18-8 stainless steel.                                       |  |  |  |  |
| Heat Treatment<br>(Steel only)     | Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.                                    |  |  |  |  |
| Surface Hardness                   | Steel: Rockwell C45 minimum  |  |  |  |  |
| Case Depth<br>(Steel only)         | No. 4 thru 6 diameter: .002007<br>No. 8 thru 12 diameter: .004009<br>1/4" and larger: .005011                          |  |  |  |  |
| Core Hardness<br>(after tempering) | Steel: Rockwell C28 - 38   |  |  |  |  |
| Plating                            | See Appendix-A for plating information.  |  |  |  |  |