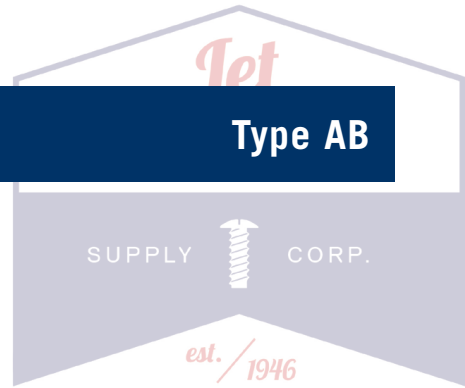
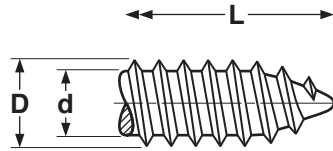


THREAD FORMING

Type AB



| THREADS FOR SELF-TAPPING SCREWS TYPE AB |                  |                |                       |                |      |                                |                |  | ASME B18.6.3-2013 |
|---|------------------|----------------|-----------------------|----------------|------|--------------------------------|----------------|--|-------------------|
| 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 |  |                   |

| Description                            | A thread forming tapping screw with spaced threads and a gimlet point.   |  |  |
|--|--|--|--|
| <b>Applications/ Advantages</b>        | For self starting in thin (.015-.050 thick) metal or resin-filled plywood. Recommended over a Type-A, particularly in brittle materials. | For self starting in thin stainless sheet when corrosion resistance is required. | For self-starting in thin stainless sheet when a harder material is preferred.   |
| <b>Material</b>                        | <b>Steel:</b> AISI 1016 - 1024 or equivalent steel   | <b>18-8 Stainless:</b> Austenitic 18-8 stainless steel                           | <b>410 Stainless:</b> Martensitic 410 stainless steel  |
| <b>Heat Treatment</b>                  | Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.  | -  | <b>410 Stainless:</b> Screws shall be annealed by heating to 1850-1950°F, held at least for 1/2 hour and rapid air- or oil-quenched then reheating to 525°F minimum for at least 1 hour and air cooled to provide the required tensile, yield and hardness properties. |
| <b>Surface Hardness</b>                | Steel: 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>410 Stainless:</b> Rockwell C38 - 42  |
| <b>Plating</b>                         | See Appendix-A for plating information.  |  |  |