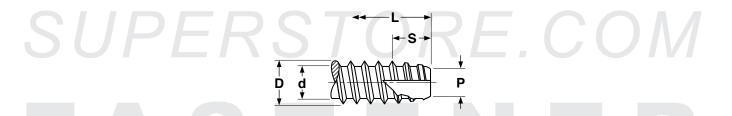
**Tolerance on Length** 

## **Thread Forming**

## Self- Tapping Screws

Over 3/4" to 1-1/2", Incl.: -0.05



|                                            |       |                     | D              |      | d              |      | Р                 | S                  |      | L                                 |              | Minimum<br>Torsional<br>Strength,<br>Ib in. |
|--------------------------------------------|-------|---------------------|----------------|------|----------------|------|-------------------|--------------------|------|-----------------------------------|--------------|---------------------------------------------|
| Nominal Size or<br>Basic Screw<br>Diameter |       | Threads<br>Per Inch | Major Diameter |      | Minor Diameter |      | Point<br>Diameter | Point Taper Length |      | Minimum Practical<br>Screw Length |              |                                             |
|                                            |       |                     | Max            | Min  | Max            | Min  | Ref               | Max                | Min  | 90° Heads                         | Csk<br>Heads | (STEEL<br>SCREWS<br>ONLY)                   |
| 2                                          | .0860 | 32                  | .088           | .082 | .064           | .060 | .058              | .062               | .047 | 5/32                              | 3/16         | 4                                           |
| 4                                          | .1120 | 24                  | .114           | .108 | .086           | .082 | .079              | .083               | .063 | 3/16                              | 1/4          | 13                                          |
| 5                                          | .1250 | 20                  | .130           | .123 | .094           | .090 | .087              | .100               | .075 | 7/32                              | 9/32         | 18                                          |
| 6                                          | .1380 | 20                  | .139           | .132 | .104           | .099 | .095              | .100               | .075 | 1/4                               | 9/32         | 24                                          |
| 7                                          | .1510 | 19                  | .154           | .147 | .115           | .109 | .105              | .105               | .079 | 1/4                               | 5/16         | 30                                          |
| 8                                          | .1640 | 18                  | .166           | .159 | .122           | .116 | .112              | .111               | .083 | 9/32                              | 11/32        | 39                                          |
| 10                                         | .1900 | 16                  | .189           | .182 | .141           | .135 | .130              | .125               | .094 | 5/16                              | 3/8          | 56                                          |
| 12                                         | .2160 | 14                  | .215           | .208 | .164           | .157 | .152              | .143               | .107 | 11/32                             | 7/16         | 88                                          |
| 1/4                                        | .2500 | 14                  | .246           | .237 | .192           | .185 | .179              | .143               | .107 | 3/8                               | 1/2          | 142                                         |
| 5/16                                       | .3125 | 12                  | .315           | .306 | .244           | .236 | .230              | .167               | .125 | 15/32                             | 19/32        | 290                                         |
| 3/8                                        | .3750 | 12                  | .380           | .371 | .309           | .299 | .293              | .167               | .125 | 17/32                             | 11/16        | 590                                         |

A thread cutting screw with spaced threads, a blunt point, tapered entering threads, a single wide cutting edge, and a Description chip cavity. Steel Stainless Stainless screws offer greater corrosion resistance than steel screws but have a more limited range of appli-Applications/ For molded or through holes in plastics and other soft cations due to being a softer metal. When using any Advantages materials. Provides excellent chip clearing capability. thread-cutting screw, the material in which the threads are cut should have a a lower hardness by 10-20 Rockwell hardness points. Material AISI 1016 - 1024 or equivalent steel. 18-8 stainless steel. Screws shall be guenched in liquid and then tempered by **Heat Treatment** 18-8 thread-cutting screws are not heat-treated. reheating to 650°F minimum. Surface Hardness Rockwell C45 minimum No. 4 thru 6 diameter: .002 - .007 **Case Depth** No. 8 thru 10 diameter: .004 - .009 1/4" diameter and larger: .005 - .011 **Core Hardness** Rockwell B90 - C20 Rockwell C28 - 38 (after tempering) Plating See Appendix-A for plating information.

Up to 3/4", Incl.: -0.03