



| Screw Size | DIN 127 Type B - With Square Ends |       |                     |             |                     |
|------------|-----------------------------------|-------|---------------------|-------------|---------------------|
|            | Hole Diameter d1                  |       | Outside Diameter d2 | Thickness s | Thickness Tolerance |
|            | min.                              | max.  |                     |             |                     |
| 2          | 2.1                               | 2.4   | 4.4                 | 0.5         | +/-0.1              |
| 2.2        | 2.3                               | 2.6   | 4.8                 | 0.6         | +/-0.1              |
| 2.5        | 2.6                               | 2.9   | 5.1                 | 0.6         | +/-0.1              |
| 3          | 3.1                               | 3.4   | 6.2                 | 0.8         | +/-0.1              |
| (3.5)      | 3.6                               | 3.9   | 6.7                 | 0.8         | +/-0.1              |
| 4          | 4.1                               | 4.4   | 7.6                 | 0.9         | +/-0.1              |
| 5          | 5.1                               | 5.4   | 9.2                 | 1.2         | +/-0.1              |
| 6          | 6.1                               | 6.5   | 11.8                | 1.6         | +/-0.1              |
| 7          | 7.1                               | 7.5   | 12.8                | 1.6         | +/-0.1              |
| 8          | 8.1                               | 8.5   | 14.8                | 2.0         | +/-0.1              |
| 10         | 10.2                              | 10.7  | 18.1                | 2.2         | +/-0.15             |
| 12         | 12.2                              | 12.7  | 21.1                | 2.5         | +/-0.15             |
| 14         | 14.2                              | 14.7  | 24.1                | 3.0         | +/-0.15             |
| 16         | 16.2                              | 17.0  | 27.4                | 3.5         | +/-0.2              |
| (18)       | 18.2                              | 19.0  | 29.4                | 3.5         | +/-0.2              |
| 20         | 20.2                              | 21.2  | 33.6                | 4.0         | +/-0.2              |
| (22)       | 22.5                              | 23.5  | 35.9                | 4.0         | +/-0.2              |
| 24         | 24.5                              | 25.5  | 40.0                | 5.0         | +/-0.2              |
| (27)       | 27.5                              | 28.5  | 43.0                | 5.0         | +/-0.2              |
| 30         | 30.5                              | 31.7  | 48.2                | 6.0         | +/-0.2              |
| (33)       | 33.5                              | 34.7  | 55.2                | 6.0         | +/-0.2              |
| 36         | 36.5                              | 37.7  | 58.2                | 6.0         | +/-0.2              |
| (39)       | 39.5                              | 40.7  | 61.2                | 6.0         | +/-0.2              |
| 42         | 42.5                              | 43.7  | 68.2                | 7.0         | +/-0.25             |
| (45)       | 45.5                              | 46.7  | 71.2                | 7.0         | +/-0.25             |
| 48         | 49.0                              | 50.5  | 75.0                | 7.0         | +/-0.25             |
| 52         | 53.0                              | 54.5  | 83.0                | 8.0         | +/-0.25             |
| 56         | 57.0                              | 58.5  | 87.0                | 8.0         | +/-0.25             |
| (60)       | 61.0                              | 62.5  | 91.0                | 8.0         | +/-0.25             |
| 64         | 65.0                              | 66.5  | 95.0                | 8.0         | +/-0.25             |
| 68         | 69.0                              | 70.5  | 99.0                | 8.0         | +/-0.25             |
| 72         | 73.0                              | 74.5  | 103.0               | 8.0         | +/-0.25             |
| 80         | 81.0                              | 82.5  | 111.0               | 8.0         | +/-0.25             |
| 90         | 91.0                              | 92.5  | 121.0               | 8.0         | +/-0.25             |
| 100        | 101.0                             | 102.5 | 131.0               | 8.0         | +/-0.25             |

| DIN 7980 - With Square Ends |      |                     |             |                     |
|-----------------------------|------|---------------------|-------------|---------------------|
| Hole Diameter d1            |      | Outside Diameter d2 | Thickness s | Thickness Tolerance |
| min.                        | max. |                     |             |                     |
| 3.1                         | 3.4  | 5.6                 | 1.0         | +/-0.1              |
| 3.6                         | 3.9  | 6.1                 | 1.0         | +/-0.1              |
| 4.1                         | 4.4  | 7.0                 | 1.2         | +/-0.1              |
| 5.1                         | 5.4  | 8.8                 | 1.6         | +/-0.1              |
| 6.1                         | 6.5  | 9.9                 | 1.6         | +/-0.1              |
| 8.1                         | 8.5  | 12.7                | 2.0         | +/-0.1              |
| 10.2                        | 10.7 | 16.0                | 2.5         | +/-0.15             |
| 12.2                        | 12.7 | 18.0                | 2.5         | +/-0.15             |
| 14.2                        | 14.7 | 21.1                | 3.0         | +/-0.2              |
| 16.2                        | 17.0 | 24.4                | 3.5         | +/-0.2              |
| 18.2                        | 19.0 | 26.4                | 3.5         | +/-0.2              |
| 20.2                        | 21.2 | 30.6                | 4.5         | +/-0.2              |
| 22.5                        | 23.5 | 32.9                | 4.5         | +/-0.2              |
| 24.5                        | 25.5 | 35.9                | 5.0         | +/-0.2              |
| 27.5                        | 28.5 | 38.9                | 5.0         | +/-0.2              |
| 30.5                        | 31.7 | 44.1                | 6.0         | +/-0.2              |
| 33.5                        | 34.7 | 47.1                | 6.0         | +/-0.2              |
| 36.5                        | 37.7 | 52.2                | 7.0         | +/-0.25             |
| 42.5                        | 43.7 | 60.2                | 8.0         | +/-0.25             |
| 49.0                        | 50.5 | 67.0                | 8.0         | +/-0.25             |

DIN 7980 Lock Washers Are Designed For Use With Cheese Head Screws And Or Socket Head Cap Screws Because Of The Smaller OD max.

Sizes With ( ) Should be Avoided For New Design.

Not All Diameters In DIN 127 B And DIN 7980 Available In All Materials.

| Material | Spring Steel     | A2 Stainless | A4 Stainless | Phosphor Bronze |
|----------|------------------|--------------|--------------|-----------------|
| Hardness | HRC 44-51        | NA           | NA           | NA              |
| Finish   | Plain/Plated (1) | Plain        | Plain        | Plain           |

(1) Mechanical, Organic, Or Electro Zinc Plated At Manufacturer's Option.

FOR MORE DETAILED INFORMATION, PLEASE REFER TO COMPLETE DIN STANDARD, WHICH IS THE GOVERNING STANDARD

DIN 127 B (1987) / DIN 7980 (1987) - LFG 10/01/10 REVISED