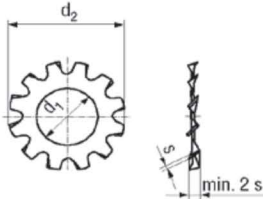
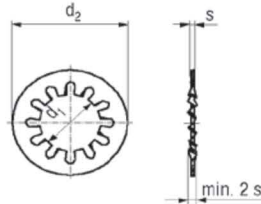


TOOTHED & SERRATED LOCK WASHERS - EXTERNAL (A) AND INTERNAL (J) - DIN 6797 / DIN 6798

DIN 6797 Type A Externally Toothed

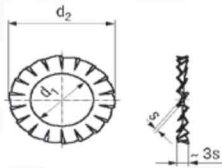


DIN 6797 Type J Internally Toothed

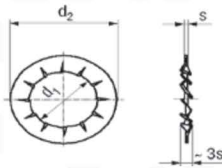


| Screw Size | Hole Diameter d1 | | OD Diameter d2 | | Material Thickness s | Minimum # Of Teeth | Washer Thickness min. | Below Applies To Both DIN 6797 And DIN 6798 | | | |
|------------|------------------|-------|----------------|---------------|----------------------|--------------------|-----------------------|---|--|--|--|
| | min.= nominal | max. | min. | max.= nominal | | | | Material | | | |
| 1.6 | 1.70 | 1.84 | 3.30 | 3.6 | 0.3 | 6 | 0.6 | Material | | | |
| 2 | 2.20 | 2.34 | 4.20 | 4.5 | 0.3 | 6 | 0.6 | | | | |
| 2.5 | 2.70 | 2.84 | 5.20 | 5.5 | 0.4 | 6 | 0.8 | A2 Stainless | | | |
| 3 | 3.20 | 3.38 | 5.70 | 6.0 | 0.4 | 6 | 0.8 | A4 Stainless | | | |
| (3.5) | 3.70 | 3.88 | 6.64 | 7.0 | 0.5 | 6 | 1.0 | (1) Mechanical, Organic, Or Electro Zinc Plated At Manufacturer's Option. | | | |
| 4 | 4.30 | 4.48 | 7.64 | 8.0 | 0.5 | 8 | 1.0 | | | | |
| 5 | 5.30 | 5.48 | 9.64 | 10.0 | 0.6 | 8 | 1.2 | Hardness | | | |
| 6 | 6.40 | 6.62 | 10.57 | 11.0 | 0.7 | 8 | 1.4 | 350-425 HV | | | |
| 7 | 7.40 | 7.62 | 12.07 | 12.5 | 0.8 | 8 | 1.6 | Finish | | | |
| 8 | 8.40 | 8.62 | 14.57 | 15.0 | 0.8 | 8 | 1.6 | Plain/Plated (1) | | | |
| 10 | 10.50 | 10.77 | 17.57 | 18.0 | 0.9 | 9 | 1.8 | Not All Diameters In DIN 6797 And DIN 6798 Available In All Materials. | | | |
| 12 | 13.00 | 13.27 | 19.98 | 20.5 | 1.0 | 10 | 2.0 | | | | |
| 14 | 15.00 | 15.27 | 23.48 | 24.0 | 1.0 | 10 | 2.0 | Spring Steel | | | |
| 16 | 17.00 | 17.27 | 25.48 | 26.0 | 1.2 | 12 | 2.4 | A2 Stainless | | | |
| (18) | 19.00 | 19.33 | 29.48 | 30.0 | 1.4 | 12 | 2.8 | A4 Stainless | | | |
| 20 | 21.00 | 21.33 | 32.38 | 33.0 | 1.4 | 12 | 2.8 | Material | | | |
| (22) | 23.00 | 23.33 | 35.38 | 36.0 | 1.5 | 14 | 3.0 | Spring Steel | | | |
| 24 | 25.00 | 25.33 | 37.38 | 38.0 | 1.5 | 14 | 3.0 | A2 Stainless | | | |
| (27) | 28.00 | 28.33 | 43.38 | 44.0 | 1.6 | 14 | 3.2 | A4 Stainless | | | |
| 30 | 31.00 | 31.39 | 47.38 | 48.0 | 1.6 | 14 | 3.2 | Material | | | |

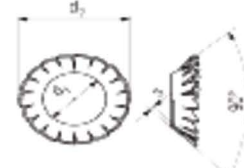
DIN 6798 Type A Externally Toothed



DIN 6798 Type J Internally Toothed



DIN 6798 Type V Externally Toothed



Hole ID For Type V Is The Same As For Type A & J

| Screw Size | Hole Diameter d1 | | OD Diameter d2 | | Material Thickness s | Minimum # Of Teeth | | Washer Thickness min. | Type V OD Diameter d2 | Type V Material Thickness s |
|------------|------------------|-------|----------------|---------------|----------------------|--------------------|--------|-----------------------|-----------------------|-----------------------------|
| | min.= nominal | max. | min. | max.= nominal | | Type A | Type J | | | |
| 1.6 | 1.70 | 1.84 | 3.30 | 3.6 | 0.3 | 9 | 7 | 0.9 | | |
| 2 | 2.20 | 2.34 | 4.20 | 4.5 | 0.3 | 9 | 7 | 0.9 | ~4.2 | 0.20 |
| 2.5 | 2.70 | 2.84 | 5.20 | 5.5 | 0.4 | 9 | 7 | 1.2 | ~5.1 | 0.20 |
| 3 | 3.20 | 3.38 | 5.70 | 6.0 | 0.4 | 9 | 7 | 1.2 | ~6 | 0.20 |
| (3.5) | 3.70 | 3.88 | 6.64 | 7.0 | 0.5 | 10 | 8 | 1.5 | ~7 | 0.25 |
| 4 | 4.30 | 4.48 | 7.64 | 8.0 | 0.5 | 11 | 8 | 1.5 | ~8 | 0.25 |
| 5 | 5.30 | 5.48 | 9.64 | 10.0 | 0.6 | 11 | 8 | 1.8 | ~9.8 | 0.30 |
| 6 | 6.40 | 6.62 | 10.57 | 11.0 | 0.7 | 12 | 9 | 2.1 | ~11.8 | 0.40 |
| 7 | 7.40 | 7.62 | 12.07 | 12.5 | 0.8 | 14 | 10 | 2.4 | | |
| 8 | 8.40 | 8.62 | 14.57 | 15.0 | 0.8 | 14 | 10 | 2.4 | ~15.3 | 0.40 |
| 10 | 10.50 | 10.77 | 17.57 | 18.0 | 0.9 | 16 | 12 | 2.7 | ~19 | 0.50 |
| 12 | 13.00 | 13.27 | 19.98 | 20.5 | 1.0 | 16 | 12 | 3.0 | ~23 | 0.50 |
| 14 | 15.00 | 15.27 | 23.48 | 24.0 | 1.0 | 18 | 14 | 3.0 | ~26.2 | 0.60 |
| 16 | 17.00 | 17.27 | 25.48 | 26.0 | 1.2 | 18 | 14 | 3.6 | ~30.2 | 0.60 |
| (18) | 19.00 | 19.33 | 29.48 | 30.0 | 1.4 | 18 | 14 | 4.2 | | |
| 20 | 21.00 | 21.33 | 32.38 | 33.0 | 1.4 | 20 | 16 | 4.2 | | |
| (22) | 23.00 | 23.33 | 35.38 | 36.0 | 1.5 | 20 | 16 | 4.5 | | |
| 24 | 25.00 | 25.33 | 37.38 | 38.0 | 1.5 | 20 | 16 | 4.5 | | |
| (27) | 28.00 | 28.33 | 43.38 | 44.0 | 1.6 | 22 | 18 | 4.8 | | |
| 30 | 31.00 | 31.39 | 47.38 | 48.0 | 1.6 | 22 | 18 | 4.8 | | |

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

DIN 6797 (1988) / DIN 6798 (1988) - LFG 10/01/10 REVISED