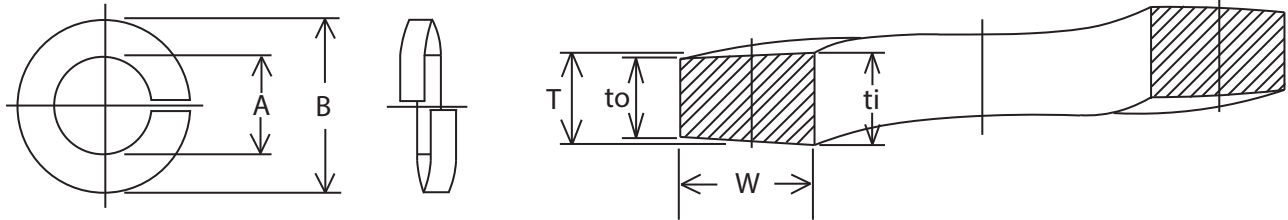


PRODUCT DATA SHEET

REGULAR HELICAL SPRING LOCK WASHERS

1.0 DIMENSIONS: AS PER ASME B18.21.1.



| NOMINAL WASHER SIZE | INSIDE DIAMETER (A) | | OUTSIDE DIAMETER (B) | MEAN SECTION THICKNESS (T) (ti+to)2 | | SECTION WIDTH (W) |
|---------------------------|------------------------|-------|-------------------------|---|-------|----------------------|
| | MAX | MIN | | MAX | MIN | |
| #2 | 0.094 | 0.088 | 0.172 | 0.026 | 0.020 | 0.035 |
| #4 | 0.120 | 0.114 | 0.209 | 0.031 | 0.025 | 0.040 |
| #5 | 0.133 | 0.127 | 0.236 | 0.037 | 0.031 | 0.047 |
| #6 | 0.148 | 0.141 | 0.250 | 0.037 | 0.031 | 0.047 |
| #8 | 0.174 | 0.167 | 0.293 | 0.046 | 0.040 | 0.055 |
| #10 | 0.200 | 0.193 | 0.334 | 0.053 | 0.047 | 0.062 |
| #12 | 0.227 | 0.220 | 0.377 | 0.062 | 0.056 | 0.070 |
| 1/4 | 0.260 | 0.252 | 0.487 | 0.072 | 0.062 | 0.109 |
| 5/16 | 0.322 | 0.314 | 0.583 | 0.088 | 0.078 | 0.125 |
| 3/8 | 0.385 | 0.377 | 0.680 | 0.104 | 0.094 | 0.141 |
| 7/16 | 0.450 | 0.440 | 0.776 | 0.119 | 0.109 | 0.156 |
| 1/2 | 0.512 | 0.502 | 0.869 | 0.135 | 0.125 | 0.171 |
| 9/16 | 0.574 | 0.564 | 0.965 | 0.151 | 0.141 | 0.188 |
| 5/8 | 0.641 | 0.628 | 1.073 | 0.166 | 0.156 | 0.203 |
| 3/4 | 0.766 | 0.753 | 1.265 | 0.198 | 0.188 | 0.234 |
| 7/8 | 0.894 | 0.878 | 1.459 | 0.239 | 0.219 | 0.266 |
| 1 | 1.024 | 1.003 | 1.656 | 0.270 | 0.250 | 0.297 |
| 1-1/8 | 1.153 | 1.129 | 1.847 | 0.301 | 0.281 | 0.328 |
| 1-1/4 | 1.280 | 1.254 | 2.036 | 0.332 | 0.312 | 0.359 |
| 1-3/8 | 1.408 | 1.379 | 2.219 | 0.364 | 0.344 | 0.391 |
| 1-1/2 | 1.534 | 1.504 | 2.419 | 0.395 | 0.375 | 0.422 |
| 1-3/4 | 1.789 | 1.758 | 2.679 | 0.419 | 0.389 | 0.424 |
| 2 | 2.039 | 2.008 | 2.936 | 0.452 | 0.422 | 0.427 |
| 2-1/2 | 2.543 | 2.512 | 3.471 | 0.470 | 0.440 | 0.442 |
| 3 | 3.043 | 3.012 | 4.074 | 0.488 | 0.458 | 0.491 |

Notes: Popularly known as "Split Lock Washers"

PRODUCT DATA SHEET

REGULAR HELICAL SPRING LOCK WASHERS

2.0 MECHANICAL PROPERTIES: AS PER AME B18.21.1

2.1 STEEL (HIGH CARBON STEEL & ALLOY STEEL): HARDNESS: 38 HRC TO 46 HRC

2.2 STAINLESS STEEL (18-8 / 304 & 316): SIZES UP TO & INCLUDING 5/8": 35 HRC TO 43 HRC.
 SIZES ABOVE 5/8": 32 HRC TO 43 HRC. WASHERS WILL BE PASSIVATED

3.0 SURFACE FINISH: PLAIN / ZINC / HDG. ZINC & HDG DETAILS GIVEN IN TABLE BELOW

| PROPERTIES | ZINC | ZINC YELLOW | HOT DIPPED GALVANIZED |
|---------------------------|----------------------------------|---------------------------------|---|
| TYPE | TRIVALENT (Cr+3) | HEXAVALENT (Cr+6) | RoHS |
| COLOR | CLEAR | YELLOW | |
| MINIMUM COATING THICKNESS | 0.0001" / 3 MICRONS | 0.0001" / 3 MICRONS | Washers under 3/16" in thickness: 0.0017" (43 microns) and washers 3/16" & 1/4" thickness: 0.0020" (50 microns) |
| SPECIFICATION | ASTM F1941 / F1941M Fe/Zn 3AN | ASTM F1941 / F1941M Fe/Zn 3C | ASTM F1941 / F1941M Fe/Zn 3CN or Fe/Zn 5CN |