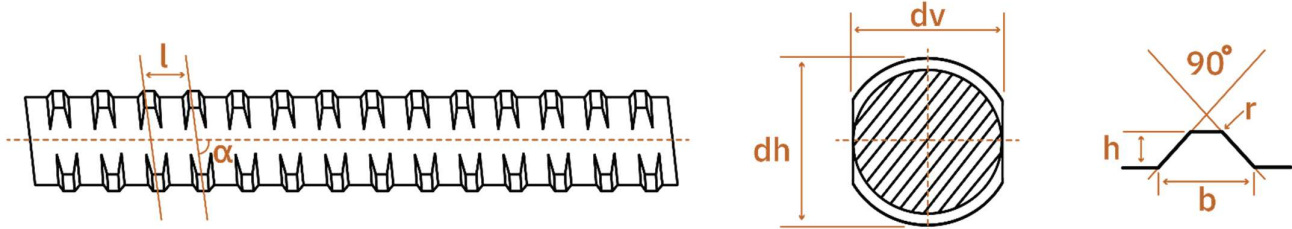




## THREADED BAR SYSTEM



| Threaded Bar Dimensions - Right hand Thread & left hand threads |      |       |      |           |      |       |      |       |      |       |           |       |                                  |
|-----------------------------------------------------------------|------|-------|------|-----------|------|-------|------|-------|------|-------|-----------|-------|----------------------------------|
| Dia.<br>(mm)                                                    | dh   |       | dv   |           | h    |       | b    |       | l    |       | r<br>(mm) | α     | Left<br>Hand<br>Thread<br>Option |
|                                                                 | (mm) | Tol.  | (mm) | Tol.      | (mm) | Tol.  | (mm) | Tol.  | (mm) | Tol.  |           |       |                                  |
| 15                                                              | 14.7 | ± 0.2 | 14.4 | ± 0.5     | 1    | ± 0.2 | 4.2  | ± 0.3 | 10   | ± 0.2 | 0.5       | 78.5° | -                                |
| 20                                                              | 20   | ± 0.4 | 20   | + 0.4-0.8 | 1.3  | ± 0.3 | 4.8  | ± 0.5 | 10   | ± 0.2 | 1.2       | 80.5° | ✓                                |
| 25                                                              | 25   | ± 0.4 | 25   | + 0.4-0.8 | 1.6  | ± 0.3 | 6    | ± 0.5 | 12   | ± 0.2 | 1.5       | 81°   | ✓                                |
| 28                                                              | 27.3 | ± 0.4 | 26.8 | + 0.4-0.8 | 1.8  | ± 0.3 | 6.5  | ± 0.3 | 14   | ± 0.3 | 2         | 81.5° | ✓                                |
| 32                                                              | 32   | ± 0.5 | 32   | + 0.5-1.2 | 2    | ± 0.4 | 7    | ± 0.5 | 16   | ± 0.2 | 2         | 81.5° | ✓                                |
| 36                                                              | 36   | ± 0.5 | 36   | + 0.5-1.2 | 2.2  | ± 0.4 | 8    | ± 0.5 | 18   | ± 0.3 | 2.5       | 81.5° | ✓                                |
| 40                                                              | 40   | ± 0.5 | 40   | + 0.5-1.2 | 2.5  | ± 0.5 | 8    | ± 0.5 | 20   | ± 0.3 | 2.5       | 81.5° | ✓                                |
| 50                                                              | 50   | ± 0.5 | 50   | + 0.5-1.2 | 3    | ± 0.5 | 9    | ± 0.5 | 24   | ± 0.3 | 2.5       | 81.8° | ✓                                |
| 63.5                                                            | 63.5 | ± 0.5 | 63.5 | + 0.5-1.2 | 3    | ± 0.6 | 12   | ± 0.5 | 22   | ± 0.4 | 2.5       | 84°   | ✓                                |
| 75                                                              | 75   | ± 0.5 | 75   | + 0.4-0.8 | 3    | ± 0.6 | 12   | ± 0.4 | 20   | ± 0.4 | 2.5       | 85°   | -                                |

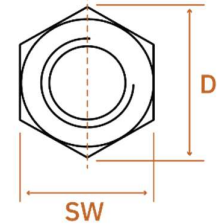
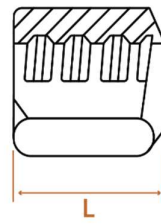
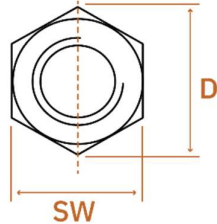
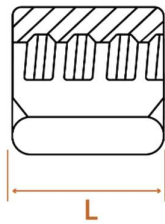
\*Bar properties are representative of manufacturers data and may be subject to minor variation or change, additional order specific detail can be provided.

| Theoretical Load Capacity (kN) for Threaded Bars (Yield and Ultimate Stress) |                                          |                  |                   |                   |                   |                   |                   |                    |                   |                    |                    |                    |  |
|------------------------------------------------------------------------------|------------------------------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--|
| Dia.<br>(mm)                                                                 | Sectional<br>Area<br>(m m <sup>2</sup> ) | Weight<br>(kg/m) | 500 Grade         |                   | 670 Grade         |                   | 830 Grade         |                    | 930 Grade         |                    | 1080 Grade         |                    |  |
|                                                                              |                                          |                  | 500<br>MPa<br>Y.S | 630<br>MPa<br>U.S | 670<br>MPa<br>Y.S | 800<br>MPa<br>U.S | 830<br>MPa<br>Y.S | 1030<br>MPa<br>U.S | 930<br>MPa<br>Y.S | 1080<br>MPa<br>U.S | 1080<br>MPa<br>Y.S | 1230<br>MPa<br>U.S |  |
|                                                                              |                                          |                  |                   |                   |                   |                   |                   |                    |                   |                    |                    |                    |  |
| 15                                                                           | 177                                      | 1.4              | 89                | 112               | 119               | 142               | 147               | 182                | 165               | 191                | 191                | 218                |  |
| 20                                                                           | 314                                      | 2.47             | 157               | 198               | 210               | 251               | 261               | 323                | 292               | 339                | 339                | 386                |  |
| 25                                                                           | 491                                      | 4.1              | 246               | 309               | 329               | 393               | 408               | 506                | 457               | 530                | 530                | 604                |  |
| 28                                                                           | 616                                      | 5.1              | 308               | 388               | 413               | 493               | 511               | 643                | 573               | 665                | 665                | 758                |  |
| 32                                                                           | 804                                      | 6.65             | 402               | 507               | 539               | 643               | 667               | 828                | 748               | 868                | 868                | 989                |  |
| 36                                                                           | 1018                                     | 8.41             | 509               | 641               | 682               | 814               | 845               | 1049               | 947               | 1099               | 1099               | 1252               |  |
| 40                                                                           | 1257                                     | 10.34            | 629               | 792               | 842               | 1006              | 1043              | 1295               | 1169              | 1358               | 1358               | 1546               |  |
| 50                                                                           | 1963                                     | 16.28            | 982               | 1237              | 1315              | 1570              | 1629              | 2022               | 1826              | 2120               | 2120               | 2414               |  |
| 63.5                                                                         | 3167                                     | 26.5             | 1584              | 1995              | 2122              | 2534              | 2629              | 3262               | 2945              | 3420               | 3420               | 3895               |  |
| 75                                                                           | 4418                                     | 36.9             | 2209              | 2783              | 2960              | 3534              | 3667              | 4551               | 4109              | 4771               | 4471               | 5434               |  |

\*Bar properties are representative of manufacturers data and may be subject to minor variation or change, additional order specific detail can be provided.



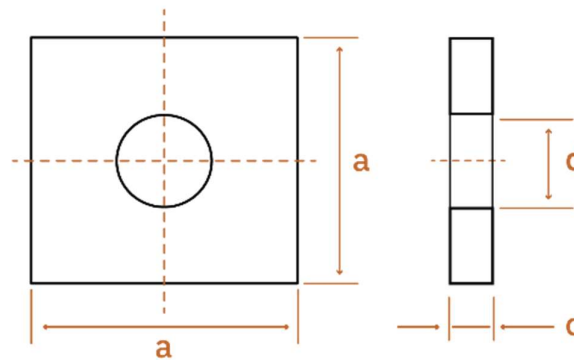
## THREADED BAR COMPONENTS



**Flat Nut**

**Spherical Nut**

| Standard Flat Hex Nut and Spherical Hex Nut Dimensions |         |        |        |             |                  |
|--------------------------------------------------------|---------|--------|--------|-------------|------------------|
| Bar Dia                                                | SW (mm) | L (mm) | D (mm) | Weight (kg) | Spherical Option |
| 15                                                     | 30      | 50     | 34.5   | 0.22        | -                |
| 15                                                     | 30      | 100    | 34.5   | 0.45        | -                |
| 20                                                     | 32      | 45     | 37     | 0.17        | -                |
| 20                                                     | 36      | 60     | 69     | 0.36        | -                |
| 25                                                     | 50      | 60     | 55     | 0.7         | ✓                |
| 28                                                     | 50      | 60     | 55     | 0.7         | ✓                |
| 32                                                     | 65      | 72     | 75     | 1.4         | ✓                |
| 36                                                     | 65      | 80     | 75     | 1.45        | ✓                |
| 40                                                     | 70      | 100    | 81     | 2.12        | ✓                |
| 50                                                     | 80      | 110    | 92     | 3.1         | ✓                |
| 63.5                                                   | 100     | 115    | 130.2  | 4.72        | ✓                |
| 75                                                     | 115     | 160    | 132.2  | 8.84        | ✓                |



| Anchor Plates |        |        |             |                  |
|---------------|--------|--------|-------------|------------------|
| Bar Dia       | a (mm) | c (mm) | Weight (kg) | Spherical Option |
| 15            | 100    | 8      | 0.6         | -                |
| 20            | 100    | 30     | 2.2         | -                |
| 25            | 150    | 35     | 5.9         | ✓                |
| 32            | 180    | 40     | 9.6         | ✓                |
| 36            | 200    | 45     | 13.4        | ✓                |
| 40            | 220    | 50     | 18          | ✓                |
| 50            | 240    | 55     | 33.6        | ✓                |
| 63.5          | 325    | 70     | 56.3        | ✓                |

\*Properties are representative of manufacturers data and may be subject to minor variation or change, additional order specific detail can be provided.