
$\qquad$ $\underset{-}{\ddagger}$


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$\ddagger$ Length of a socket shoulder screw is measured from the underhead bearing surface to the plane of the shoulder at the threaded end.

| Socket Head Shoulder Screws - Alloy Steel |  |  |  |  |  |  |  |  |  |  |  | ASME B18.3-1988 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Size | D |  | A |  | H |  | C | J | T | M | R | K | F |
|  | Shoulder Diameter |  | Head Diameter |  | Head Height |  | Chamfer or Radius | Hex Socket Size | Key Engagement | Fillet <br> Transition <br> Diameter | Head Fillet Radius | Shoulder Neck Diameter | Shoulder Neck Width |
|  | Max | Min | Max | Min | Max | Min | Min | Nom | Min | Max | Min | Min | Max |
| 1/4 | 0.2480 | 0.2460 | 0.375 | 0.357 | 0.188 | 0.177 | 0.020 | 1/8 | 0.094 | 0.276 | 0.009 | 0.227 | 0.093 |
| 5/16 | 0.3105 | 0.3085 | 0.438 | 0.419 | 0.219 | 0.209 | 0.026 | 5/32 | 0.117 | 0.345 | 0.012 | 0.289 | 0.093 |
| 3/8 | 0.3730 | 0.3710 | 0.562 | 0.543 | 0.250 | 0.240 | 0.031 | 3/16 | 0.141 | 0.413 | 0.015 | 0.352 | 0.093 |
| 1/2 | 0.4980 | 0.4960 | 0.750 | 0.729 | 0.312 | 0.302 | 0.040 | 1/4 | 0.188 | 0.550 | 0.020 | 0.477 | 0.093 |
| 5/8 | 0.6230 | 0.6210 | 0.875 | 0.853 | 0.375 | 0.365 | 0.050 | 5/16 | 0.234 | 0.687 | 0.024 | 0.602 | 0.093 |
| 3/4 | 0.7480 | 0.7460 | 1.000 | 0.977 | 0.500 | 0.490 | 0.069 | 3/8 | 0.281 | 0.826 | 0.030 | 0.727 | 0.093 |


| Description | A hex socket head screw with an enlarged, unthreaded, cylindrical shoulder under the head, the diameter of which serves as the |
| :---: | :---: |
| basis for the derivation of the nominal size. |  |

