| Bolt Elongation and Stress Eq. 1 |  | Units |
| ---: | :---: | :---: |
| Blocks shown as light blue are editable |  |  |
| Effective bolt length $\mathrm{L}_{\mathrm{B}}=$ | 1.500 | in $\quad \vee$ |
| Axial stress based on thread stress area $f_{\mathrm{T}}=$ | 4000 | psi |
| Modulus of elasticity $E=$ | 85000.0 | psi |
| Calculated Results |  |  |
| Bolt elongation $\sigma_{B}=$ | 0.0706 | in |


| Bolt Elongation and Stress Eq. 2 |  | Units |  |
| ---: | :---: | :---: | :---: |
| Blocks shown as light blue are editable |  |  |  |
| Bolt elongation $\sigma_{B}=$ | 0.0706 | psi $\quad \vee$ |  |
| Axial stress based on thread stress area $f_{T}=$ | 4000 | in |  |
| Modulus of elasticity $E=$ | 85000.0 | in |  |
| Calculated Results |  |  |  |
| Effective bolt length $L_{B}=$ | 1.5003 | psi |  |


| Bolt Elongation and Stress Eq. 3 |  | Units |
| ---: | :---: | :---: |
| Blocks shown as light blue are editable |  |  |
| Effective bolt length $\mathrm{L}_{\mathrm{B}}=$ | 1.500 | in $\quad \downarrow$ |
| Bolt elongation $\sigma_{\mathrm{B}}=$ | 0.0706 | in |
| Modulus of elasticity $E=$ |  |  |
| Calculated Results |  |  |
| Axial stress based on thread stress area $f_{T}=$ | 4001 | psi |


| Bolt Elongation and Stress Eq. 4 |  |  |
| ---: | :---: | :---: |
| Blocks shown as light blue are editable |  |  |
| Effective bolt length $\mathrm{L}_{\mathrm{B}}=$ | 1.500 | in $\quad \vee$ |
| Bolt elongation $\sigma_{\mathrm{B}}=$ | 0.0700 | in |
| Axial stress based on thread stress area $f_{\mathrm{T}}=$ | 4000.0 | psi |
| Calculated Results |  |  |
| Modulus of elasticity $E=$ | 85714 | psi |


| Bolt Elongation and Stress Eq. 5 |  | Units |
| ---: | :---: | :---: |
| Thread stress area $\mathrm{d}_{\mathrm{ts}}=$ | 2.500 | psi $\quad \boldsymbol{\text { in }}$ |
| Bolt nominal diameter $\mathrm{d}=$ | 2.000 | in |
| Grip length $\mathrm{L}_{\mathrm{S}}=$ | 1.000 | in |
| Bolt head thickness $\mathrm{H}_{\mathrm{B}}=$ | 0.375 | in |
| Material thickness $\mathrm{L}_{\mathrm{J}}=$ | 0.750 | in |
| Nut thickness $\mathrm{H}_{\mathrm{N}}=$ | 0.375 | in |
| Calculated Results |  |  |
| Effective bolt length $\mathrm{L}_{\mathrm{B}}$ | $=$ | 1.79296875 |

