|  | Force Units Cross Reference Chart |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| units | lbf | N | kg | kN | $\mathbf{0 z}$ | ton (short) | ton (long) | ton (metric) |
| lbf | $\mathbf{1}$ | 4.448221615 | 0.45359237 | 0.004448222 | 16 | 0.0005 | 0.000446429 | 0.000453592 |
| N | 0.224808943 | 1 | 0.101971621 | 0.001 | 3.59694309 | 0.000112404 | 0.000100361 | 0.000101972 |
| kg | 2.204622622 | 9.80665 | 1 | 0.00980665 | 35.27396195 | 0.001102311 | 0.000984207 | 0.001 |
| kN | 224.8089431 | 1000 | 101.9716213 | 1 | 3596.94309 | 0.112404472 | 0.100361135 | 0.101971621 |
| 0 Oz | 0.0625 | 0.278013851 | 0.028349523 | 0.000278014 | 1 | 0.00003125 | $2.79018 \mathrm{E}-05$ | $2.83495 \mathrm{E}-05$ |
| ton (short) | 2000 | 8896.443231 | 907.18474 | 8.896443231 | 32000 | 1 | 0.892857143 | 0.90718474 |
| ton (long) | 2240 | 9964.016418 | 1016.046909 | 9.964016418 | 35840 | 1.12 | 1 | 1.016046909 |
| ton (metric) | 2204.622622 | 9806.65 | 1000 | 9.80665 | 35273.96195 | 1.102311311 | 0.984206528 | 1 |

