# A=440 - Chime Length Calculator for a Tube or Rod – Inches Version

unrestricted at both ends

To determine the resonant frequency for a rod, set the ID=0 and enter the OD and Metal Type

**Enter values in BLUE, answers in ORANGE (inches) and YELLOW (mm)**

**OD** inches = **2.250** | **ID** inches = **2.000** | **Metal =** **Aluminum** **< Click to Select**

**Wall =** 0.125 inches | Length calculated for fundamental F | Hang Point is for fundamental F node

| Note | Freq Hz | Length inches | Hang Point | Length mm | Hang Point | Note | Freq Hz | Length inches | Hang Point | Length mm | Hang Point |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C1 | 32.70 | 127 9/16 | 28 5/8 | 3,240.1 | 726.4 | C5 | 523.30 | 31 7/8 | 7 1/8 | 809.6 | 181.5 |
| C#/Db | 34.60 | 124 | 27 13/16 | 3,149.6 | 706.1 | C#/Db | 554.40 | 31 | 6 15/16 | 787.4 | 176.5 |
| D | 36.70 | 120 7/16 | 27 | 3,059.1 | 685.9 | D | 587.30 | 30 1/8 | 6 3/4 | 765.2 | 171.6 |
| D#/Eb | 38.90 | 116 15/16 | 26 3/16 | 2,970.2 | 665.9 | D#/Eb | 622.30 | 29 1/4 | 6 9/16 | 743.0 | 166.6 |
| E | 41.21 | 113 5/8 | 25 1/2 | 2,886.1 | 647.1 | E | 659.30 | 28 7/16 | 6 3/8 | 722.3 | 161.9 |
| F | 43.70 | 110 3/8 | 24 3/4 | 2,803.5 | 628.6 | F | 698.50 | 27 5/8 | 6 3/16 | 701.7 | 157.3 |
| F#/Gb | 46.30 | 107 3/16 | 24 1/16 | 2,722.6 | 610.4 | F#/Gb | 740.00 | 26 13/16 | 6 | 681.0 | 152.7 |
| G | 49.00 | 104 3/16 | 23 3/8 | 2,646.4 | 593.3 | G | 784.00 | 26 1/16 | 5 13/16 | 662.0 | 148.4 |
| G#/Ab | 51.90 | 101 1/4 | 22 11/16 | 2,571.8 | 576.6 | G#/Ab | 830.60 | 25 5/16 | 5 11/16 | 642.9 | 144.1 |
| A | 55.00 | 98 3/8 | 22 1/16 | 2,498.7 | 560.2 | A | 880.00 | 24 9/16 | 5 1/2 | 623.9 | 139.9 |
| A#/Bb | 58.30 | 95 9/16 | 21 7/16 | 2,427.3 | 544.2 | A#/Bb | 932.30 | 23 7/8 | 5 3/8 | 606.4 | 136.0 |
| B | 61.70 | 92 7/8 | 20 13/16 | 2,359.0 | 528.9 | B | 987.80 | 23 3/16 | 5 3/16 | 589.0 | 132.0 |
| C2 | 65.40 | 90 3/16 | 20 1/4 | 2,290.8 | 513.6 | C6 | 1,046.50 | 22 9/16 | 5 1/16 | 573.1 | 128.5 |
| C#/Db | 69.30 | 87 5/8 | 19 5/8 | 2,225.7 | 499.0 | C#/Db | 1,108.70 | 21 15/16 | 4 15/16 | 557.2 | 124.9 |
| D | 73.41 | 85 1/8 | 19 1/16 | 2,162.2 | 484.8 | D | 1,174.61 | 21 5/16 | 4 3/4 | 541.3 | 121.4 |
| D#/Eb | 77.80 | 82 11/16 | 18 9/16 | 2,100.3 | 470.9 | D#/Eb | 1,244.50 | 20 11/16 | 4 5/8 | 525.5 | 117.8 |
| E | 82.40 | 80 3/8 | 18 | 2,041.5 | 457.7 | E | 1,318.50 | 20 1/16 | 4 1/2 | 509.6 | 114.2 |
| F | 87.30 | 78 1/16 | 17 1/2 | 1,982.8 | 444.5 | F | 1,397.00 | 19 1/2 | 4 3/8 | 495.3 | 111.0 |
| F#/Gb | 92.50 | 75 7/8 | 17 | 1,927.2 | 432.1 | F#/Gb | 1,480.00 | 18 15/16 | 4 1/4 | 481.0 | 107.8 |
| G | 98.01 | 73 11/16 | 16 1/2 | 1,871.7 | 419.6 | G | 1,568.00 | 18 7/16 | 4 1/8 | 468.3 | 105.0 |
| G#/Ab | 103.80 | 71 5/8 | 16 1/16 | 1,819.3 | 407.9 | G#/Ab | 1,661.20 | 17 7/8 | 4 | 454.0 | 101.8 |
| A | 110.00 | 69 9/16 | 15 5/8 | 1,766.9 | 396.1 | A | 1,760.00 | 17 3/8 | 3 7/8 | 441.3 | 98.9 |
| A#/Bb | 116.50 | 67 9/16 | 15 1/8 | 1,716.1 | 384.7 | A#/Bb | 1,864.60 | 16 7/8 | 3 13/16 | 428.6 | 96.1 |
| B | 123.50 | 65 5/8 | 14 11/16 | 1,666.9 | 373.7 | B | 1,975.50 | 16 7/16 | 3 11/16 | 417.5 | 93.6 |
| C3 | 130.81 | 63 3/4 | 14 5/16 | 1,619.3 | 363.0 | C7 | 2,093.00 | 15 15/16 | 3 9/16 | 404.8 | 90.8 |
| C#/Db | 138.60 | 61 15/16 | 13 7/8 | 1,573.2 | 352.7 | C#/Db | 2,217.40 | 15 1/2 | 3 1/2 | 393.7 | 88.3 |
| D | 146.80 | 60 3/16 | 13 1/2 | 1,528.8 | 342.7 | D | 2,349.20 | 15 1/16 | 3 3/8 | 382.6 | 85.8 |
| D#/Eb | 155.60 | 58 1/2 | 13 1/8 | 1,485.9 | 333.1 | D#/Eb | 2,489.01 | 14 5/8 | 3 1/4 | 371.5 | 83.3 |
| E | 164.80 | 56 13/16 | 12 3/4 | 1,443.0 | 323.5 | E | 2,637.00 | 14 3/16 | 3 3/16 | 360.4 | 80.8 |
| F | 174.61 | 55 3/16 | 12 3/8 | 1,401.8 | 314.3 | F | 2,794.00 | 13 13/16 | 3 1/8 | 350.8 | 78.7 |
| F#/Gb | 185.00 | 53 5/8 | 12 | 1,362.1 | 305.4 | F#/Gb | 2,960.00 | 13 7/16 | 3 | 341.3 | 76.5 |
| G | 196.00 | 52 1/8 | 11 11/16 | 1,324.0 | 296.8 | G | 3,136.00 | 13 | 2 15/16 | 330.2 | 74.0 |
| G#/Ab | 207.70 | 50 5/8 | 11 3/8 | 1,285.9 | 288.3 | G#/Ab | 3,322.41 | 12 5/8 | 2 13/16 | 320.7 | 71.9 |
| A | 220.00 | 49 3/16 | 11 | 1,249.4 | 280.1 | A | 3,520.00 | 12 5/16 | 2 3/4 | 312.7 | 70.1 |
| A#/Bb | 233.10 | 47 3/4 | 10 11/16 | 1,212.9 | 271.9 | A#/Bb | 3,729.20 | 11 15/16 | 2 11/16 | 303.2 | 68.0 |
| B | 246.90 | 46 7/16 | 10 7/16 | 1,179.5 | 264.4 | B | 3,951.00 | 11 5/8 | 2 5/8 | 295.3 | 66.2 |
| C4 | 261.60 | 45 1/8 | 10 1/8 | 1,146.2 | 257.0 | C8 | 4,186.00 | 11 1/4 | 2 1/2 | 285.8 | 64.1 |
| C#/Db | 277.20 | 43 13/16 | 9 13/16 | 1,112.8 | 249.5 | C#/Db | 4,434.81 | 10 15/16 | 2 7/16 | 277.8 | 62.3 |
| D | 293.70 | 42 9/16 | 9 9/16 | 1,081.1 | 242.4 | D | 4,698.40 | 10 5/8 | 2 3/8 | 269.9 | 60.5 |
| D#/Eb | 311.10 | 41 3/8 | 9 1/4 | 1,050.9 | 235.6 | D#/Eb | 4,978.00 | 10 5/16 | 2 5/16 | 261.9 | 58.7 |
| E | 329.61 | 40 3/16 | 9 | 1,020.8 | 228.9 | E | 5,274.00 | 10 1/16 | 2 1/4 | 255.6 | 57.3 |
| F | 349.30 | 39 | 8 3/4 | 990.6 | 222.1 | F | 5,588.00 | 9 3/4 | 2 3/16 | 247.7 | 55.5 |
| F#/Gb | 370.00 | 37 15/16 | 8 1/2 | 963.6 | 216.0 | F#/Gb | 5,920.00 | 9 1/2 | 2 1/8 | 241.3 | 54.1 |
| G | 392.00 | 36 7/8 | 8 1/4 | 936.6 | 210.0 | G | 6,272.00 | 9 3/16 | 2 1/16 | 233.4 | 52.3 |
| G#/Ab | 415.30 | 35 13/16 | 8 | 909.6 | 203.9 | G#/Ab | 6,644.80 | 8 15/16 | 2 | 227.0 | 50.9 |
| A | 440.00 | 34 3/4 | 7 13/16 | 882.7 | 197.9 | A | 7,040.00 | 8 11/16 | 1 15/16 | 220.7 | 49.5 |
| A#/Bb | 466.20 | 33 13/16 | 7 9/16 | 858.8 | 192.6 | A#/Bb | 7,458.40 | 8 7/16 | 1 7/8 | 214.3 | 48.0 |
| B | 493.91 | 32 7/8 | 7 3/8 | 835.0 | 187.2 | B | 7,902.01 | 8 3/16 | 1 13/16 | 208.0 | 46.6 |
| **Calculate Length or Frequency for ID & OD entered above** | | | | | | C9 | 8,367.01 | 8 | 1 13/16 | 203.2 | 45.6 |
| **Enter F** | **963.00** | 23 1/2 | 5 1/4 | 596.9 | 133.8 | **Convert** | | **2.000** | inches to | 50.8 | mm |
| | | **Enter L** | | | | | | **25.4** | mm to | 1 | inches |

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|---|---|---|---|---|---|---|
| **F=** | 213.30 | **50** | 11 3/16 | 1,270.0 | 284.7 | http://leehite.org/Chimes.htm |