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 = **1.250** | **ID** inches = **1.000** | **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	93	20 7/8	2,362.2	529.6	C5	523.30	23 1/4	5 3/16	590.6	132.4
C#/Db	34.60	90 7/16	20 1/4	2,297.1	515.0	C#/Db	554.40	22 9/16	5 1/16	573.1	128.5
D	36.70	87 13/16	19 11/16	2,230.4	500.1	D	587.30	21 15/16	4 15/16	557.2	124.9
D#/Eb	38.90	85 5/16	19 1/8	2,166.9	485.8	D#/Eb	622.30	21 5/16	4 3/4	541.3	121.4
E	41.21	82 7/8	18 9/16	2,105.0	471.9	E	659.30	20 11/16	4 5/8	525.5	117.8
F	43.70	80 7/16	18 1/16	2,043.1	458.1	F	698.50	20 1/8	4 1/2	511.2	114.6
F#/Gb	46.30	78 3/16	17 1/2	1,986.0	445.3	F#/Gb	740.00	19 9/16	4 3/8	496.9	111.4
G	49.00	76	17 1/16	1,930.4	432.8	G	784.00	19	4 1/4	482.6	108.2
G#/Ab	51.90	73 13/16	16 9/16	1,874.8	420.3	G#/Ab	830.60	18 7/16	4 1/8	468.3	105.0
A	55.00	71 3/4	16 1/16	1,822.5	408.6	A	880.00	17 15/16	4	455.6	102.1
A#/Bb	58.30	69 11/16	15 5/8	1,770.1	396.8	A#/Bb	932.30	17 7/16	3 15/16	442.9	99.3
B	61.70	67 3/4	15 3/16	1,720.9	385.8	B	987.80	16 15/16	3 13/16	430.2	96.5
C2	65.40	65 3/4	14 3/4	1,670.1	374.4	C6	1,046.50	16 7/16	3 11/16	417.5	93.6
C#/Db	69.30	63 7/8	14 5/16	1,622.4	363.7	C#/Db	1,108.70	16	3 9/16	406.4	91.1
D	73.41	62 1/16	13 15/16	1,576.4	353.4	D	1,174.61	15 1/2	3 1/2	393.7	88.3
D#/Eb	77.80	60 5/16	13 1/2	1,531.9	343.5	D#/Eb	1,244.50	15 1/16	3 3/8	382.6	85.8
E	82.40	58 5/8	13 1/8	1,489.1	333.9	E	1,318.50	14 5/8	3 1/4	371.5	83.3
F	87.30	56 15/16	12 3/4	1,446.2	324.2	F	1,397.00	14 1/4	3 3/16	362.0	81.1
F#/Gb	92.50	55 5/16	12 3/8	1,404.9	315.0	F#/Gb	1,480.00	13 13/16	3 1/8	350.8	78.7
G	98.01	53 3/4	12 1/16	1,365.3	306.1	G	1,568.00	13 7/16	3	341.3	76.5
G#/Ab	103.80	52 3/16	11 11/16	1,325.6	297.2	G#/Ab	1,661.20	13 1/16	2 15/16	331.8	74.4
A	110.00	50 11/16	11 3/8	1,287.5	288.6	A	1,760.00	12 11/16	2 7/8	322.3	72.3
A#/Bb	116.50	49 5/16	11 1/16	1,252.5	280.8	A#/Bb	1,864.60	12 5/16	2 3/4	312.7	70.1
B	123.50	47 7/8	10 3/4	1,216.0	272.6	B	1,975.50	11 15/16	2 11/16	303.2	68.0
C3	130.81	46 1/2	10 7/16	1,181.1	264.8	C7	2,093.00	11 5/8	2 5/8	295.3	66.2
C#/Db	138.60	45 3/16	10 1/8	1,147.8	257.3	C#/Db	2,217.40	11 5/16	2 9/16	287.3	64.4
D	146.80	43 7/8	9 13/16	1,114.4	249.9	D	2,349.20	11	2 7/16	279.4	62.6
D#/Eb	155.60	42 5/8	9 9/16	1,082.7	242.7	D#/Eb	2,489.01	10 11/16	2 3/8	271.5	60.9
E	164.80	41 7/16	9 5/16	1,052.5	236.0	E	2,637.00	10 3/8	2 5/16	263.5	59.1
F	174.61	40 1/4	9	1,022.4	229.2	F	2,794.00	10 1/16	2 1/4	255.6	57.3
F#/Gb	185.00	39 1/8	8 3/4	993.8	222.8	F#/Gb	2,960.00	9 3/4	2 3/16	247.7	55.5
G	196.00	38	8 1/2	965.2	216.4	G	3,136.00	9 1/2	2 1/8	241.3	54.1
G#/Ab	207.70	36 15/16	8 5/16	938.2	210.3	G#/Ab	3,322.41	9 1/4	2 1/16	235.0	52.7
A	220.00	35 7/8	8 1/16	911.2	204.3	A	3,520.00	8 15/16	2	227.0	50.9
A#/Bb	233.10	34 13/16	7 13/16	884.2	198.2	A#/Bb	3,729.20	8 11/16	1 15/16	220.7	49.5
B	246.90	33 7/8	7 5/8	860.4	192.9	B	3,951.00	8 7/16	1 7/8	214.3	48.0
C4	261.60	32 7/8	7 3/8	835.0	187.2	C8	4,186.00	8 1/4	1 7/8	209.6	47.0
C#/Db	277.20	31 15/16	7 3/16	811.2	181.9	C#/Db	4,434.81	8	1 13/16	203.2	45.6
D	293.70	31 1/16	6 15/16	789.0	176.9	D	4,698.40	7 3/4	1 3/4	196.9	44.1
D#/Eb	311.10	30 3/16	6 3/4	766.8	171.9	D#/Eb	4,978.00	7 9/16	1 11/16	192.1	43.1
E	329.61	29 5/16	6 9/16	744.5	166.9	E	5,274.00	7 5/16	1 5/8	185.7	41.6
F	349.30	28 7/16	6 3/8	722.3	161.9	F	5,588.00	7 1/8	1 5/8	181.0	40.6
F#/Gb	370.00	27 5/8	6 3/16	701.7	157.3	F#/Gb	5,920.00	6 15/16	1 9/16	176.2	39.5
G	392.00	26 7/8	6	682.6	153.0	G	6,272.00	6 11/16	1 1/2	169.9	38.1
G#/Ab	415.30	26 1/8	5 7/8	663.6	148.8	G#/Ab	6,644.80	6 1/2	1 7/16	165.1	37.0
A	440.00	25 3/8	5 11/16	644.5	144.5	A	7,040.00	6 5/16	1 7/16	160.3	35.9
A#/Bb	466.20	24 5/8	5 1/2	625.5	140.2	A#/Bb	7,458.40	6 3/16	1 3/8	157.2	35.2
B	493.91	23 15/16	5 3/8	608.0	136.3	B	7,902.01	6	1 3/8	152.4	34.2
Calculate Length or Frequency for ID & OD entered above						C9	8,367.01	5 13/16	1 5/16	147.6	33.1
Enter F	**963.00**	17 1/8	3 13/16	435.0	97.5	**Convert**		**2.000**	inches to	50.8	mm
		Enter L						**25.4**	mm to	1	inches

F=	113.42	**50**	11 3/16	1,270.0	284.7	http://leehite.org/Chimes.htm