



STRING TENSION

GUIDE FOR BASS GUITAR

UPDATED MAY, 2020

Foreward

Whether you are a luthier, a repair tech, or someone looking to find your “ideal” set for your bass guitar, string tension will play a role. It is with this in mind that we at GHS have put together our String Tension Guide for Bass Guitar, as a resource to help you find the information you are looking for to help you in whatever role you fall.

PLEASE NOTE: This guide as a reference of the tension of our strings at various pitches. Please use caution when making sets that have extremely high tensions, as the set as a whole may put undue stress on the neck, as well as snap the core of the strings prematurely.

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How to Calculate Tension

String tension is the amount of force a string has when tuned to a specific pitch. To find out the tension of a particular string, you need three variables: the **Unit Weight**, the **Scale Length**, and the **Frequency or Pitch** of the string you will be using. This guide provides you with a comprehensive list of all our current bass guitar strings, listed in singles and pre-packaged sets. The formulas used are the industry standard, and can be used to approximate other string tensions.

For those that prefer to use altered or down tunings, we present our tension guide in such a way as to help you choose the ideal set of strings for your application.

- UW** **UNIT WEIGHT:** The weight of the string, measured in pounds per linear inch (lb/in).
- L** **SCALE LENGTH:** The vibrating length of a string. Measure the distance from the nut to the bridge of the instrument to find the scale length. **GHS has used the 25.5" scale length** (typical for Fender) in the enclosed guide. Your individual instrument may vary.
- F** **FREQUENCY or PITCH:** The specific pitch at which each note is expressed, represented in cycles per second (Hertz).

To calculate the tension of a particular string in pounds, use the formula below, inserting the three needed variables.

$$T (\text{Tension}) = (UW \times (2 \times L \times F)^2) / 386.4$$

For those looking for a specific tension, you can use the formula below to get the unit weight for your particular needs. With that, compare the unit weight against the ones listed in the following pages to find the string gauge that meets your needs.

$$UW (\text{Unit Weight}) = (T \times 386.4) / (2 \times L \times F)^2$$

Frequency Chart

The chart below represents the frequency or pitch of each note, as it relates to the bass guitar fretboard. Standard tunings are shown in bold type; use the additional frequencies to calculate tension for strings when using altered tunings.

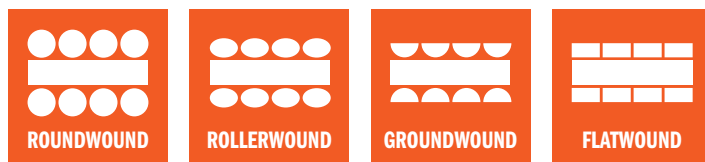
B0 30.9 Hz	E1 41.2 Hz	A1 55.0 Hz	D2 73.4 Hz	G2 98.0 Hz	C3 130.8 Hz	Nut / Open
C1 32.7 Hz	F1 43.7 Hz	A#1 58.3 Hz	D#2 77.8 Hz	G#2 103.8 Hz	C#3 138.6 Hz	First Fret
C#1 34.7 Hz	F#1 46.3 Hz	B1 61.7 Hz	E2 82.4 Hz	A2 110.0 Hz	D3 146.8 Hz	Second Fret
D1 36.7 Hz	G1 49.0 Hz	C2 65.4 Hz	F2 87.3 Hz	A#2 116.5 Hz	D#3 155.6 Hz	Third Fret
D#1 38.9 Hz	G#1 51.9 Hz	C#2 69.3 Hz	F#2 92.5 Hz	B2 123.5 Hz	E3 164.8 Hz	Fourth Fret
E1 41.2 Hz	A1 55.0 Hz	D2 73.4 Hz	G2 98.0 Hz	C3 130.8 Hz	F3 174.6 Hz	Fifth Fret

String Construction - At A Glance

The biggest thing to understand is that the "tension" of a string is not the same as the "feel" of the string under your fingers. String tension plays a part, but there are a number of other factors involved as well.

We've created these "at a glance" icons for you to quickly see/understand how our strings are made, and what makes each one unique.

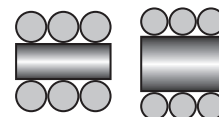
Winding Techniques: There are four types of winding techniques used for strings. The type providing the brightest tone (all else being equal) is the roundwound string. Next is the rollerwound, followed by the groundwound (also called a halfwound) and finally a flatwound.



String Materials: The hardness of common materials used in the cover wire of strings affects both the tone and "feel" of a string. Usually, with all else remaining constant, the harder the material the brighter the string. Common cover wire materials include (ranked by order of brightness) stainless steel, Alloy 52, nickel plated steel, pure nickel, and for acoustics, brass and bronze.



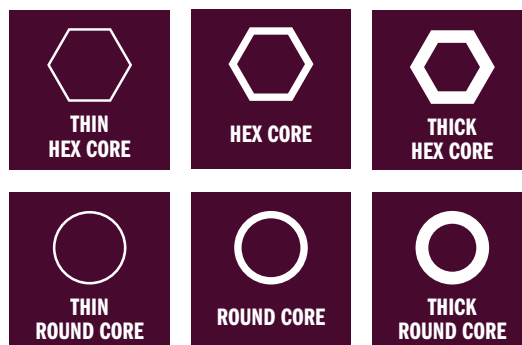
String Geometry: "String Geometry" refers to the ratio of the core wire diameter to the cover wire diameter. These two parameters are used to come up with the final string gauge.



A string with a **thin core** will have a small core-to-cover ratio, resulting in greater flexibility and a brighter tone.

Small Ratio **Large Ratio**

A string with a **thick core** will have a larger core-to-cover ratio, which gives a stiffer feel with a beefier tone and sustain.



String Lengths: Unless otherwise mentioned, all of our strings are made to the winding lengths listed below:

Plain Steel - 42" overall length

Wound Strings - 38" winding length (ball to taper), 40" overall length

SUPER STEELS™

- Roundwound Stainless Steel over a Hex Core - Grey Silks
- Bright, Punchy and Articulate Tone
- Extraordinary Longevity



By Individual String

Long Scale Plus (38" Winding Length)																																						
Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0		
PB18	.00000727	26.5	23.6	21.0	18.8	16.7																																
PB20	.00000841	30.7	27.3	24.3	21.7	19.3	17.2	15.3																														
STB027	.00016212		52.7	46.9	41.8	37.3	33.2	29.6	26.3	23.5	20.9	18.6	16.6																									
STB030	.00017301		56.3	50.1	44.6	39.8	35.4	31.6	28.1	25.0	22.3	19.9	17.7	15.8																								
STB035	.00023236					59.9	47.6	42.4	37.7	33.7	30.0	26.7	23.8	21.2	18.9	16.8																						
STB040	.00029172							53.2	47.4	42.3	37.6	33.5	29.9	26.6	23.7	21.1	18.8	16.8																				
STB044	.00038523									55.8	49.7	44.3	39.4	35.1	31.3	27.9	24.9	22.1	19.7	17.6	15.7																	
STB046	.00040243									58.3	51.9	46.3	41.2	36.7	32.7	29.1	25.9	23.1	20.6	18.3	16.4																	
STB050	.00048386											55.6	49.5	44.1	39.3	35.0	31.2	27.8	24.8	22.1	19.7	17.5	15.6															
STB058	.00059786												54.5	48.6	43.3	38.6	34.3	30.6	27.3	24.3	21.6	19.3	17.2	15.3														
STB063	.00077190													55.9	49.8	44.4	39.5	35.2	31.4	27.9	24.9	22.2	19.8	17.6	15.7													
STB067	.00082542													59.8	53.3	47.4	42.3	37.7	33.6	29.9	26.6	23.7	21.2	18.8	16.8													
STB070	.00095418																	54.8	48.8	43.5	38.8	34.5	30.8	27.4	24.5	21.7	19.4	17.3										
STB080	.00113651																		58.2	51.8	46.2	41.1	36.6	32.6	29.2	25.9	23.1	20.6	18.3	16.4								
STB084	.00129257																			58.9	52.6	46.8	41.7	37.1	33.2	29.5	26.2	23.4	20.8	18.6	16.5							
STB090	.00136385																				55.5	49.4	43.9	39.2	35.0	31.1	27.7	24.7	22.0	19.6	17.4	15.6						
STB098	.00181843																					58.6	52.2	46.6	41.5	36.9	32.9	29.3	26.2	23.3	20.7	18.5	16.5					
STB102	.00200935																						57.7	51.5	45.8	40.8	36.4	32.4	28.9	25.7	22.9	20.4	18.2	16.2				
STB106	.00214559																							55.0	48.9	43.6	38.8	34.6	30.9	27.5	24.5	21.8	19.4	17.3	15.3			
STB121	.00279247																									56.7	50.6	45.0	40.2	35.7	31.8	28.4	25.3	22.5	20.0			
STB126	.00291823																										59.3	52.9	47.1	42.0	37.3	33.3	29.6	26.4	23.5	21.0		

Medium Scale (35.5" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0
5501 (.044)	.00034447							55.7	49.6	44.2	39.3	35.1	31.2	27.8	24.8	22.1	19.7	17.5	15.6																	
5502 (.063)	.00075784														54.6	48.6	43.3	38.6	34.4	30.6	27.3	24.3	21.6	19.3	17.2	15.3										
5503 (.084)	.00109724																	55.9	49.8	44.3	39.5	35.2	31.3	27.9	24.9	22.2	19.7	17.6	15.7							
5504 (.106)	.00199794																						57.0	50.9	45.4	40.4	36.0	32.0	28.5	25.5	22.6	20.2	16.0			

By Available Sets

Long Scale Plus (38" Winding Length)								Standard Long Scale (36.5" Winding Length)							
Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B	Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
LS000 Light	153.5		STB40 33.5	STB58 38.6	STB80 41.1	STB102 40.8		SEM-STB Evan Marien Sig	159.3		STB35 26.7	STB58 38.6	STB70 34.5	STB90 27.7	STB121 31.8
ML5000 Medium Light	176.0		STB44 44.3	STB63 49.8	STB80 41.1	STB102 40.8		5ML-STB Medium Light, 5 String	203.9		STB44 44.3	STB63 49.8	STB80 41.1	STB98 36.9	STB121 31.8
M5000 Medium	184.5		STB44 44.3	STB63 49.8	STB84 46.8	STB106 43.6		5M-STB Medium, 5 String	217.8		STB44 44.3	STB63 49.8	STB84 46.8	STB106 43.6	STB126 33.3
CM5000 Custom Medium	184.3		STB46 46.3	STB67 53.3	STB80 41.1	STB106 43.6		6L-STB Medium, 6 String	220.5	STB27 33.2	STB40 33.5	STB58 38.6	STB80 41.1	STB102 40.8	STB126 33.3
Medium Scale (35.5" Winding Length)															
Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B								
5500 Medium	149.6		5501 (.044) 35.1	5502 (.063) 43.3	5503 (.084) 35.2	5504 (.106) 36.0									

CONTACT CORE™ SUPER STEELS™

- Roundwound Stainless Steel over a Hex Core - Grey Silks
- Exposed Core for Improved Intonation and Action
- Extra Clarity, Articulation and Tone



By Individual String

Standard Long Scale (36.5" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0		
CC60	.00064841													59.2	52.7	46.9	41.8	37.3	33.2	29.6	26.4	23.5	20.9	18.6	16.6													
CC65	.00072849													59.2	52.7	47.0	41.9	37.3	33.2	29.6	26.4	23.5	20.9	18.7	16.6													
CC80	.00110296																	56.5	50.3	44.9	39.9	35.6	31.7	28.3	25.1	22.4	20.0	17.8	15.9									
CC85	.00122664																	55.9	49.9	44.4	39.5	35.2	31.4	27.9	24.9	22.2	19.8	17.7	15.7									
CC100	.00168265																					54.2	48.3	43.2	38.4	34.2	30.4	27.1	24.2	21.5	19.2	17.1	15.2					
CC105	.00187551																						53.9	48.1	42.7	38.1	34.0	30.2	27.0	24.0	21.4	19.1	16.9	15.1				
CC125	.00272903																									55.4	49.4	44.0	39.3	34.9	31.1	27.7	24.7	22.0	19.6			
CC129	.00304755																										55.2	49.1	43.9	39.0	34.7	30.9	27.6	24.6	21.9			

By Available Sets

Standard Long Scale (36.5" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B	Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
LS200	149.4		STB40	CC60	CC80	CC100		5L-CC	180.5		STB40	CC60	CC80	CC100	CC125
Light			33.5	41.8	39.9	34.2		Light, 5 String			33.5	41.8	39.9	34.2	31.1
M5200	173.8		STB44	CC65	CC85	CC105		5M-CC	208.5		STB44	CC65	CC85	CC105	CC129
Medium			44.3	47.0	44.4	38.1		Medium, 5 String			44.3	47.0	44.4	38.1	34.7

BASSICS®

- Roundwound Nickel-Plated Steel over a Hex Core - NO Silks
- Clear and Present Tone, without being Harsh
- Smooth Feel on Fingers



By Individual String

Universal Long Scale (37.25" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0
BAS27	.00019746			57.2	50.9	45.4	40.4	36.3	32.1	28.6	25.5	22.7	20.2	18.0	16.0																					
BAS40	.00029254							53.4	47.5	42.4	37.7	33.6	30.0	26.7	23.8	21.2	18.9	16.8	15.0																	
BAS44	.00034672							56.3	50.2	44.7	39.9	35.5	31.6	28.2	25.1	22.4	19.9	17.8	15.8																	
BAS58	.00061412												56.0	49.9	44.5	39.6	35.3	31.4	28.0	25.0	22.2	19.8	17.6	15.7												
BAS63	.00074073												53.7	47.8	42.6	37.9	33.8	30.1	26.8	23.9	21.3	19.0	16.9	15.0												
BAS80	.00116093																	59.4	52.9	47.2	42.0	37.4	33.4	29.8	26.5	23.6	21.0	18.7	16.7							
BAS84	.00130673																	59.6	53.2	47.3	42.2	37.5	33.5	29.8	26.5	23.7	21.1	18.8	16.7							
BAS102	.00187526																						53.9	48.1	42.7	38.1	33.9	30.2	27.0	24.0	21.4	19.1	17.0	15.1		
BAS106	.00202522																						58.2	52.0	46.2	41.1	36.7	32.7	29.2	25.9	23.1	20.6	18.3	16.3		
BAS130	.00324209																									58.7	52.3	46.7	41.5	36.9	32.9	29.3	26.1	23.3		

By Available Sets

Universal Long Scale (37.25" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B	Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
L6000	153.3		BAS40	BAS58	BAS80	BAS102		M6000	176.1		BAS44	BAS63	BAS84	BAS106	
Light			33.6	39.6	42.0	38.1		Medium			39.9	47.8	47.3	41.1	
ML6000	167.8		BAS44	BAS63	BAS80	BAS102		M6000-5	213.0		BAS44	BAS63	BAS84	BAS106	BAS130
Medium Light			39.9	47.8	42.0	38.1		Medium, 5 String			39.9	47.8	47.3	41.1	36.9

BASS BOOMERS®

- Roundwound Nickel-Plated Steel over a Hex Core - Red Silks
- Low-Mid Punch and Definition
- The ORIGINAL Power String



By Individual String

Long Scale Plus (38" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0	
DYB30X	.00017947		58.3	51.9	46.3	41.2	36.7	32.7	29.1	26.0	23.1	20.6	18.4	16.4																							
DYB40X	.00031887							58.2	51.8	46.2	41.1	36.6	32.6	29.1	25.9	23.1	20.6	18.3	16.3																		
DYB45X	.00041633										53.7	47.8	42.6	38.0	33.8	30.2	26.8	23.9	21.3	18.9																	
DYB50X	.00047323										54.4	48.4	43.2	38.5	34.3	30.5	27.2	24.2	21.6	19.2	17.1																
DYB55X	.00057105											58.5	52.1	46.4	41.4	36.8	32.8	29.2	26.0	23.2	20.7	18.4	16.4														
DYB65X	.00080788												58.5	52.2		58.5	52.2	46.4	41.4	36.8	32.8	29.2	26.0	23.2	20.7	18.4	16.4										
DYB70X	.00091866															59.3	52.8	47.0	41.9	37.4	33.2	29.6	26.4	23.6	20.9	18.7	16.6										
DYB75X	.00104534																	53.5	47.7	42.5	37.8	33.7	30.0	26.8	23.8	21.2	18.9	16.8									
DYB80X	.00131659																			53.6	47.6	42.4	37.8	33.8	30.0	26.7	23.8	21.2	18.9	16.8	15.0						
DYB85X	.00141093																				57.4	51.1	45.5	40.5	36.2	32.2	28.7	25.5	22.8	20.3	18.0	16.1					
DYB90X	.00155487																					56.3	50.1	44.7	39.9	35.4	31.6	28.1	25.1	22.4	19.9	17.7	15.8	14.1			
DYB95X	.00178139																						57.4	51.2	45.7	40.6	36.2	32.3	28.7	25.7	22.8	20.3	18.1	16.1			
DYB100X	.00193456																							55.6	49.6	44.1	39.3	35.0	31.2	27.9	24.8	22.0	19.6	17.5	15.6		
DYB105X	.00214494																								55.0	48.9	43.6	38.8	34.6	30.9	27.4	24.4	21.8	19.4	17.3	15.4	

Universal Long Scale (37.25" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0		
PB18	.00007270	26.5	23.6	21.1	18.7	16.7																																
PB20	.00008410	30.7	27.3	24.3	21.7	19.3	17.2	15.3																														
DYB20	.00009726	35.5	31.6	28.2	25.1	22.4	19.9	17.7	15.8																													
DYB25	.00014277	52.1	46.4	41.3	36.8	32.8	29.3	26.0	23.2	20.7	18.4	16.4																										
DYB30	.00018173			52.6	46.8	41.8	37.2	33.2	29.5	26.3	23.4	20.9	18.6	16.6																								
DYB35	.00022576					51.9	46.2	41.2	36.7	32.7	29.1	26.0	23.1	20.6	18.4	16.3																						
DYB40	.00029254							53.4	47.5	42.3	37.7	33.6	29.9	26.7	23.8	21.2	18.9	16.8																				
DYB45	.00039025									56.5	50.3	44.8	39.9	35.6	31.7	28.3	25.2	22.4	20.0	17.8																		
DYB50	.00044866										57.8	51.6	45.9	40.9	36.5	32.5	28.9	25.8	22.9	20.5	18.3	16.2																
DYB55	.00054649												56.0	49.9	44.4	39.6	35.3	31.4	28.0	24.9	22.3	19.8	17.6	15.7														
DYB60	.00065431													59.7	53.2	47.4	42.2	37.6	33.5	29.8	26.6	23.7	21.1	18.8	16.8													
DYB65	.00077758														56.3	50.2	44.7	39.8	35.5	31.6	28.1	25.1	22.3	20.0	17.7													
DYB70	.00087143															56.2	50.0	44.6	39.7	35.4	31.5	28.1	25.0	22.4	19.8	17.7												
DYB75	.00099196																57.0	50.8	45.3	40.3	35.9	32.0	28.5	25.4	22.6	20.1	17.9	16.0										
DYB80	.00124296																	56.7	50.6	45.0	40.1	35.7	31.9	28.3	25.2	22.5	20.0	17.9	15.9									
DYB85	.00136441																				55.5	49.4	44.0	39.2	35.0	31.1	27.7	24.7	22.0	19.7	17.5							
DYB95	.00177657																						57.3	51.0	45.6	40.5	36.1	32.2	28.6	25.6	22.7	20.2	18.0	16.0				
DYB100	.00186258																							53.5	47.8	42.5	37.8	33.7	30.0	26.8	23.8	21.2	18.9	16.8	15.0			
DYB105	.00207884																								59.7	53.3	47.4	42.2	37.6	33.5	29.9	26.6	23.7	21.1	18.8	16.7		
DYB110	.00246386																									56.2	50.0	44.6	39.7	35.5	31.5	28.1	25.0	22.3	19.9	17.7		
DYB115	.00241806																									55.2	49.1	43.8	39.0	34.8	30.9	27.6	24.6	21.9	19.5	17.4		
DYB120	.00274276																									55.7	49.7	44.3	39.5	35.1	31.3	27.9	24.8	22.1	19.7			
DYB125	.00303173																										54.9	48.9	43.7	38.8	34.6	30.8	27.4	24.4	21.8			
DYB126	.00296169																										52.8	47.0	42.0	37.3	33.3	29.6	26.4	23.5	20.9			
DYB130	.00338012																										58.7	52.3	46.7	41.5	37.0	32.9	29.3	26.1	23.3			
DYB135	.00336554																											54.3	48.5	43.1	38.4	34.2	30.5	27.1	24.2			
DYB140	.00349147																											56.3	50.3	44.7	39.8	35.5	31.6	28.2	25.1			
DYB145	.00361617																											58.3	52.1	46.3	41.2	36.7	32.7	29.2	26.0			

Medium Scale (35.5" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0
3041 (.045)	.00041107								59.1	52.7	46.9	41.8	37.3	33.2	29.6	26.4	23.4	20.9	18.6	16.6																
3042 (.065)	.00064630												58.6	52.3	46.5	41.5	36.9	32.9	29.3	26.1	23.3	20.7	18.4	16.4												
3143 (.080)	.00110995																	56.5	50.3	44.8	40.0	35.6	31.7	28.3	25.2	22.4	20.0	17.8	15.9							
3043 (.085)	.00124381																		56.4	50.3	44.8	39.9	35.5	31.6	28.3	25.1	22.4	19.9	17.8	15.9						
3144 (.100)	.00169832																					54.5	48.5	43.2	38.6	34.3	30.5	27.2	24.3	21.7	19.3	17.1	15.2			
3044 (.105)	.00181699																					58.3	51.9	46.2	41.3	36.7	32.7	29.1	26.0	23.2	20.6	18.4	16.4			

BASS BOOMERS® (cont.)

- Roundwound Nickel-Plated Steel over a Hex Core - Red Silks
- Low-Mid Punch and Definition
- The ORIGINAL Power String



By Individual String

Short Scale (32.75" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0	
3136 (.045)	.00041435							58.8	52.3	46.7	41.6	37.1	33.0	29.4	26.2	23.3	20.8	18.5	16.5																		
3036 (.050)	.00047666									53.7	47.8	42.6	38.0	33.8	30.2	26.9	23.9	21.3	19.0	16.9	15.1																
3137 (.060)	.00066895											59.8	53.3	47.5	42.3	37.7	33.6	29.9	26.7	23.7	21.2	18.8	16.8														
3037 (.070)	.00088008													55.7	49.6	44.2	39.4	35.1	31.3	27.9	24.8	22.1	19.7	17.6	15.6												
3138 (.075)	.00099367															49.9	44.5	39.6	35.3	31.4	28.0	24.9	22.2	19.8	17.6	15.7											
3038 (.090)	.00147901																	58.9	52.5	46.8	41.7	37.1	33.1	29.5	26.2	23.4	20.8	18.6	16.6								
3139 (.095)	.00162311																		57.6	51.4	45.7	40.7	36.3	32.4	28.8	25.7	22.9	20.4	18.2	16.2							
3039 (.107)	.00208113																			58.6	52.2	46.6	41.6	36.9	32.9	29.3	26.1	23.3	20.7	18.5	16.4						

By Available Sets

Long Scale Plus (38" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
P3045 Piccolo	122.4		PB18 33.4	DYB30X 46.3	DYB40X 46.2	DYB50X 38.5	
L3045X Light	147.4		DYB40X 36.6	DYB55X 36.8	DYB75X 37.8	DYB95X 36.2	
ML3045X Medium Light	185.4		DYB45X 47.8	DYB65X 52.2	DYB80X 47.6	DYB100 37.8	
M3045X Medium	194.7		DYB45X 47.8	DYB65X 52.2	DYB85X 51.1	DYB105X 43.6	
5M-C-DYB Medium, 5 String	222.1	DYB30X 36.7	DYB45X 47.8	DYB65X 52.2	DYB80X 47.6	DYB100 37.8	
8LS-DYB Regular, 8 String	278.8	Octaves	PB20 38.6	DYB25 36.8	DYB35 32.7	DYB45X 33.8	
		Regulars	DYB40X 36.6	DYB55X 36.8	DYB70X 33.2	DYB90X 31.6	

Medium Scale (35.5" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
3140 Medium Light	144.8		3041 (.045) 41.8	3042 (.065) 36.9	3143 (.080) 35.6	3144 (.100) 30.5	
3040 Regular	148.3		3041 (.045) 41.8	3042 (.065) 36.9	3043 (.085) 39.9	3044 (.105) 32.7	

Short Scale (32.75" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
3135 Light	124.4		3136 (.045) 37.1	3137 (.060) 33.6	3138 (.075) 28.0	3139 (.095) 25.7	
3035 Regular	161.4		3036 (.050) 42.6	3037 (.070) 44.2	3038 (.090) 41.7	3039 (.107) 32.9	

Universal Long Scale (37.25" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
XL3045 Extra Light	109.1		DYB30 20.9	DYB50 28.9	DYB70 31.5	DYB90 27.8	
L3045 Light	140.8		DYB40 33.6	DYB55 35.2	DYB75 35.9	DYB95 36.1	
ML3045 Medium Light	177.7		DYB45 44.8	DYB65 50.1	DYB80 45.0	DYB100 37.8	
M3045 Medium	186.5		DYB45 44.8	DYB65 50.1	DYB85 49.4	DYB105 42.2	
M3045F Flea Signature Set	186.5		DYB45 44.8	DYB65 50.1	DYB85 49.4	DYB105 42.2	
H3045 Heavy	221.0		DYB50 51.3	DYB70 56.2	DYB95 64.3	DYB115 49.2	
4ML-B-DYB Med Light, BEAD Tuning	158.2			DYB60 42.2	DYB80 45.0	DYB100 37.8	DYB126 33.2
4M-B-DYB Medium, BEAD Tuning	180.2			DYB65 50.1	DYB85 49.4	DYB105 42.2	DYB130 38.5
4H-B-DYB Heavy, BEAD Tuning	202.0			DYB70 56.2	DYB90 56.8	DYB115 49.2	DYB140 39.8
5L-DYB Light, 5 String	172.1		DYB40 33.6	DYB55 35.2	DYB75 35.9	DYB95 36.1	DYB120 31.3
5ML-DYB Medium Light, 5 String	210.9		DYB45 44.8	DYB65 50.1	DYB80 45.0	DYB100 37.8	DYB126 33.2
5M-DYB Medium, 5 String	225.0		DYB45 44.8	DYB65 50.1	DYB85 49.4	DYB105 42.2	DYB130 38.5
6ML-DYB Medium Light, 6 String	248.1	DYB30 37.2	DYB45 44.8	DYB65 50.1	DYB80 45.0	DYB100 37.8	DYB126 33.2

BALANCED NICKELS

- Roundwound Pure Nickel over a Round Core - Green Silks
- Balanced Construction from String to String
- Tonally Even across Entire Fretboard



By Individual String

Universal Long Scale (37.25" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0	
NB40	.00037608									54.5	48.5	43.2	38.5	34.3	30.6	27.2	24.3	21.6	19.3	17.2	15.3																
NB44	.00041369									59.9	53.3	47.5	42.4	37.7	33.6	30.0	26.7	23.8	21.2	18.9	16.8																
NB56	.00066571														54.1	48.2	42.9	38.3	34.1	30.4	27.1	24.1	21.5	19.1	17.1	15.2											
NB60	.00071326														57.9	51.7	46.1	40.9	36.5	32.5	29.0	25.2	20.0	20.5	18.3	16.3											
NB76	.00120125																			54.8	48.8	43.5	38.7	34.5	30.8	27.4	24.4	21.8	19.4	17.3	15.4						
NB80	.00126442																			57.8	51.4	45.8	40.8	36.3	32.4	28.8	25.7	22.9	20.4	18.2	16.2						
NB101	.00210063																							53.9	47.9	42.7	38.0	33.9	30.3	26.9	24.0	21.3	19.0	16.9	15.1		
NB106	.00220462																							56.6	50.3	44.8	39.9	35.6	31.8	28.2	25.1	22.4	19.9	17.8	15.8		
NB126	.00262059																									53.2	47.5	42.3	37.8	33.5	29.9	26.6	23.7	21.1	18.8		
NB130	.00270378																									54.9	48.9	43.6	38.9	34.6	30.8	27.5	24.5	21.8	19.4		

Short Scale (32.75" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0
4701 (.044)	.00041369							58.8	52.3	46.6	41.5	37.0	33.0	29.4	26.2	23.3	20.8	18.5	16.5																	
4702 (.060)	.00071326												56.9	50.7	45.1	40.2	35.8	31.9	28.4	28.4	22.6	20.1	17.9	15.9												
4703 (.080)	.00126442																	56.6	50.4	44.9	40.0	35.6	31.7	28.3	25.3	22.4	20.0	17.8	15.9							
4704 (.106)	.00220462																						55.3	49.3	44.0	39.1	34.9	31.1	27.7	24.7	21.9	19.6	17.4	15.5		

By Available Sets

Universal Long Scale (37.25" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
4L-NB Light	172.3		NB40 43.2	NB56 42.9	NB76 43.5	NB101 42.7	
4M-NB Medium	184.2		NB44 47.5	NB60 46.1	NB80 45.8	NB106 44.8	
5L-NB Light, 5 String	202.2		NB40 43.2	NB56 42.9	NB76 43.5	NB101 42.7	NB126 29.9
5M-NB Medium, 5 String	215.0		NB44 47.5	NB60 46.1	NB80 45.8	NB106 44.8	NB130 30.8

Short Scale (32.75" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
4700 Medium	143.3		4701 (.044) 37.0	4702 (.060) 35.8	4703 (.080) 35.6	4704 (.106) 34.9	

TAPEWOUND

- Flatwound Stainless Steel over a Hex Core - Red Silks
- Black Nylon Tape Wrapped as Final Cover and Polished Smooth
- Mellow Sound with Clear Articulation with Lower Tension



By Individual String

Universal Long Scale (37.25" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0
3061 (.050)	.00035663								57.9	51.6	46.0	40.9	36.5	32.5	28.9	25.8	23.0	20.5	18.3	16.3																
3062 (.070)	.00074452														53.9	48.0	42.8	38.1	33.9	30.3	26.9	24.0	21.4	19.1	17.0											
3063 (.090)	.00123199																			56.2	50.1	44.6	39.7	35.4	31.6	28.1	25.0	22.3	19.9	17.8	15.8					
3064 (.105)	.00168588																						54.3	48.4	43.2	38.4	34.3	30.5	27.2	24.3	21.6	19.3	17.1	15.3		
3065 (.130)	.00226940																							58.2	51.7	46.1	41.1	36.6	32.7	29.0	25.9	23.1	20.5	18.3	16.3	

By Available Sets

Universal Long Scale (37.25" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
3060 Regular	167.8		3061 (.050) 40.9	3062 (.070) 48.0	3063 (.090) 44.6	3064 (.105) 34.3	

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
3060-5 Regular, 5 String	193.7		3061 (.050) 40.9	3062 (.070) 48.0	3063 (.090) 44.6	3064 (.105) 34.3	3065 (.130) 25.9

ROUND CORE BASS BOOMERS®

- Roundwound Nickel-Plated Steel over a Round Core - Red Silks
- Fuller Frequency Sound, Generous in the Low Mids
- Balanced Construction on GDAE Strings for Better Clarity



By Individual String

Universal Long Scale (37.25" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0	
RC-DYB30	.00016211						33.2	29.6	26.3	23.5	20.9	18.6	16.6																								
RC-DYB40	.00031495							57.5	51.2	45.6	40.6	36.2	32.2	28.7	25.6	22.8	20.3	18.1	16.1																		
RC-DYB45	.00037101									53.7	47.8	42.6	38.0	33.8	30.2	26.9	23.9	18.9	16.9	15.1																	
RC-DYB50	.00047242											54.3	48.4	43.1	38.4	34.2	30.5	27.2	24.2	21.5	19.2	17.1	15.2														
RC-DYB55	.00051411											59.1	52.6	46.9	41.8	37.2	33.2	29.5	26.3	23.5	20.9	18.6	16.5														
RC-DYB60	.00058724												53.6	47.7	42.5	37.9	33.7	30.1	26.8	23.9	21.3	18.9	16.9	15.1													
RC-DYB65	.00071326													58.0	51.7	46.0	41.0	36.5	32.5	29.0	25.8	23.0	20.5	18.3	16.3												
RC-DYB70	.00081914														59.3	52.8	47.1	42.0	37.4	33.3	29.6	26.4	23.5	21.0	18.7	16.6											
RC-DYB75	.00100619																57.8	51.5	45.9	40.9	36.4	32.4	28.9	25.8	22.9	20.4	18.2	16.2									
RC-DYB80	.00119324																	54.4	48.5	43.2	38.5	34.3	30.6	27.2	24.2	21.6	19.2	17.2	15.3								
RC-DYB85	.00136168																		55.4	49.3	43.9	39.1	34.9	31.0	27.7	24.7	21.9	19.6	17.4	15.5							
RC-DYB95	.00173438																			62.8	55.9	49.8	44.5	39.5	35.2	31.4	28.0	25.0	22.2	19.8	17.6	15.7					
RC-DYB100	.00188275																				54.1	48.3	42.9	38.2	34.1	30.4	27.1	24.1	21.5	19.1	17.0	15.2					
RC-DYB105	.00200873																				57.7	51.5	45.8	40.8	36.4	32.4	28.9	25.7	22.9	20.4	18.4	16.2					
RC-DYB115	.00224009																					57.5	51.1	45.5	40.6	36.1	32.3	28.7	25.5	22.8	20.3	18.1	16.1				
RC-DYB126	.00280684																						57.0	50.8	45.3	40.4	35.9	32.0	28.5	25.4	22.6	20.2					
RC-DYB130	.00311241																							56.4	50.2	44.8	39.8	35.5	31.6	28.2	25.1	22.4					

By Available Sets

Universal Long Scale (37.25" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
RC-L3045 Light	141.0		RC-DYB40 36.2	RC-DYB55 33.2	RC-DYB75 36.4	RC-DYB95 35.2	
RC-ML3045 Medium Light	170.0		RC-DYB45 42.6	RC-DYB65 46.0	RC-DYB80 43.2	RC-DYB100 38.2	
RC-M3045 Medium	178.7		RC-DYB45 42.6	RC-DYB65 46.0	RC-DYB85 49.3	RC-DYB105 40.8	
RC-H3045 Heavy	215.4		RC-DYB50 54.3	RC-DYB70 52.8	RD-DYB95 62.8	RC-DYB115 45.5	

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
RC-5ML-DYB Medium Light, 5 String	202.0		RC-DYB45 42.6	RC-DYB65 46.0	RC-DYB80 43.2	RC-DYB100 38.2	RC-DYB126 32.0
RC-5M-DYB Medium, 5 String	214.2		RC-DYB45 42.6	RC-DYB65 46.0	RC-DYB85 49.3	RC-DYB105 40.8	RC-DYB130 35.5
RC-6ML-DYB Medium Light, 6 String	235.2	RC-DYB30 33.2	RC-DYB45 42.6	RC-DYB65 46.0	RC-DYB80 43.2	RC-DYB100 38.2	RC-DYB126 32.0

CROSSOVERS

- Groundwound Nickel-Iron over a Round Core - Red Silks
- Mellow Tone with Punch and Definition; Good for Pizz and Arco
- For NS Design CR and NXT Electric-Upright Bases ONLY!



By Individual String

NS Standard Double Bass 3/4 Length (46.5" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0
NS37	.00032422											56.9	50.7	45.1	40.2	35.8	31.9	28.4	25.4	22.6	20.1															
NS53	.00062989															69.6	62.0	55.2	49.2	43.8	39.1	34.8	30.9	27.6	24.6	21.9										
NS74	.00110231																				68.4	60.9	54.2	48.3	43.2	38.3	34.2	30.4	27.1	24.2	21.5					
NS104	.00204715																																			
NS127	.00314940																																			

By Available Sets

NS Standard Double Bass 3/4 Length (46.5" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
NS3075 Medium	243.2		NS37 56.9	NS53 62.0	NS74 60.9	NS104 63.4	

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
NS3075-5 Medium, 5 String	298.0		NS37 56.9	NS53 62.0	NS74 60.9	NS104 63.4	NS127 54.8

PRESSUREWOUND™

- Rollerwound Nickel-Iron over a Hex Core - Black Silks
- Roundwound Tone and Definition with Minimal Finger Noise
- Deep Tone with Punch and Clarity



By Individual String

Universal Long Scale (37.25" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0
PWB28	.00016178		52.6	46.9	41.7	37.2	33.2	29.5	26.3	23.4	20.9	18.6	16.6																							
PWB40	.00032349							59.0	52.5	46.8	41.7	37.2	33.1	29.5	26.3	23.4	20.8	18.6	16.6																	
PWB44	.00037715								54.6	48.6	43.3	38.6	34.4	30.6	27.3	24.3	21.7	19.3	17.2																	
PWB054	.00056615												58.0	51.6	46.0	41.0	36.5	32.5	29.0	25.8	23.0	20.5	18.3	16.3												
PWB058	.00064945												59.2	52.8	47.0	41.9	37.3	33.2	29.6	26.4	23.5	20.9	18.7													
PWB062	.00075360															54.6	48.6	43.3	38.6	34.4	30.6	27.3	24.3	21.7	19.3	17.2										
PWB076	.00108491																		55.5	49.5	44.1	39.3	35.0	31.2	27.8	24.7	22.0	19.6	17.5							
PWB080	.00123089																			56.1	50.1	44.6	39.7	35.4	31.6	28.1	25.0	22.3	19.8	17.7	15.8					
PWB084	.00130260																			59.4	53.0	47.2	42.0	37.4	33.4	29.7	26.5	23.6	21.0	18.8	16.7					
PWB096	.00168590																						54.4	48.4	43.3	38.4	34.2	30.5	27.2	24.3	21.6	19.2	17.1	15.3		
PWB102	.00194575																							55.9	49.9	44.4	39.5	35.2	31.4	28.0	24.9	22.2	19.8	17.6	15.7	
PWB106	.00236502																								53.9	48.0	42.8	38.1	34.1	30.3	26.9	24.0	21.4	19.1		
PWB128	.00297998																										54.0	48.0	42.9	38.1	34.0	30.3	27.0	24.0	21.4	19.1

Short Scale (32.75" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0
7701 (.040)	.00033069						52.7	46.9	41.8	37.3	33.2	29.6	26.4	23.5	20.9	18.7	16.6																			
7702 (.054)	.00060118												53.8	47.9	42.7	38.0	33.9	30.2	26.9	24.0	21.3	19.0	16.9	15.1												
7703 (.076)	.00128603																	57.5	51.3	45.7	40.7	36.2	32.3	28.8	25.7	22.8	20.3	18.1	16.1							
7704 (.096)	.00183720																					51.8	46.1	41.1	36.7	32.6	29.1	25.9	23.1	20.6	18.3	16.3				

By Available Sets

Universal Long Scale (37.25" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
L7200 Light	147.2		PWB40 37.2	PWB54 36.5	PWB76 39.3	PWB96 34.2	
ML7200 Medium Light	169.3		PWB44 43.3	PWB58 41.9	PWB80 44.6	PWB102 39.5	
M7200 Medium	187.1		PWB44 43.3	PWB62 48.6	PWB84 47.2	PWB106 48.0	
M7200-5 Medium, 5 String	221.1		PWB44 43.3	PWB62 48.6	PWB84 47.2	PWB106 48.0	PWB128 34.0

Short Scale (32.75" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
7700 Light	125.1		7701 (.040) 29.6	7702 (.054) 30.2	7703 (.076) 36.2	7704 (.096) 29.1	

PRESSUREWOUND™ BRONZE

- Rollerwound Phosphor Bronze over a Round Core - NO Silks
- No Harsh Overtones or Finger Noise
- Sounds Great with Magnetic Pickups!



By Individual String

Universal Long Scale (37.25" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0
RBB42	.00030281							55.2	49.2	43.8	39.0	34.8	31.0	27.6	24.6	21.9	19.5	17.4	15.5																	
RBB56	.00062680													57.2	50.9	45.4	40.4	36.0	32.1	28.6	25.5	22.7	20.2	18.0	16.1											
RBB74	.00109518																		56.1	49.9	44.5	39.6	35.3	31.5	28.1	25.0	22.2	19.8	17.7	15.8						
RBB92	.00170037																										34.5	30.8	27.4	24.5	21.8	19.4	17.3	15.4		
RBB120	.00264771																										53.8	47.9	42.7	38.1	33.9	30.2	26.9	24.0	21.4	19.1

By Available Sets

Universal Long Scale (37.25" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
4L-RBB Light	149.3		RBB42 34.8	RBB56 40.4	RBB74 39.6	RBB92 34.5	

BRITE FLATS™

- Groundwound Nickel-Iron over a Hex Core - Dark Blue Silks
- Roundwound Attack with Flatwound Feel
- Mellow Sound, with Tight Definition and Sustain



By Individual String

Long Scale Plus (38" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0				
BF27	.00016294		52.3	47.2	42.0	37.4	33.4	29.7	26.4	23.6	21.0	18.7	16.7																											
BF45	.00033286								54.1	48.2	42.9	38.3	34.1	30.4	27.0	24.1	21.5	19.2	17.0	15.2																				
BF49	.00037284								54.0	48.1	42.8	38.2	34.0	30.3	27.0	24.0	21.4	19.1	17.0	15.2																				
BF52	.00045956										59.3	52.8	47.1	41.9	37.3	33.3	29.6	26.4	23.5	20.9	18.7	16.3																		
BF56	.00055712												57.0	50.8	45.3	40.4	35.9	32.0	28.5	25.4	22.7	20.2	18.0	16.0																
BF62	.00068278													55.5	49.5	44.0	39.2	34.9	31.1	27.8	24.7	22.0	19.6	17.5	15.6															
BF65	.00074284														53.8	47.9	42.7	38.0	33.9	30.2	26.9	23.9	21.3	19.1	16.9															
BF77	.00108720																		55.7	49.6	44.2	39.3	35.0	31.3	27.9	24.8	22.1	19.7	17.5											
BF84	.00136654																			55.6	49.5	44.0	39.3	35.1	31.1	27.7	24.7	22.0	19.7	17.5										
BF98	.00191153																						54.9	49.0	43.6	38.8	34.6	30.8	27.5	24.5	21.8	19.4	17.3	15.4						
BF103	.00206683																						59.4	53.0	47.1	42.0	37.4	33.3	29.8	26.4	23.6	21.0	18.7	16.7						
BF108	.00220740																							56.6	50.3	44.8	40.0	35.6	31.8	28.2	25.2	22.4	20.0	17.8	15.9					
BF129	.00319394																											51.5	46.0	40.8	36.4	32.5	28.9	25.8	22.9					

Medium Scale (35.5" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0
3066 (.049)	.00045345									58.2	51.8	46.2	41.2	36.6	32.7	29.1	25.9	23.1	20.6	18.3	16.4															
3067 (.062)	.00069298												56.0	49.8	44.5	39.6	35.3	31.4	28.0	24.9	22.2	19.8	17.6	15.7												
3068 (.084)	.00120910																	54.8	48.8	43.6	38.8	34.5	30.8	27.5	24.4	21.7	19.4	17.3	15.4							
3069 (.108)	.00218012																						55.5	49.5	44.0	39.2	34.9	31.1	27.8	24.7	22.0	19.6	17.4			

Short Scale (32.75" Winding Length)

Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0
3071 (.049)	.00047964									54.1	48.2	42.9	38.2	34.1	30.3	27.0	24.1	21.5	19.1	17.0																
3072 (.062)	.00072449												57.7	51.4	45.8	40.9	36.4	32.4	28.9	25.7	23.0	20.4	18.2	16.2												
3073 (.084)	.00125724																	56.3	50.1	44.6	39.8	35.4	31.6	28.1	25.1	22.3	19.9	17.7	15.8							
3074 (.108)	.00218012																						54.7	48.8	43.5	38.7	34.5	30.7	27.4	24.5	21.7	19.4	17.2	15.4		

By Available Sets

Long Scale Plus (38" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
L3075 Light	152.3		BF45 38.3	BF56 35.9	BF77 39.3	BF98 38.8	
ML3075 Medium Light	192.2		BF52 52.8	BF65 47.9	BF84 49.5	BF103 42.0	
M3075 Medium	181.1		BF49 42.8	BF62 44.0	BF84 49.5	BF108 44.8	
M3075-5 Medium, 5 String	217.5		BF49 42.8	BF62 44.0	BF84 49.5	BF108 44.8	BF129 36.4

Medium Scale (35.5" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
3065 Regular	163.8		3066 (.049) 46.2	3067 (.062) 39.6	3068 (.084) 38.8	3069 (.108) 39.2	

Short Scale (32.75" Winding Length)

Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
3070 Regular	150.2		3071 (.049) 42.9	3072 (.062) 36.4	3073 (.084) 35.4	3074 (.108) 35.5	

Precision Flats™

- Flatwound Stainless Steel over a Hex Core - Purple Silks
- Polished to a Velvety Smooth Finish
- The Sound of Chocolate! Dark, Thick, Thumpy Tone



By Individual String

Long Scale Plus (38" Winding Length)																																					
Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0	
FB28	.00016859		54.8	48.8	43.5	38.7	34.5	30.7	27.3	24.4	21.7	19.4	17.3	15.4																							
FB45	.00036100							58.6	52.3	46.5	41.5	36.9	32.9	29.3	26.1	23.3	20.7	18.5	16.5																		
FB55	.00059573													54.3	48.4	43.2	38.4	34.2	30.5	27.2	24.2	21.6	19.2	17.1	15.3												
FB60	.00072062													58.6	52.2	46.5	41.4	36.9	32.9	29.3	26.1	23.2	20.7	18.5	16.4												
FB65	.00078579													56.9	50.7	45.2	40.2	35.8	31.9	28.4	25.3	22.6	20.2	17.9	15.9												
FB70	.00096566															55.5	49.4	44.0	39.3	34.9	31.1	27.7	24.8	22.0	19.6	17.5	15.6										
FB75	.00106341																54.4	48.5	43.3	38.5	34.3	30.5	27.3	24.2	21.6	19.3	17.1	15.3									
FB80	.00123933																	56.5	50.4	44.9	39.9	35.6	31.8	28.3	25.2	22.4	20.0	17.9	15.9								
FB85	.00141525																		57.6	51.2	45.6	40.7	36.3	32.3	27.7	25.6	22.8	20.4	18.1	16.1							
FB90	.00157079																			56.9	50.6	45.1	40.3	35.8	31.9	28.4	25.3	22.6	20.1	17.9	15.9						
FB95	.00180706																				58.2	51.9	46.4	41.0	36.7	32.7	29.1	26.0	23.1	20.6	18.3	16.4					
FB105	.00203172																					58.4	52.1	46.3	41.2	36.8	32.8	29.3	26.0	23.2	20.6	18.4	16.4				
XLFB126	.00301768																									54.6	48.7	43.4	38.6	34.4	30.7	27.3	24.3	21.7			

Medium Scale (35.5" Winding Length)																																					
Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0	
3121 (.045)	.00034470							55.7	49.6	44.2	39.4	35.1	31.3	27.8	24.8	22.1	19.7	17.5	15.6																		
3122 (.060)	.00068894												55.7	49.6	44.2	39.4	35.0	31.2	27.8	24.8	22.1	19.7	17.5	15.7													
3123 (.075)	.00103342													59.0	52.6	46.9	41.7	37.2	33.1	29.5	26.3	23.5	20.9	18.6	16.6												
3124 (.095)	.00172236																				55.3	49.2	43.8	39.1	34.8	31.0	27.6	24.6	21.9	19.5	17.4	15.5					

Short Scale (32.75" Winding Length)																																					
Cat. No.	Unit Weight	F3	E3	D#3	D3	C#3	C3	B2	A#2	A2	G#2	G2	F#2	F2	E2	D#2	D2	C#2	C2	B1	A#1	A1	G#1	G1	F#1	F1	E1	D#1	D1	C#1	C1	B0	A#0	A0	G#0	G0	
3021 (.045)	.00041594							59.1	52.6	46.9	41.7	37.2	33.2	29.5	26.3	23.4	20.9	18.6	16.6																		
3022 (.060)	.00066346											59.4	52.9	47.1	41.9	37.4	33.3	29.7	26.4	23.6	21.0	18.7	16.6														
3023 (.075)	.00097376												54.9	48.9	43.6	38.8	34.6	30.8	27.4	24.4	21.8	19.5	17.3	15.4													
3024 (.095)	.00153294																			54.4	48.5	43.2	38.5	34.3	30.6	27.2	24.3	21.6	19.2	17.2	15.3						

By Available Sets

Long Scale Plus (38" Winding Length)							
Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E	5-B
3025 Light	163.2		FB45 41.5	FB60 46.5	FB75 38.5	FB95 36.7	
CM3050 Custom Medium	174.1		FB45 41.5	FB60 46.5	FB80 44.9	FB105 41.2	
M3050 Medium	184.6		FB45 41.5	FB65 50.7	FB85 51.2	FB105 41.2	
3050 Regular	229.1		FB55 68.8	FB70 62.2	FB90 56.9	FB105 41.2	
M3050X-S Medium, 5 String	219.0		FB45 41.5	FB65 50.7	FB85 51.2	FB105 41.2	XLFB126 34.4

Universal Long Scale (37.25" Winding Length)						
Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E
M3050-5 Medium, 5 String	219.0		FB45 41.5	FB65 50.7	FB85 51.2	FB105 41.2
						FB126 34.4

Medium Scale (35.5" Winding Length)						
Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E
3120 Light	138.6		3121 (.045) 35.1	3122 (.060) 39.4	3123 (.075) 33.1	3124 (.095) 31.0

Short Scale (32.75" Winding Length)						
Cat. No.	TOTAL	High C	1-G	2-D	3-A	4-E
3020 Light	122.2		3021 (.045) 37.2	3022 (.060) 33.3	3023 (.075) 27.4	3024 (.095) 24.3

Final Thoughts

This tension guide is just that; a guide. You're the expert at your own personal playing style and needs; if something doesn't feel/sound right, change it! Music is a very organic art form, so while you can start with science, you perfect it by touch and feel.

If you're perfectly happy with playing a pre-packaged set of strings, *GREAT!*

If you're excited about putting together that balanced tension set, *GREAT!*

If you want to try a set with less/more tension than what you're used to, *GREAT!*

You're playing. You're learning. That's the important part. We'll provide the strings; you provide the inspiration.



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