

String Gauges for Steel Guitar

By John Ely

The string gauge chart shown could be used as a general guide for pedal steel guitar, but is primarily aimed at steel guitar without pedals.

String Tension On Your Guitar

Each pitch has a range of acceptable gauges. There are a couple of reasons for this. Some players prefer a loose fitting string and use gauges that are smaller than normal. Others prefer strings to be on the tight side and use the larger gauges listed. [Example: Using a .015 gauge for the high E-string will have a tighter feel than a .014 gauge string.]

Scale length can be a factor when selecting gauges. If you use identical string gauges on both a short scale guitar (22-22.5 inches from the bridge to the nut) and a long scale guitar (24-24.5 inches), the string tension on the long scale instrument will be noticeably greater. From the chart below, you can see that for Middle C, a .017 gauge string is normal. On a short scale instrument, string tension is lower so you might consider using an .018 gauge string. Some instruments have a "super long scale", 26 inches and beyond. For these instruments you probably will need to use the smallest of the recommended gauges; string tension will be significantly greater on these guitars.

An Inexact Science

It is not always possible to find a great selection of string gauges at your local music store. If you have to use a string that is one or two gauges smaller or larger than the recommended gauge range, you're still going to be okay. This is especially true for the larger wound strings. Any string over .030w can cover a wider range of pitches than the chart would indicate.

EXAMPLE STRING GAUGES FOR COMMON TUNINGS

C6th		A6th		E7th		C6th		C13th	
E	.014	E	.014	E	.014	G	.012	E	.014
C	.017	C#	.017	B	.018	E	.014	C	.017
A	.021	A	.021	G#	.024w	C	.017	A	.021
G	.024w	F#	.026w	E	.030w	A	.021	G	.024w
E	.030w	E	.030w	D	.034w	G	.024w	E	.030w
C	.036w	C#	.036w	B	.038w	E	.030w	C	.036w
		A	.042w	G#	.046w	C	.036w	BB	.042w
		F#	.046w	E	.056w	A	.042w	C	.068w

Pitch	Gauge Range	My Choice	
A	.009 to .011	.010	
G#/Ab	.010 to .011	.011	
G	.011 to .012	.012	
F#/Gb	.012 to .013	.013	
F	.013 to .015	.013	
E	.013 to .015	.014	GUITAR HIGH E
D#/Eb	.014 to .016	.015	
D	.015 to .017	.016	
C#/Db	.016 to .018	.017	
C	.016 to .018	.017	MIDDLE C
B	.017 to .019	.018	
Bb/A#	.018 to .020	.020	
A	.020* to .022*	.021	
G#/Ab	.024* to .026*	.024w	
G	.024* to .026*	.024w	
F#/Gb	.024w to .026w	.026w	
F	.026w to .030w	.028w	
E	.028w to .032w	.030w	
D#/Eb	.028w to .032w	.032w	
D	.032w to .036w	.034w	GUITAR D STRING
C#/Db	.034w to .038w	.036w	
C	.034w to .038w	.036w	
B	.034w to .038w	.038w	
Bb/A#	.034w to .038w	.042w	
A	.040w to .044w	.042w	
G#/Ab	.042w to .046w	.046w	
G	.044w to .048w	.048w	
F#/Gb	.048w to .052w	.052w	
F	.052w to .056w	.054w	
E	.054w to .058w	.056w	GUITAR LOW E
D#/Eb	.056w to .060w	.058w	
D	.060w to .064w	.060w	
C#/Db	.060w to .068w	.064w	
C	.064w to .068w	.068w	
B	.064w to .068w	.068w	
Bb/A#	.068w to .072w	.072w	
A	.068w to .072w	.072w	

* Either wound or plain acceptable