

**8-key tenoroon, Anonymous (7), Unknown (Austria), ca. 1815**

<b>BASIC - OUTSIDE</b>	mm	mm	Comments
<b>Joint lengths</b>	<b>Min.</b>	<b>Max.</b>	
Standing length to bell	840		
Standing length to wing joint	563		
Wing joint length	322		
Wing joint - tenon length	34.8		
Butt joint length	274		
Long joint length	373		
Long joint - south tenon length	33		
Long joint - north tenon length	32		
Bell length	255		
Vent hole distance from north	x		
Vent hole approx diameter	x		
<b>Tone hole distance, axis</b>			
Wing - tone hole 1 distance from north	153		
Wing - tone hole 2 distance from north	180		
Wing - tone hole 3 distance from north	212		
Butt - tone hole 4 distance from north	64.7		
Butt - tone hole 5 distance from north	92		
Butt - tone hole 6 distance from north	121		
Butt - tone hole F distance from north	212		
Butt - tone hole E distance from north	87.7		
Butt - tone hole Ab distance from north	232		
Butt - tone hole F# distance from north	176		
Long joint - tone hole D distance from north	325		
Long joint - tone hole Eb distance from north	283		
Long joint - tone hole C distance from north	204		
Long joint - tone hole Bb distance from north	58.8		
Wing - major axis at tone hole 1	41		
Wing - major axis at tone hole 2	41.2		
Wing - major axis at tone hole 3	41		
Butt - major axis (side to side) at tone hole 4	52.6		
Butt - minor axis (front to back) at tone hole 4	35.3		

## 8-key tenoroon, Anonymous (7), Unknown (Austria), ca. 1815

Butt - major axis (side to side) at tone hole 5	51.8		
Butt - minor axis (front to back) at tone hole 5	34.8		
Butt - major axis (side to side) at tone hole 6	50.4		
Butt - minor axis (front to back) at tone hole 6	35.2		
Butt - major axis (side to side) at tone hole F	46.7		
Butt - minor axis (front to back) at tone hole F	31		
Butt - major axis (side to side) at tone hole E	51.7		
Butt - minor axis (front to back) at tone hole E	33.8		
Butt - major axis (side to side) of the bottom butt ellipse	41.1	43.5	
Butt - minor axis (front to back) of the bottom butt ellipse	29.2	31.4	
Butt - major axis (side to side) of the top butt ellipse	50.3	52.8	Min. without / max. with ferrule
Butt - minor axis (front to back) of the top butt ellipse	33.1	35.8	Min. without / max. with ferrule
Butt - cork major axis (side to side)	32.7		Two corks
Butt - cork minor axis (front to back)	17.1		Two corks
Long joint - minor axis (front to back) at tone hole D	30.3		Platform
Long joint - major axis (side to side) at tone hole D	29.3		
Long joint - minor axis (front to back) at tone hole Eb	31.9		Platform
Long joint - major axis (side to side) at tone hole Eb	31	31.5	Platform forming a little wing
Long joint - minor axis (front to back) at tone hole C	34		Platform
Long joint - major axis (side to side) at tone hole C	32.8	35	Platform forming a little wing
Long joint - minor axis (front to back) at tone hole Bb	35.8		Platform
Long joint - major axis (side to side) at tone hole Bb	35.4		
<b>Tone hole angle, Ø, length</b>			
Wing - tone hole 1 angle	36°N		
Wing - tone hole 2 angle	22°S		
Wing - tone hole 3 angle	23°S		
Wing - tone hole 1 approx. Ø	4.2	4.5	
Wing - tone hole 2 approx. Ø	4.3	4.8	
Wing - tone hole 3 approx. Ø	4.2	4.7	
Wing - tone hole 1 approx. length	20.3		
Wing - tone hole 2 approx. length	20.6		

## 8-key tenoroon, Anonymous (7), Unknown (Austria), ca. 1815

Wing - tone hole 3 approx. length	21		
Butt - tone hole 4 angle	14°N		
Butt - tone hole 5 angle	15°S		
Butt - tone hole 6 angle	24°S		
Butt - tone hole E angle	14°S		
Butt - tone hole 4 approx. Ø	5	5.8	
Butt - tone hole 5 approx. Ø	4.8	5.1	
Butt - tone hole 6 approx. Ø	4.8	5	
Butt - tone hole E approx. Ø	5.7	6.5	
Butt - tone hole 4 approx. length	19.2		
Butt - tone hole 5 approx. length	18.5		
Butt - tone hole 6 approx. length	17.6		
Butt - tone hole E approx. length	15.4		
Long joint - tone hole C angle	0		
Long joint - tone hole C Ø	7.4		
Long joint - tone hole C approx. length	7.4		
<b>BASIC - INSIDE</b>			
<b>Inner bore length</b>			
Bore length	1144.9		
Wing bore length	323		
Butt - small bore length	258		
Butt - big bore length	258		
Butt - small bore socket length	35.6		
Butt - big bore socket length	32.4		
Butt - small bore beginning of septum	238		
Butt - big bore beginning of septum	238		
Long joint bore length	374		
Bell bore length	256		
<b>Inner bore beginning Ø (not socket!)</b>	<b>Min.</b>	<b>Max.</b>	
Wing bore Ø north	8	8.2	
Wing bore Ø south	11.7	12.2	
Bocal well length	21.2		
Butt - small bore Ø north	12.6		

## 8-key tenoroon, Anonymous (7), Unknown (Austria), ca. 1815

Butt - big bore Ø north	19.2		
Long joint Ø north	23.8	24.4	
Long joint Ø south	18.7	19.2	
Bell bore Ø north	23	23.4	
Bell bore Ø south	23.2	23.4	
Bell socket length	33.1		
Bocal Ø at the beginning	3.9		
Bocal thickness at the beginning	0.2		
Bocal Ø at the tenon	8.2		
Bocal thickness at the tenon	0.5		
Bocal length (along top)	225		
<b>COMPLETE - OUTSIDE</b>	<b>Min.</b>	<b>Max.</b>	
Bocal well thickness with ferrule	5.4	5.6	4.8/5.1 Without ferrule
Bocal well ferrule thickness	0.5		
Wing - tenon thickness	3.8	4.1	
Wing - tenon northern extern. Ø	20		
Wing - tenon southern extern. Ø	19.5		
Wing - tone hole A distance from north	67.4		
Wing - tone hole A angle	1°S		
Wing - tone hole A approx. Ø	3.0	3.3	
Wing - tone hole A approx. length	7.7		
Wing - tone hole C distance from north	59.0		
Wing - tone hole C angle	2°S		
Wing - tone hole C approx. Ø	3.0	3.2	
Wing - tone hole C approx. length	7.7		
Butt - big socket thickness with ferrule	1.6	2.6	Min. without / max. with ferrule
Butt - small socket thickness with ferrule	1.8	2.8	ferrule
Butt - top ferrule thickness	1		
Minimum wall thickness between butt sockets	1.7		
Butt - wood space between corks - bottom	0.9		
Butt - big bore cork Ø - bottom	15.8		
Butt - small bore cork Ø - bottom	15.5		
Butt - wood wall between cork/front - small bore	3.4	4.7	ferrule
Butt - wood wall between cork/front - big bore	4.4	5.5	ferrule

## 8-key tenoroon, Anonymous (7), Unknown (Austria), ca. 1815

Butt - wood wall between cork/back - small bore	5.3	6.3	ferrule
Butt - wood wall between cork/back - big bore	4.2	5.9	ferrule
Wood wall between cork/side - small bore	3.7	4.7	ferrule
Wood wall between cork/side - big bore	3.4	3.5	ferrule
Butt - bottom ferrule thickness	1		
Long joint - south tenon thickness	2.4		
Long joint - south tenon northern extern. Ø	24.2		
Long joint - south tenon southern extern. Ø	24		
Long joint - north tenon thickness	2		
Long joint - north tenon northern extern. Ø	21.8	28.2	
Long joint - north tenon southern extern. Ø	28.9	29.1	
Bell socket thickness with brass	3		
Brass thickness of the bell ferrule	0.7		
Bell ferrule height	30.8		
<b>Tone hole angle, Ø, length</b>			
Butt - tone hole Ab angle	12°N		
Butt - tone hole F angle	15°N		
Butt - tone hole F# angle	12°S		
Butt - tone hole Ab approx. Ø	5.9	6.3	
Butt - tone hole F approx. Ø	5.9	6.4	
Butt - tone hole F# approx. Ø	4.3	5.1	
Butt - tone hole Ab approx. length	13.2		
Butt - tone hole F approx. length	12.8		
Butt - tone hole F# approx. length	13.5		
Long joint - tone hole D angle	0		
Long joint - tone hole E ♭ angle	5°N		
Long joint - tone hole B ♭ angle	0		
Long joint - tone hole D approx. Ø	6.6	7	
Long joint - tone hole E ♭ approx. Ø	5.9	6.3	
Long joint - tone hole B ♭ approx. Ø	8.5	8.9	
Long joint - tone hole D approx. length	6.6		
Long joint - tone hole E ♭ approx. length	9.3		
Long joint - tone hole B ♭ approx. length	8.4		
<b>COMPLETE - INSIDE</b>			

**8-key tenoroon, Anonymous (7), Unknown (Austria), ca. 1815**

Wing - tone hole 1 distance from south	182		
Wing - tone hole 2 distance from south	138		
Wing - tone hole 3 distance from south	105		
Wing - tone hole A distance from south	257		
Wing - tone hole C distance from south	264		
Butt - tone hole 4 distance from north	58		
Butt - tone hole 5 distance from north	97		
Butt - tone hole 6 distance from north	126		
Butt - tone hole Ab distance from north	238		
Butt - tone hole F distance from north	208		
Butt - tone hole F $\sharp$ distance from north	177		
Butt - tone hole E distance from north	89		
Long joint - tone hole D distance from north	325		
Long joint- tone hole E $\flat$ distance from north	288		
Long joint - tone hole C distance from north	204		
Long joint - hole B $\flat$ distance from north	58		
Bell - vent hole distance from north	x		