

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Bassoon Name	GrenserH1-O- Leipzig1386- Wol	GrenserH1386- Wol	GrenserH2-O- Leipzig1387	GrenserH3-O- Basel1904.312	GrenserH4-O- VichyWol	GrenserH4-O- VichyWol	GrenserH5-O- Waterhouse	GrenserH6-O- BrusMIM0183	GrenserH7-O- BrusMIM4353	GrenserH8-O- Goettingen95	GrenserH9-O- Peebles	GrenserH10-O- NMW3608	GrenserH11-O- Leipzig1385	GrenserH12-O- Vleeshuis1967. 001.158
2	I. Bocal	Shorter Wing	Longer Wing			Shortest Wing	Longest Wing								
3	dia reed end				4.2	4.8	4.6								
4	bocal string length (0, 1)				33.3	18	18								
5	metal bocal length top (0, 1)				324	323	333								
6	metal bocal length bot (0, 1)				314	304	314								
7	dia wj end				9.8	9.8	9.8								
8															
9	bocal logic	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10															
11															
12															
13	II. Wing Joint Lengths														
14	choke bore dia.	9.1	9.2	9.3	8.7	8.8	8.2	8.7	8.7	8.7	8.7	9.2	8.5	9.1	8.9
15	receiver length (1, 0) (formally choke length)	23.4	24.5	26.9	33.3	25.5	25	25	29.3	26.3	45	33	25.5	34	30
16	wing joint length	513	527	528	527	514	526	528	515	514	509	516	514	516	516
17	tenon length	40.3	40.2	39.9	38.6	39.3	39.3	40	39.2	39.5	40	40	38.8	38.9	40.4
18															
19	wj f2	235	241	239	229	240	241	241	238	239	232	229	234	239	237
20	wj e	298	304	301	301	303	300	300	294	294	292	294	299	295	300
21	wj d	345	351	347	345	346	348	348	338	339	335	338	341	340	345
22															
23	Bore dia. Bottom of wing joint	15.7	15.9	14.9	14.8	15.1	15.3	15.5	16.1	15.6	14.9	15.7	15	15.5	15.6
24	Bore dia. top of boot joint small side	16.4	16.4	16.1	16	16	16	16.8	16.7	16.5	16.4	16.5	16.6	16.2	16.2
25	Bore dia. top of boot joint large side	24	24	25.3	24.8	24.8	24.8	25.2	25.3	25.2	24.9	25	24.7	24.8	25.7
26															
27	III. Boot Lengths														
28	bj logic	1	1	0	1	1	1	1	1	1	1	1	1	1	1
29	bj c	82	82	84	83	84	84	83	85	85	88	85	85	86	83
30	bj b	139	139	139	135	140	140	137	145	147	145	139	139	139	139
31	bj a	182	182	184	183	188	188	183	189	183	191	190	189	188	185
32															
33	bjstotal (Needed for both boot logics)	433	433	425	416	422	422	425	422	423	424	425	424	423	428
34	bjtotal (Needed for both boot logics)	433	433	425	416	422	422	425	422	423	424	425	424	423	438
35	plus small (Need for logic 0 only)	19	19	19.2	0	0	0	0	0	0	0	0	0	0	0
36	plus large (Need for logic 0 only)	19.3	19.3	19.5	0	0	0	0	0	0	0	0	0	0	0
37															
38	boots (Needed for both boot logics)	393	393	381	376	381	381	387	382	387	385	386	384	384	381
39	bootl (Needed for both boot logics)	393	393	381	376	381	381	387	382	387	385	386	384	384	381
40															
41	boots bottom (Needed for both boot logics)	21	21	27	16	20.5	20.5	22.5	20.5	15	24	19	17	18	25
42	bootl bottom (Needed for both boot logics)	21	21	27	16	20.5	20.5	22.5	20.5	15	24	19	17	18	25
43															
44	extreme bore (Needed for logic 1 only)	41.1	41.1	40.8	41.6	41.6	41.6	42.9	41.6	42.1	41.4	41.4	43	42	41.4
45															
46	septum length exp (Need for logic 0 only)	0	0	44	0	0	0	0	0	38	0	0	0	0	0
47	septum length calc - do not imput value	40	40	44	40	41	41	38	40	36	39	39	40	39	47
48	septum length - do not imput value	40	40	44	40	41	41	38	40	36	39	39	40	39	47
49															
50	shore dia sep* (Needed for both boot logics)	18.3	18.3	17.6	18.1	18.1	18.1	17.8	18.1	18	18.1	18.1	18.1	18.2	18.1
51	lbre dia sep* (Needed for both boot logics)	19.1	19.1	18.8	19.1	19.2	19.2	19.2	18.4	19	18.9	19.1	19	19.2	19.1
52	sep width exp (Need for logic 0 only)	0	0	4.9	0	0	0	5.7	0	5.3	0	0	5.3	0	0
53	sep width calc - do not imput value	3.7	3.7	4.4	4.4	4.3	4.3	5.9	5.1	5.1	4.4	4.2	5.9	4.6	4.2
54	sep width - do not imput value	3.7	3.7	4.9	4.4	4.3	4.3	5.9	5.1	5.1	4.4	4.2	5.9	4.6	4.2
55															
56	bj g	348	348	330	327	327	327	327	324	327	326	325	328	328	325
57	bj fl	121	121	115	116	118	118	112	124	112	122	115	114	115	116
58															
59															
60															
61															
62															
63															
64	IV. Tone Hole Diameters														
65	f2	5.1	5.2	5.2	6.2	5.4	5.4	5.6	5.4	5.3	5.3	5.8	5.3	5.1	4.7
66	e	5.8	5.8	5	6.3	6	6	6.2	5.6	6	5.5	6.5	5.8	5.5	5.8
67	d	5.4	5.5	5	4.9	5.3	5.3	5.4	5.4	5.4	5.2	5.5	5.5	5.5	5.3
68															
69	c	6.7	6.7	6.2	8.3	7.8	7.8	7.7	7.8	7.5	6.6	7.5	8.1	7.2	6.9
70	b	6.8	6.8	6.5	7	7.2	7.2	7	7.2	7	6.7	7.6	7.4	7.2	7.2
71	a	5.5	5.5	5.6	5.8	5.8	5.8	6.3	5.7	5.7	5.5	7.4	6.8	6.1	5.9
72	g	9.2	9.2	8.5	9.7	9.2	9.2	9.1	8.4	9.2	9	9	9.2	9	9.7
73	f1	9.2	9.2	9.2	9.5	9.7	9.7	10.2	9.7	10	9.5	14	10	10	9.3
74															
75	e1	13.8	13.8	12.4	11	11	11	14.3	10.5	14.2	11.3	14.4	12.2	12.8	11.8
76	d1	11.4	11.4	8.9	10.8	9.3	9.3	11.2	9.2	10	10.5	12.5	9.2	10.8	9
77	c1	15	15	12.9	13.8	11	11	14.4	11	14.7	12.5	15.5	12.7	13.5	13
78															
79															
80															
81															
82															
83	V. Tone Hole Depths														
84	f2	25	26.7	22	29.8	22.8	22.8	22.8	18.3	21.7	25.1	22.2	24.5	21	25
85	e	28.3	31	24	29.7	30.5	29.5	26	19.5	26	30.5	23.6	26.5	25	27.2
86	d	33.2	34.8	31.6	35.7	34	34	32.1	23.5	28.2	32.7	29	29	31.5	33
87															
88	c	22.4	22.4	21.8	19.9	23.2	23.2	22.3	25.6	22.5	24	23.6	24.3	23.5	22.2
89	b	24.6	24.6	23.3	20.7	23.8	23.8	24.1	23.7	25	25.3	23.1	28.5	26	23.5
90	a	27.7	27.7	24.3	24.4	30.8	30.8	28.2	30.6	29	26.7	22.5	31	32.5	24.7
91	g	17	17	18.1	20.2	16.7	16.7	19.4	14.5	18.5	17	13.6	18	16.5	17
92	f1	19	19	19.5	17.4	19.9	19.9	17.5	19	22.5	24	17	20	22.5	20.5
93															
94	e1	10	10	8.7	9.2	9.2	9.2	8.1	9.5	9.1	8.4	9.1	8.7	9.4	9
95	d1	9.6	9.6	7.9	10.3	9.1	9.1	7.1	11.4	10	10.7	10.7	8.8	7.7	8
96	c1	8.6	8.6	7.3	6.6	7.6	7.6	6.8	8.4	7	6.8	9	6	6.9	6.5
97															
98															
99															
100															
101															
102	VI. Long Joint														
103	lq length	613	613	612	608	605	605	608	610	612	604	605	608	607	610
104	lq tenon bot	43.8	43.8	43	42	42	42	42.3	42	43.2	42.3	43.4	41.7	41.6	43.8
105	l bot bore	24.3	24.3	24.8	24	24.5	24.5	24.8	24.2	25	23	23.2	23.6	24.5	25.1
106	l top bore	35	35	31.6	32.1	32.6	32.6	32.7	32.4	32.3	30.7	32.1	31.3	32	32
107	lq tenon top	35	35	33.9	33.9	31.2	31.2	33	34.5	35	30.6	31.6	31.8	32.2	33
108	e1 distance	62	62	58	53	55	55	56	58	57	52	48	56	55	58
109	d1 distance	340	340	263	261	260	260	260	262	262	252	250	262	261	263
110	c1 distance	535	535	511	516	518	518	515	512	520	532	532	520	518	517
111															

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
132															
133															
134															
135	VIII. Bell														
136	bell logic	0	0	0	0	0	0	0	0	1	0	0	0	0	0
137	bell length (0, 1, 2)	319	319	298	295	295	295	295	295	338	296	296	293	296	299
138	bell bot bore (0, 1, 2)	34.8	34.8	32.5	31.9	31.9	31.9	32.1	32.2	33.3	32.2	33.4	31.6	31.8	32
139	bell top bore (0, 1, 0, 2)	33.6	33.6	33.5	33.3	33.4	33.4	32.6	34.5	31.2	33.5	36	34.7	32	32.8
140	bell center bore (only for logic 2)														
141	bell wall (only for logic 2)														
142	bell bot bore expansion (only for logic 2)														
143	Outside diameter of wood at expansion														
144	bell tenon (0, 1, 0, 2)	35.3	35.3	37.5	33.5	31.9	31.9	34.4	34.5	42	30.8	32.5	31	36	36.5
145	bell expansion length (only for logic 2)														
146	beiflg				58.3			58.3	49	40	40	44.5	38	44	42.1
147															
148															
149	IX. PITCH														
150	pitch	430	430	430	430	430	430	430	430	430	430	430	430	430	430
151	freq_init	380	380	380	380	380	380	380	380	380	380	380	380	380	380
152	Delta frequency	2	2	2	2	2	2	2	2	2	2	2	2	2	2
153	Number of frequencies	60	60	60	60	60	60	60	60	60	60	60	60	60	60
154	frequency adjust	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
155	X. Title														
156	title														
157															
158															
159															
160	XI. Bore Diameter Locations														
161		21	21	19	19	19	19	20	23	19	19	19	18	21	19
162	Bell Bore:GrenserH1-O-Leipzig1386-Wq1	9.1	9.2	9.3	8.7	8.8	8.2	8.7	8.7	8.7	9.2	8.5	9.1	8.9	
163	34.8mm dia. at socket	403	412	401	385	382	393	397	377	377	377	385	0	390	391
164	34mm rod 220mm from socket	335	345	334	315	315	333	330	326	315	320	315	395	310	318
165	33.6mm dia. at bell end	274	284	274	258	263	280	265	265	265	265	268	290	265	264
166		210	223	196	190	214	227	225	202	200	200	175	255	217	195
167		110	123	85	45	105	130	107	95	95	125	135	102	120	112
168		52	62	0	0	0	0	6	44	50	0	0	0	60	0
169		0	0	0	0	0	0	0	50	0	0	0	0	0	0
170		87	87	120	138	93	93	322	155	110	105	80	98	95	96
171		320	320	0	345	365	365	0	290	0	345	285	270	270	285
172		0	0	371	0	0	0	0	375	0	370	0	0	0	0
173		335	335	335	327	335	335	335	310	350	343	337	348	355	350
174		275	275	281	265	275	275	283	267	270	275	275	285	285	288
175		226	226	225	203	223	223	238	175	220	225	240	235	245	247
176		101	101	138	140	148	148	152	125	140	90	135	155	160	153
177		51	51	88	0	115	115	95	560	80	555	512	105	101	93
178		488	488	556	520	550	550	550	498	568	490	485	564	565	553
179		440	440	490	475	490	490	490	441	480	441	450	520	525	475
180		405	405	419	420	412	412	425	380	430	395	410	430	440	417
181		382	382	315	340	340	340	345	328	300	328	330	360	370	305
182		339	339	271	278	270	270	280	261	270	270	270	285	293	275
183		272	272	221	215	215	215	200	225	190	170	215	238	240	195
184		233	233	8	90	110	110	100	81	100	0	125	115	128	95
185		203	203	0	15	0	0	9	9	0	0	0	0	60	0