

Deep Throat Subwoofer
Design Data
W.H. Geiger / Rev.02 18-Sep-2014

Heavy Wall Sonotube					
Desig	Inside Dia.	Inside Area	Wall Thickness	Outside Diameter	Outside Area
-	Di	Si	Wt	Do	So
	in	in²	in	in	in²
RW6	6.00	28.3	0.190	6.4	32.0
RW8	8.00	50.3	0.190	8.4	55.2
RW10	10.00	78.5	0.190	10.4	84.6
RW12	12.00	113.1	0.190	12.4	120.4
RW14	14.00	153.9	0.215	14.4	163.5
RW16	16.00	201.1	0.250	16.5	213.8
RW18	18.00	254.5	0.250	18.5	268.8
RW20	20.00	314.2	0.295	20.6	333.0
RW22	22.00	380.1	0.295	22.6	400.8
RW24	24.00	452.4	0.295	24.6	474.9
RW26	26.00	530.9		26.0	530.9
RW28	28.00	615.8	0.365	28.7	648.3
RW30	30.00	706.9	0.365	30.7	741.7
RW32	32.00	804.2	0.365	32.7	841.4

Driver				
Driver	Metric		English	
Desg	Value	Units	Value	Units
Mfg	TC Sounds			
Mdl	LMS-Ultra 5400 18"			
Xmax	33.7	mm	1.33	in
X70%BL	38.1	mm	1.50	in
Xmec	47.6	mm	1.87	in
ERD	390	mm	15.35	in
PRA	1194.6	cm²	185.2	in²
Qts	0.325			
Qes	0.34			
Qms	7.6			
Fs	20	Hz		
Vas	240	liters		
Cms	120	µm/N		
Mms	501	grams		
Bl	26.8	T*m		
Re	3.78	Ohms		
Sens	89.7	dB SPL		

Passage		Outer	Inner	Passage	Passage	Strut	Passage			Passage	
Desig.	Type	Area	Area	Area	Width	Area	Net Area		Desig.	Acoustic Length	
Sn		Sno	Sni	Sna	Wna	Sns	Sn		Ln	Lna	
	UOM -->	in²	in²	in²	in	in²	in²	cm²	UOM -->	in	cm
S6 (EC)	End Correction								L6	7.4	18.7
S5 (24")	Mouth Cylinder		452.4	452.4	24.00		452.4	2918.6	L5(P4-P5)	40.9	103.9
S4 (24")	Throat Annulus	268.8	254.5	183.6	5.50	33.0	150.6	971.5	L4(P3-P4)	38.4	97.5
S3 (18")	Throat Annulus	120.4	113.1	134.1	5.62	33.7	100.4	647.6	L3(P2-P3)	30.9	78.6
S2 (12")	Throat Annulus	32.0	28.3	81.1	5.62	33.7	47.4	305.9	L2(P1-P2)	34.0	86.5
S1 (6")	Throat Cylinder		28.3	28.3	6.00		28.3	182.4	L1(P0-P1)	41.9	106.5
									Lm = 42"	48.2	122.5
									Lt = 42"	145.3	369.1
									Total	193.6	491.7
									ft	16.1	

Front Chamber Volume	in³	cm³
Driver Cavity	266.1	4360.9
Chamber Cylinder	378.0	6193.9
Total	644.1	10554.9