SICA LOUDSPEAKERS

18"- 1400W Professional Woofer

18 K4 - 8 Ω

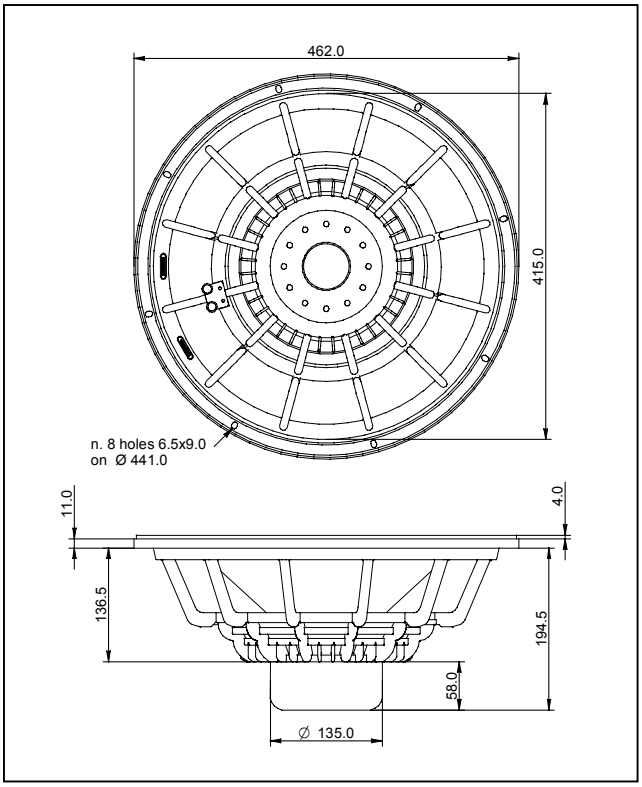
Code Z008402

GENERAL CHARACTERISTICS		
Nominal Overall Diameter	462	mm
Nominal Voice Coil Diameter	100	mm
Magnet Weight	780	g
Flux Density.....	1.11	T
Weight.....	6.50	Kg

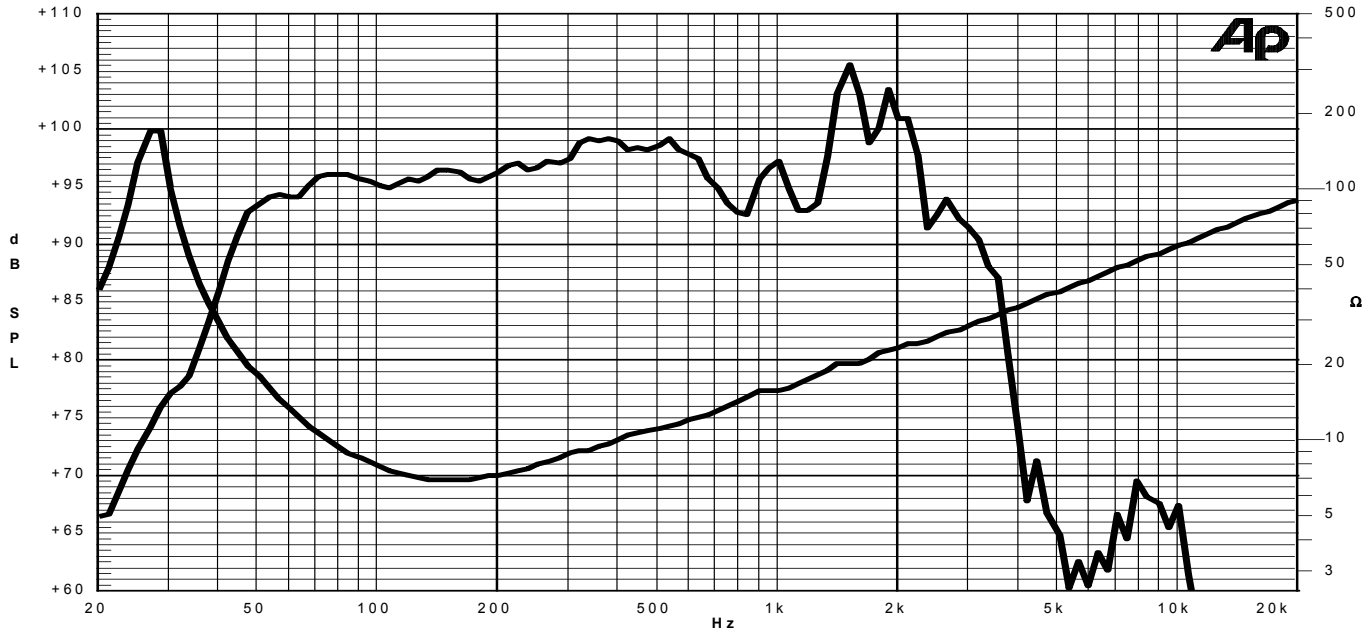
ELECTRICAL CHARACTERISTICS		
Nominal Impedance.....	8	Ω
Musical Power	1400	W
Rated Power*	700	W
Sensitivity @ 1 W, 1 m	98.6	dB

THIELE-SMALL PARAMETERS			
Voice Coil DC Resistance	R_E	5.47	Ω
Resonance Frequency	f_s	26.7	Hz
Mechanical Q Factor.....	Q_{MS}	7.80	
Electrical Q Factor.....	Q_{ES}	0.24	
Total Q Factor.....	Q_{TS}	0.23	
Mechanical Moving Mass	M_{MS}	174.1	g
Mechanical Compliance.....	C_{MS}	200	μm/N
Force Factor	$B \times l$	25.72	Wb/m
Equivalent Acoustic Volume.....	V_{AS}	389.9	lt.
Maximum Linear Displacement	X_{MAX}	+/-6.0	mm
Reference Efficiency	η_0	2.96	%
Diaphragm Area	S_D	1164.0	cm^2
Losses Electrical Resistance.....	R_{ES}	176.2	Ω
Voice Coil Inductance @ 1kHz	L_E	1.56	mH

CONSTRUCTIVE CHARACTERISTICS	
Magnet.....	Neodymium
Voice Coil Winding.....	Copper
Voice Coil Former.....	Fiberglass
Cone	Paper
Surround.....	Treated Cloth
Dust Dome	Solid Paper
Basket	Aluminium Die-Cast



**rated power measured with 2 hours test with pink noise signal, 6 dB crest factor, loudspeaker mounted on enclosure*
Thiele-Small parameters measured with LASER system



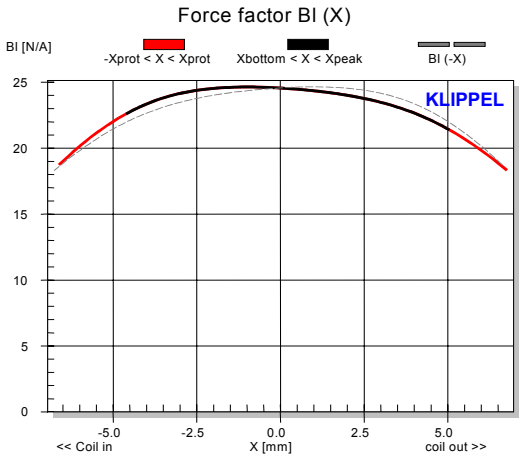
Frequency Response on 150 litres vented box @ 1 W, 1 m - Impedance

CAD AUDIO DK - www.cadaudio.dk - km_cad@yahoo.com - phone/fax +45 38334048

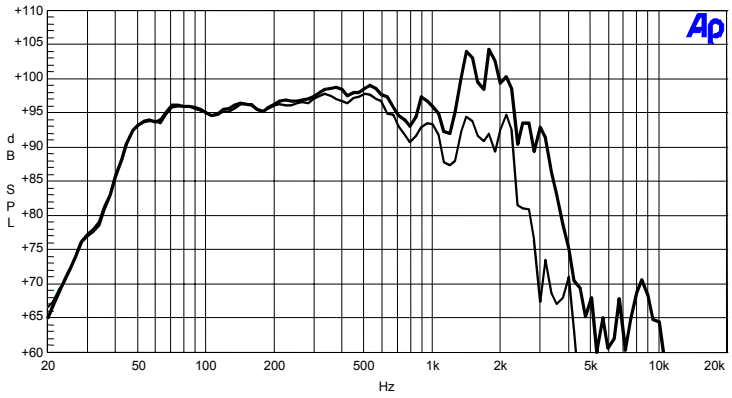
18K4

18” speaker – 4”voice coil

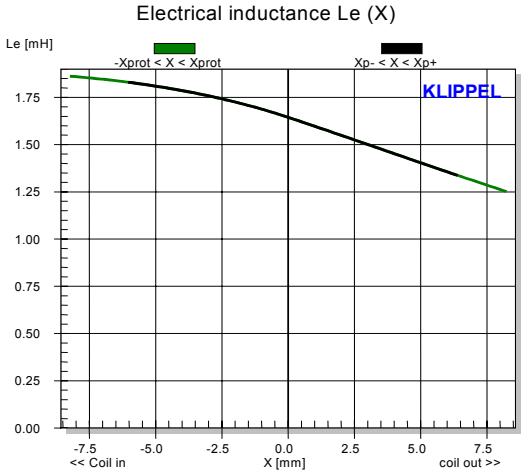
GRAPHICS AND MEASUREMENTS



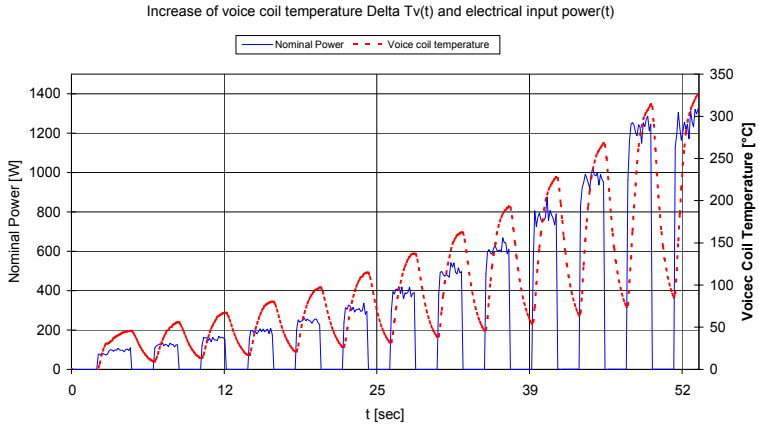
Bl(X): force factor variation with voice coil displacement



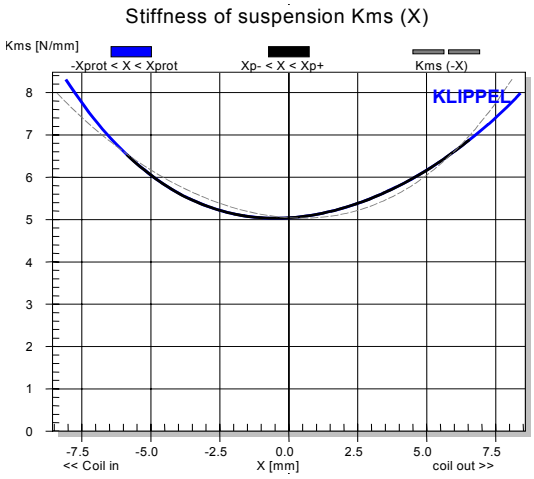
Frequency Response: enclosure volume 150l, port tuning 43Hz (thick curve on axis, thin curve 30° off axis)



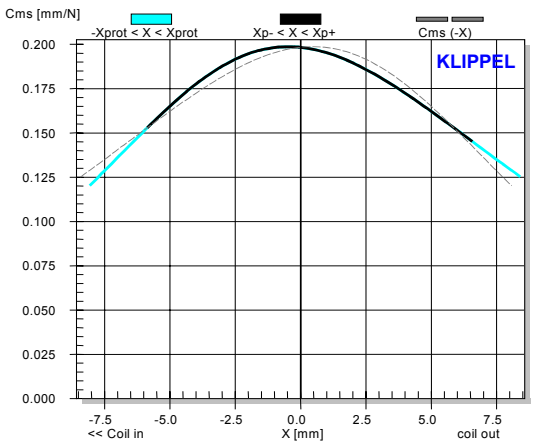
L_e: electrical inductance variation with voice coil displacement



Power test done with intermittent excitation, ON interval 2min, duty cycle 50%, pink noise signal 6dB crest factor with frequency range 45-1000Hz.



K_{ms}: stiffness of suspension variation with voice coil displacement



C_{ms}: mechanical compliance variation with voice coil displacement