

GENERAL CHARACTERISTICS

Nominal Overall Diameter	320	mm
Nominal Voice Coil Diameter	100	mm
Magnet Weight	625	g
Flux Density.....	1.20	T
Weight.....	4.50	Kg

THIELE-SMALL PARAMETERS

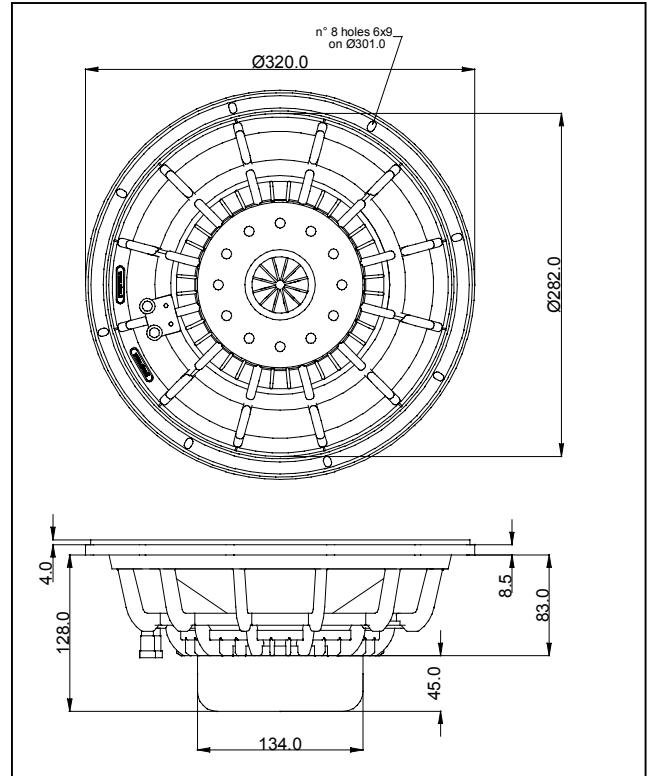
Voice Coil DC Resistance	R_E	5.16	Ω
Resonance Frequency	f_s	50.4	Hz
Mechanical Q Factor.....	Q_{MS}	10.30	
Electrical Q Factor.....	Q_{ES}	0.28	
Total Q Factor	Q_{TS}	0.27	
Mechanical Moving Mass	M_{MS}	91.6	g
Mechanical Compliance	C_{MS}	110	μm/N
Force Factor	$B \times l$	23.30	Wb/m
Equivalent Acoustic Volume.....	V_{AS}	43.3	lt.
Maximum Linear Displacement	X_{MAX}	+/-6.0	mm
Reference Efficiency	η_0	1.94	%
Diaphragm Area	S_D	530.9	cm ²
Losses Electrical Resistance.....	R_{ES}	193.1	Ω
Voice Coil Inductance @ 1kHz	L_E	0.61	mH

CONSTRUCTIVE CHARACTERISTICS

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

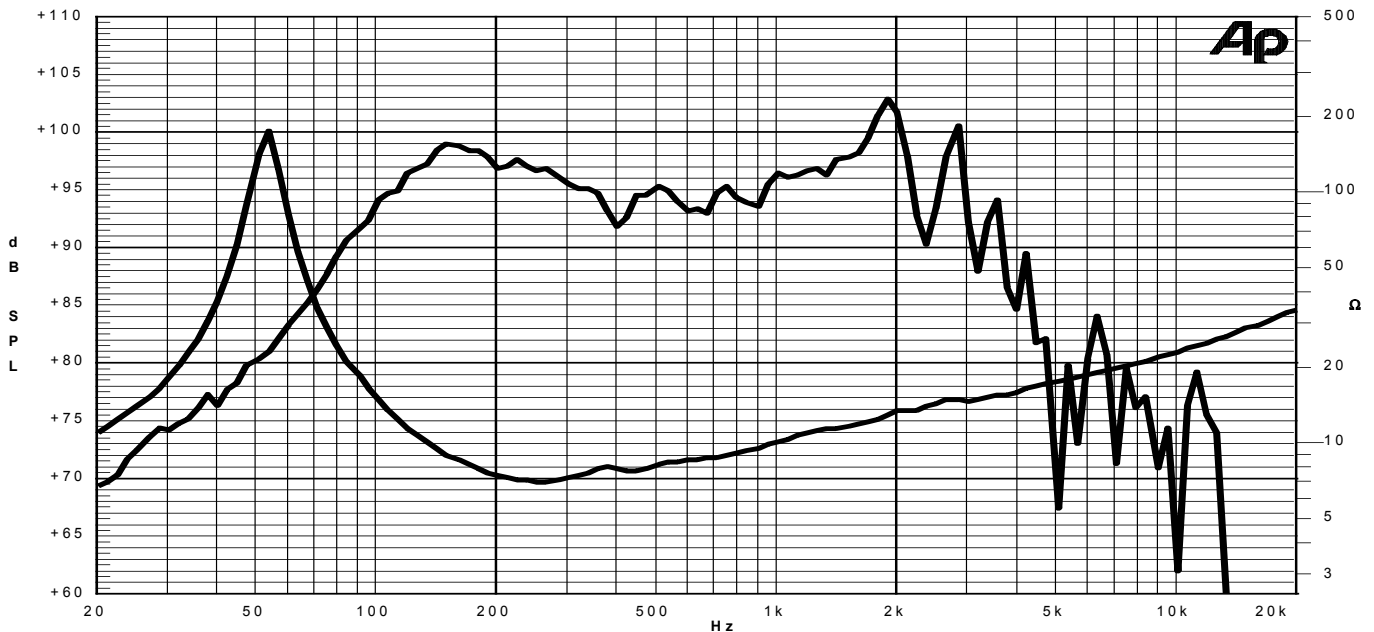
ELECTRICAL CHARACTERISTICS

Nominal Impedance.....	8	Ω
Musical Power	1400	W
Rated Power*	700	W
Sensitivity @ 1 W, 1 m	97.0	dB



*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

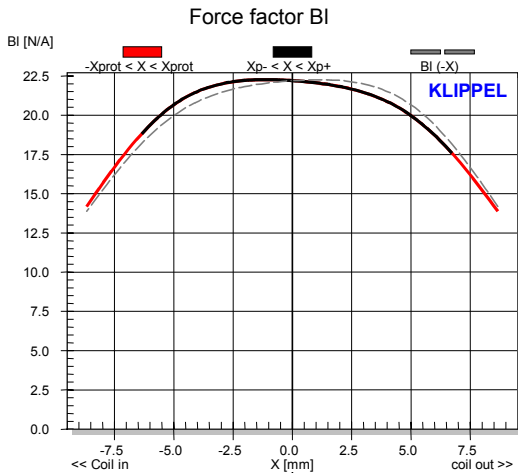
Frequency Response on IEC Baffle (DIN 45575) @ 1 W, 1 m - Impedance



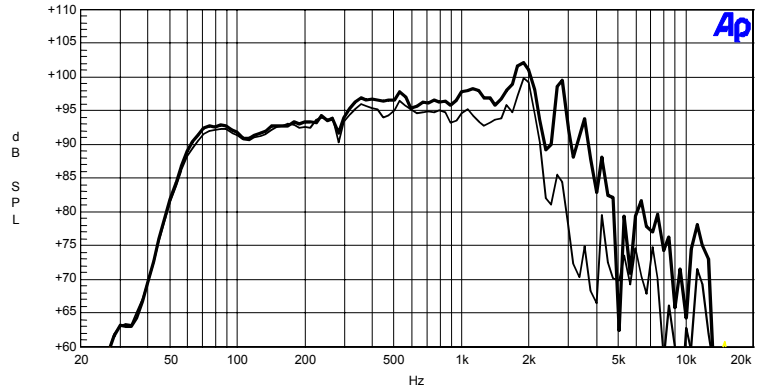
12 K 4 PL

12" speaker - 4" voice coil

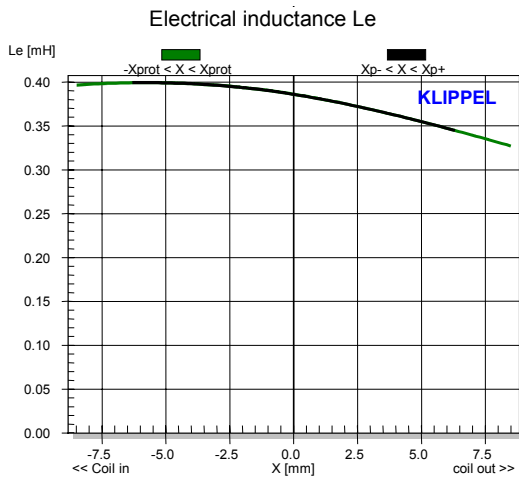
GRAPHICS AND MEASUREMENTS



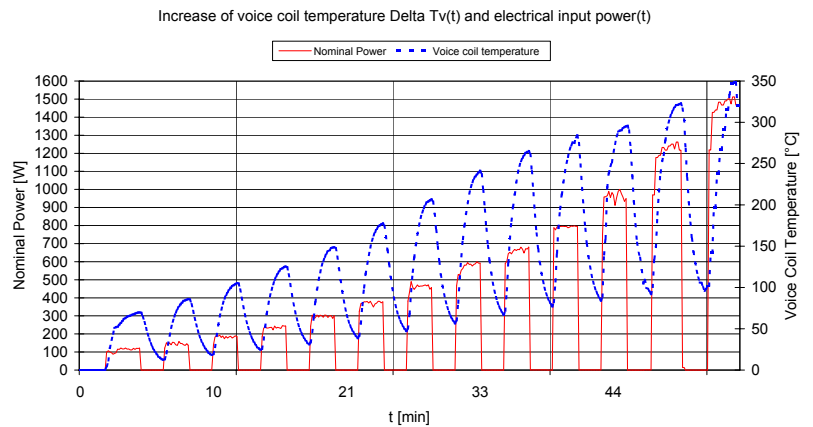
BI(X): force factor variation with voice coil displacement



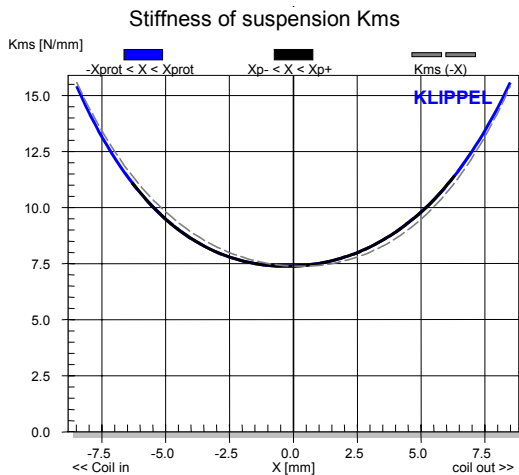
Frequency Response: enclosure volume 45l, port tuning 60Hz (thick curve on axis, thin curve 30° off axis)



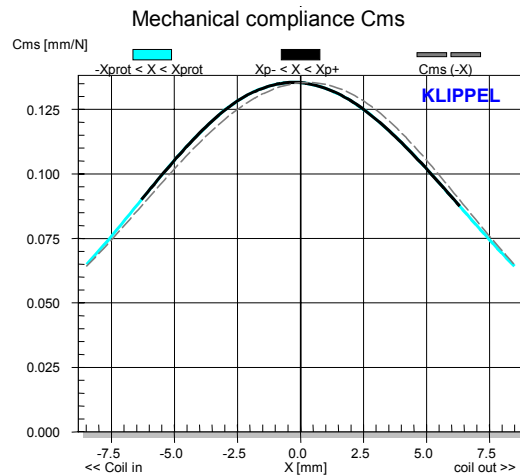
Le: electrical inductance variation with voice coil displacement



Power test done with intermittent excitation, ON interval 2min, duty cycle 50%, pink noise signal 6dB crest factor with frequency range 50-2000Hz.



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



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