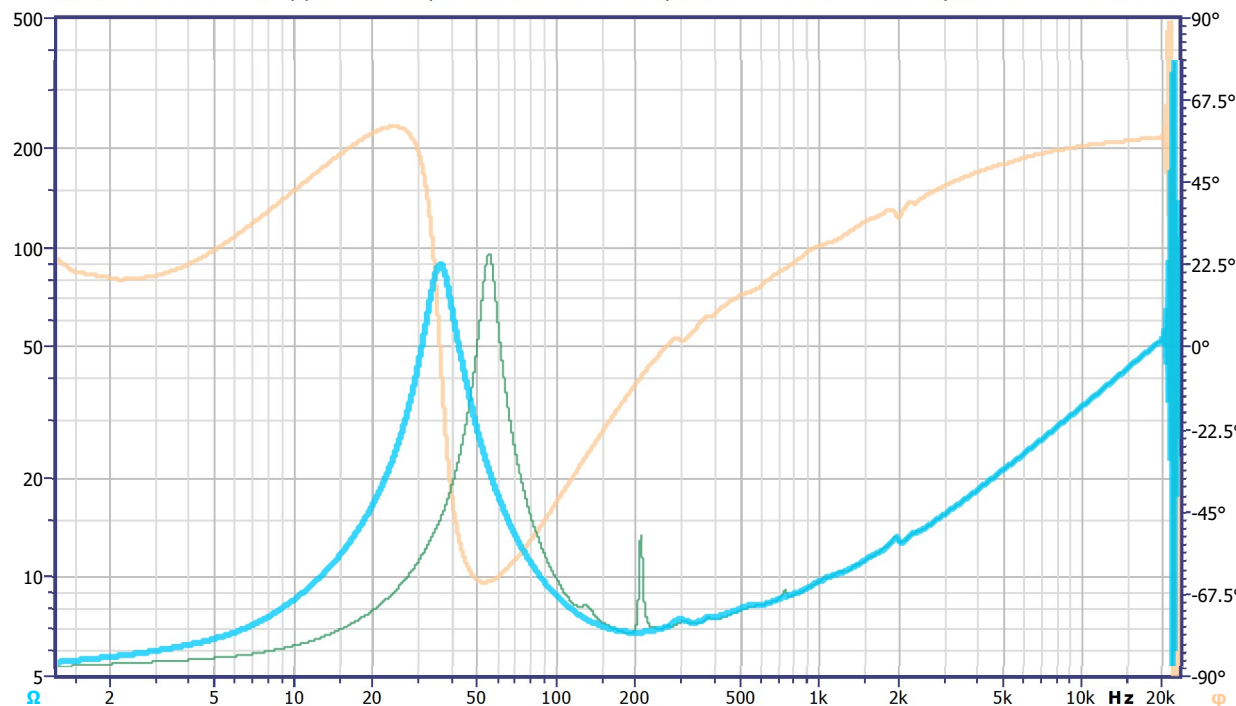


# Impedance Measurement

# Thiele-Small Parameters

File: C:/.../BMS 12s305 8/Uppmätta TS-parametrar Delta compliance BMS 12s305-8 högtalare 2 BMS 12s305-8 högtalare 2

Date: Mon Jul 24 10:39:01 2023



**Manufacturer:** BMS  
**Model:** 12s305-8 högtalare 2 höger  
**Method:** Delta Compliance  
**Test volume:** 52,85L  
**Inductor model:** Standard

## Parameters:

Resonance frequency in free air	<b>fs</b>	35,9Hz	Voice coil inductance [@10kHz]	<b>Le10k</b>	0,4336mH
Equivalent air volume	<b>Vas</b>	71,507L	Voice coil inductance [Average]	<b>LeAve</b>	0,5282mH
Effective cone diameter	<b>D</b>	25,61cm	Half space reference efficiency	<b>no</b>	3,7852%
Effective piston area	<b>Sd</b>	515cm <sup>2</sup>	Half space reference sensitivity	<b>Lm</b>	97,8dB-1W/1m
Moving mass including air load	<b>Mms</b>	103,529g	Nominal sensitivity	<b>Lnom</b>	99,63dB-2,83V/1m
Moving mass excluding air load	<b>Mmd</b>	90,0888g	Electrical capacitance (moving mass)	<b>Cmes</b>	246,2085µF
Mechanical compliance	<b>Cms</b>	0,1899mm/N	Electrical inductance (compliance)	<b>Lces</b>	79,8354mH
Mechanical stiffness	<b>Kms</b>	5,267N/mm	Resistance due to mechanical losses	<b>Res</b>	84,6643Ω
Mechanical resistance	<b>Rms</b>	4,9666kg/s	Motor efficiency factor (BL <sup>2</sup> /Revc)	<b>β</b>	80,09
Force factor	<b>BL</b>	20,5059N/A	Acceleration factor (BL/Mms)	-	198,07
Mechanical Q factor	<b>Qms</b>	4,7017	Ratio (BL/√Revc)	-	8,95
Electrical Q factor	<b>Qes</b>	0,2915	Ratio (fs/Qts)	<b>F</b>	130,76
Total Q factor	<b>Qts</b>	0,2745	Efficiency bandwidth product (fs/Qes)	<b>EBP</b>	123,13
Voice-Coil D.C. resistance	<b>Revc</b>	5,25Ω			
Nominal impedance	<b>Znom</b>	6Ω			
Maximum impedance [@fs]	<b>Zmax</b>	89,9143Ω			
Voice coil inductance [@1kHz]	<b>Le1k</b>	0,7193mH			