

#### GENERAL CHARACTERISTICS

|                                   |      |    |
|-----------------------------------|------|----|
| Nominal Overall Diameter .....    | 320  | mm |
| Nominal Voice Coil Diameter ..... | 65   | mm |
| Magnet Weight .....               | 220  | g  |
| Flux Density.....                 | 1.14 | T  |
| Weight .....                      | 2.50 | Kg |

#### THIELE-SMALL PARAMETERS

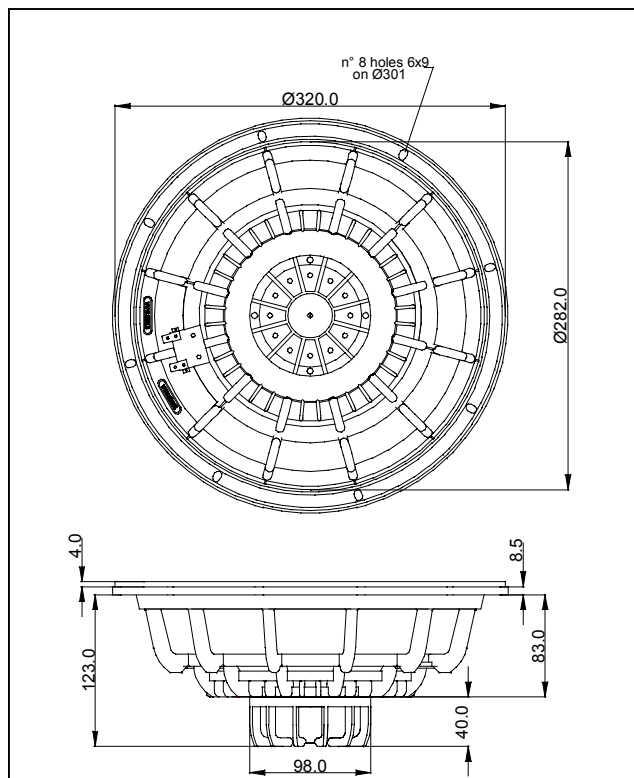
|                                    |              |        |                 |
|------------------------------------|--------------|--------|-----------------|
| Voice Coil DC Resistance .....     | $R_E$        | 5.46   | $\Omega$        |
| Resonance Frequency .....          | $f_s$        | 46.8   | Hz              |
| Mechanical Q Factor.....           | $Q_{MS}$     | 12.58  |                 |
| Electrical Q Factor.....           | $Q_{ES}$     | 0.44   |                 |
| Total Q Factor .....               | $Q_{TS}$     | 0.43   |                 |
| Mechanical Moving Mass .....       | $M_{MS}$     | 56.7   | g               |
| Mechanical Compliance .....        | $C_{MS}$     | 200    | $\mu\text{m/N}$ |
| Force Factor .....                 | $B \times l$ | 14.37  | Wb/m            |
| Equivalent Acoustic Volume.....    | $V_{AS}$     | 81.3   | lt.             |
| Maximum Linear Displacement ....   | $X_{MAX}$    | +/-5.0 | mm              |
| Reference Efficiency .....         | $\eta_0$     | 1.81   | %               |
| Diaphragm Area .....               | $S_D$        | 530.9  | $\text{cm}^2$   |
| Losses Electrical Resistance.....  | $R_{ES}$     | 155.6  | $\Omega$        |
| Voice Coil Inductance @ 1kHz ..... | $L_E$        | 1.00   | 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 |

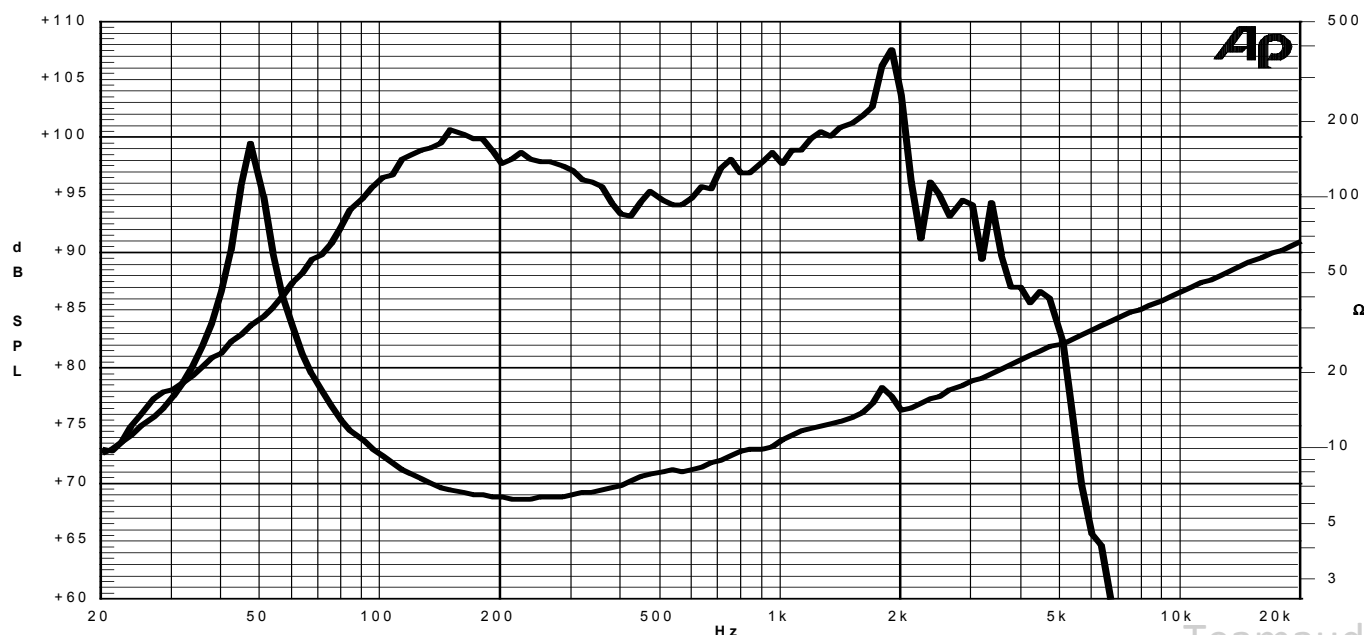
#### ELECTRICAL CHARACTERISTICS

|                              |      |          |
|------------------------------|------|----------|
| Nominal Impedance.....       | 8    | $\Omega$ |
| Musical Power .....          | 500  | W        |
| Rated Power* .....           | 250  | W        |
| Sensitivity @ 1 W, 1 m ..... | 96.4 | 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

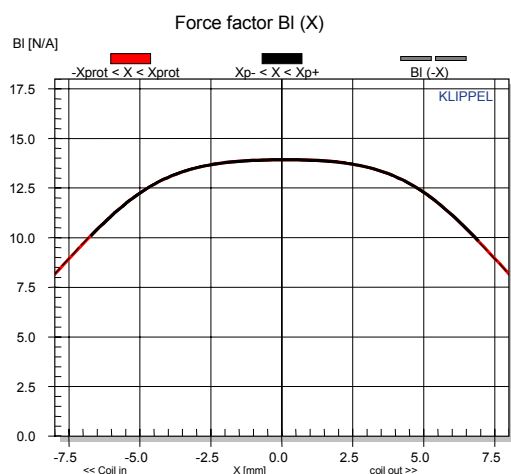
Frequency Response on IEC Baffle (DIN 45575) @ 1 W, 1 m - Impedance



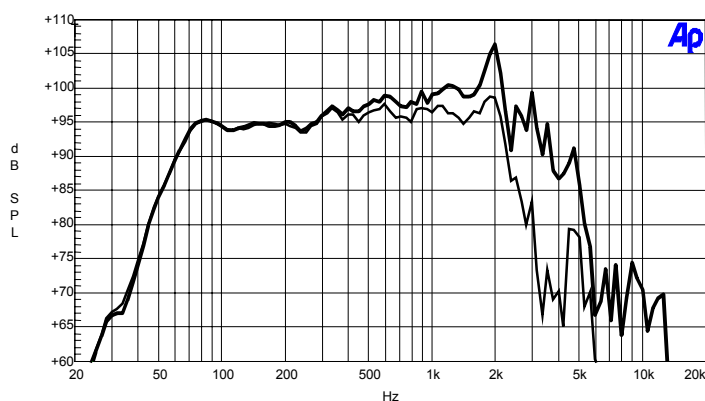
# 12 B 2,5 PL

12" speaker – 2,5" voice coil

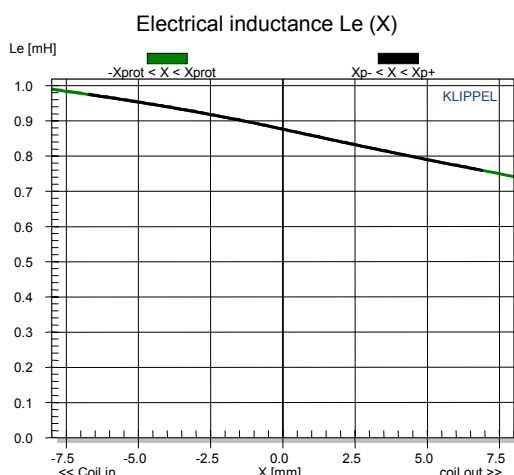
## GRAPHICS AND MEASUREMENTS



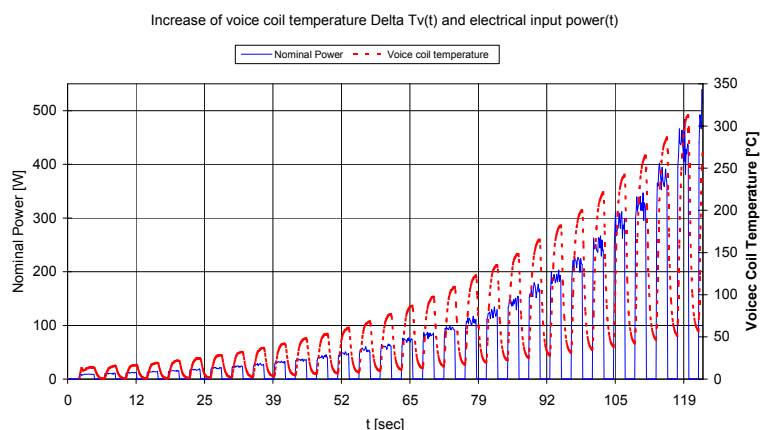
$Bl(X)$ : force factor variation with voice coil displacement



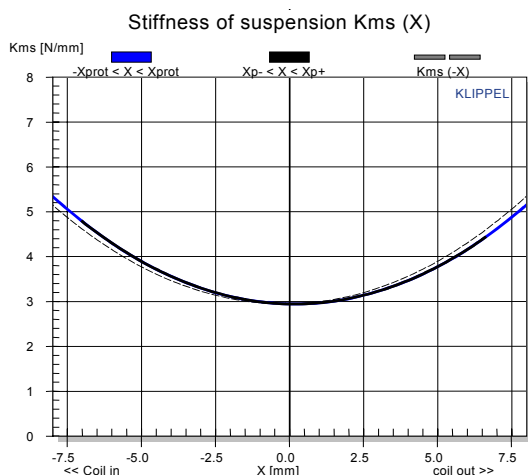
Frequency Response: enclosure volume 45l, port tuning 58Hz (thick curve on axis, thin curve 30° off axis)



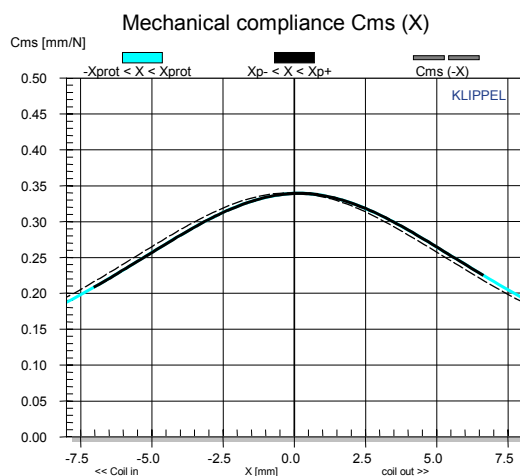
$L_e$ : electrical inductance variation with voice coil displacement



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



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



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