

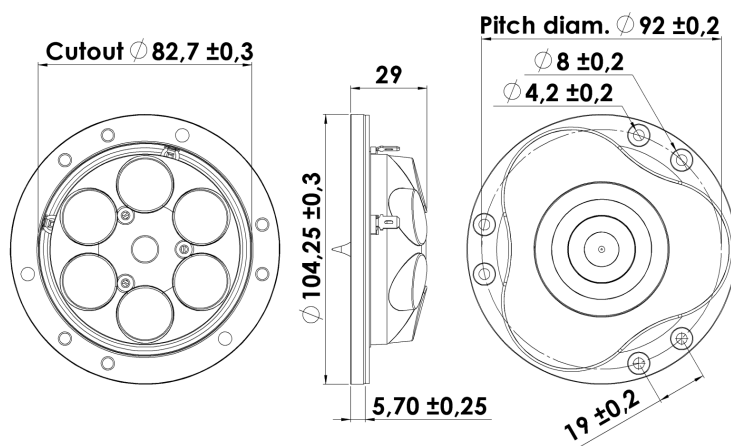


# ILLUMINATOR

## TWEETER

## R3004/662000

The Illuminator tweeters stand for superb vocal rendition and excellent imaging at all listening locations. With its large roll surround and textile diaphragm provide a flat frequency response to above 30KHz. The unique AirCirc Magnet System, and its rear chamber, results in elimination of reflections and resonances that compromise the performance of traditional motors.



### KEY FEATURES:

- 1" Ring Dome Diaphragm
- Patented Symmetrical Drive (SD-2) motor
- Diffraction Damping Rubber Front
- Patented Phase Plug Design
- AirCirc Motor Design w. 6 Neo magnets
- Die Cast Rubber Painted Alu Face Plate

#### T-S Parameters

|                               |                     |
|-------------------------------|---------------------|
| Resonance frequency [fs]      | 520 Hz              |
| Mechanical Q factor [Qms]     | 3.27                |
| Electrical Q factor [Qes]     | 0.56                |
| Total Q factor [Qts]          | 0.48                |
| Force factor [Bl]             | 2.3 Tm              |
| Mechanical resistance [Rms]   | 0.30 kg/s           |
| Moving mass [Mms]             | 0.3 g               |
| Suspension compliance [Cms]   | 0.31 mm/N           |
| Effective diaph. diameter [D] | 27 mm               |
| Effective piston area [Sd]    | 5.6 cm <sup>2</sup> |
| Equivalent volume [Vas]       | 0.01 l              |
| Sensitivity (2.83V/1m)        | 90.4 dB             |
| Ratio Bl/√Re                  | 1.33 N/√W           |
| Ratio fs/Qts                  | 1094 Hz             |

#### Notes:

IEC specs. refer to IEC 60268-5 third edition.  
All Scan-Speak products are RoHS compliant.  
Data are subject to change without notice.  
Datasheet updated: February 22, 2011.

#### Electrical Data

|                            |         |
|----------------------------|---------|
| Nominal impedance [Zn]     | 4 Ω     |
| Minimum impedance [Zmin]   | 3.9 Ω   |
| Maximum impedance [Zo]     | 20.6 Ω  |
| DC resistance [Re]         | 3 Ω     |
| Voice coil inductance [Le] | 0.03 mH |

#### Power Handling

|                                 |       |
|---------------------------------|-------|
| 100h RMS noise test (IEC 17.1)* | 90 W  |
| Long-term max power (IEC 17.3)* | 150 W |

\*Filter: 2. order HP Butterworth, 2.5 kHz

#### Voice Coil and Magnet Data

|                     |          |
|---------------------|----------|
| Voice coil diameter | 26 mm    |
| Voice coil height   | 2.1 mm   |
| Voice coil layers   | 2        |
| Height of gap       | 2.5 mm   |
| Linear excursion    | ± 0.2 mm |
| Max mech. excursion | ± 1.6 mm |
| Unit weight         | 0.3 kg   |



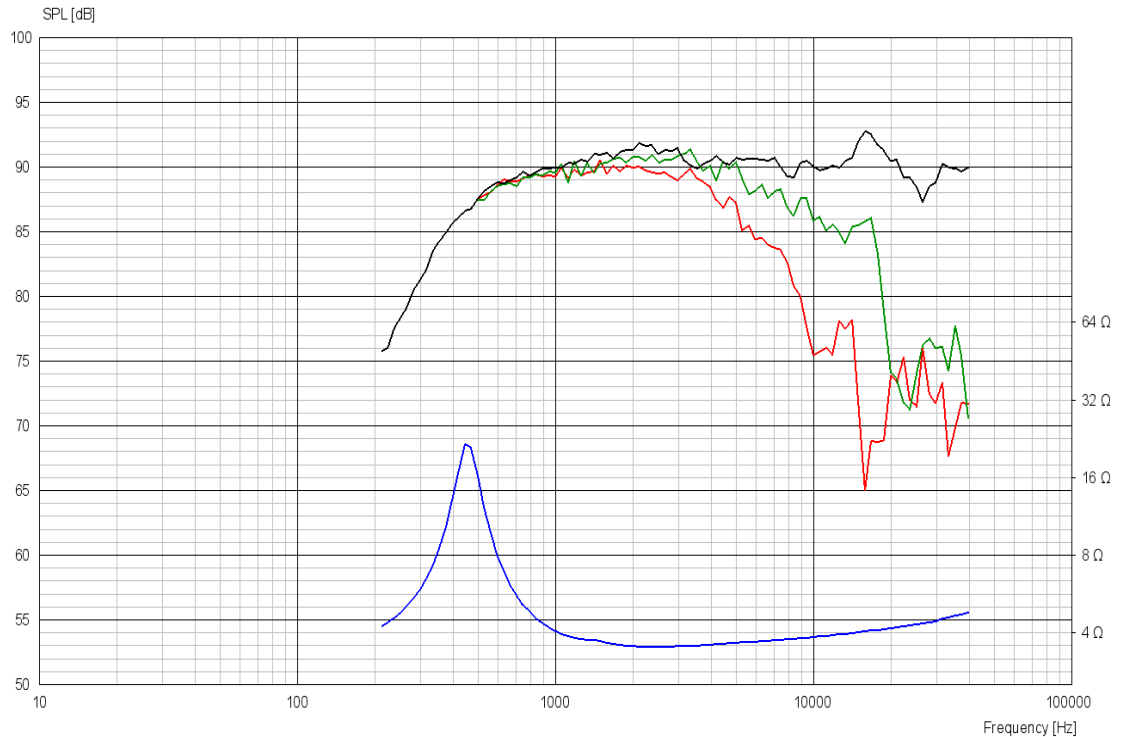
# SCANSPEAK



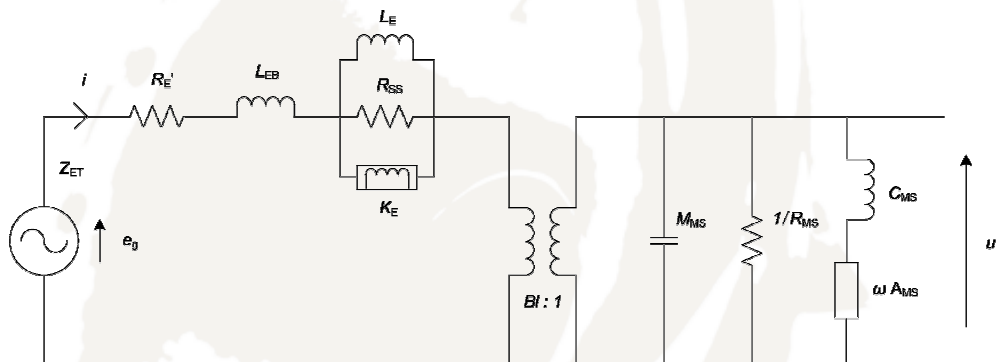
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## Advanced Parameters (Preliminary)



### Electrical data:

|                             |            |
|-----------------------------|------------|
| Resistance $[R_E']$         | - $\Omega$ |
| Free inductance $[L_{EB}]$  | - mH       |
| Bound inductance $[L_E]$    | - mH       |
| Semi-inductance $[K_E]$     | - SH       |
| Shunt resistance $[R_{SS}]$ | - $\Omega$ |

### Mechanical Data

|                                  |        |
|----------------------------------|--------|
| Force Factor $[Bl]$              | - Tm   |
| Moving mass $[M_{MS}]$           | - g    |
| Compliance $[C_{MS}]$            | - mm/N |
| Mechanical resistance $[R_{MS}]$ | - kg/s |
| Admittance $[A_{MS}]$            | - mm/N |



SCAN SPEAK