

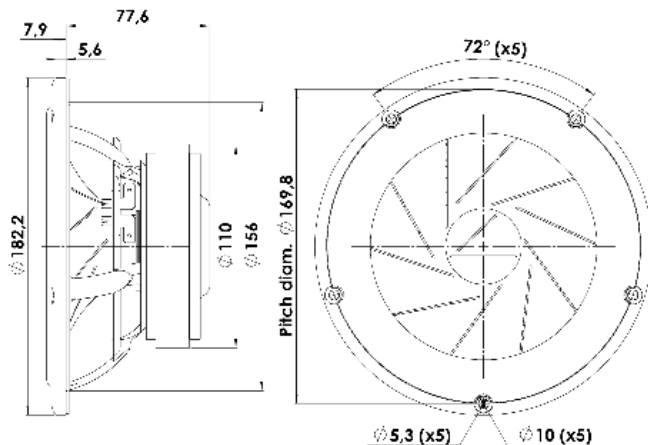


# REVELATOR

## MIDWOOFER

## 18W/4531G00

The Revelator midrange and midwoofers, both well known for their sliced paper cone technology. The slices are filled with damping glue, which dramatically reduces breakup modes in the diaphragm. In combination with Scan-Speaks low-loss linear suspension and the patented Symmetrical Drive (SD-1) it represented a breakthrough in midrange clarity and overall smooth frequency response characteristics.



### KEY FEATURES:

- Patented Symmetrical Drive Motor Design
- Low-Loss linear suspension
- Die cast Alu Chassis vented below spider
- Sliced Cone (Controls Cone Breakups)
- Low Damping SBR Rubber Surround
- Large Ferrite Magnet System

#### T-S Parameters

Resonance frequency [fs]	33 Hz
Mechanical Q factor [Qms]	5.20
Electrical Q factor [Qes]	0.38
Total Q factor [Qts]	0.35
Force factor [Bl]	5.7 Tm
Mechanical resistance [Rms]	0.70 kg/s
Moving mass [Mms]	17.5 g
Suspension compliance [Cms]	1.33 mm/N
Effective diaph. diameter [D]	138 mm
Effective piston area [Sd]	150 cm <sup>2</sup>
Equivalent volume [Vas]	41.9 l
Sensitivity (2.83V/1m)	90 dB
Ratio Bl/√Re	3.09 N/√W
Ratio fs/Qts	93 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]	4.2 Ω
Maximum impedance [Zo]	49.9 Ω
DC resistance [Re]	3.4 Ω
Voice coil inductance [Le]	0.3 mH

#### Power Handling

100h RMS noise test (IEC 17.1)	70 W
Long-term max power (IEC 17.3)	- W

#### Voice Coil and Magnet Data

Voice coil diameter	38 mm
Voice coil height	17.5 mm
Voice coil layers	2
Height of gap	5 mm
Linear excursion	± 6.5 mm
Max mech. excursion	± 11 mm
Unit weight	1.7 kg

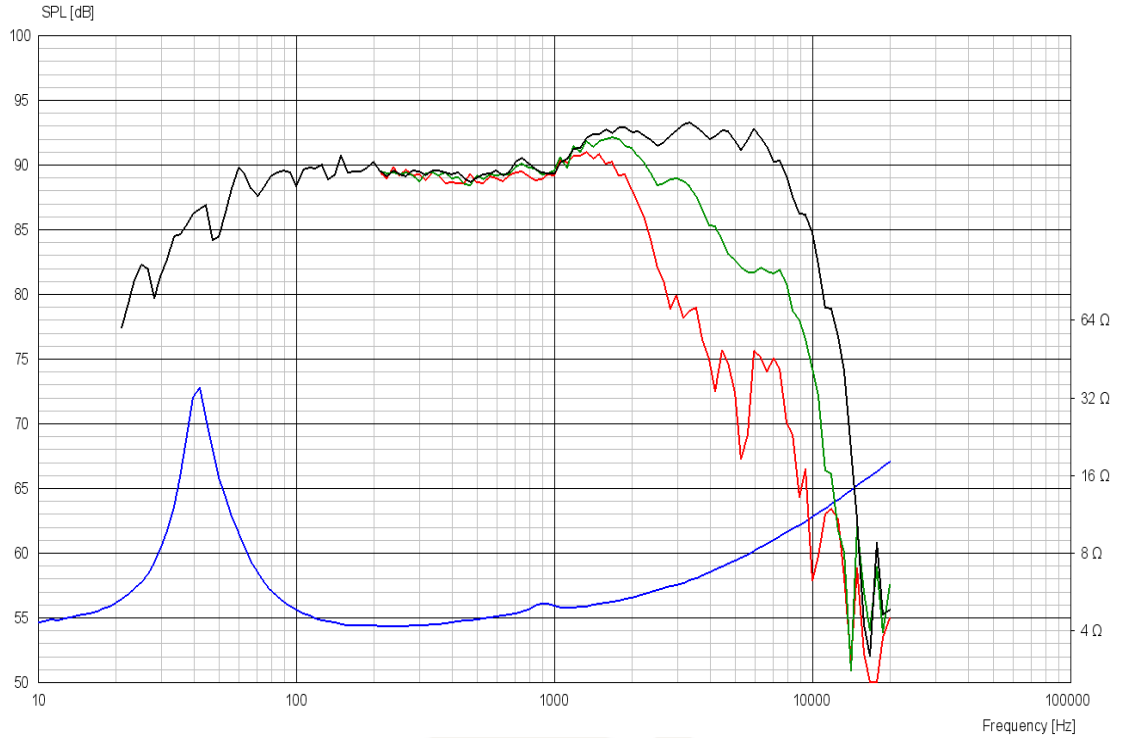
# SCANSPEAK



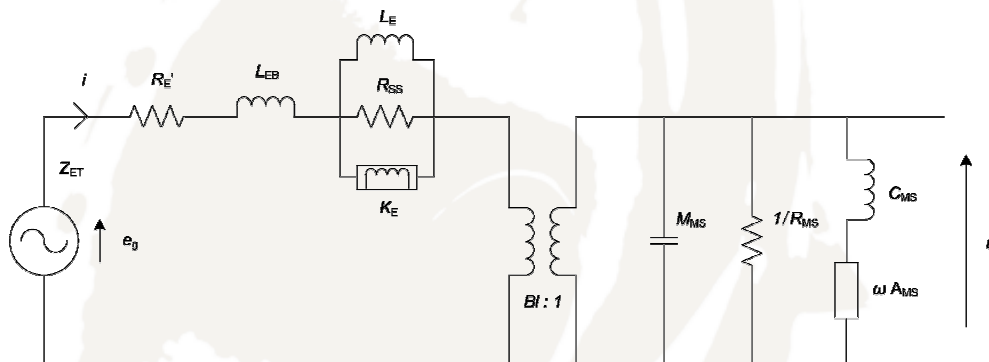
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## Advanced Parameters (Preliminary)



### Electrical data:

Resistance [Re']	3.70 Ω
Free inductance [L <sub>b</sub> ]	0.0885 mH
Bound inductance [L <sub>e</sub> ]	0.631 mH
Semi-inductance [K <sub>e</sub> ]	0.0176 SH
Shunt resistance [R <sub>ss</sub> ]	2289 Ω

### Mechanical Data

Force Factor [Bl]	5.02 Tm
Moving mass [M <sub>ms</sub> ]	19.1 g
Compliance [C <sub>ms</sub> ]	0.926 mm/N
Mechanical resistance [R <sub>ms</sub> ]	0.036 kg/s
Admittance [A <sub>ms</sub> ]	0.119 mm/N

