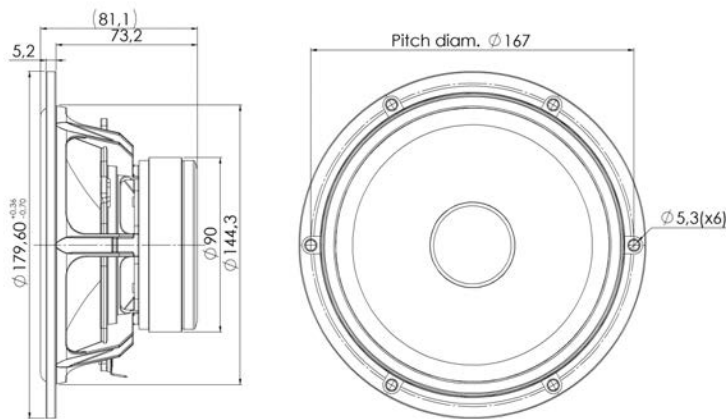




# MIDWOOFER

# 18W/8434G00

The Discovery series offer traditional design, superior sound, a solid construction, and a wide range of variants. Combining these elements - plus a wealth of technical features and finesses - it gives our customers the possibility of acquiring a tailor-made Scan-Speak solution with very good performance at a reasonable low price point!



## KEY FEATURES:

- High Output 89dB @ 2,83V
- Magnet System w. Alu Ring
- Die cast Alu Chassis vented below spider
- Coated NRSC Fibre Glass Cone
- Low Damping SBR Rubber Surround

### T-S Parameters

Resonance frequency [fs]	50 Hz
Mechanical Q factor [Qms]	7.58
Electrical Q factor [Qes]	0.46
Total Q factor [Qts]	0.43
Force factor [Bl]	7.2 Tm
Mechanical resistance [Rms]	0.57 kg/s
Moving mass [Mms]	13.7 g
Suspension compliance [Cms]	0.74 mm/N
Effective diaph. diameter [D]	132 mm
Effective piston area [Sd]	137 cm <sup>2</sup>
Equivalent volume [Vas]	19.5 l
Sensitivity (2.83V/1m)	88.7 dB
Ratio Bl/√Re	3.05 N/√W
Ratio fs/Qts	115 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]	8 Ω
Minimum impedance [Zmin]	6.7 Ω
Maximum impedance [Zo]	97.9 Ω
DC resistance [Re]	5.6 Ω
Voice coil inductance [Le]	0.55 mH

### Power Handling

100h RMS noise test (IEC 17.1)	55 W
Long-term max power (IEC 17.3)	170 W

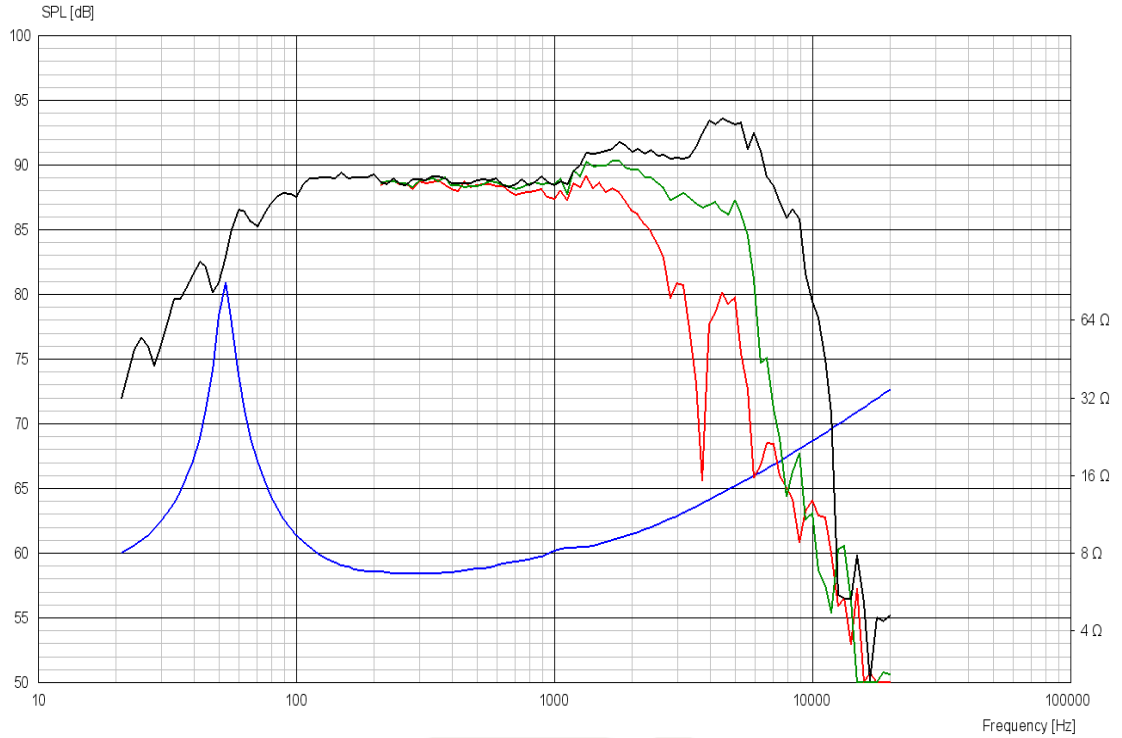
### Voice Coil and Magnet Data

Voice coil diameter	32 mm
Voice coil height	13.4 mm
Voice coil layers	2
Height of gap	5 mm
Linear excursion	± 4.2 mm
Max mech. excursion	± 8 mm
Unit weight	1.3 kg



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## Advanced Parameters (Preliminary)



### Electrical data:

Resistance [Re']	5.83 Ω
Free inductance [L <sub>b</sub> ]	0.0968 mH
Bound inductance [L <sub>e</sub> ]	0.794 mH
Semi-inductance [K <sub>e</sub> ]	0.0669 SH
Shunt resistance [R <sub>ss</sub> ]	2289 Ω

### Mechanical Data

Force Factor [BI]	6.75 Tm
Moving mass [M <sub>ms</sub> ]	13.7 g
Compliance [C <sub>ms</sub> ]	0.882 mm/N
Mechanical resistance [R <sub>ms</sub> ]	0.180 kg/s
Admittance [A <sub>ms</sub> ]	0.0920 mm/N