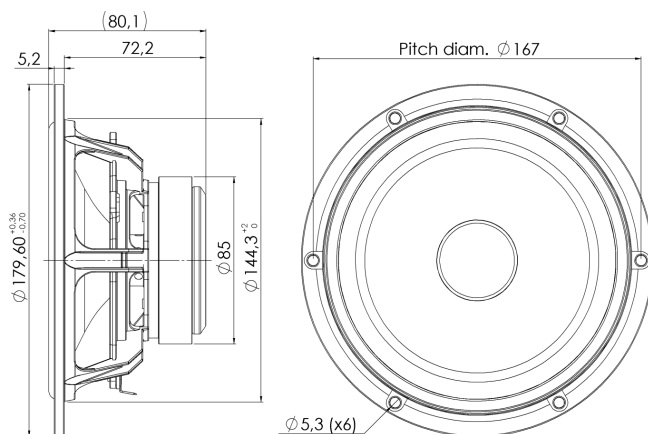




## MIDWOOFER

## 18W/4424G00

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 91dB @ 2,83V
- Coated NRSC Fibre Glass Cone
- Die cast Alu Chassis vented below spider
- Excellent Midrange Performance
- Low Damping SBR Rubber Surround

#### T-S Parameters

Resonance frequency [fs]	49 Hz
Mechanical Q factor [Qms]	4.57
Electrical Q factor [Qes]	0.42
Total Q factor [Qts]	0.38
Force factor [Bl]	5.2 Tm
Mechanical resistance [Rms]	0.77 kg/s
Moving mass [Mms]	11.4 g
Suspension compliance [Cms]	0.92 mm/N
Effective diaph. diameter [D]	132 mm
Effective piston area [Sd]	137 cm <sup>2</sup>
Equivalent volume [Vas]	24.1 l
Sensitivity (2.83V/1m)	90.9 dB
Ratio Bl/√Re	2.91 N/√W
Ratio fs/Qts	128 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 $\Omega$
Minimum impedance [Zmin]	4.1 $\Omega$
Maximum impedance [Zo]	38.0 $\Omega$
DC resistance [Re]	3.2 $\Omega$
Voice coil inductance [Le]	0.47 mH

#### Power Handling

100h RMS noise test (IEC 17.1)	50 W
Long-term max power (IEC 17.3)	110 W

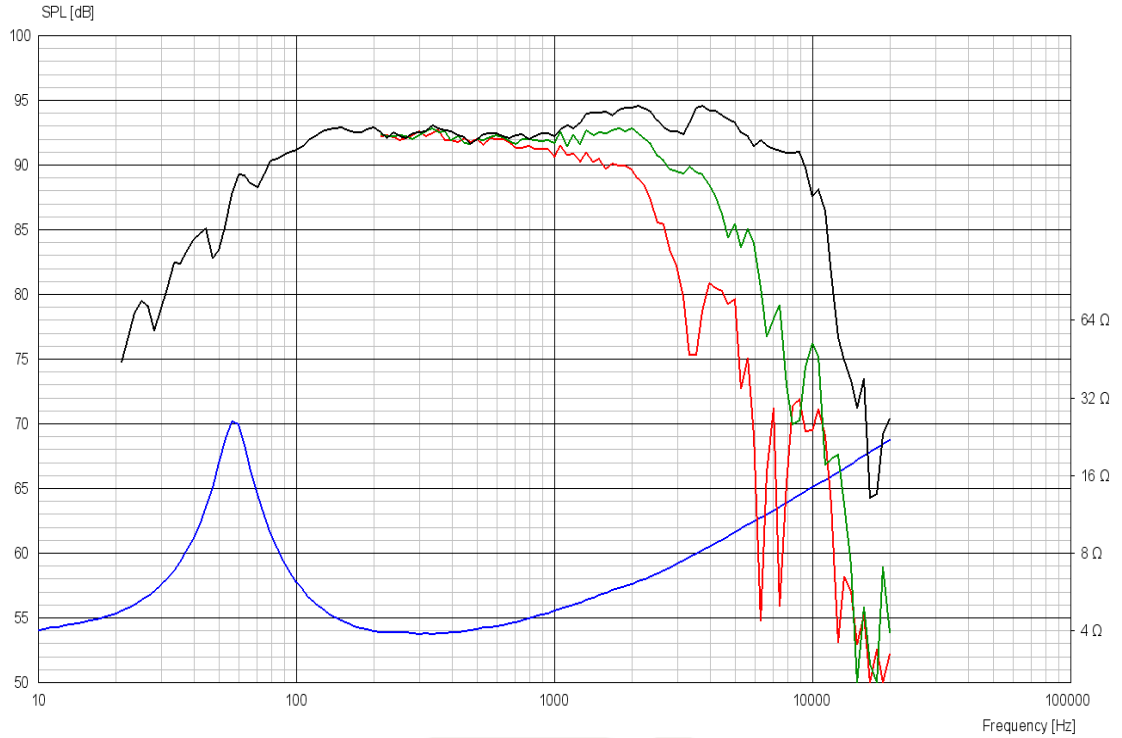
#### Voice Coil and Magnet Data

Voice coil diameter	25 mm
Voice coil height	10.5 mm
Voice coil layers	2
Height of gap	5 mm
Linear excursion	$\pm 2.8$ mm
Max mech. excursion	$\pm 8$ mm
Unit weight	1.1 kg



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## Advanced Parameters (Preliminary)



### Electrical data:

Resistance [Re']	3.35 Ω
Free inductance [Leb]	0.0240 mH
Bound inductance [Le]	0.512 mH
Semi-inductance [Ke]	0.0609 SH
Shunt resistance [Rss]	2289 Ω

### Mechanical Data

Force Factor [Bl]	5.05 Tm
Moving mass [Mms]	12.3 g
Compliance [Cms]	0.654 mm/N
Mechanical resistance [Rms]	0.341 kg/s
Admittance [Ams]	0.105 mm/N