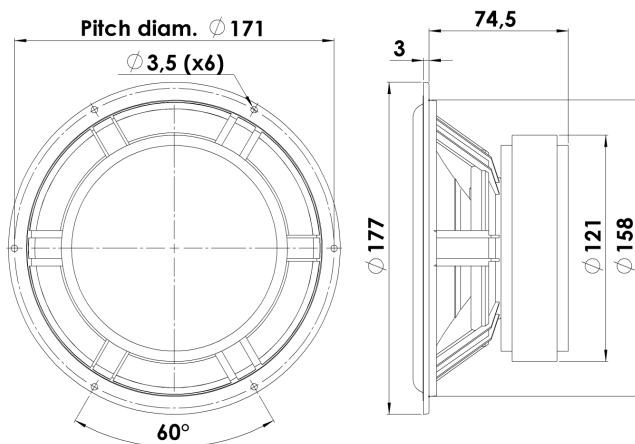




## MIDWOOFER

## 18W/8542-00

The Symmetric Drive (SD) concept with copper in the magnet system was invented by Scan-Speak. High-quality magnet system design has thus been a key feature of Scan-Speak design since the company's inception. The Classic woofers are highly praised, and are used in some of the world's most exceptional high-end Loudspeakers. Some feature Kevlar cones, others have the innovative Carbon fibre paper cones.



### KEY FEATURES:

- Patented Symmetrical Drive Motor Design
- Air Dried Paper/Carbon Fibre Cone
- 42mm Voice Coil
- Low-Loss linear suspension
- Low Damping Coated Foam Surround

#### T-S Parameters

Resonance frequency [fs]	30 Hz
Mechanical Q factor [Qms]	1.70
Electrical Q factor [Qes]	0.26
Total Q factor [Qts]	0.23
Force factor [Bl]	7.8 Tm
Mechanical resistance [Rms]	1.66 kg/s
Moving mass [Mms]	15 g
Suspension compliance [Cms]	1.88 mm/N
Effective diaph. diameter [D]	131 mm
Effective piston area [Sd]	135 cm <sup>2</sup>
Equivalent volume [Vas]	47.9 l
Sensitivity (2.83V/1m)	89 dB
Ratio Bl/√Re	3.33 N/√W
Ratio fs/Qts	133 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]	6.6 Ω
Maximum impedance [Zo]	41.5 Ω
DC resistance [Re]	5.5 Ω
Voice coil inductance [Le]	0.2 mH

#### Power Handling

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

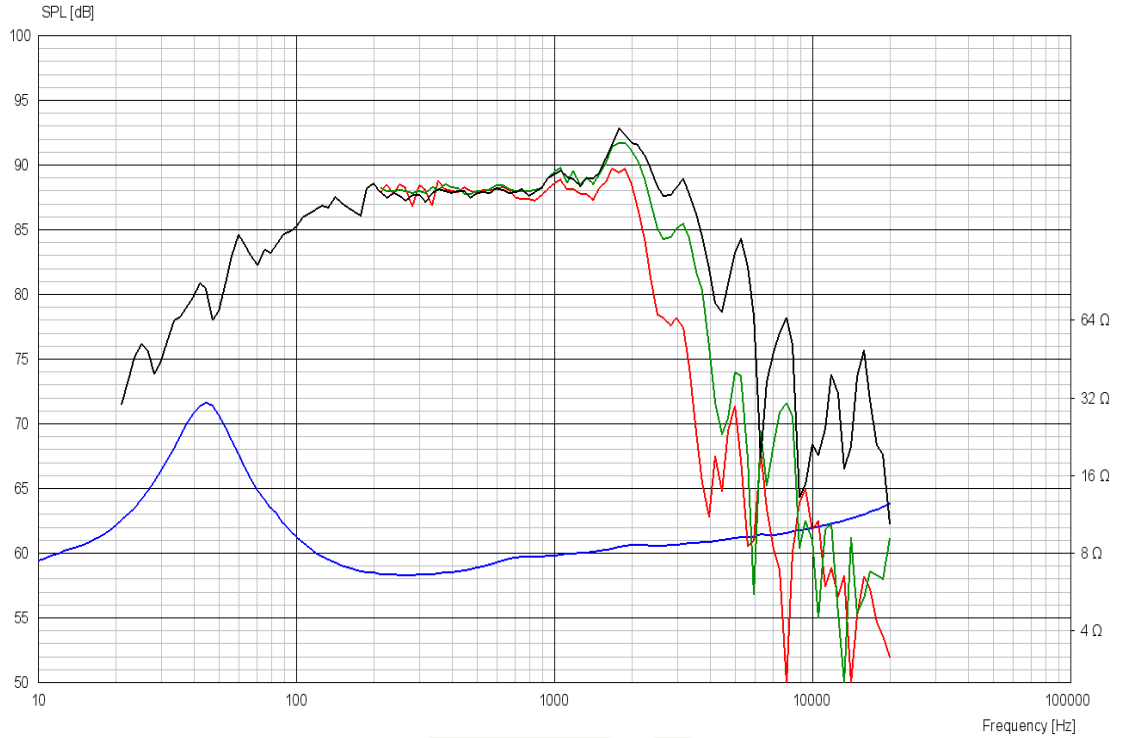
#### Voice Coil and Magnet Data

Voice coil diameter	42 mm
Voice coil height	19 mm
Voice coil layers	2
Height of gap	6 mm
Linear excursion	± 6.5 mm
Max mech. excursion	± 10 mm
Unit weight	2.1 kg



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## Advanced Parameters (Preliminary)



### Electrical data:

Resistance [Re']	5.58 Ω
Free inductance [Leb]	0.0627 mH
Bound inductance [Le]	1.29 mH
Semi-inductance [Ke]	0.122 SH
Shunt resistance [Rss]	3.62 Ω

### Mechanical Data

Force Factor [BI]	7.45 Tm
Moving mass [Mms]	16.2 g
Compliance [Cms]	1.07 mm/N
Mechanical resistance [Rms]	1.404 kg/s
Admittance [Ams]	0.164 mm/N