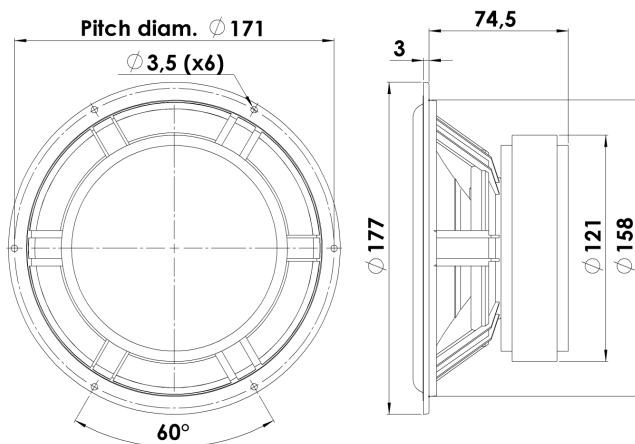




MIDWOOFER

18W/4545-00

The Symmetric Drive (SD-1) 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 companys inception. The Classic woofers are highly praised, and are used in some of the worlds 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 w. Alu foil
- Low-Loss linear suspension
- Low Damping SBR Rubber Surround

T-S Parameters

Resonance frequency [fs]	35 Hz
Mechanical Q factor [Qms]	2.49
Electrical Q factor [Qes]	0.38
Total Q factor [Qts]	0.33
Force factor [Bl]	6.6 Tm
Mechanical resistance [Rms]	1.91 kg/s
Moving mass [Mms]	21.6 g
Suspension compliance [Cms]	0.96 mm/N
Effective diaph. diameter [D]	136 mm
Effective piston area [Sd]	145 cm ²
Equivalent volume [Vas]	28.2 l
Sensitivity (2.83V/1m)	90 dB
Ratio Bl/√Re	3.58 N/√W
Ratio fs/Qts	106 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]	4.5 Ω
Maximum impedance [Zo]	25.7 Ω
DC resistance [Re]	3.4 Ω
Voice coil inductance [Le]	0.31 mH

Power Handling

100h RMS noise test (IEC 17.1)	80 W
Long-term max power (IEC 17.3)	- W

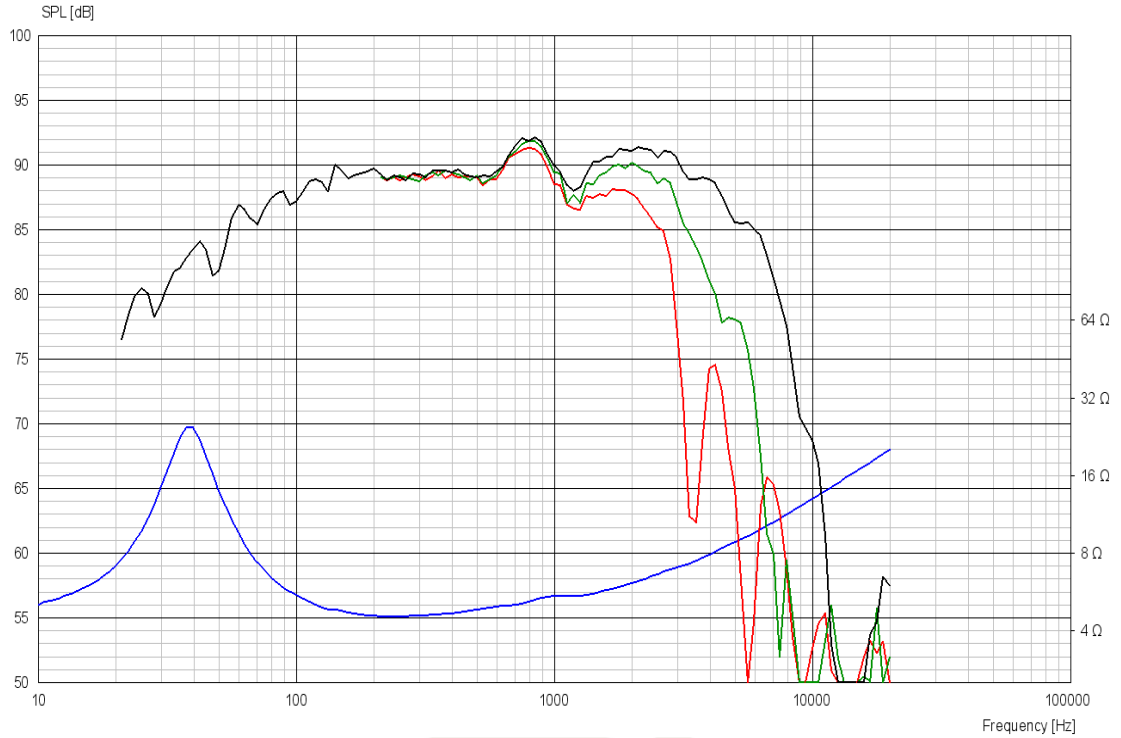
Voice Coil and Magnet Data

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	2.4 kg



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Advanced Parameters (Preliminary)



Electrical data:

Resistance [Re']	3.68 Ω
Free inductance [Leb]	0.0859 mH
Bound inductance [Le]	0.829 mH
Semi-inductance [Ke]	0.0260 SH
Shunt resistance [Rss]	2289 Ω

Mechanical Data

Force Factor [Bl]	5.98 Tm
Moving mass [Mms]	20.7 g
Compliance [Cms]	0.890 mm/N
Mechanical resistance [Rms]	1.36 kg/s
Admittance [Ams]	0.0657 mm/N