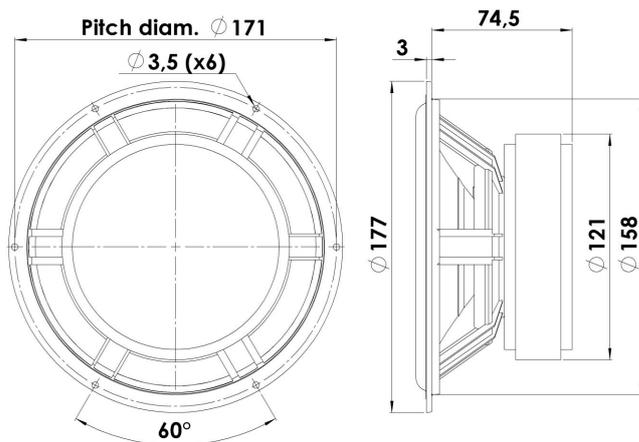




MIDWOOFER

18W/8545-00

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]	28 Hz
Mechanical Q factor [Qms]	2.30
Electrical Q factor [Qes]	0.30
Total Q factor [Qts]	0.27
Force factor [Bl]	8 Tm
Mechanical resistance [Rms]	1.53 kg/s
Moving mass [Mms]	20 g
Compliance [Cms]	1.62 mm/N
Effective diaph. diameter [D]	136 mm
Effective piston area [Sd]	145 cm ²
Equivalent volume [Vas]	47.6 l
Sensitivity (2.83V/1m)	88 dB
Ratio Bl/√Re	3.41 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: January 30, 2013.

Electrical Data

Nominal impedance [Zn]	8 Ω
Minimum impedance [Zmin]	6.6 Ω
Maximum impedance [Zo]	47.7 Ω
DC resistance [Re]	5.5 Ω
Voice coil inductance [Le]	0.4 mH

Power Handling

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

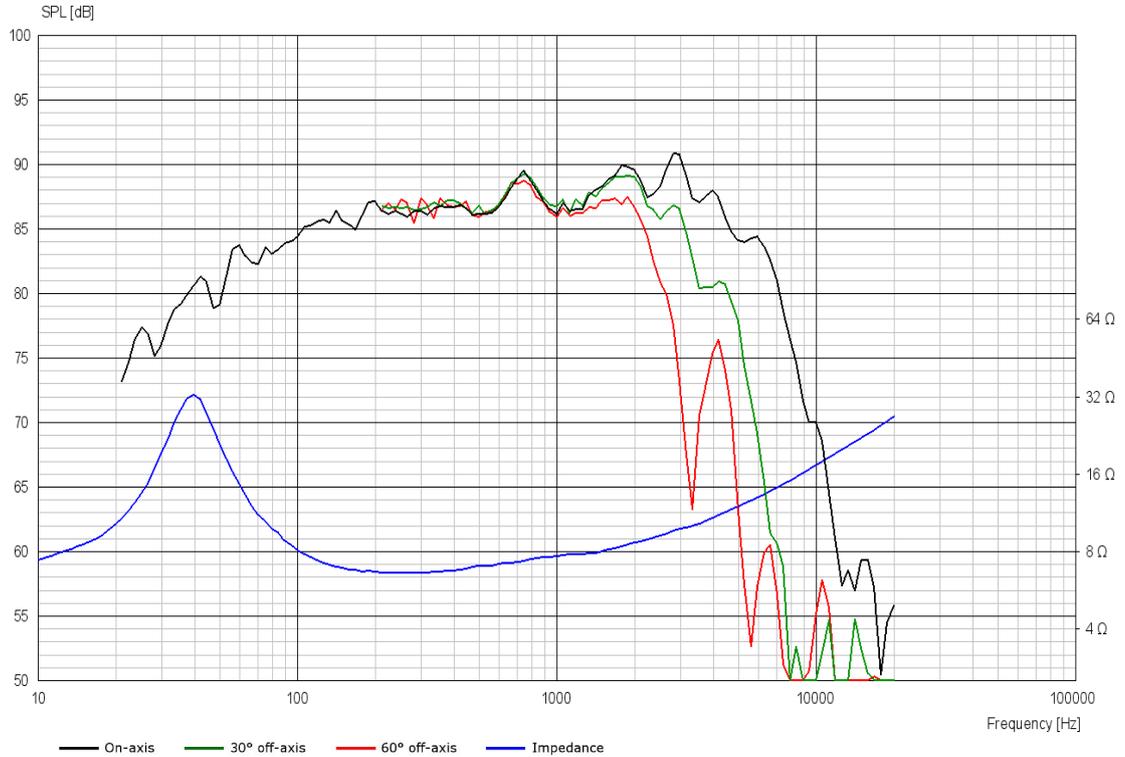
Voice Coil & Magnet Data

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	2.3 kg

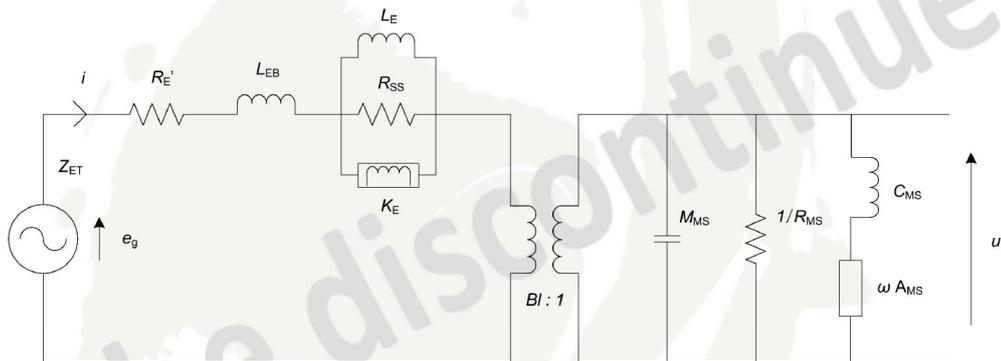


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Advanced Parameters (Preliminary)



Electrical data

Resistance [$R_{E'}$]	5.61 Ω
Free inductance [L_{EB}]	0.115 mH
Bound inductance [L_E]	2.18 mH
Semi-inductance [K_E]	0.033 SH
Shunt resistance [R_{SS}]	105 Ω

Mechanical Data

Force Factor [Bl]	7.62 Tm
Moving mass [M_{MS}]	19.9 g
Compliance [C_{MS}]	1.33 mm/N
Mechanical resistance [R_{MS}]	1.85 kg/s
Admittance [A_{MS}]	0.11 mm/N