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 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 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 cm²
- Equivalent volume [Vas]: 28.2 l
- Sensitivity (2.83V/1m): 90 dB
- Ratio Bl/√Re: 3.58 N/√W
- Ratio fs/√Qts: 106 Hz

**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

**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.
Advanced Parameters (Preliminary)

**Electrical data:**
- Resistance [$R_e'$] 3.68 Ω
- Free inductance [$L_{eb}$] 0.0859 mH
- Bound inductance [$L_e$] 0.8294 mH
- Semi-inductance [$K_e$] 0.0260 SH
- Shunt resistance [$R_{ss}$] 2289 Ω

**Mechanical Data:**
- Force Factor [$B_l$] 5.98 Tm
- Moving mass [$M_{ms}$] 20.7 g
- Compliance [$C_{ms}$] 0.890 mm/N
- Mechanical resistance [$R_{ms}$] 1.36 kg/s
- Admittance [$A_{ms}$] 0.0657 mm/N