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. fiber glass foil
- Low-Loss linear suspension
- Low Damping SBR Rubber Surround

**T-S Parameters**
- Resonance frequency \( [fs] \) 28 Hz
- Mechanical Q factor \([Qms]\) 5.20
- Electrical Q factor \([Qes]\) 0.30
- Total Q factor \([Qts]\) 0.28
- Force factor \([Bl]\) 8.2 Tm
- Mechanical resistance \([Rms]\) 0.69 kg/s
- Moving mass \([Mms]\) 20.5 g
- Suspension compliance \([Cms]\) 1.58 mm/N
- Effective diaph. diameter \([D]\) 136 mm
- Effective piston area \([Sd]\) 145 cm²
- Equivalent volume \([Vas]\) 46.4 l
- Sensitivity (2.83V/1m) 87.5 dB
- Ratio \(Bl/\sqrt{Re}\) 3.50 N/V/W
- Ratio \(fs/Qts\) 99 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 \([Zo]\) 101 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) - 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 2.3 kg
Advanced Parameters (Preliminary)

**Electrical data:**
- Resistance \([R_e']\) = 5.67 Ω
- Free inductance \([L_{eb}]\) = 0.127 mH
- Bound inductance \([L_e]\) = 1.18 mH
- Semi-inductance \([K_e]\) = 0.0355 SH
- Shunt resistance \([R_{ss}]\) = 1000 Ω

**Mechanical Data**
- Force Factor \([B_l]\) = 7.27 Tm
- Moving mass \([M_{ms}]\) = 20.2 g
- Compliance \([C_{ms}]\) = 2.16 mm/N
- Mechanical resistance \([R_{ms}]\) = 0.202 kg/s
- Admittance \([A_{ms}]\) = 0.269 mm/N