

ILLUMINATOR

MIDWOOFER

18WU/8741T00

The Illuminator midranges and midwoofers are in every aspect unusual designs with the open construction, the extremely long linear excursion and patented under-hung SD-3 (Symmetrical Drive) neodymium motor system, which due to copper caps and its construction ensures very low distortion, adding the unique patented cones, low-loss linear suspension the result is: "The Very Best Money Can Buy"!







KEY FEATURES:

Under-Hung Neodymium Motor Design

- Patented Sandwich Paper Cone
- Low-Loss linear suspension

T-S Parameters

Resonance frequency [fs]	31 Hz
Mechanical Q factor [Qms]	3.51
Electrical Q factor [Qes]	0.37
Total Q factor [Qts]	0.33
Force factor [BI]	7.5 Tm
Mechanical resistance [Rms]	1.00 kg/s
Moving mass [Mms]	18 g
Suspension compliance [Cms]	1.46 mm/N
Effective diaph. diameter [D]	140 mm
Effective piston area [Sd]	154 cm ²
Equivalent volume [Vas]	48.6 I
Sensitivity (2.83V/1m)	85.4 dB
Ratio BI/√Re	3.09 N/√W
Ratio fs/Qts	93 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 29, 2011. Patented Symmetrical Drive (SD-3)

Exceptionally Long Linear Excursion

Patented Design

Electrical Data

Nominal impedance [Zn]	8 Ω
Minimum impedance [Zmin]	7.5 Ω
Maximum impedance [Zo]	61.9 Ω
DC resistance [Re]	5.9 Ω
Voice coil inductance [Le]	0.41 mH

Power Handling

100h RMS noise test (IEC 17.1)	80 W
Long-term max power (IEC 17.3)	150 W

Voice Coil and Magnet Data

Voice coil diameter	42 mm
Voice coil height	8 mm
Voice coil layers	4
Height of gap	20 mm
Linear excursion	± 9 mm
Max mech. excursion	± 16 mm
Unit weight	1.7 kg





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Advanced Parameters (Preliminary)



Electrical data:

Resistance [Re']	6.14 Ω
Free inductance [Leb]	0.0790 mH
Bound inductance [Le]	2.81 mH
Semi-inductance [Ke]	0.122 SH
Shunt resistance [Rss]	6.40 Ω

Mechanical Data	
Force Factor [BI]	6.53 Tm
Moving mass [Mms]	16.4 g
Compliance [Cms]	1.16 mm/N
Mechanical resistance [Rms]	0.131 kg/s
Admittance resistance [Rams]	8.36 mΩ·s

N.C. Madsensvej 1 · 6920 Videbæk · Denmark · Phone: +45 6040 5200 · www.scan-speak.dk