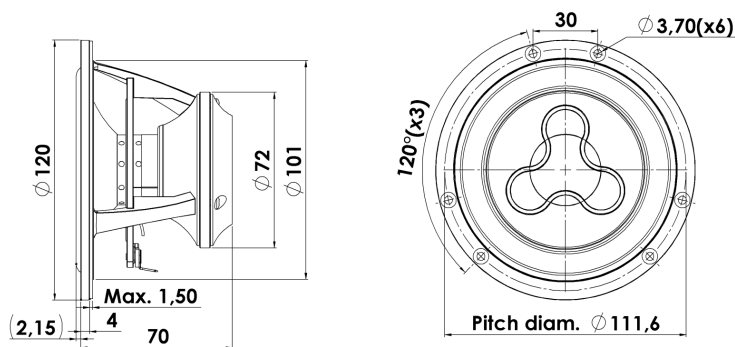




## MIDRANGE

## 12MU/8731T00

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
- One Piece Cone-Dust Cap
- Very Wide Frequency Response 100-10KHz
- Patented Symmetrical Drive (SD-3)
- Low-Loss Linear Suspension
- High Output 87dB @ 2,83V

#### T-S Parameters

Resonance frequency [fs]	66 Hz
Mechanical Q factor [Qms]	3.63
Electrical Q factor [Qes]	0.31
Total Q factor [Qts]	0.29
Force factor [Bl]	6.1 Tm
Mechanical resistance [Rms]	0.54 kg/s
Moving mass [Mms]	4.7 g
Suspension compliance [Cms]	1.24 mm/N
Effective diaph. diameter [D]	86 mm
Effective piston area [Sd]	58 cm <sup>2</sup>
Equivalent volume [Vas]	5.8 l
Sensitivity (2.83V/1m)	87.2 dB
Ratio Bl/√Re	2.51 N/√W
Ratio fs/Qts	231 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]	7.7 Ω
Maximum impedance [Zo]	75.0 Ω
DC resistance [Re]	5.9 Ω
Voice coil inductance [Le]	0.13 mH

#### Power Handling

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

\*Filter: 2. order HP Butterworth, 200 Hz

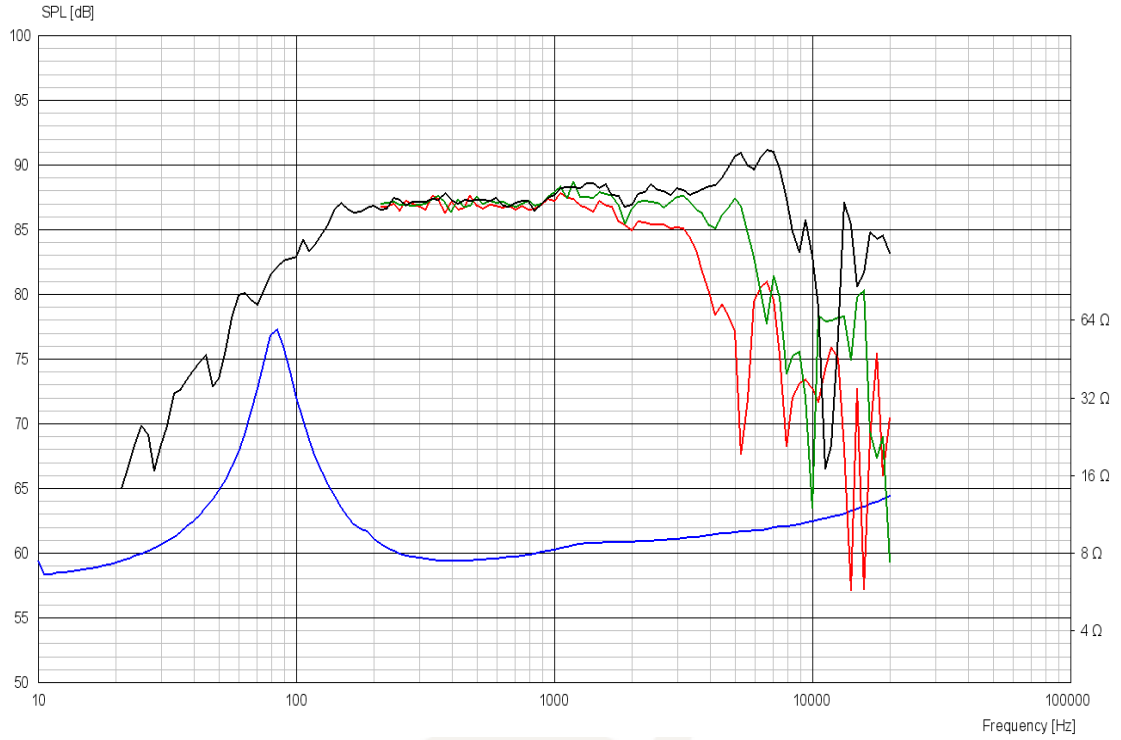
#### Voice Coil and Magnet Data

Voice coil diameter	32 mm
Voice coil height	6.2 mm
Voice coil layers	4
Height of gap	13 mm
Linear excursion	± 3.4 mm
Max mech. excursion	± 11 mm
Unit weight	0.7 kg

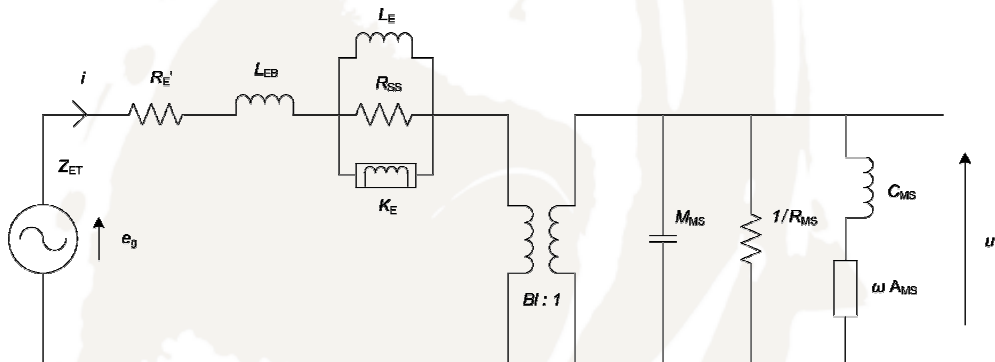


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## Advanced Parameters (Preliminary)



### Electrical data:

Resistance [Re']	5.92 Ω
Free inductance [L <sub>b</sub> ]	0.0704 mH
Bound inductance [L <sub>e</sub> ]	1.49 mH
Semi-inductance [K <sub>e</sub> ]	0.0766 SH
Shunt resistance [R <sub>ss</sub> ]	4.21 Ω

### Mechanical Data

Force Factor [Bl]	5.73 Tm
Moving mass [M <sub>ms</sub> ]	4.98 g
Compliance [C <sub>ms</sub> ]	0.928 mm/N
Mechanical resistance [R <sub>ms</sub> ]	0.281 kg/s
Admittance [A <sub>ms</sub> ]	0.149 mm/N