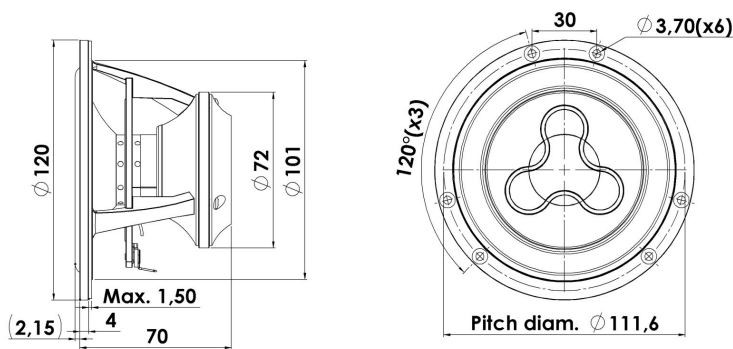




## MIDRANGE

## 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
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: January 30, 2013.

#### 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

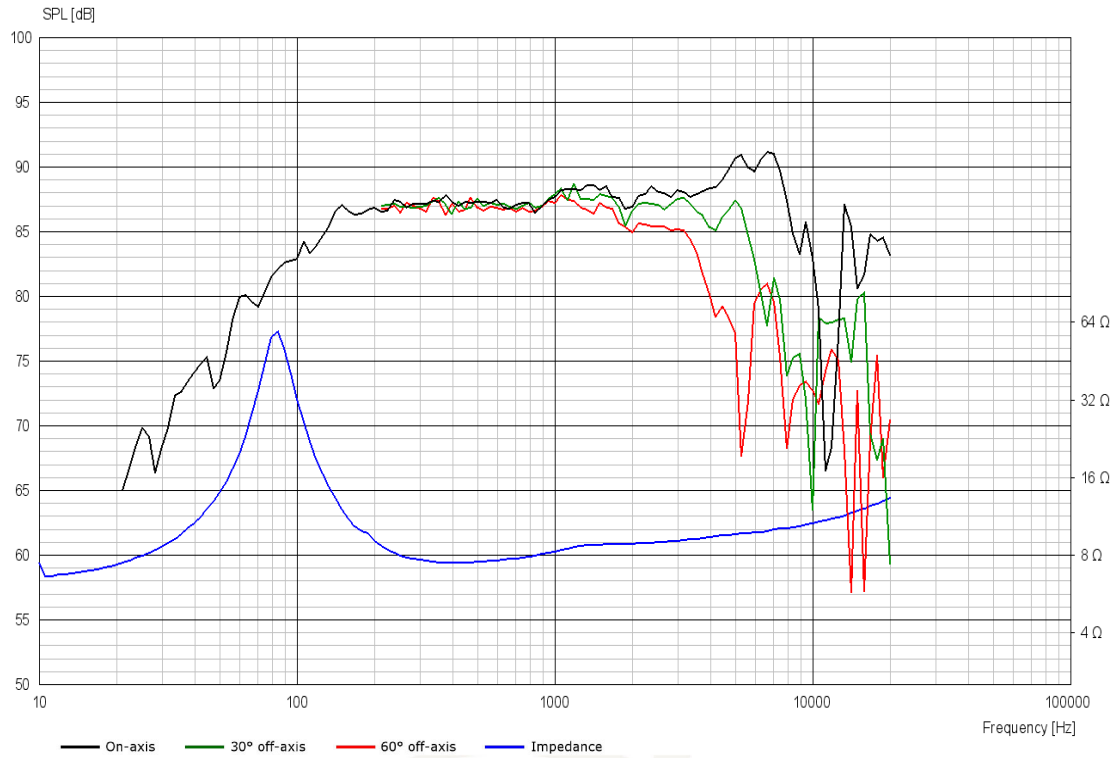
#### Voice Coil & Magnet Data

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

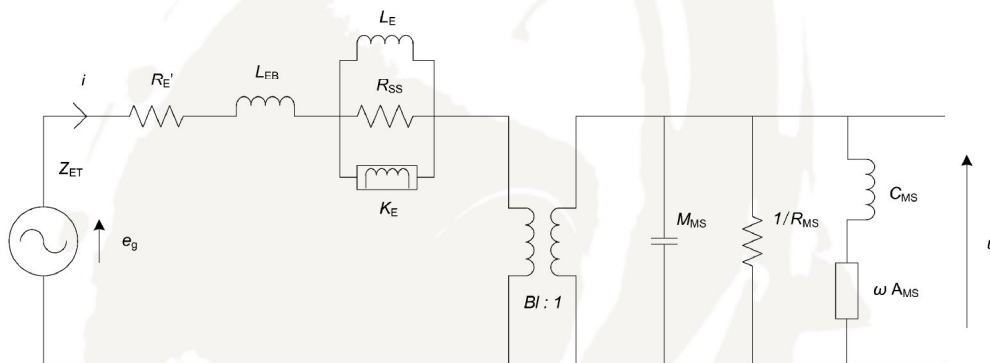


# MIDRANGE

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## Advanced Parameters (Preliminary)



### Electrical data

Resistance [ $R_{E'}$ ]	5.86 $\Omega$
Free inductance [ $L_{EB}$ ]	0.064 mH
Bound inductance [ $L_E$ ]	2.03 mH
Semi-inductance [ $K_E$ ]	0.080 SH
Shunt resistance [ $R_{SS}$ ]	5 $\Omega$

### Mechanical Data

Force Factor [ $BI$ ]	5.85 Tm
Moving mass [ $M_{MS}$ ]	5.2 g
Compliance [ $C_{MS}$ ]	0.69 mm/N
Mechanical resistance [ $R_{MS}$ ]	0.63 kg/s
Admittance [ $A_{MS}$ ]	0.09 mm/N