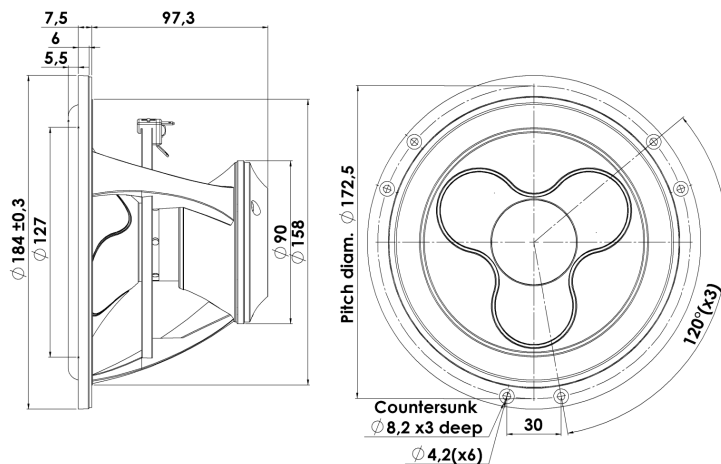




## MIDWOOFER

## 18WU/4741T00

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
- Patented Symmetrical Drive (SD-3)
- Exceptionally Long Linear Excursion
- Patented Design

#### T-S Parameters

Resonance frequency [fs]	30 Hz
Mechanical Q factor [Qms]	3.56
Electrical Q factor [Qes]	0.32
Total Q factor [Qts]	0.29
Force factor [Bl]	6 Tm
Mechanical resistance [Rms]	1.00 kg/s
Moving mass [Mms]	18.9 g
Suspension compliance [Cms]	1.49 mm/N
Effective diaph. diameter [D]	140 mm
Effective piston area [Sd]	154 cm <sup>2</sup>
Equivalent volume [Vas]	49.4 l
Sensitivity (2.83V/1m)	87.2 dB
Ratio Bl/√Re	3.35 N/√W
Ratio fs/Qts	102 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]	4 Ω
Minimum impedance [Zmin]	4.5 Ω
Maximum impedance [Zo]	38.8 Ω
DC resistance [Re]	3.2 Ω
Voice coil inductance [Le]	0.5 mH

#### Power Handling

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

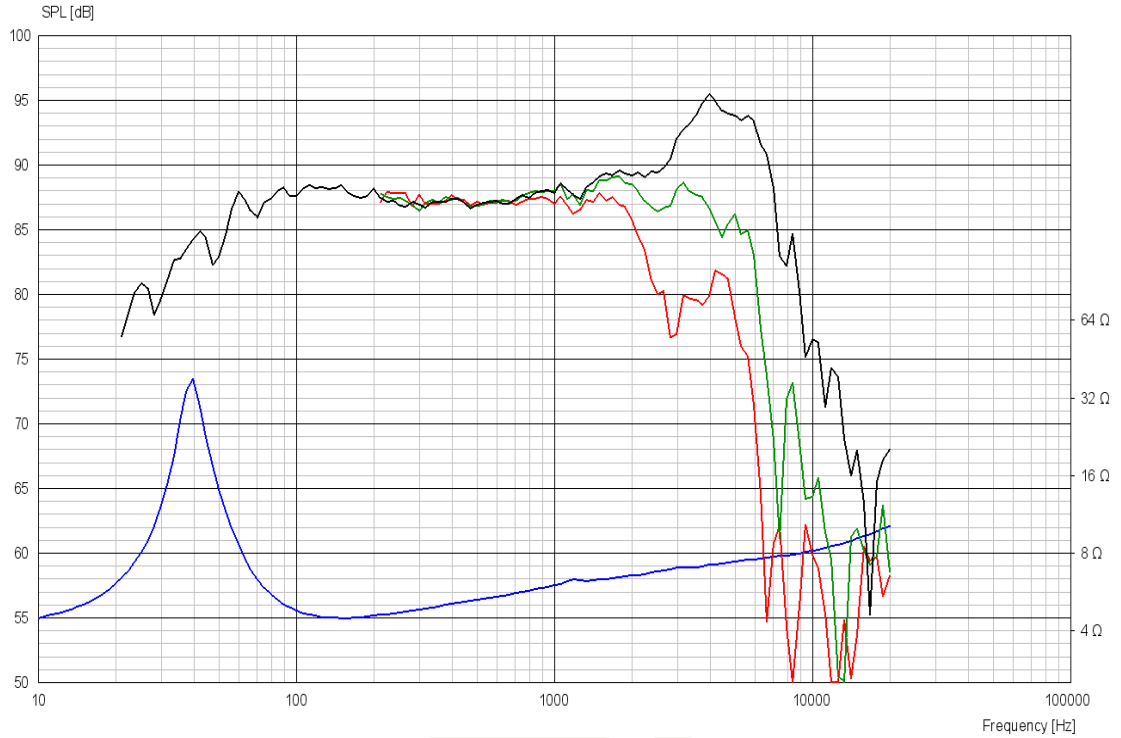
#### Voice Coil and Magnet Data

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']	3.41 Ω
Free inductance [L <sub>b</sub> ]	0.0517 mH
Bound inductance [L <sub>e</sub> ]	2.59 mH
Semi-inductance [K <sub>e</sub> ]	0.0641 SH
Shunt resistance [R <sub>ss</sub> ]	4.53 Ω

### Mechanical Data

Force Factor [BI]	5.20 Tm
Moving mass [M <sub>ms</sub> ]	17.1 g
Compliance [C <sub>ms</sub> ]	0.963 mm/N
Mechanical resistance [R <sub>ms</sub> ]	0.178 kg/s
Admittance [A <sub>ms</sub> ]	0.140 mm/N