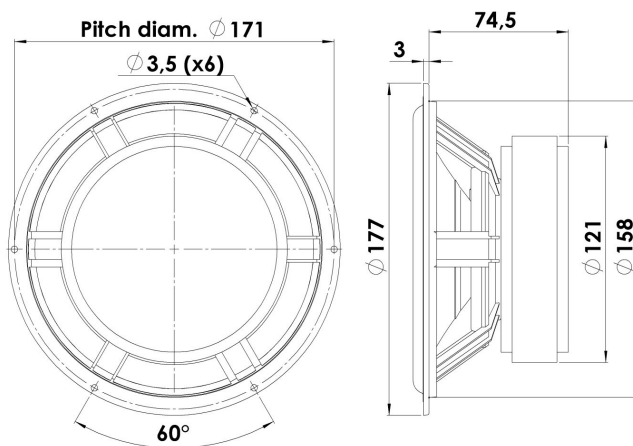




## MIDWOOFER

## 18W/8542-00

The Symmetric Drive (SD) 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/Nylon Fibre Cone
- 42mm Voice Coil
- Low-Loss linear suspension
- Low Damping Coated Foam Surround

#### T-S Parameters

Resonance frequency [fs]	30 Hz
Mechanical Q factor [Qms]	1.70
Electrical Q factor [Qes]	0.26
Total Q factor [Qts]	0.23
Force factor [Bl]	7.8 Tm
Mechanical resistance [Rms]	1.66 kg/s
Moving mass [Mms]	15 g
Compliance [Cms]	1.88 mm/N
Effective diaph. diameter [D]	131 mm
Effective piston area [Sd]	135 cm <sup>2</sup>
Equivalent volume [Vas]	47.9 l
Sensitivity (2.83V/1m)	89 dB
Ratio Bl/√Re	3.33 N/√W
Ratio fs/Qts	133 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 17, 2019.

#### Electrical Data

Nominal impedance [Zn]	8 Ω
Minimum impedance [Zmin]	6.6 Ω
Maximum impedance [Zo]	41.5 Ω
DC resistance [Re]	5.5 Ω
Voice coil inductance [Le]	0.2 mH

#### Power Handling

100h RMS noise test (IEC 17.1)	70 W
Long-term max power (IEC 17.3)	130 W

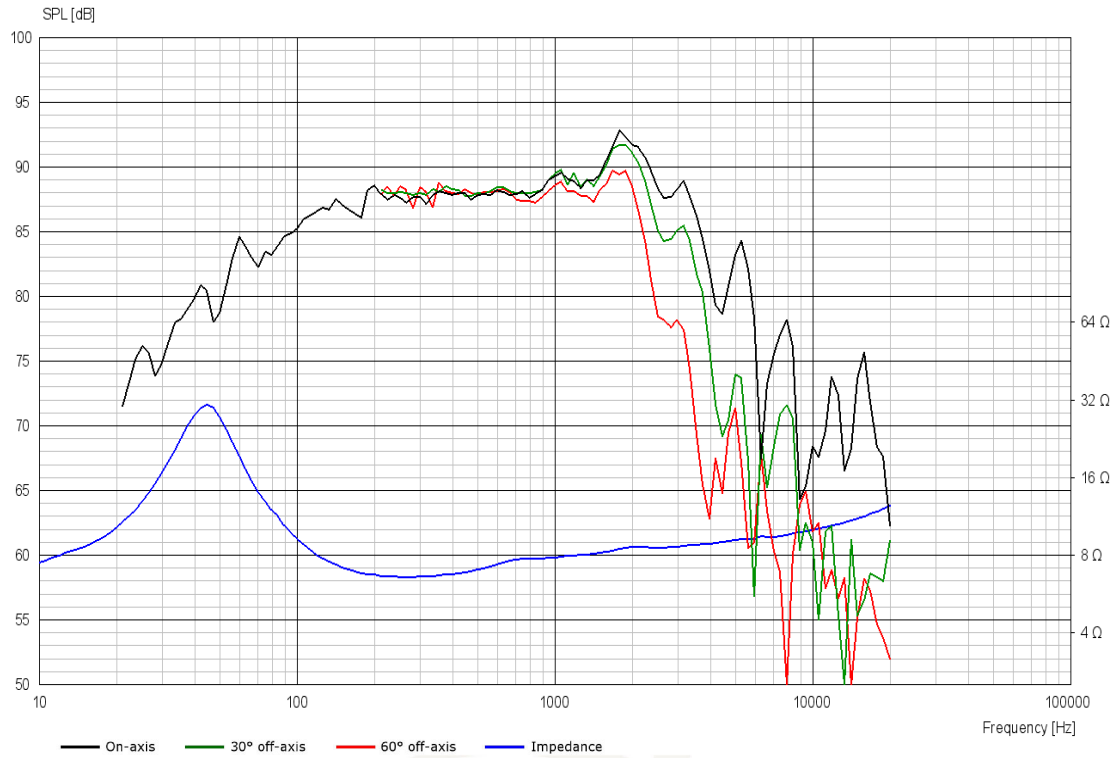
#### Voice Coil & Magnet Data

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	2.1 kg

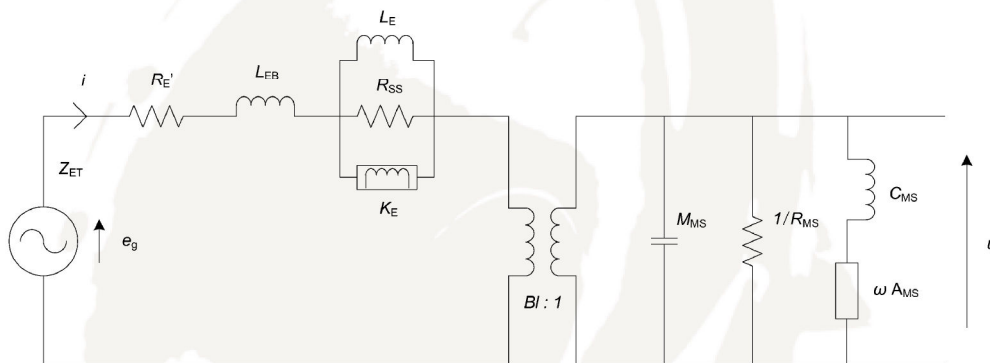


# MIDWOOFER

# 18W/8542-00



## Advanced Parameters (Preliminary)



### Electrical data

Resistance [ $R_{E'}$ ]	5.69 $\Omega$
Free inductance [ $L_{EB}$ ]	0.059 mH
Bound inductance [ $L_E$ ]	1.44 mH
Semi-inductance [ $K_E$ ]	0.091 SH
Shunt resistance [ $R_{SS}$ ]	5.00 $\Omega$

### Mechanical Data

Force Factor [ $BI$ ]	7.28 Tm
Moving mass [ $M_{MS}$ ]	15.6 g
Compliance [ $C_{MS}$ ]	1.43 mm/N
Mechanical resistance [ $R_{MS}$ ]	1.90 kg/s
Admittance [ $A_{MS}$ ]	0.26 mm/N