

What do you call a massive ferrite magnet, a 12" polypropylene cone, a rubber surround, and a vented pole piece for thermal management, all combined into one woofer? What about when you add in top-quality engineering, with home audio at the forefront of that woofer's design? What do you call a woofer perfected for vented enclosures and perfect for your next high-end audio project? We call it the 93060.

- Woofer
- 12" (305 mm) basket diameter
- 100 watts, 8 ohms, 88 dB SPL
- 2" copper voice coil, Kapton former
- Ferrite magnet, stamped-steel basket
- Polypropylene cone, rubber surround

Oaktron by MISCO is a premium line of high performance, ready-to-ship transducers and drivers for a wide variety of applications including high fidelity, arcade, and casino games, automotive, aerospace and many more. From elegantly simple to highly specialized designs for unique and demanding applications, there is an Oaktron loudspeaker perfectly suited for your needs.

MISCO engineers use the world's most sophisticated loudspeaker measurement systems including the Klippel Analyzer to maximize and validate the speaker's design, as well as the Klippel QC module to ensure perfect unit to unit consistency and reliability.

Pair this woofer with one of our [MISCO Amplifiers](#).



Primary Specifications

Size, Nominal (inch & mm)	12" (305 mm)
Rated Impedance (Ω)	8
Continuous Power (W)	100
Sensitivity (dB SPL) ¹	88
Frequency Range (Hz)	50 - 2,000
Resonant Frequency (Fs) (Hz) +/- 15%	23

More Specifications

Application	Home Audio
RoHS Compliant	No
DC Resistance (Re) (Ω)	6.6
Program Power (W)	200
Continuous Power (W)	100

Small Signal Parameters

Nominal Impedance (Z) (Ω)	8
DC Resistance (Re) (Ω)	6.6
Voice Coil Inductance (Le) (mH)	3.53
Resonant Frequency (Fs) (Hz) +/- 15%	23
Mechanical Q Factor (Qms)	12.3
Electrical Q Factor (Qes)	0.40
Total Q Factor (Qts)	0.39
Moving Mass (Mms) (gm)	111.1
Suspension Compliance (Cms) (mm/N)	0.45
Mechanical Resistance (Rms) (kg/s)	1.28
Surface Area of Diaphragm (Sd) (cm²)	539.1
Compliance Equivalent Volume (Vas) (L)	183.50
Maximum Linear Excursion (Xmax) (mm)	6.7
Coil Winding Height (mm)	22.9
Magnetic Gap Height (mm)	9.5
Motor Force Factor (BL) (T•M)	16.2
Efficiency (η_0) (%)	0.51
Efficiency Bandwidth Product (EBP) (Fs/Qes)	57.6

Material Descriptions

Basket Type	Steel
Terminal Size (mm)	5.6 x 5.2 mm
Voice Coil Diameter (mm)	51.31
Voice Coil Wire Material	High temperature copper
Voice Coil Former Material	Kapton
Magnet Material	Ferrite
Magnet Weight (g)	1077.3
Cone Body Material	Polypropylene
Cone Surround Material	Rubber

Dust Cap Material	Polypropylene
Net Weight (kg)	4.34

