

This 175-Watt woofer has a durable black powder coat, on a die cast aluminum frame, which prevents flexing at high power. The cone is a made from acoustic ribbed engineered paper stock for high rigidity. The accordion cloth compliance surround provides both stability and extended long-term use. A corrugated conex spider provides high linearity of compliance in both directions and includes sewn in tinsel leads for long term reliability. The voice coil uses high temperature edge wound copper on a polyimide film form for maximum thermal control. The vented magnet structure allows cooling needed to reduce power compression.

- Woofer
- 12" (305 mm) basket diameter
- 175 watts, 8 ohms, 96 dB SPL
- 2.5" copper voice coil, Polyimide film former
- Ferrite magnet, die cast aluminum basket
- Paper cone, cloth surround

MISCO engineers test analysis reports are created, in part with the support of world's most definitive Klippel Analytics, which are used to validate final design. Oaktron by MISCO is the premium line of high performance, ready-to-ship transducers for a wide variety of applications including high fidelity, musical instrument, automotive 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.

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



#### Primary Specifications

<b>Size, Nominal (inch &amp; mm)</b>	12" (305 mm)
<b>Rated Impedance (<math>\Omega</math>)</b>	8
<b>Continuous Power (W)</b>	175
<b>Sensitivity (dB SPL) <sup>1</sup></b>	96
<b>Frequency Range (Hz)</b>	30 - 1, 000
<b>Resonant Frequency (Fs) (Hz) +/- 15%</b>	45

### More Specifications

<b>Application</b>	Pro Sound
<b>RoHS Compliant</b>	Yes
<b>DC Resistance (Re) (<math>\Omega</math>)</b>	6.8
<b>Program Power (W)</b>	350
<b>Continuous Power (W)</b>	175

### Small Signal Parameters

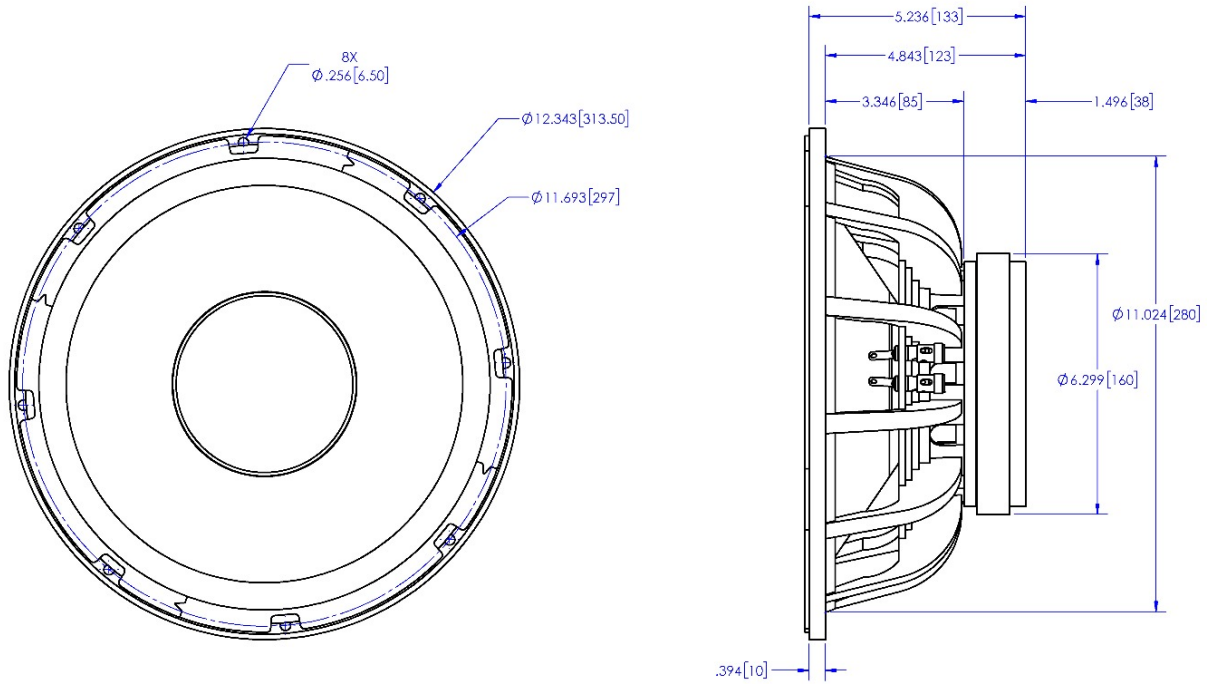
<b>Nominal Impedance (Z) (<math>\Omega</math>)</b>	8
<b>DC Resistance (Re) (<math>\Omega</math>)</b>	6.8
<b>Voice Coil Inductance (Le) (mH)</b>	0.91
<b>Resonant Frequency (Fs) (Hz) +/- 15%</b>	45
<b>Mechanical Q Factor (Qms)</b>	2.15
<b>Electrical Q Factor (Qes)</b>	0.48
<b>Total Q Factor (Qts)</b>	0.39
<b>Moving Mass (Mms) (gm)</b>	49.7
<b>Suspension Compliance (Cms) (mm/N)</b>	0.26
<b>Mechanical Resistance (Rms) (kg/s)</b>	6.50
<b>Surface Area of Diaphragm (Sd) (cm<sup>2</sup>)</b>	539.1
<b>Compliance Equivalent Volume (Vas) (L)</b>	105.03
<b>Maximum Linear Excursion (Xmax) (mm)</b>	5.5
<b>Coil Winding Height (mm)</b>	19.1
<b>Magnetic Gap Height (mm)</b>	8.0
<b>Motor Force Factor (BL) (T•M)</b>	14.1
<b>Efficiency (<math>\eta_0</math>) (%)</b>	1.89
<b>Efficiency Bandwidth Product (EBP) (Fs/Qes)</b>	93.7

### Material Descriptions

<b>Basket Type</b>	Die cast aluminum with a black powder coat
<b>Terminal Size (mm)</b>	Knurled push-type spring connectors
<b>Voice Coil Diameter (mm)</b>	63.5
<b>Voice Coil Wire Material</b>	High temperature copper
<b>Voice Coil Former Material</b>	Polyimide film
<b>Magnet Material</b>	Ferrite
<b>Magnet Weight (g)</b>	1562
<b>Cone Body Material</b>	Engineered and treated paper pulp

<b>Cone Surround Material</b>	Pre-treated accordion cloth
<b>Spider Material</b>	Conex with woven in tinsel
<b>Dust Cap Material</b>	Engineered and treated paper pulp
<b>Net Weight (kg)</b>	5.75





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MODEL: 305-WF08-02 P/N: 93061 REV. A