

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 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

Size, Nominal (inch & mm)	12" (305 mm)
Rated Impedance (Ω)	8
Continuous Power (W)	175
Sensitivity (dB SPL) ¹	96
Frequency Range (Hz)	30 - 1, 000
Resonant Frequency (Fs) (Hz) +/- 15%	45

More Specifications

Application	Pro Sound
RoHS Compliant	Yes
DC Resistance (Re) (Ω)	6.8
Program Power (W)	350
Continuous Power (W)	175

Small Signal Parameters

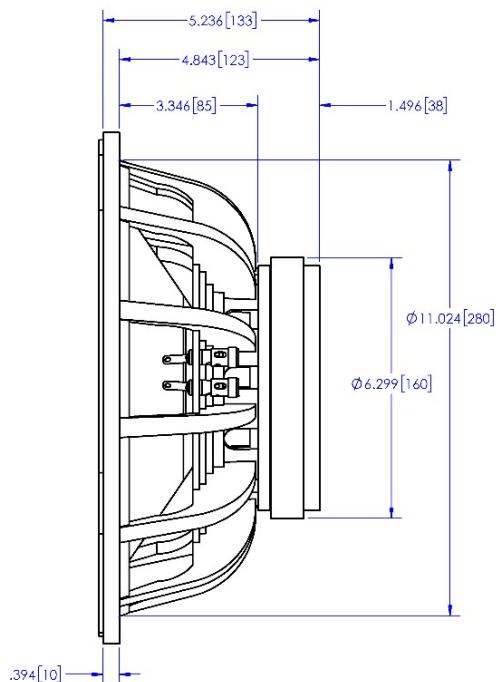
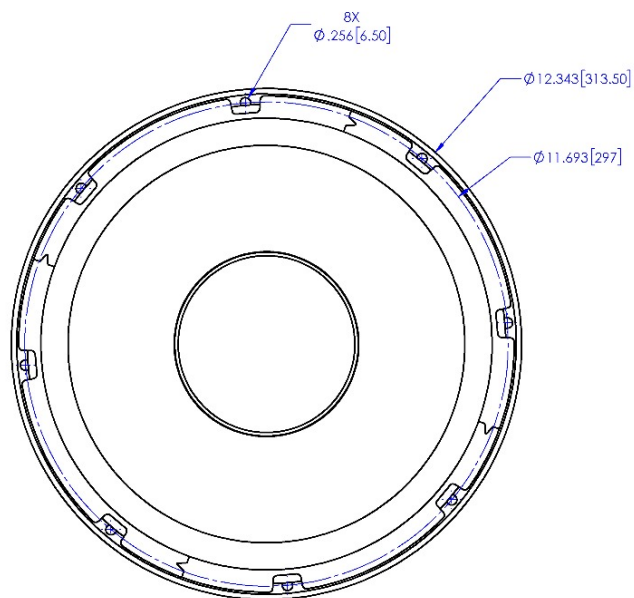
Nominal Impedance (Z) (Ω)	8
DC Resistance (Re) (Ω)	6.8
Voice Coil Inductance (Le) (mH)	0.91
Resonant Frequency (Fs) (Hz) +/- 15%	45
Mechanical Q Factor (Qms)	2.15
Electrical Q Factor (Qes)	0.48
Total Q Factor (Qts)	0.39
Moving Mass (Mms) (gm)	49.7
Suspension Compliance (Cms) (mm/N)	0.26
Mechanical Resistance (Rms) (kg/s)	6.50
Surface Area of Diaphragm (Sd) (cm²)	539.1
Compliance Equivalent Volume (Vas) (L)	105.03
Maximum Linear Excursion (Xmax) (mm)	5.5
Coil Winding Height (mm)	19.1
Magnetic Gap Height (mm)	8.0
Motor Force Factor (BL) (T•M)	14.1
Efficiency (η_0) (%)	1.89
Efficiency Bandwidth Product (EBP) (Fs/Qes)	93.7

Material Descriptions

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

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





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