MODEL #: 41X71-WB04-01

1.6 INCH X 2.8 INCH (41 MM X 71 MM) OVAL SHAPED, 4 OHM, WIDE RANGE SPEAKER

PART #: 93011

From voice communications to medical devices to arcade and casino gaming, the 93011 has your needs covered. All the signature materials of a MISCO speaker – a high-energy neodymium magnet, polypropylene cone, and a polyurethane surround – come together here in a rugged steel frame built to last while outputting top-quality sound your listeners can trust. If you're looking for a versatile, rectangular driver to fill a variety of applications indoors and outdoors, then check out the 93011.



- Wide range speaker
- 1.6 x 2.8 inches (41 mm x 71 mm) basket diameter
- 3 watts, 4 ohms, 89 dB SPL
- 0.5" copper voice coil, paper former
- Neodymium magnet, stamped steel basket
- Polypropylene cone, polyurethane 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 confirm the speaker's design, as well as the Klippel QC module to ensure perfect unit-to-unit consistency and reliability.

Primary Specifications

Size, Nominal (inch & mm)	1" Oval (25 mm)
Rated Impedance (Ω)	4
Continuous Power (W)	3
Sensitivity (dB SPL) [1]	89
Frequency Range (Hz)	223 - 18, 000
Resonant Frequency (Fs) (Hz) +/- 15%	223

©2026 MISCO/Minneapolis Speaker Company Inc.

MODEL #: 41X71-WB04-01

1.6 INCH X 2.8 INCH (41 MM X 71 MM) OVAL SHAPED, 4 OHM, WIDE RANGE SPEAKER

PART #: 93011

More Specifications

Application	Arcade Gaming, Outdoor , Voice Communications
RoHS Compliant	Yes
DC Resistance (Re) (Ω)	3.7
Program Power (W)	5
Continuous Power (W)	3

Small Signal Parameters

Nominal Impedance (Z) (Ω)	4
DC Resistance (Re) (Ω)	3.7
Voice Coil Inductance (Le) (mH)	0.06
Resonant Frequency (Fs) (Hz) +/- 15%	223
Mechanical Q Factor (Qms)	5.2
Electrical Q Factor (Qes)	3.26
Total Q Factor (Qts)	2.00
Moving Mass (Mms) (gm)	1.1
Suspension Compliance (Cms) (mm/N)	0.45
Mechanical Resistance (Rms) (kg/s)	0.31
Surface Area of Diaphragm (Sd) (cm^2)	17.6
Compliance Equivalent Volume (Vas) (L)	0.20
Maximum Linear Excursion (Xmax) (mm)	0.7
Coil Winding Height (mm)	3.3
Magnetic Gap Height (mm)	2
Motor Force Factor (BL) (T•M)	1.3
Efficiency (η_0) (%)	0.06
Efficiency Bandwidth Product (EBP) (Fs/Qes)	68.5

Material Descriptions

Basket Type	Stamped Steel
Terminal Size (mm)	5.2 mm x 0.5 mm
Voice Coil Diameter (mm)	13.28
Voice Coil Wire Material	High temperature copper
Voice Coil Former Material	Paper
Magnet Material	Neodymium
Magnet Weight (g)	36.17
Cone Body Material	Polypropylene

©2026 MISCO/Minneapolis Speaker Company Inc.

MODEL #: 41X71-WB04-01

1.6 INCH X 2.8 INCH (41 MM X 71 MM) OVAL SHAPED, 4 OHM, WIDE RANGE SPEAKER

PART #: 93011

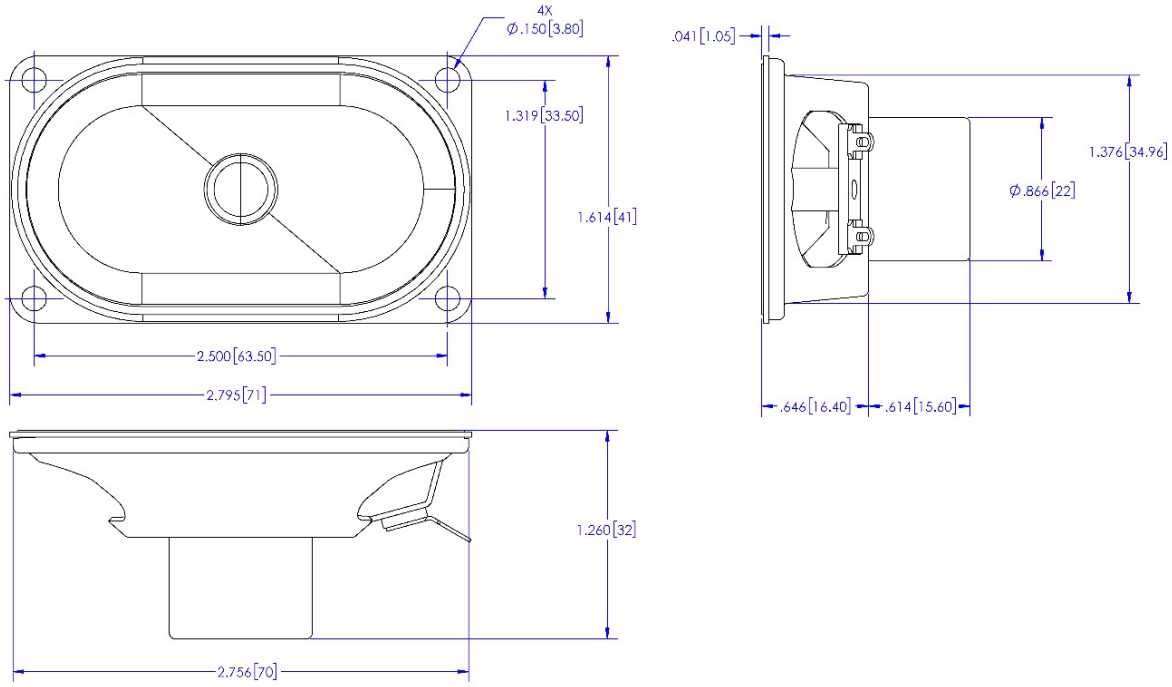
Cone Surround Material	Polyurethane
Spider Material	Cotton
Dust Cap Material	Mylar (polyester)
Net Weight (kg)	0.01

©2026 MISCO/Minneapolis Speaker Company Inc.

MODEL #: 41X71-WB04-01

1.6 INCH X 2.8 INCH (41 MM X 71 MM) OVAL SHAPED, 4 OHM, WIDE RANGE SPEAKER

PART #: 93011



MODEL: 41X71-WB04-01 **P/N: 93011** **REV. A**

©2026 MISCO/Minneapolis Speaker Company Inc.