

Specification

Nominal Basket Diameter	18", 457.2mm
Nominal Impedance*	4 or 8 ohms
Power Rating**	
Watts	800W
Music Program	1600W
Resonance	25Hz
Usable Frequency Range***	40Hz-800Hz
Sensitivity	97
Magnet Weight	109 oz
Gap Height	0.375", 9.53mm
Voice Coil Diameter	4", 101.6mm

Thiele & Small Parameters

Resonant Frequency (fs)	25Hz
DC Resistance (Re)	5.20
Coil Inductance (Le)	1.67mH
Mechanical Q (Qms)	8.18
Electromagnetic Q (Qes)	0.32
Total Q (Qts)	0.31
Compliance Equivalent Volume (Vas)	548.7 ltr/19.4 cu. ft.
Peak Diaphragm Displacement Volume (Vd)	556cc
Mechanical Compliance of Suspension (Cms)	0.29mm/N
BL Product (BL)	18.8 T-M
Diaphragm Mass inc. Airlod (Mms)	138 grams
Efficiency Bandwidth Product (EBP)	79
Maximum Linear Excursion (Xmax)	4.8mm
Surface Area of Cone (Sd)	1159.0cm ²
Maximum Mechanical Limit (Xlim)	16.0mm

Mounting Information

Recommended Enclosure Volume	
Sealed	N/A
Vented	96-198 ltr/3.4-7 cu. ft.
Overall Diameter	18", 457.2mm
Baffle Hole Diameter	16.56", 420.5mm
Front Sealing Gasket	Fitted as Standard
Rear Sealing Gasket	Fitted as Standard
Mounting Holes Diameter	0.28", 7.1mm
Mounting Holes B.C.D.	17.25", 438.2mm
Depth	8.15", 207mm
Net Weight	25.2 lbs, 11.4 kg
Shipping Weight	28.9 lbs, 13.1 kg

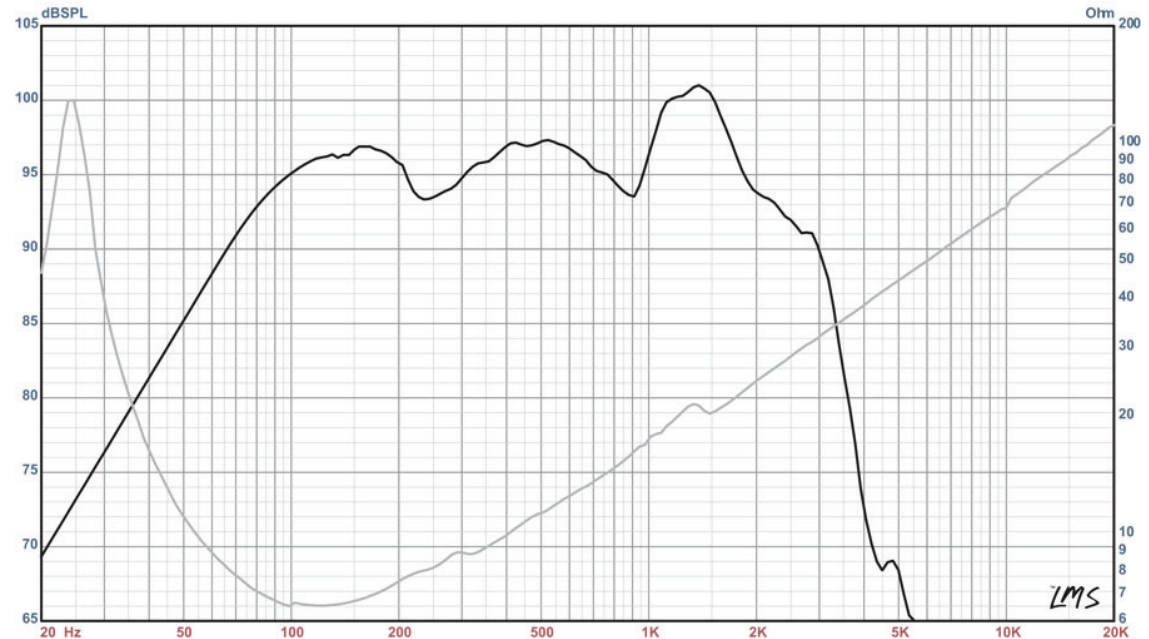
Materials of Construction

Coil Construction	Copper
Coil	Polyimide
Magnet Composition	Ferrite
Core Details	Vented And Extended
Basket Materials	Die-Cast Aluminum
Cone Composition	Paper
Cone Edge Composition	Cloth
Dust Cap Composition	Solid Composition Paper



OMEGA PRO-18A Professional Series

Recommended for professional audio as a woofer in vented enclosures. Also ideal for horn loading and scoops.



* Please inquire about alternative impedances.

** Multiple units exceed published rating evaluated under EIA 426A noise source and test standard while in a free-air, nontemperature-controlled environment.

*** The average output across the usable frequency range when applying 1W/1m into the nominal impedance. I.e: 2.83 V/8 ohms, 4 V/16 ohms.

Eminence response curves are measured under the following conditions: All speakers are tested at 1W/1m using a variety of test set-ups for the appropriate impedance | LMS using 0.25" supplied microphone (software calibrated) mounted 1m from wall/baffle | 2 ft. X 2 ft. baffle is built into the wall with the speaker mounted flush against a steel ring for minimum diffraction | Hafler P1500 Trans-Nova amplifier | 2700 cu.ft. chamber with fiberglass on all six surfaces (three with custom-made wedges)

OmegaPro18A Large Vented Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 200 Watts; F3 of 40 Hz. Must use a 30 Hz High Pass filter to protect woofer from overexcursion.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 6.581 cu.ft

V(total) = 6.922 cu.ft

Fb = 35 Hz

QL = 7

F3 = 40.11 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 5.588 in

Driver Properties

--Description--

Name: Omega Pro-18 (8 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 4 inch (101.6 mm) copper.

Magnet: 109 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 25.33 Hz

Qms = 8.18

Vas = 548.7 liters

Xmax = 4.8 mm

Sd = 1159 sq.cm

Qes = 0.321

Re = 5.2 ohms

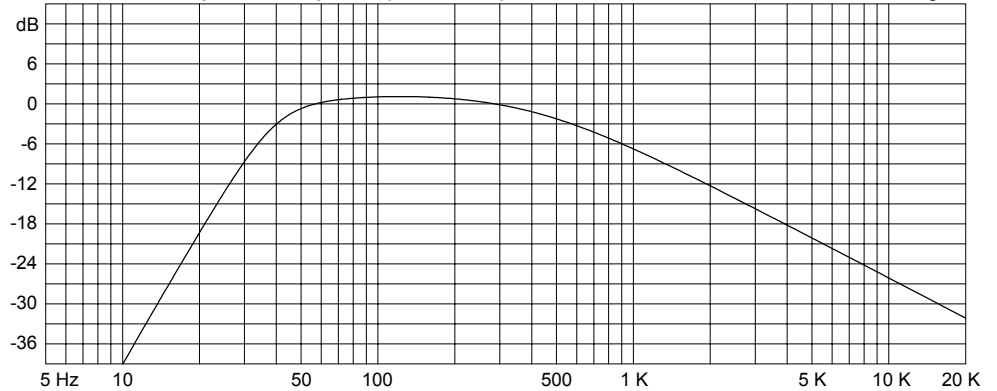
Le = 1.67 mH

Z = 8 ohms

Pe = 800 watts

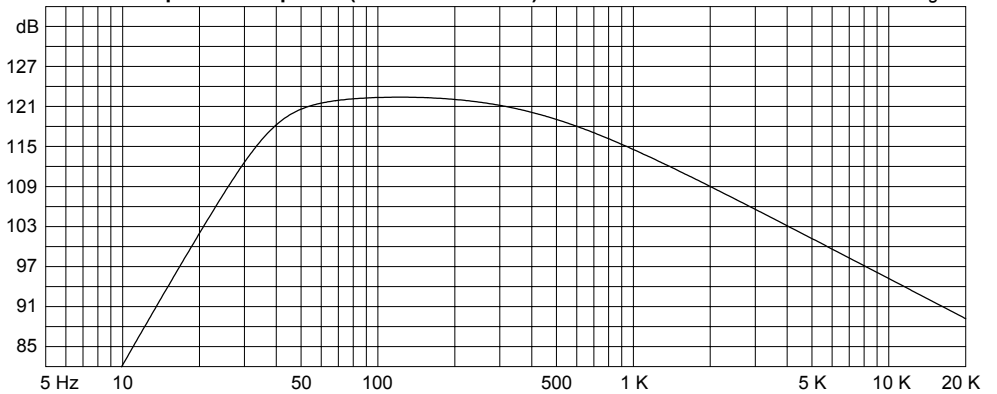
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



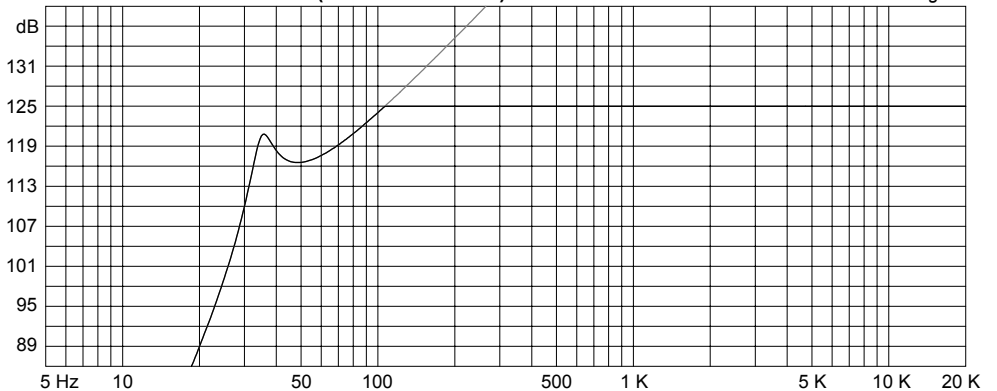
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 200 watts

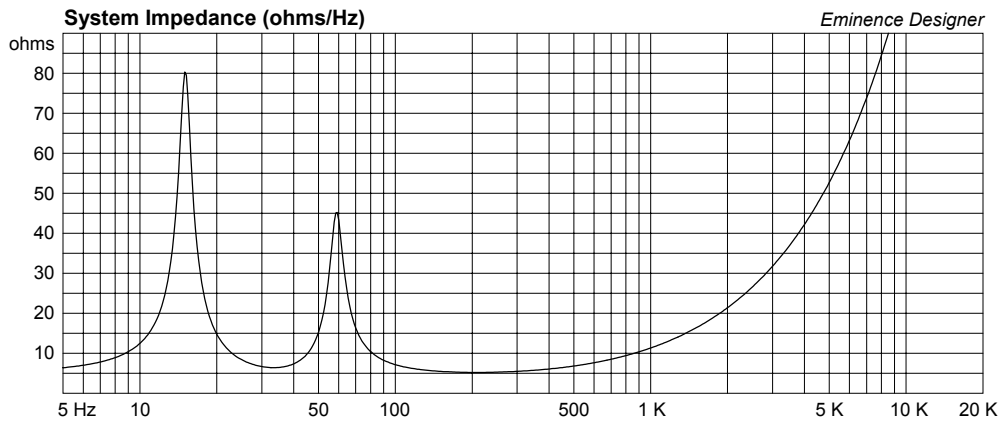
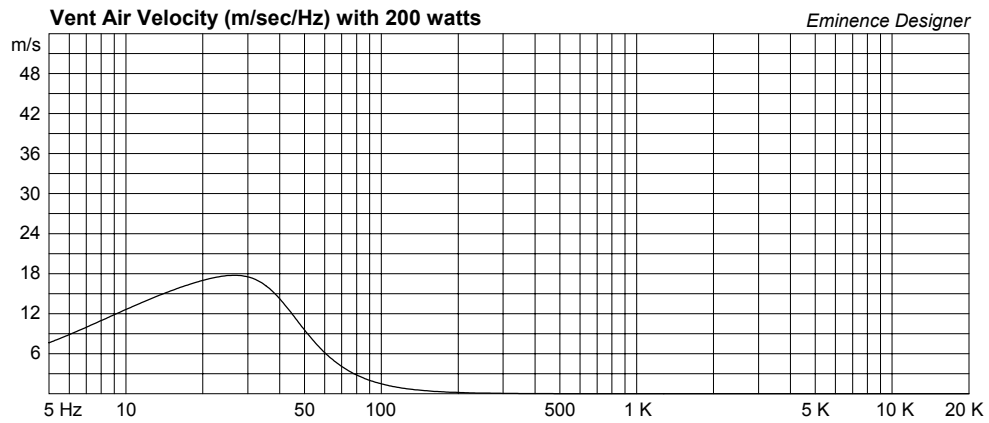
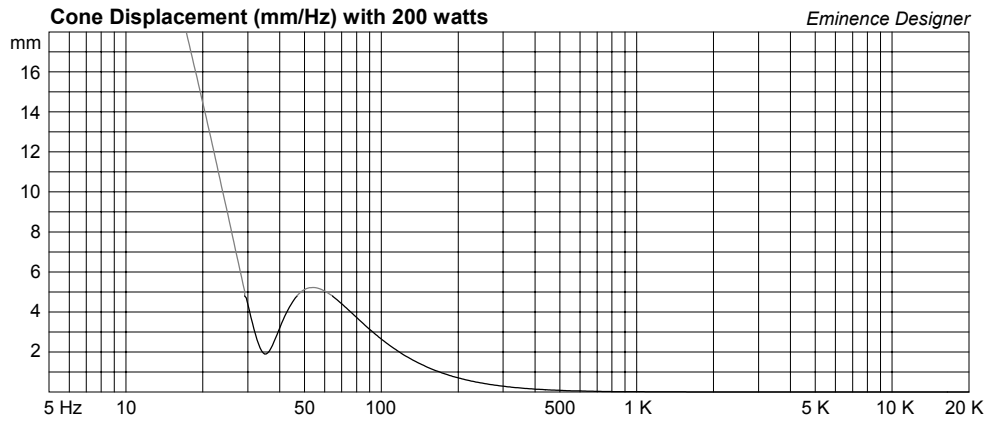
Eminence Designer



Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer





OmegaPro18A Med Vented Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 250 Watts; F3 of 45 Hz. Must use a High Pass filter set to 40 Hz to protect woofer from overexcursion.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 5 cu.ft

V(total) = 5.363 cu.ft

Fb = 38 Hz

QL = 7

F3 = 44.8 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 6.734 in

Driver Properties

--Description--

Name: Omega Pro-18 (8 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 4 inch (101.6 mm) copper.

Magnet: 109 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 25.33 Hz

Qms = 8.18

Vas = 548.7 liters

Xmax = 4.8 mm

Sd = 1159 sq.cm

Qes = 0.321

Re = 5.2 ohms

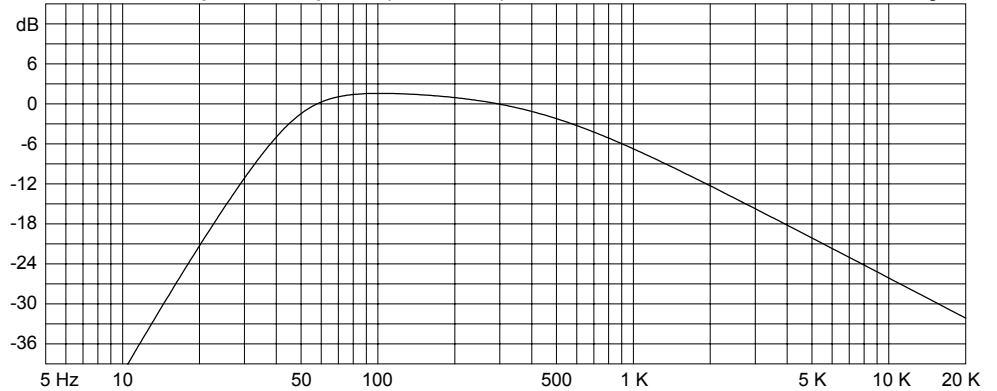
Le = 1.67 mH

Z = 8 ohms

Pe = 800 watts

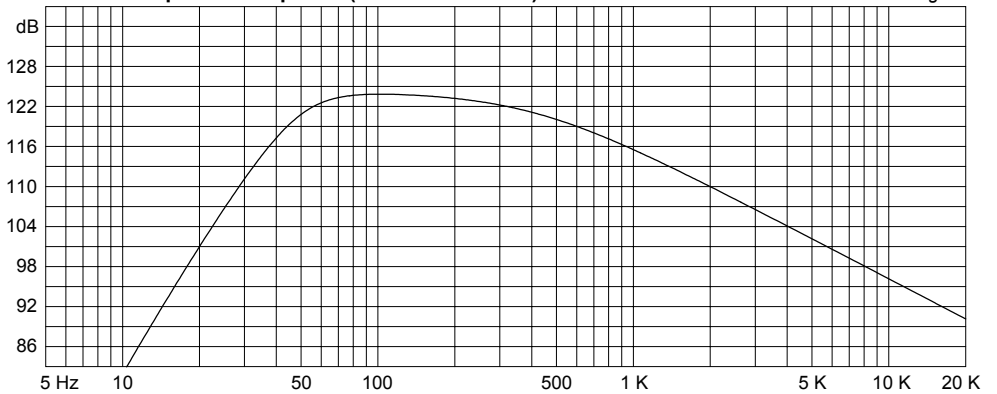
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



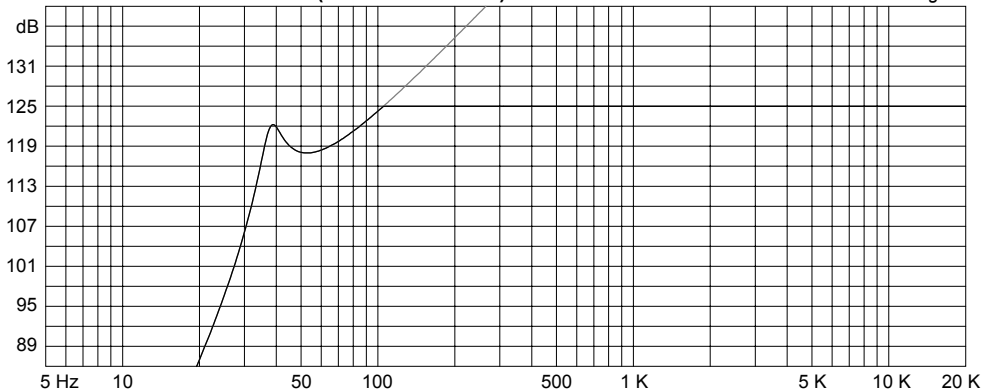
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 250 watts

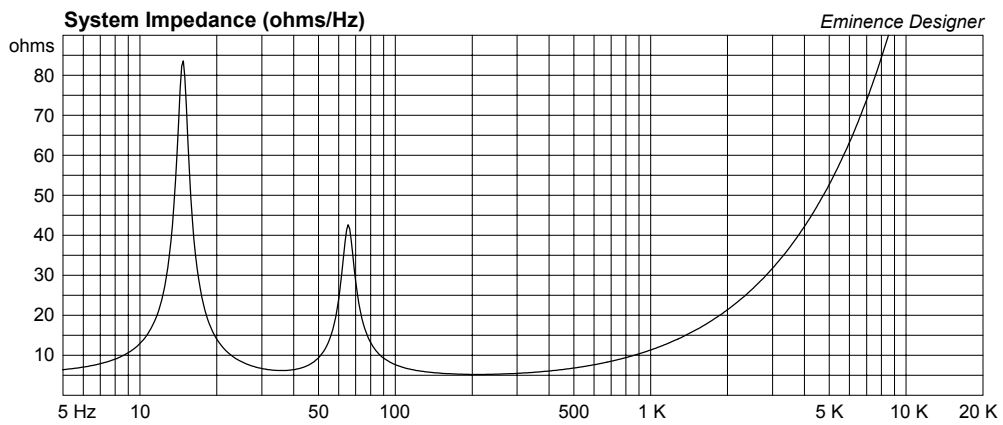
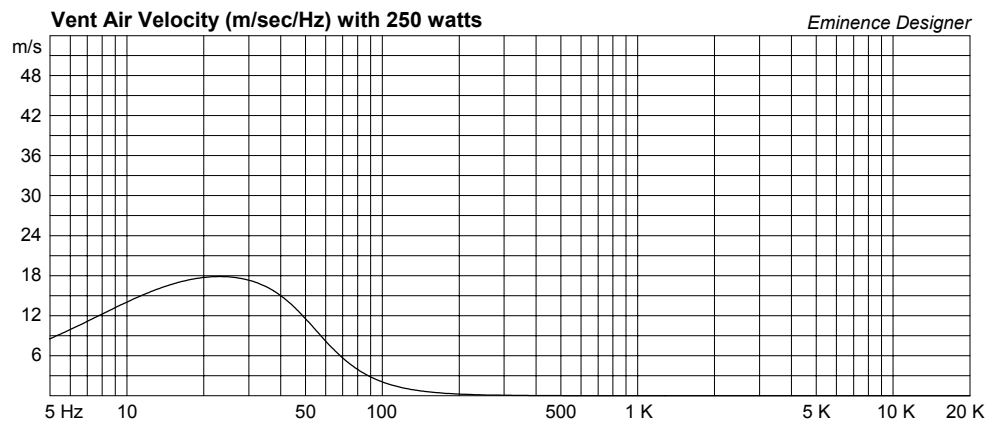
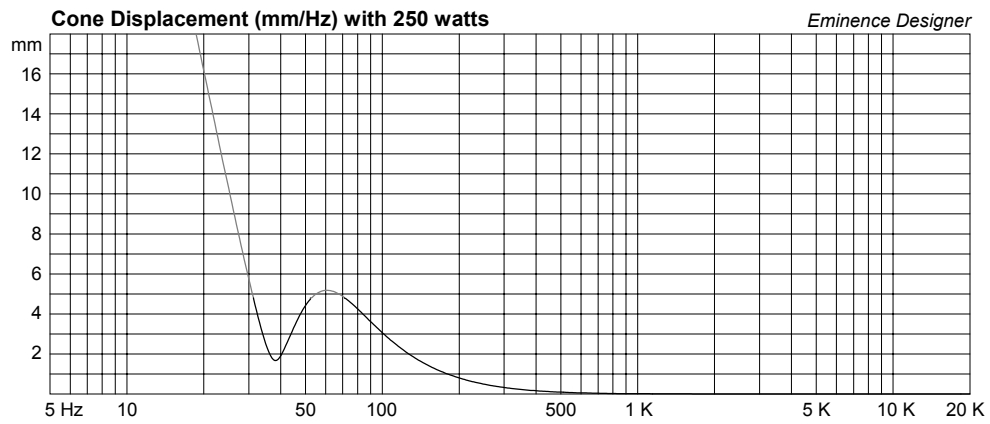
Eminence Designer



Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer





OmegaPro18A Small Vented Box

By McJerry, Eminence Speaker LLC

Displacement Limited to 400 Watts; F3 of 55 Hz. Must use a high pass filter set to 50 Hz to protect woofer from overexcursion.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 3 cu.ft

V(total) = 3.414 cu.ft

Fb = 44 Hz

QL = 7

F3 = 55.1 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 9.403 in

Driver Properties

--Description--

Name: Omega Pro-18 (8 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 4 inch (101.6 mm) copper.

Magnet: 109 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 25.33 Hz

Qms = 8.18

Vas = 548.7 liters

Xmax = 4.8 mm

Sd = 1159 sq.cm

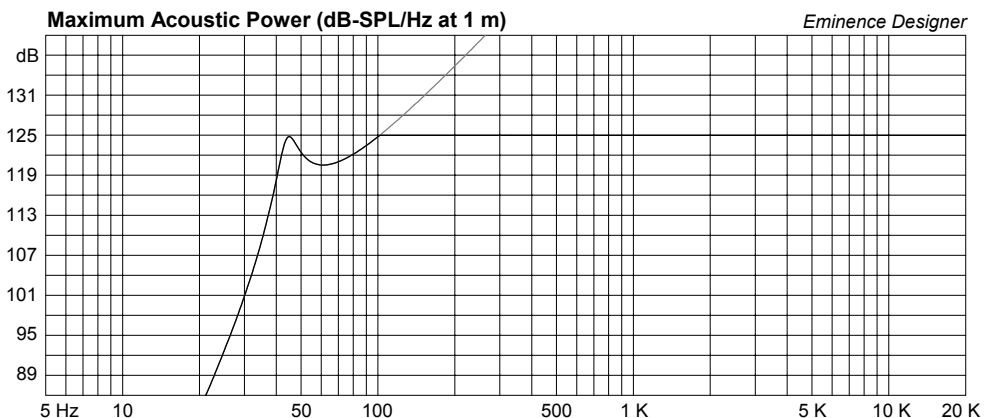
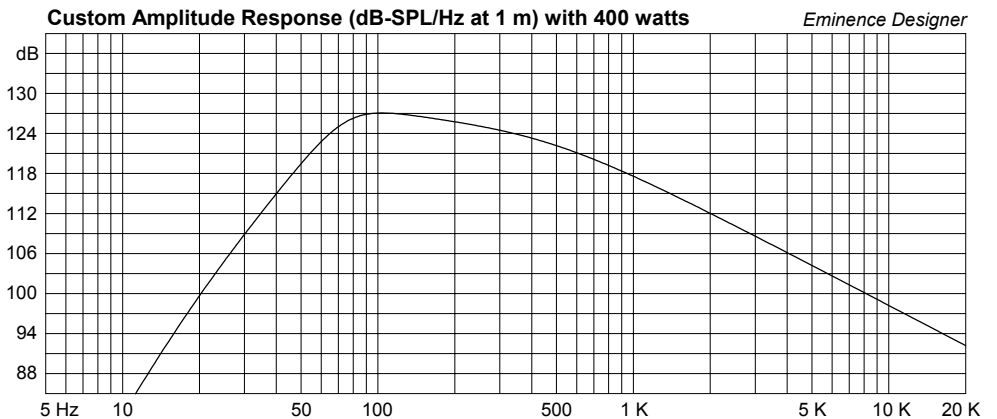
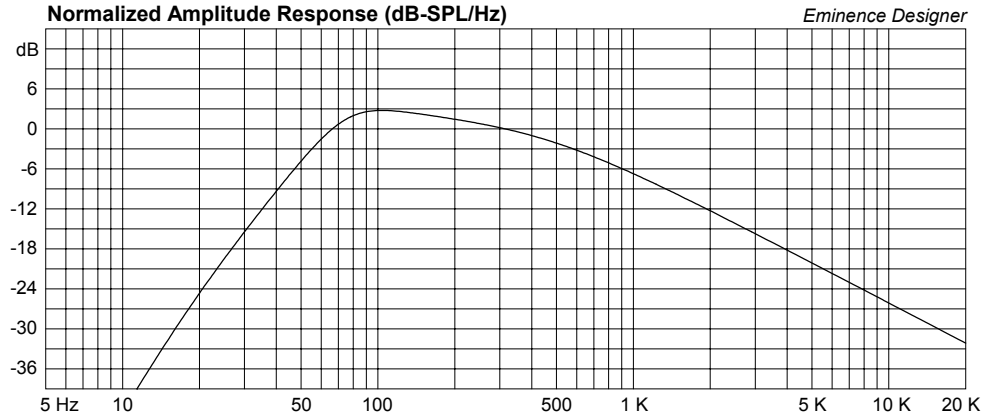
Qes = 0.321

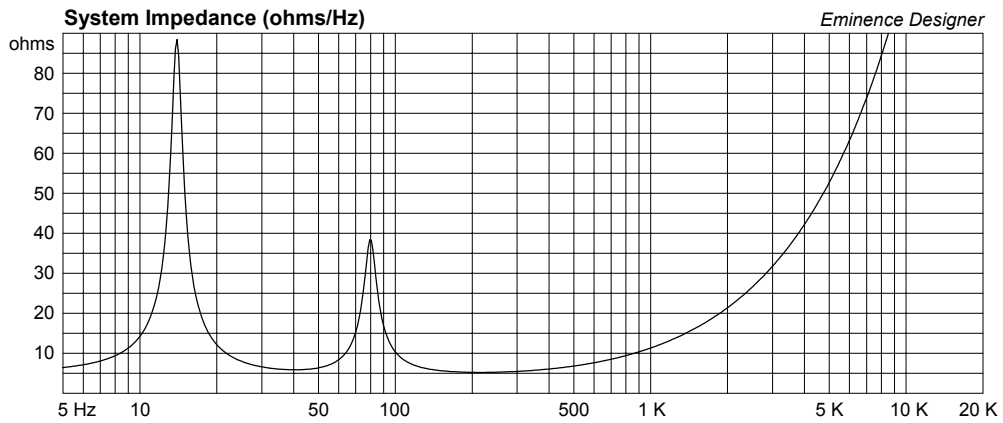
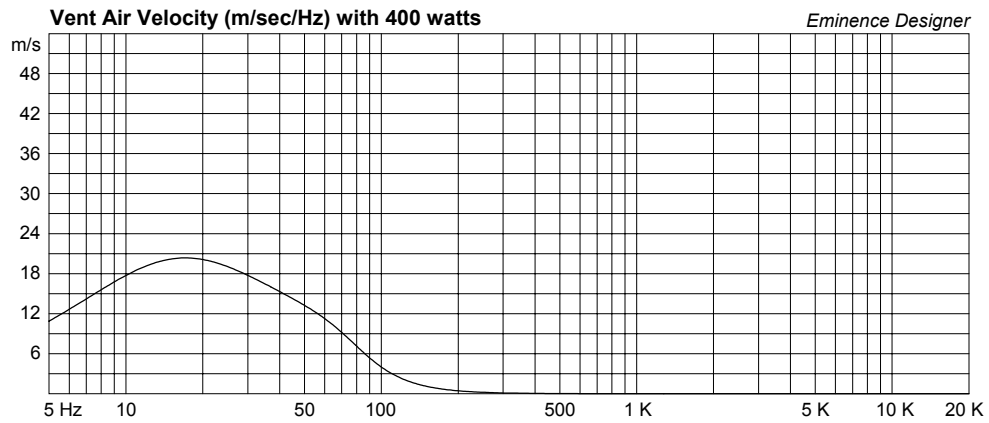
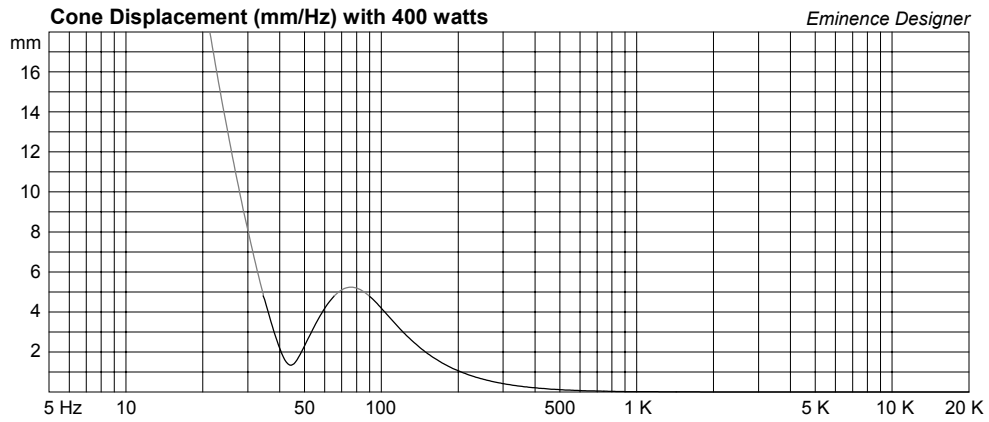
Re = 5.2 ohms

Le = 1.67 mH

Z = 8 ohms

Pe = 800 watts





Dual OmegaPro18A Med Vented Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 550 Watts; F3 of 47 Hz. Must use a High Pass filter set to 35 Hz to protect woofer from over excursion.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 9 cu.ft

V(total) = 10.09 cu.ft

Fb = 45 Hz

QL = 7

F3 = 47.3 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = rectangle

Vent ends = one flush

Hv = 20 in

Wv = 2.5 in

Lv = 9.73 in

Driver Properties

--Description--

Name: Omega Pro-18 (8 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 4 inch (101.6 mm) copper.

Magnet: 109 oz ferrite magnet.

--Configuration--

No. of Drivers = 2

Mounting = Standard

Wiring = Parallel

Drivers sum coherently = Yes

--Driver Parameters--

Fs = 25.33 Hz

Qms = 8.18

Vas = 548.7 liters [1097]

Xmax = 4.8 mm

Sd = 1159 sq.cm [2318]

Qes = 0.321

Re = 5.2 ohms [2.6]

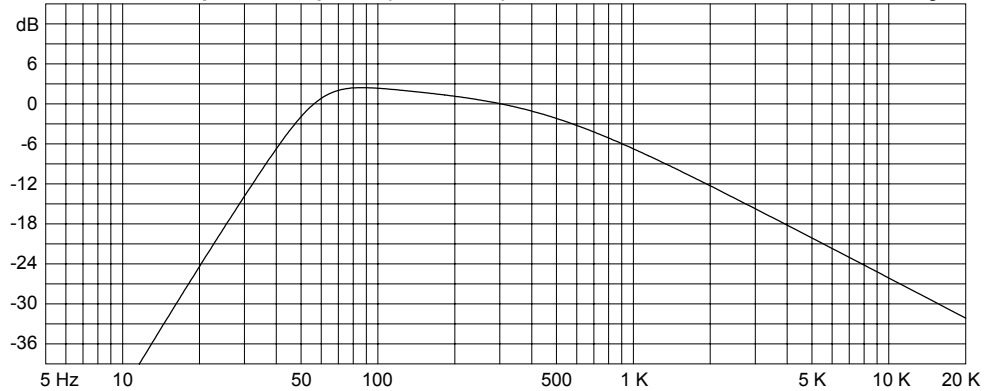
Le = 1.67 mH [0.835]

Z = 8 ohms [4]

Pe = 800 watts [1600]

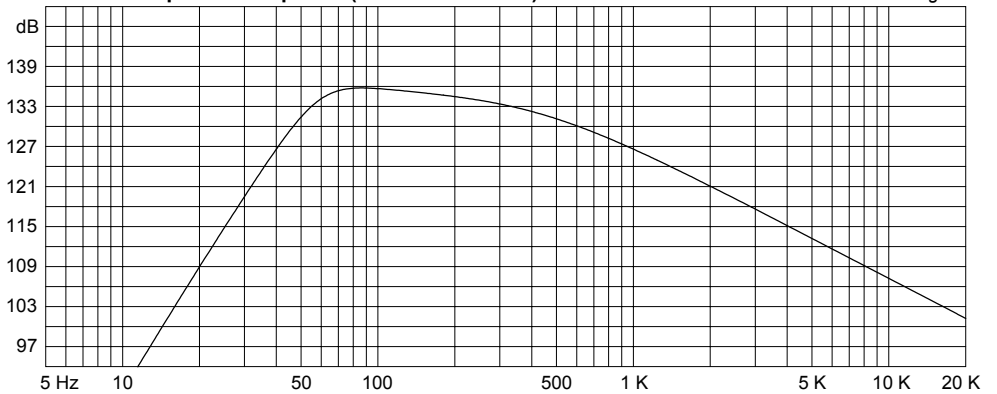
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



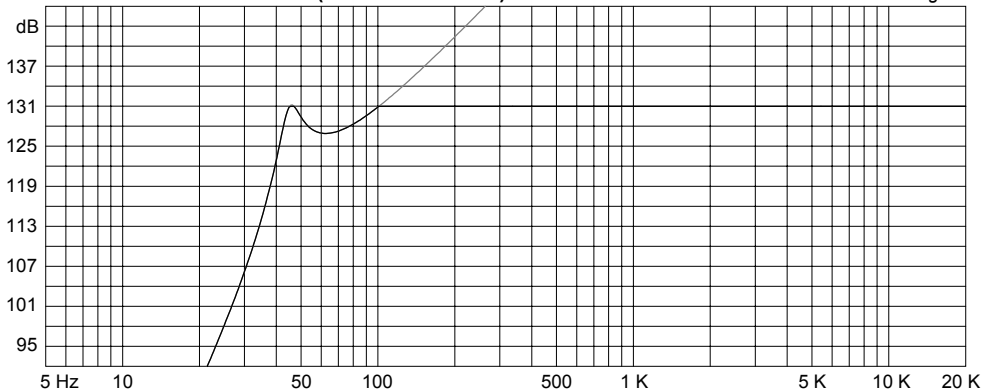
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 1600 watts

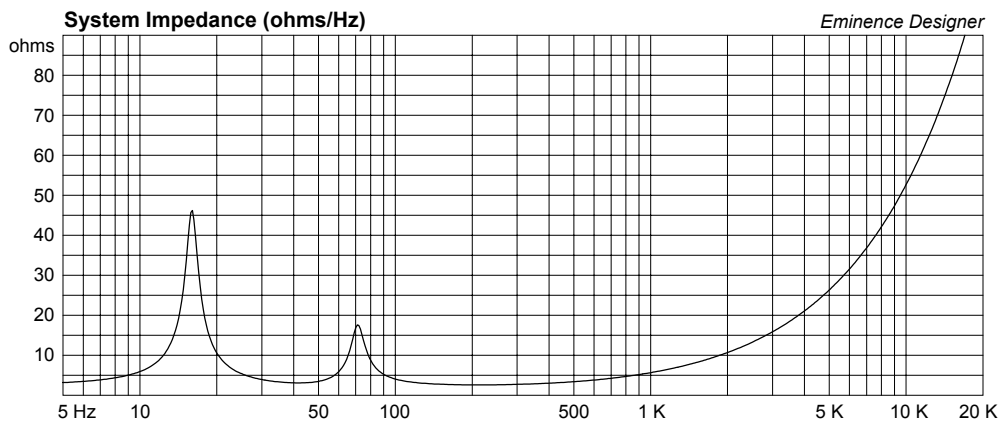
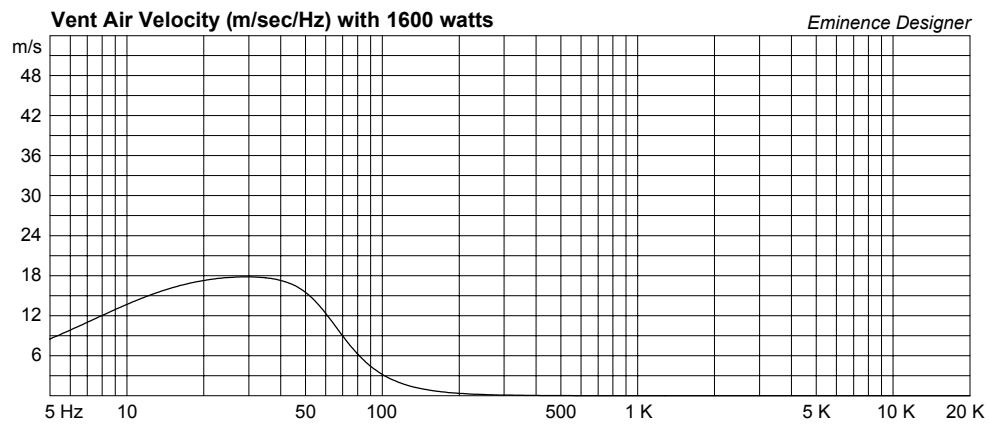
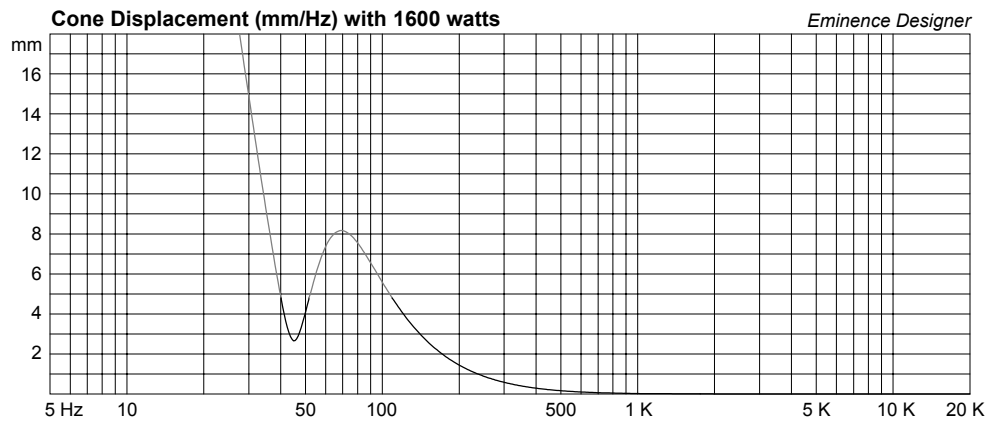
Eminence Designer



Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer





Dual OmegaPro18A Large Vented Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 300 Watts; F3 of 40 Hz. Must use a High Pass filter set to 30Hz to protect woofer from over excursion.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 13.16 cu.ft

V(total) = 14.39 cu.ft

Fb = 35 Hz

QL = 7

F3 = 40.1 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = rectangle

Vent ends = one flush

Hv = 20 in

Wv = 2.5 in

Lv = 11.73 in

Driver Properties

--Description--

Name: Omega Pro-18 (8 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 4 inch (101.6 mm) copper.

Magnet: 109 oz ferrite magnet.

--Configuration--

No. of Drivers = 2

Mounting = Standard

Wiring = Parallel

Drivers sum coherently = Yes

--Driver Parameters--

Fs = 25.33 Hz

Qms = 8.18

Vas = 548.7 liters [1097]

Xmax = 4.8 mm

Sd = 1159 sq.cm [2318]

Qes = 0.321

Re = 5.2 ohms [2.6]

Le = 1.67 mH [0.835]

Z = 8 ohms [4]

Pe = 800 watts [1600]

