

## Specification

Nominal Basket Diameter	18", 457.2mm
Nominal Impedance*	8 ohms
Power Rating**	
Watts	650W
Music Program	1300W
Resonance	28Hz
Usable Frequency Range***	41Hz-2.4kHz
Sensitivity	99
Magnet Weight	120 oz
Gap Height	0.375", 9.53mm
Voice Coil Diameter	3", 76.2mm

## Thiele & Small Parameters

Resonant Frequency (fs)	28Hz
DC Resistance (Re)	6.29
Coil Inductance (Le)	1.90mH
Mechanical Q (Qms)	8.28
Electromagnetic Q (Qes)	0.30
Total Q (Qts)	0.29
Compliance Equivalent Volume (Vas)	441.2 ltr/15.6 cu. ft.
Peak Diaphragm Displacement Volume (Vd)	695cc
Mechanical Compliance of Suspension (Cms)	0.24mm/N
BL Product (BL)	22.1 T-M
Diaphragm Mass inc. Airlod (Mms)	130 grams
Efficiency Bandwidth Product (EBP)	93
Maximum Linear Excursion (Xmax)	6.1mm
Surface Area of Cone (Sd)	1140.0cm <sup>2</sup>
Maximum Mechanical Limit (Xlim)	18.0mm

## Mounting Information

Recommended Enclosure Volume	
Sealed	N/A
Vented	93-212 ltr/3.3-7.5 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	24.5 lbs, 11.1 kg
Shipping Weight	28.1 lbs, 12.8 kg

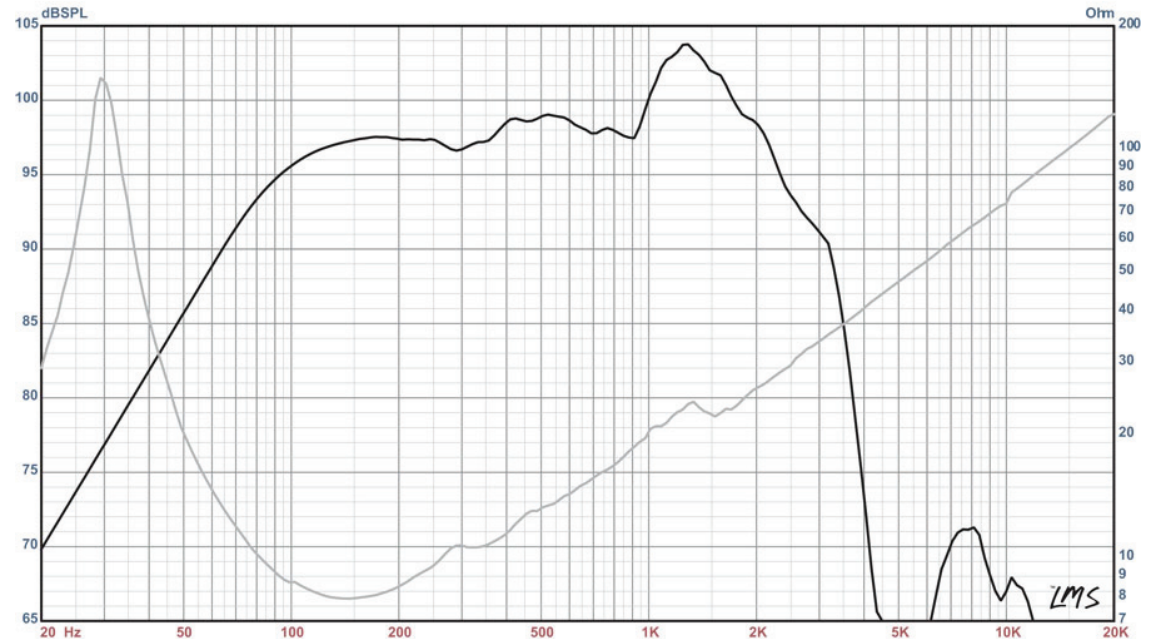
## Materials of Construction

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



## SIGMA PRO 18A-2 Professional Series

Recommended for professional audio as a woofer in vented enclosures.



\* 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)

# SigmaPro18A Ext. Bass Shelf, Medium Power, Low F3

By McJerry, Eminence Speaker LLC

Displacement limited to 400 watts. Must use a 24dB per octave high pass filter set to 35 Hz or higher to protect driver from overexcursion. Place ports symmetrically around driver if possible.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 7 cu.ft

V(total) = 7.499 cu.ft

Fb = 38 Hz

QL = 7

F3 = 40.67 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 8.282 in

## Driver Properties

--Description--

Name: Sigma Pro-18

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: 3 inch (76.2 mm) copper.

Magnet: 95 oz ferrite magnet.

--Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 28 Hz

Qms = 8.28

Vas = 441.2 liters

Xmax = 6.1 mm

Sd = 1140 sq.cm

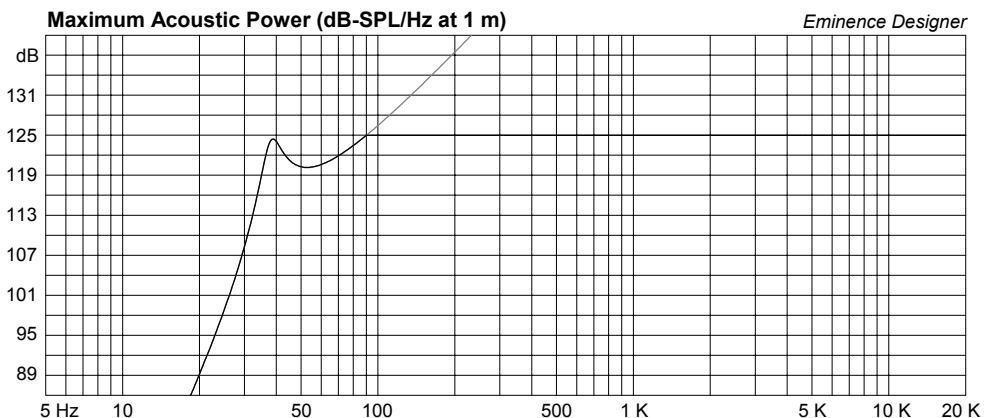
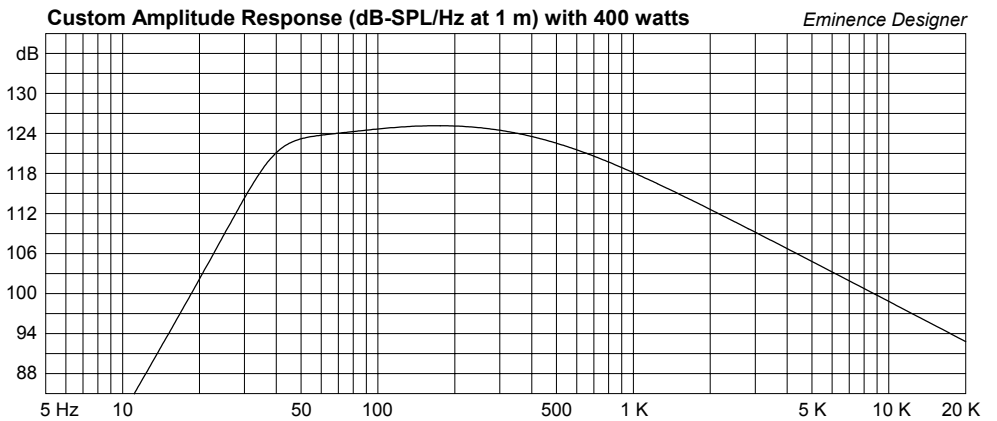
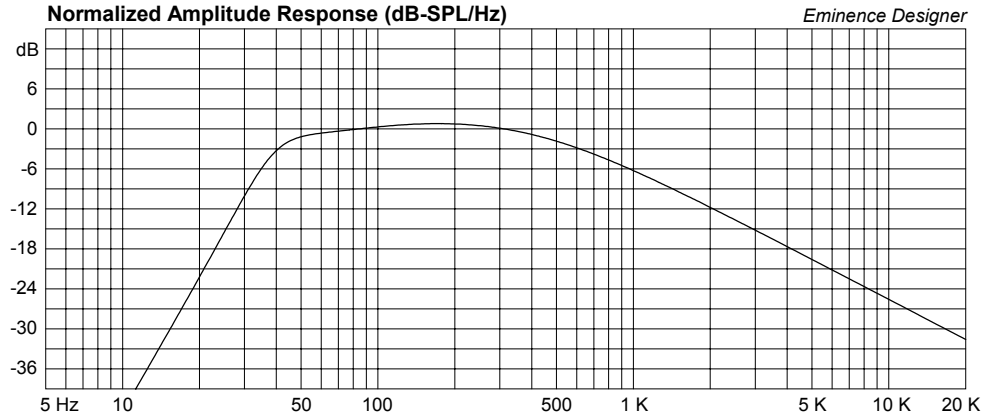
Qes = 0.3

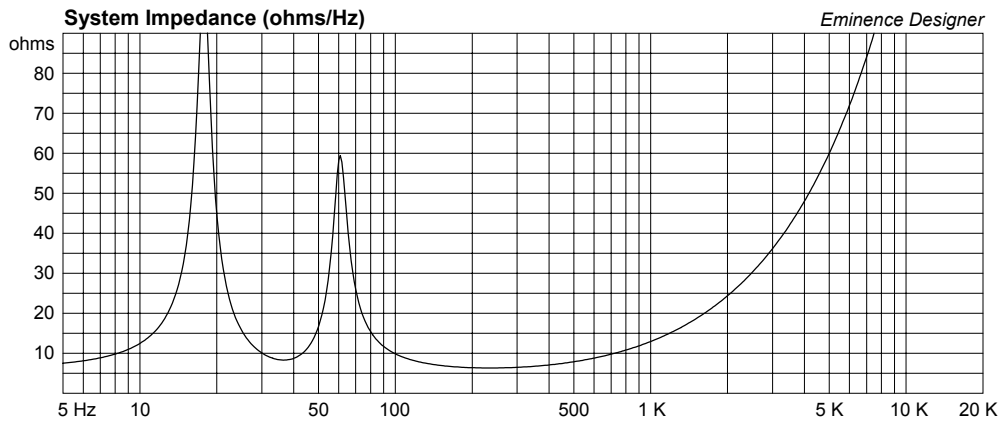
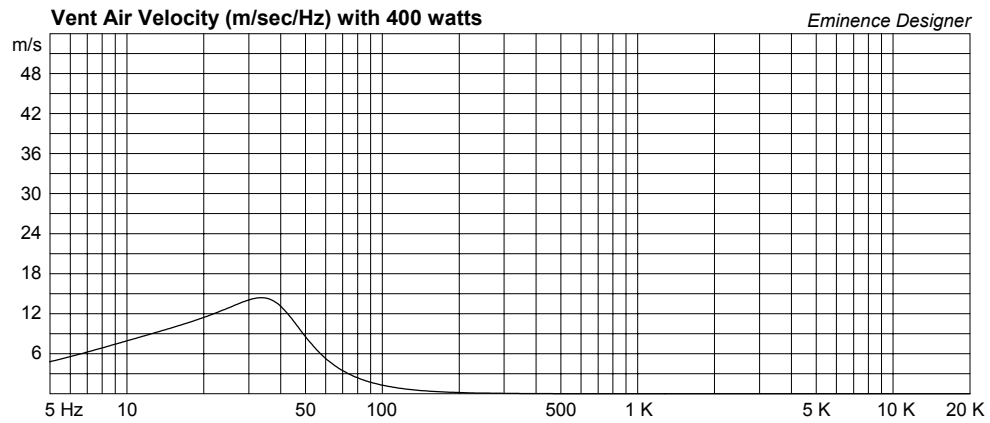
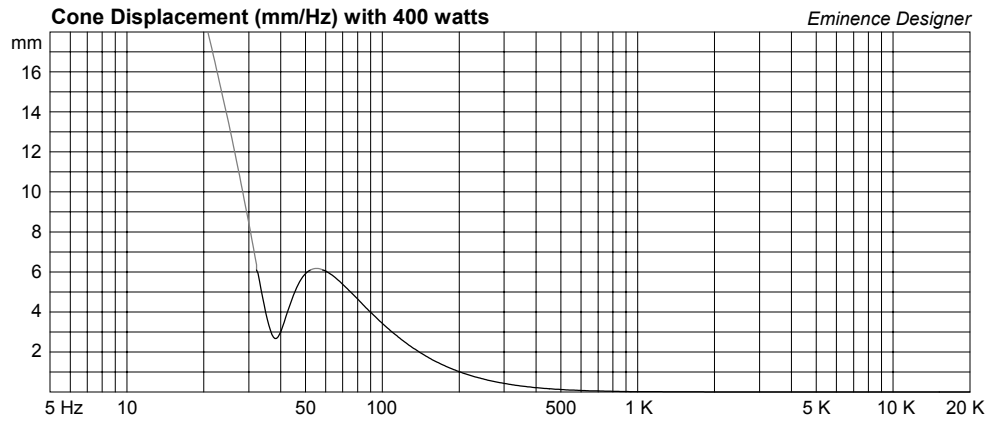
Re = 6.29 ohms

Le = 1.9 mH

Z = 8 ohms

Pe = 650 watts





# Sigma Pro18A Max Power Box, Hi Power, Med F3

By McJerry, Eminence Speaker LLC

Displacement and Thermally limited to 650 Watts. Must use a 24 dB per octave high pass filter set to 40 Hz or higher to protect driver from over excursion. Place ports symmetrically around driver.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 3 cu.ft

V(total) = 3.396 cu.ft

Fb = 45 Hz

QL = 7

F3 = 57.71 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 8.803 in

## Driver Properties

--Description--

Name: Sigma Pro-18

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: 3 inch (76.2 mm) copper.

Magnet: 95 oz ferrite magnet.

--Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 28 Hz

Qms = 8.28

Vas = 441.2 liters

Xmax = 6.1 mm

Sd = 1140 sq.cm

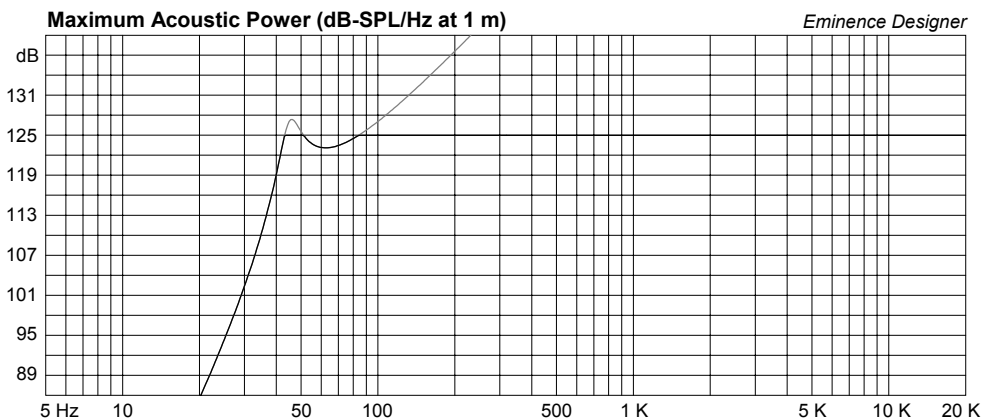
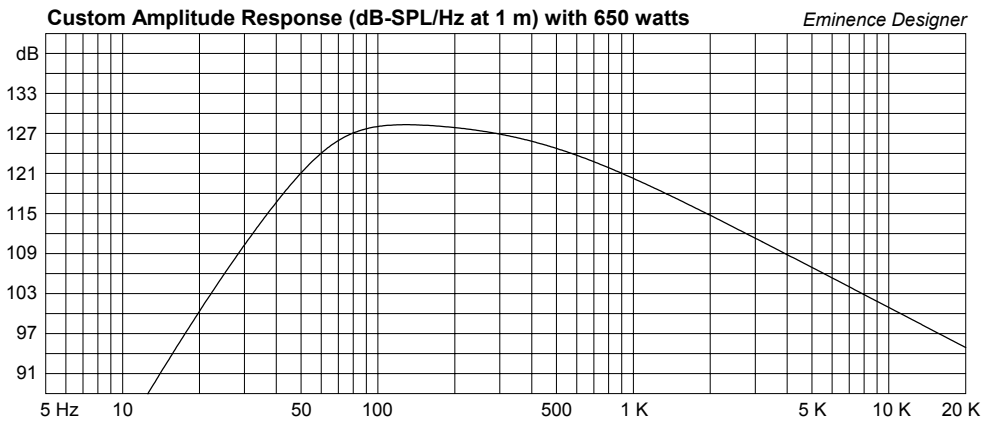
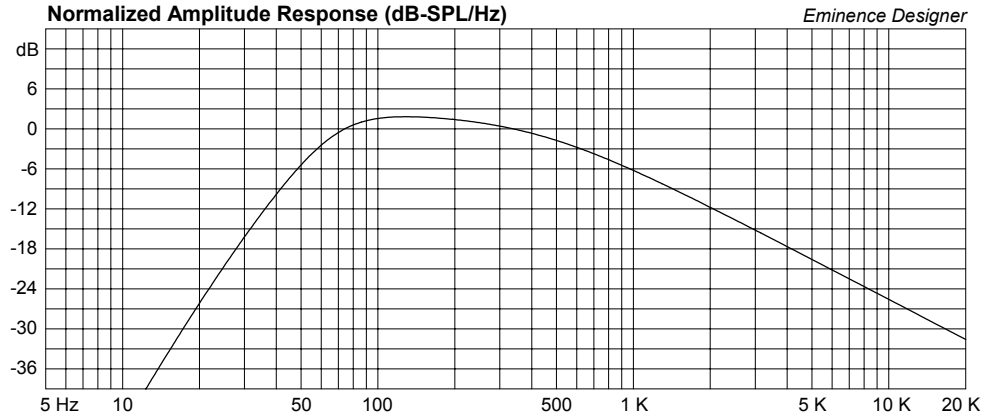
Qes = 0.3

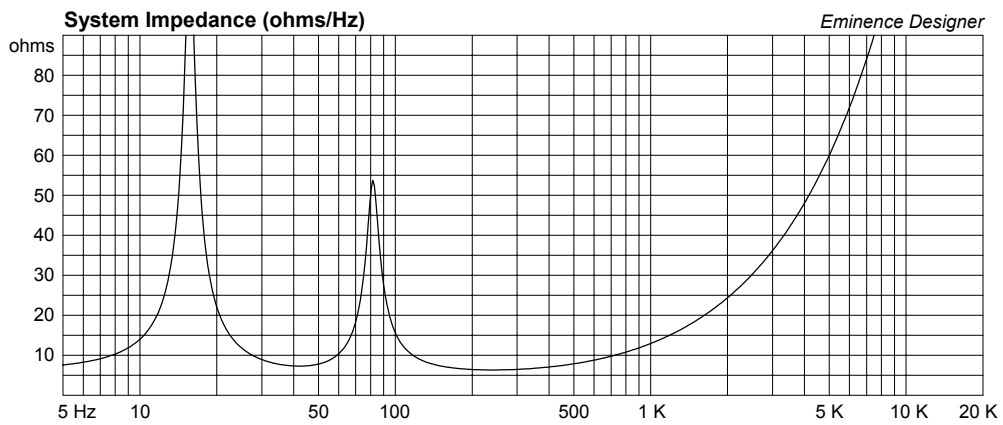
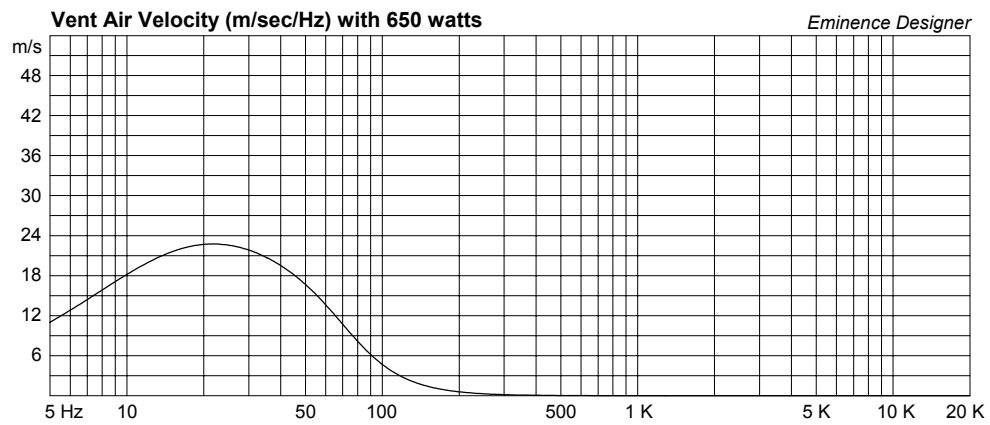
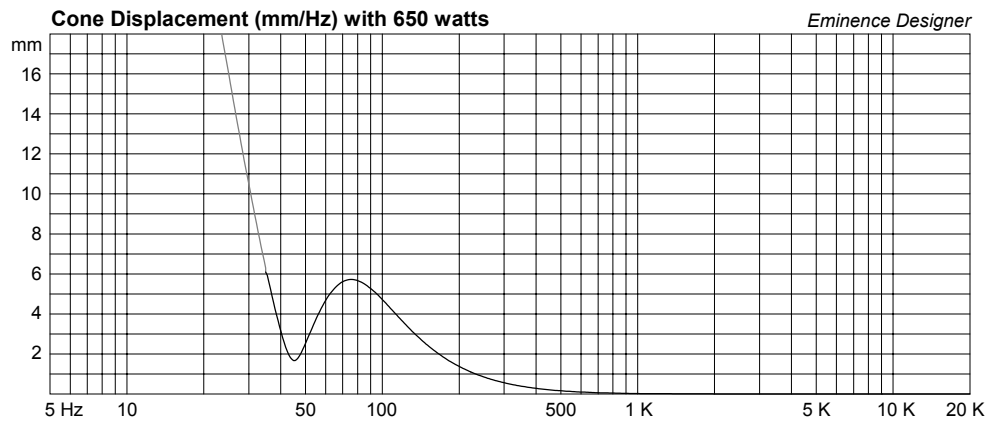
Re = 6.29 ohms

Le = 1.9 mH

Z = 8 ohms

Pe = 650 watts





# SigmaPro18A in Med Vented Box, High Power, Med F3

By McJerry, Eminence Speaker LLC

Displacement limited to 600 watts. Must use 24 dB per octave high pass filter set to 35 Hz or higher to protect driver from overexcursion. Place ports symmetrically around driver if possible.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 4.5 cu.ft

V(total) = 5.049 cu.ft

Fb = 45 Hz

QL = 7

F3 = 48.72 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 9.805 in

## Driver Properties

--Description--

Name: Sigma Pro-18

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: 3 inch (76.2 mm) copper.

Magnet: 95 oz ferrite magnet.

--Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 28 Hz

Qms = 8.28

Vas = 441.2 liters

Xmax = 6.1 mm

Sd = 1140 sq.cm

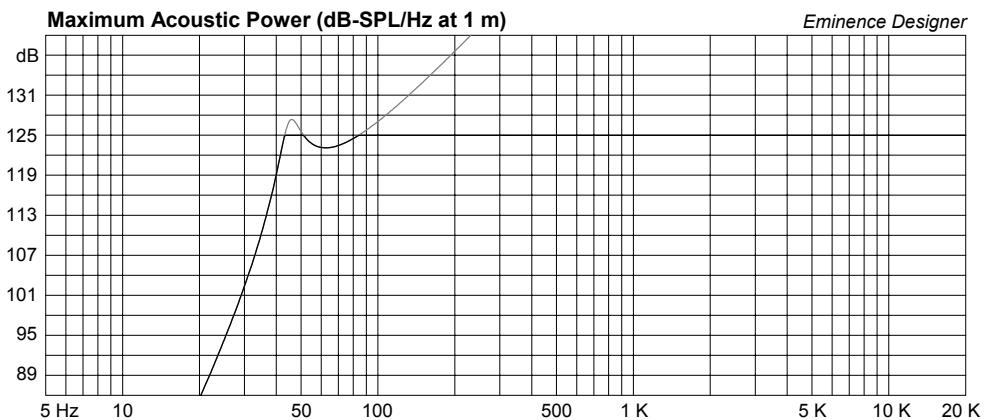
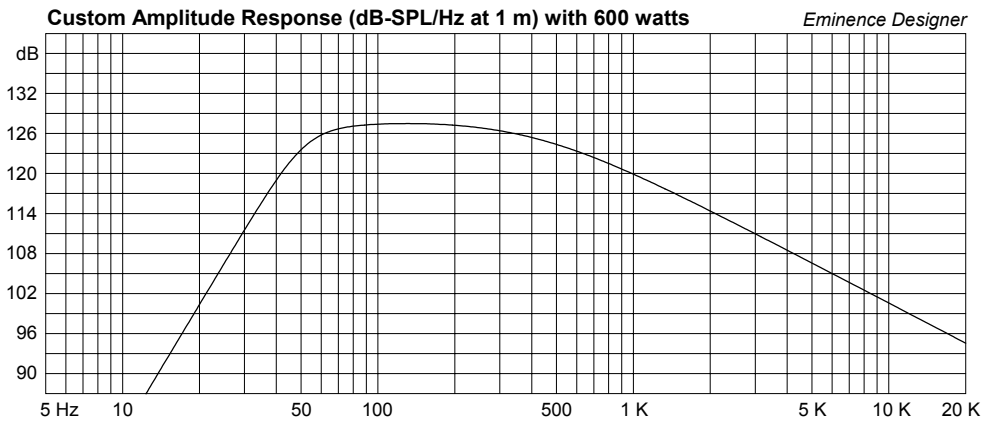
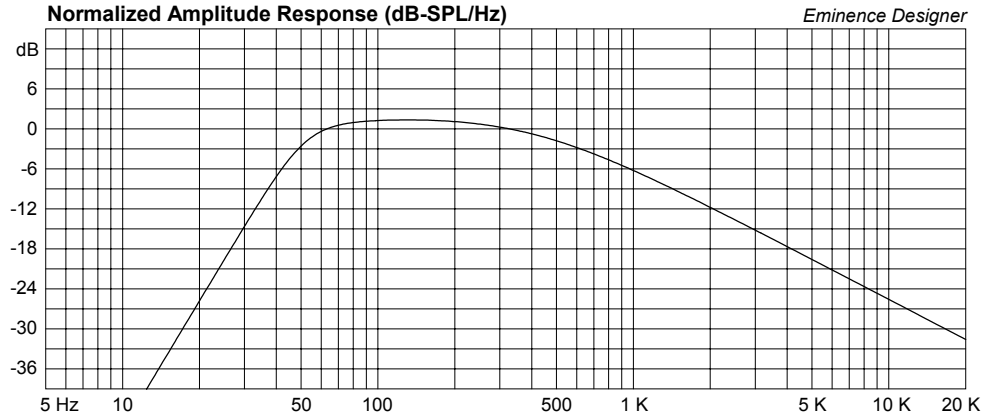
Qes = 0.3

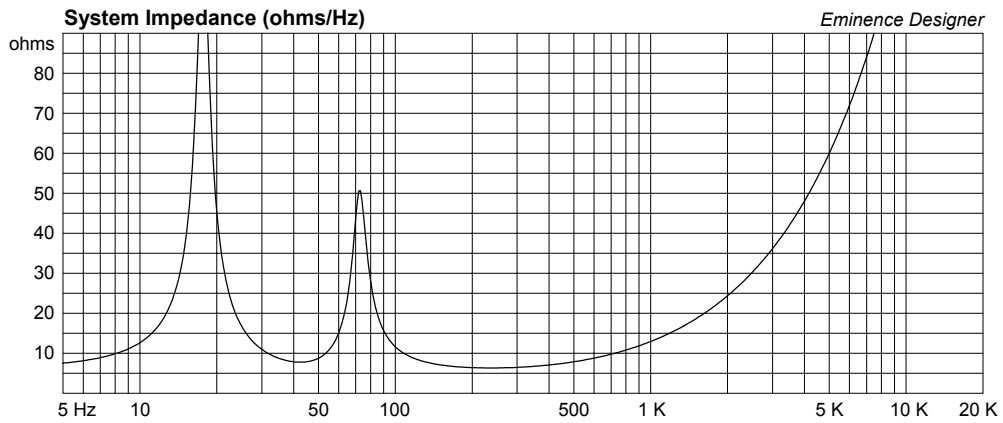
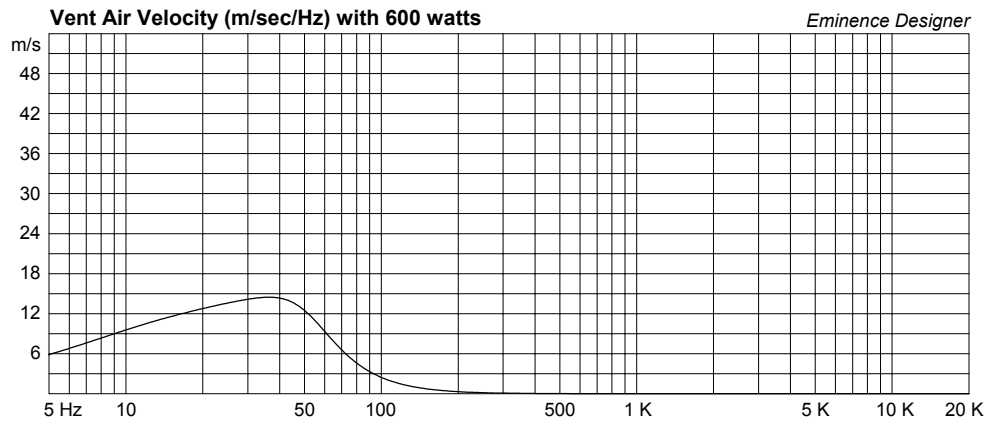
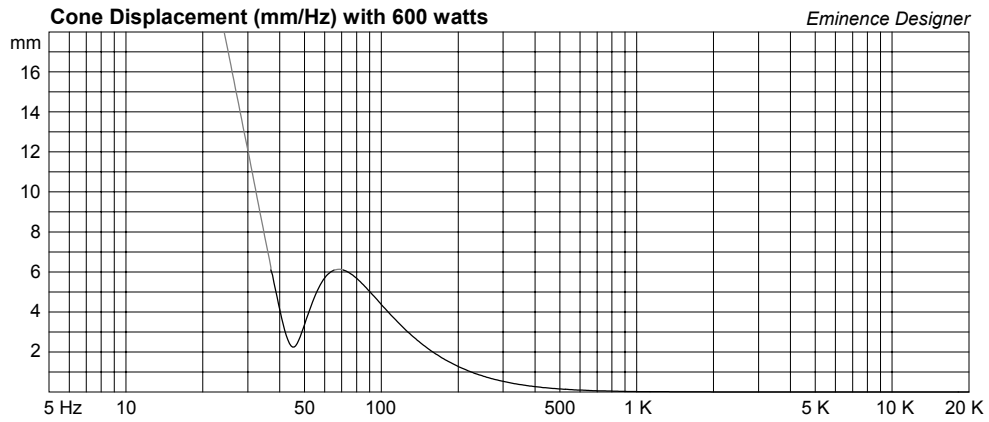
Re = 6.29 ohms

Le = 1.9 mH

Z = 8 ohms

Pe = 650 watts





# Dual SigmaPro18A Large PA Subwoofer Cabinet

By McJerry, Eminence Speaker LLC

Displacement limited to 1000 Watts; F3 of 47 Hz. Must use a 24 dB per octave high pass filter set to 35 Hz or higher to protect driver from over excursion.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 10 cu.ft

V(total) = 11.12 cu.ft

Fb = 44 Hz

QL = 7

F3 = 46.6 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = rectangle

Vent ends = one flush

Hv = 20 in

Wv = 3 in

Lv = 10.9 in

## Driver Properties

--Description--

Name: Sigma Pro-18

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: 3 inch (76.2 mm) copper.

Magnet: 95 oz ferrite magnet.

--Configuration--

**No. of Drivers = 2**

Mounting = Standard

Wiring = Parallel

Drivers sum coherently = Yes

--Driver Parameters--

Fs = 28 Hz

Qms = 8.28

Vas = 441.2 liters [882.4]

Xmax = 6.1 mm

Sd = 1140 sq.cm [2280]

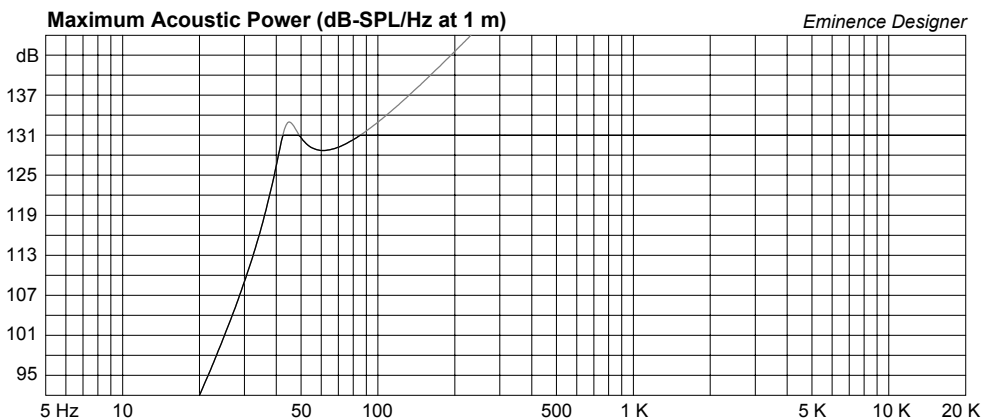
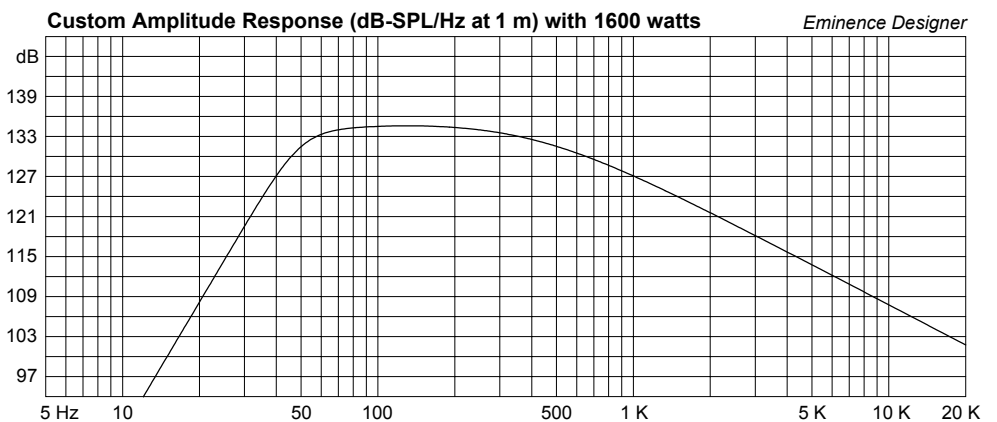
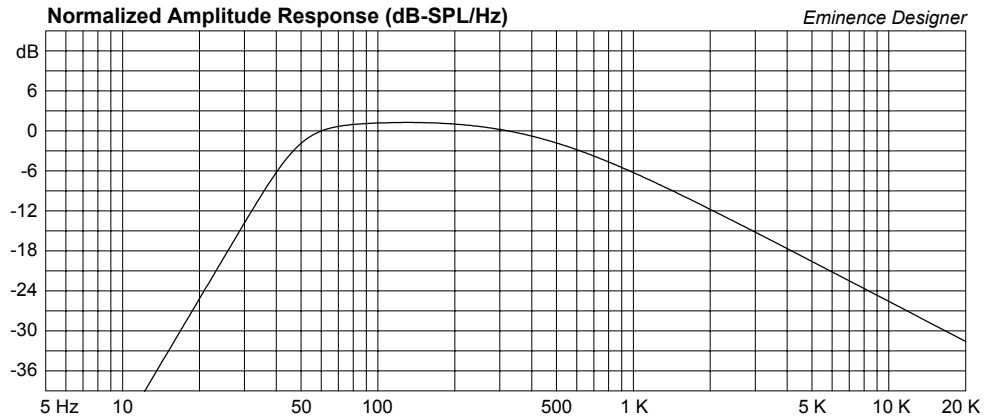
Qes = 0.3

Re = 6.29 ohms [3.145]

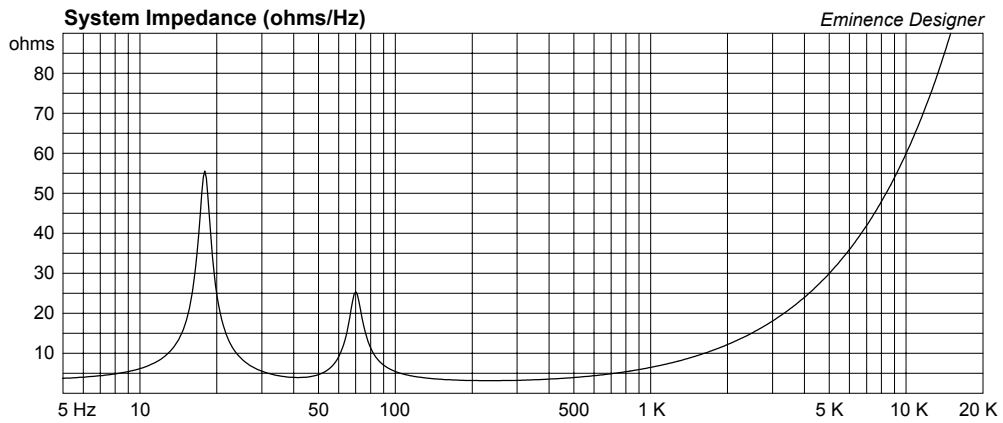
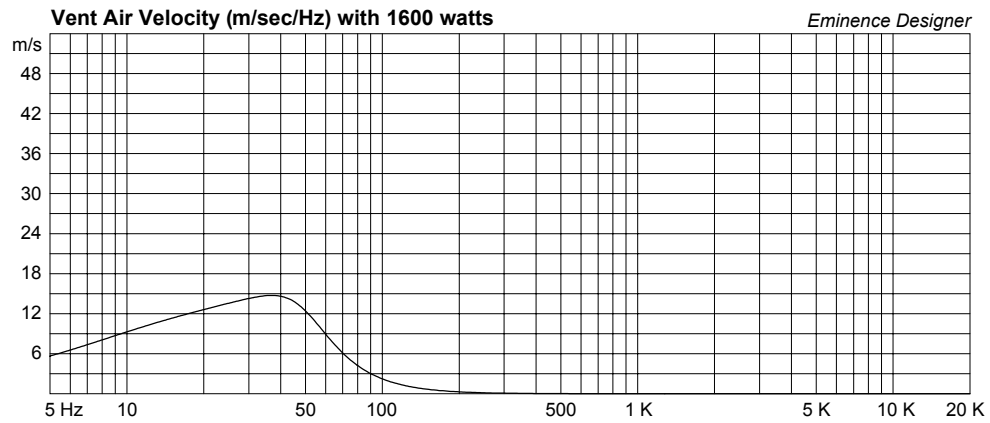
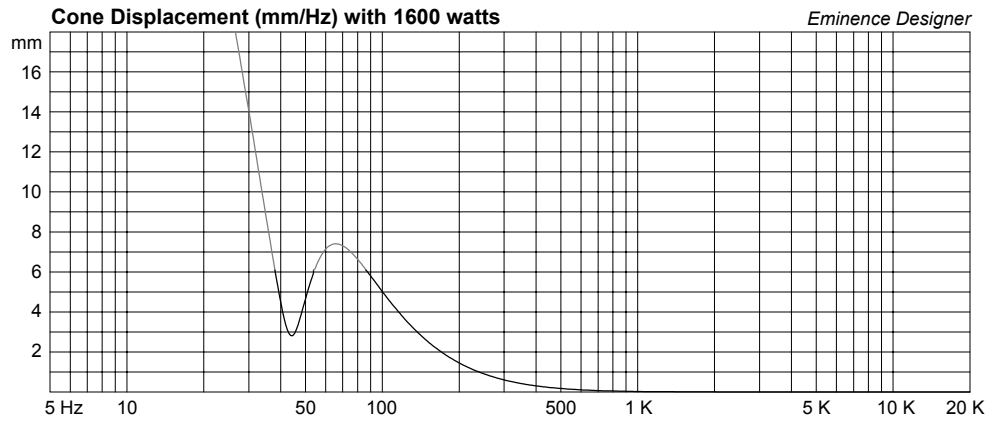
Le = 1.9 mH [0.95]

Z = 8 ohms [4]

Pe = 650 watts [1300]







# Dual SigmaPro18A High Power PA Woofer Box

By McJerry, Eminence Speaker LLC

Displacement and Thermally limited to 1300 Watts; F3 of 53 Hz. Must use a 24 dB per octave high pass filter set to 40 Hz or higher to protect driver from over excursion. Not really a subwoofer, more of a woofer box.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 7.25 cu.ft

V(total) = 8.362 cu.ft

Fb = 46 Hz

QL = 7

F3 = 53.05 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = rectangle

Vent ends = one flush

Hv = 20 in

Wv = 2.5 in

Lv = 12.62 in

## Driver Properties

--Description--

Name: Sigma Pro-18

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: 3 inch (76.2 mm) copper.

Magnet: 95 oz ferrite magnet.

--Configuration--

**No. of Drivers = 2**

Mounting = Standard

Wiring = Parallel

Drivers sum coherently = Yes

--Driver Parameters--

Fs = 28 Hz

Qms = 8.28

Vas = 441.2 liters [882.4]

Xmax = 6.1 mm

Sd = 1140 sq.cm [2280]

Qes = 0.3

Re = 6.29 ohms [3.145]

Le = 1.9 mH [0.95]

Z = 8 ohms [4]

Pe = 650 watts [1300]

