

Specification

Nominal Basket Diameter	18", 457mm
Nominal Impedance*	4 or 8 ohms
Power Rating**	
Watts	500W
Music Program	1000W
Resonance	28Hz
Usable Frequency Range***	37Hz-250Hz
Sensitivity	96
Magnet Weight	67 oz
Gap Height	.38", 9.53mm
Voice Coil Diameter	2.5", 63.5mm

Thiele & Small Parameters

Resonant Frequency (fs)	28Hz
DC Resistance (Re)	5.3
Coil Inductance (Le)	3.43mH
Mechanical Q (Qms)	10.38
Electromagnetic Q (Qes)	.33
Total Q (Qts)	.32
Compliance Equivalent Volume (Vas)	493.19 ltr/17.41 cu. ft.
Peak Diaphragm Displacement Volume (Vd)	796.00cc
Mechanical Compliance of Suspension (Cms)	.25mm/N
BL Product (BL)	18.9 T-M
Diaphragm Mass inc. Airload (Mms)	128.1 grams
Efficiency Bandwidth Product (EBP)	84
Maximum Linear Excursion (Xmax)	6.7mm
Surface Area of Cone (Sd)	1188.0cm ²
Maximum Mechanical Limit (Xlim)	15.0mm

Mounting Information

Recommended Enclosure Volume	
Sealed	N/A
Vented	85-297 ltr/3.0-10.5 cu. ft.
Overall Diameter	18.00", 457.20mm
Baffle Hole Diameter	16.57", 420.88mm
Front Sealing Gasket	Fitted as Standard
Rear Sealing Gasket	Fitted as Standard
Mounting Holes Diameter	.28", 7.11mm
Mounting Holes B.C.D.	17.25", 438.15mm
Depth	8.13", 206.50mm
Net Weight	17.00 lbs, 7.71 kg
Shipping Weight	20.5 lbs, 9.3 kg

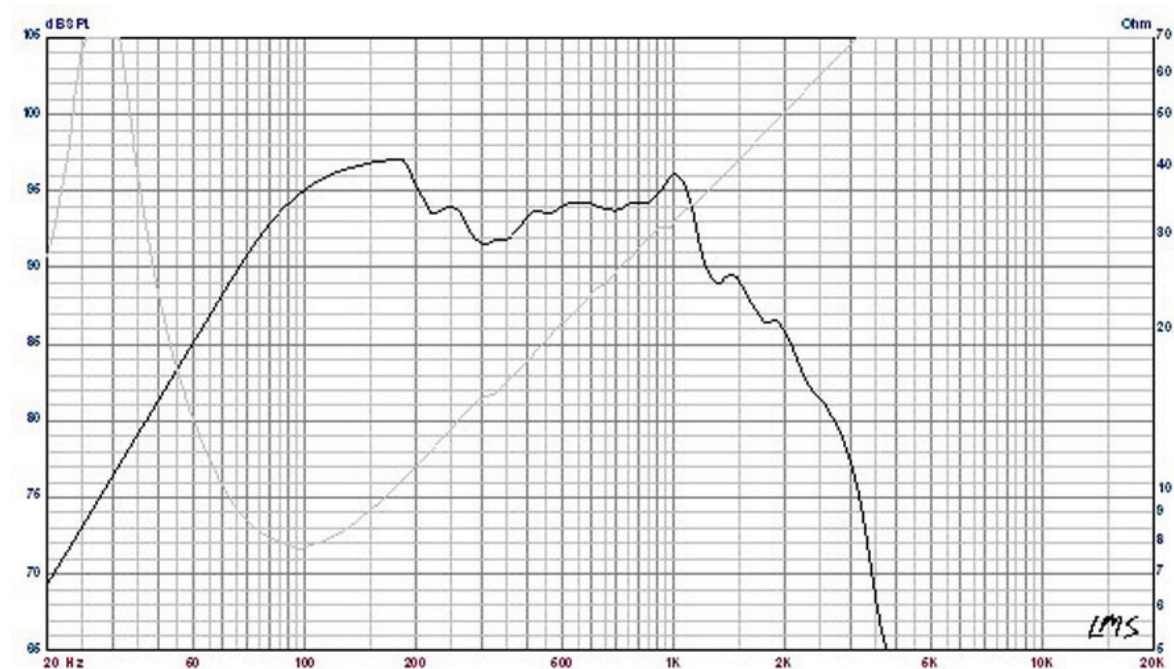
Materials of Construction

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



DELTA PRO-18A Professional Series

Long Throw Subwoofer for very small vented boxes. Over-size top plate and large pole vent help keep the coil cool.



* 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. le: 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)

Delta Pro-18A Large Subwoofer Cabinet

By Jerry McNutt, Eminence Speaker LLC

Limit to 250 Watts; F3 of 36 Hz. Use a steep high pass at 30 Hz.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 10 cu.ft

V(total) = 10.45 cu.ft

Fb = 35 Hz

QL = 7

F3 = 36.01 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 5.845 in

Driver Properties

--Description--

Name: Delta Pro-18A

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 18" Sub Woofer

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 28.03 Hz

Qms = 10.38

Vas = 17.62 cu.ft

Xmax = 0.264 in

Sd = 184.1 sq.in

Qes = 0.33

Re = 5.3 ohms

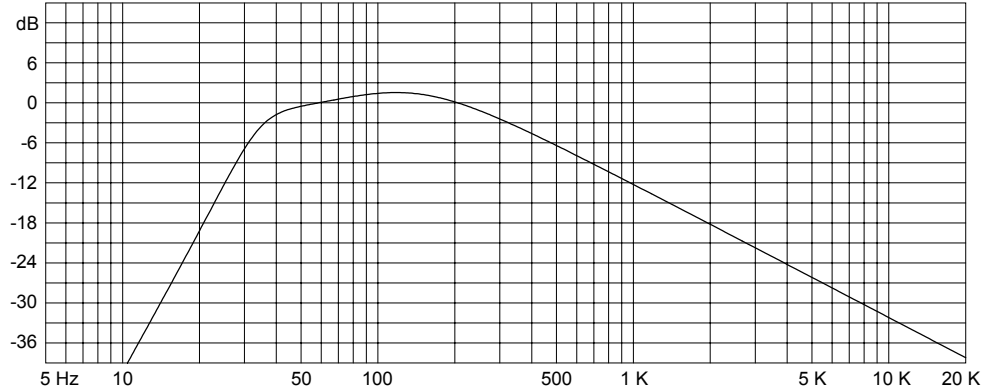
Le = 3.43 mH

Z = 8 ohms

Pe = 500 watts

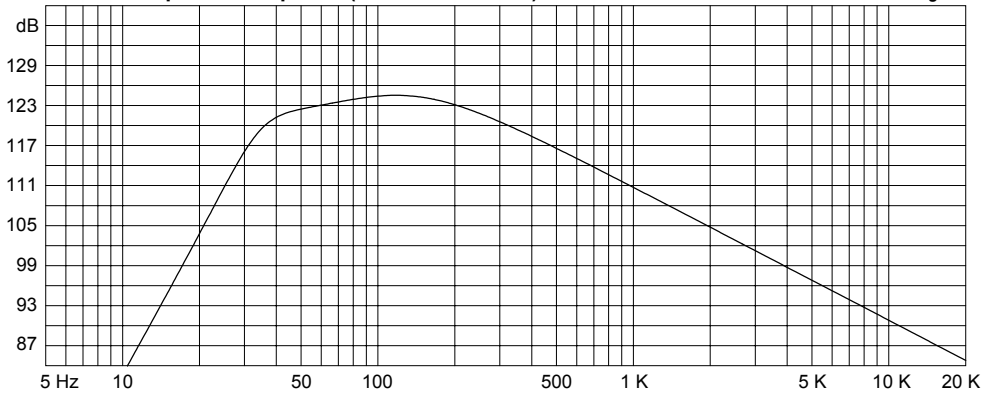
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



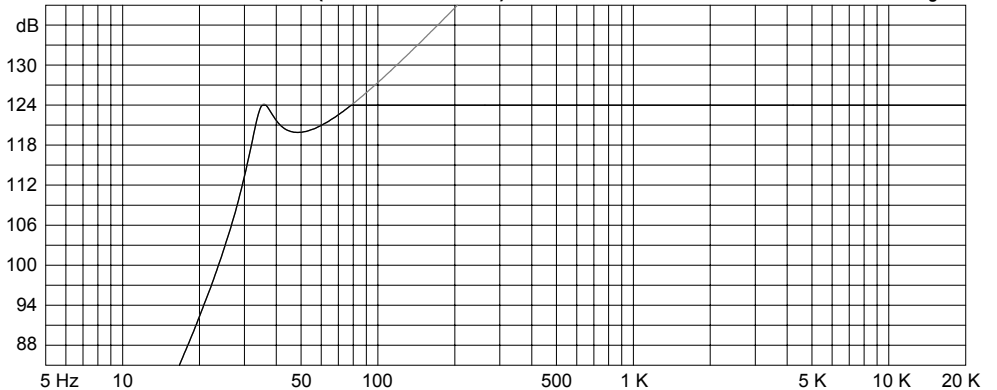
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 250 watts

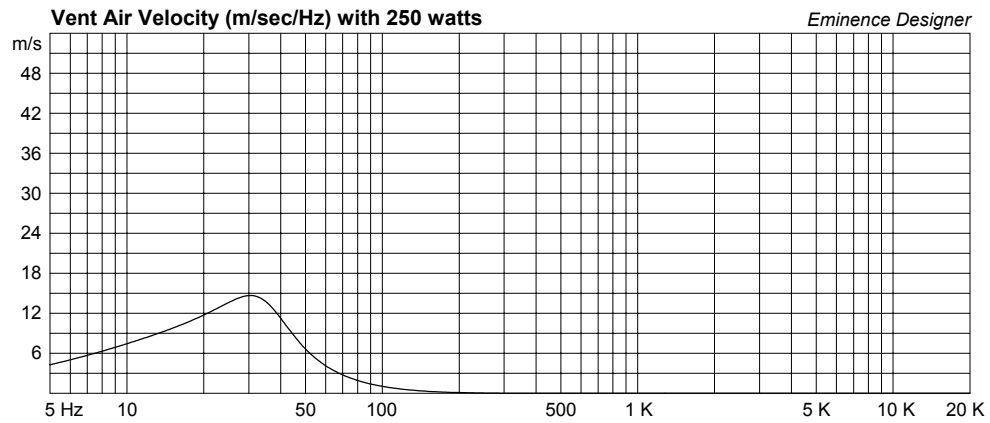
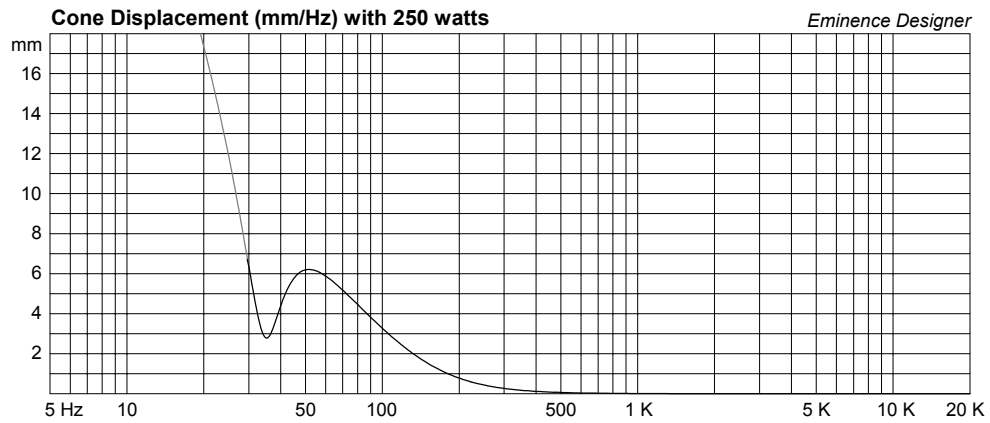
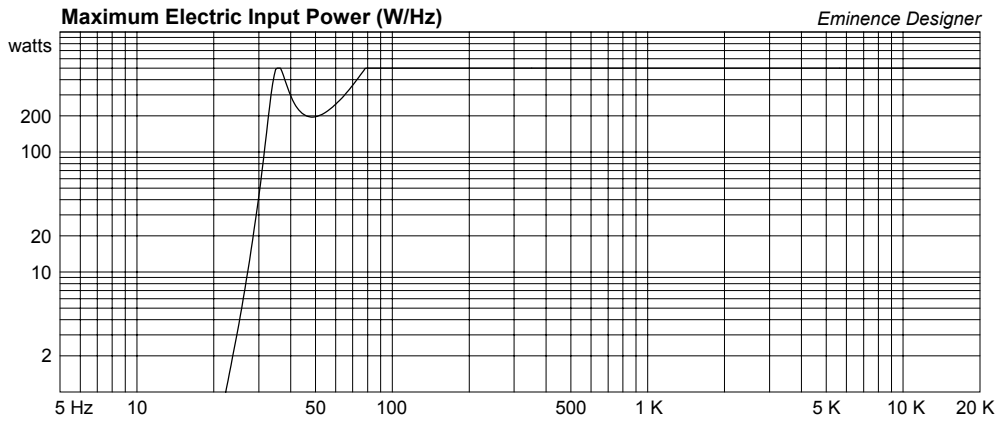
Eminence Designer

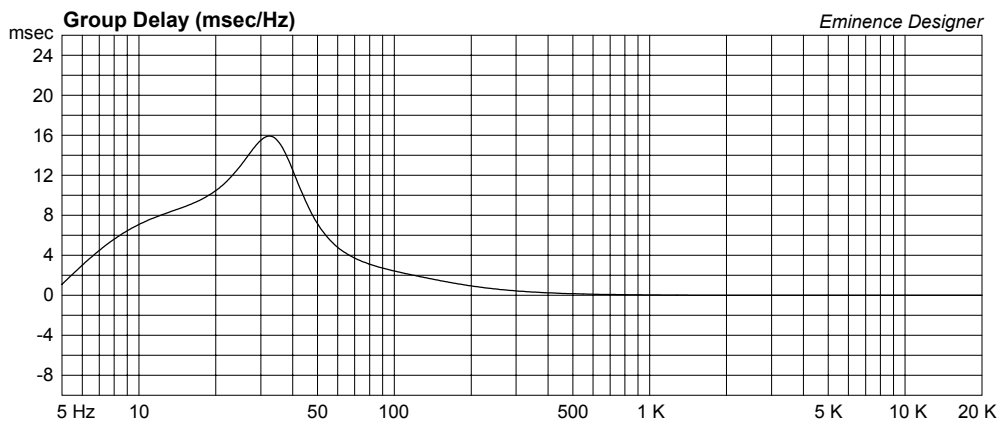
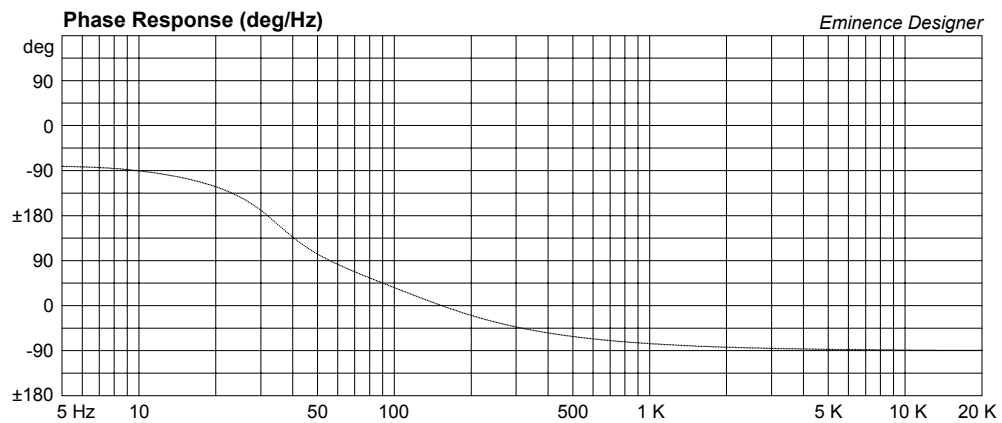
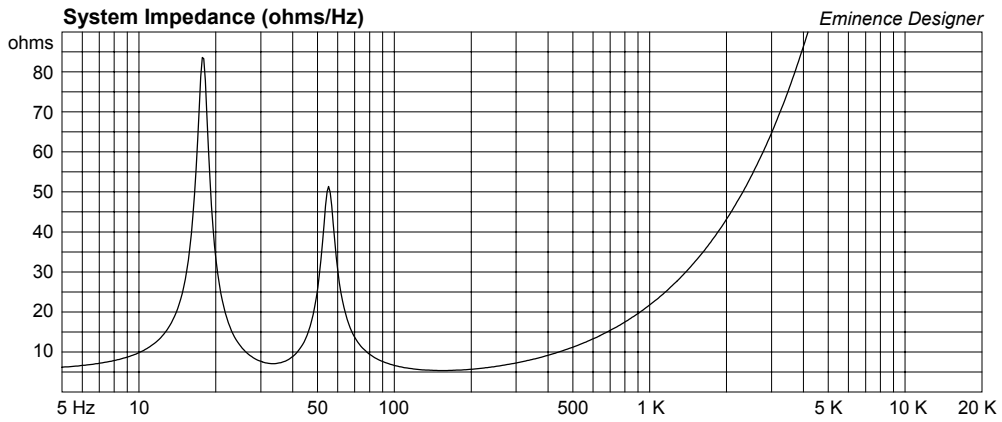


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







Delta Pro-18A Small Vented Woofer Box

By Jerry McNutt, Eminence Speaker LLC

Limit to 500 Watts; F3 of 63 Hz. Use steep high pass at 40 Hz.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 2.7 cu.ft

V(total) = 3.036 cu.ft

Fb = 55 Hz

QL = 7

F3 = 62.92 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 3.869 in

Driver Properties

--Description--

Name: Delta Pro-18A

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 18" Sub Woofer

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 28.03 Hz

Qms = 10.38

Vas = 17.62 cu.ft

Xmax = 0.264 in

Sd = 184.1 sq.in

Qes = 0.33

Re = 5.3 ohms

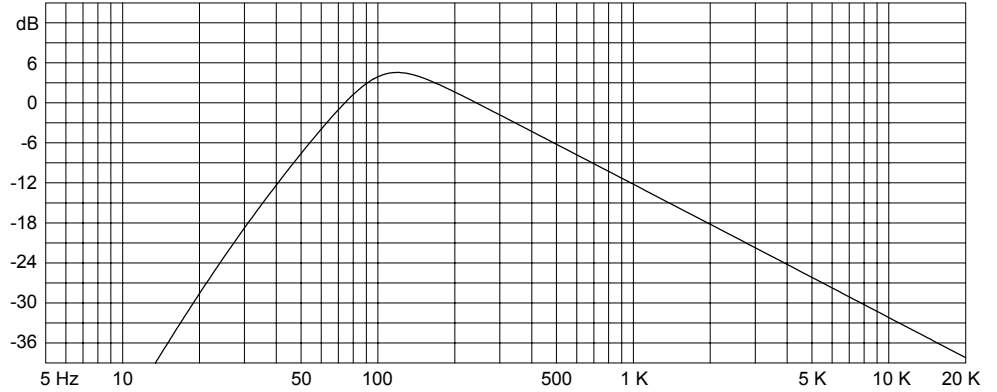
Le = 3.43 mH

Z = 8 ohms

Pe = 500 watts

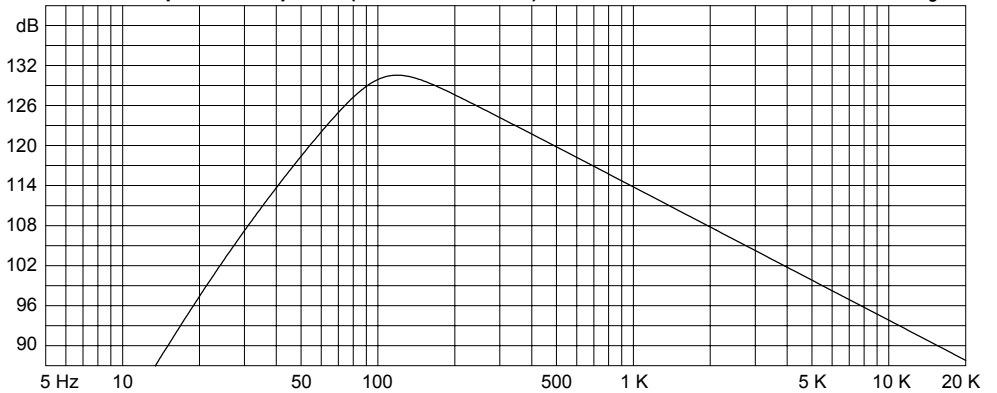
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



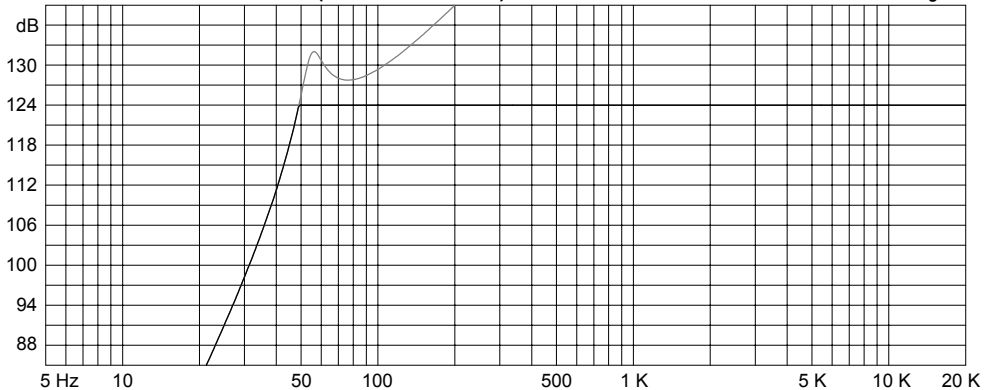
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 500 watts

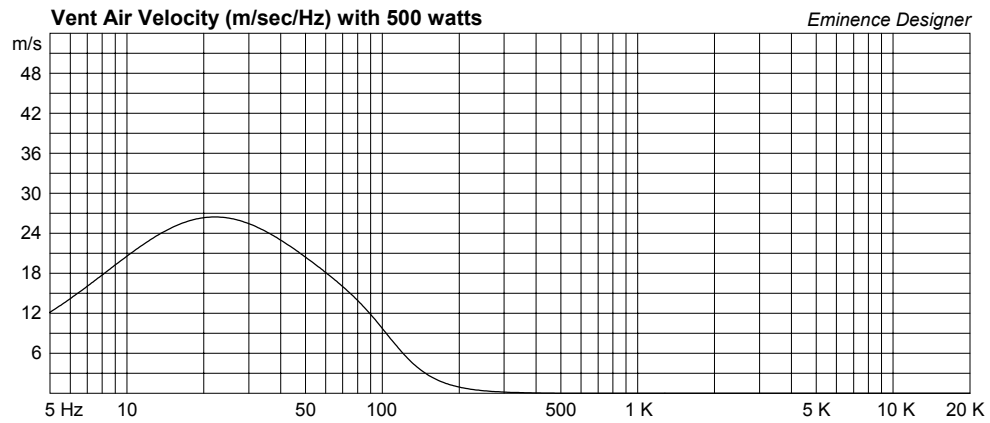
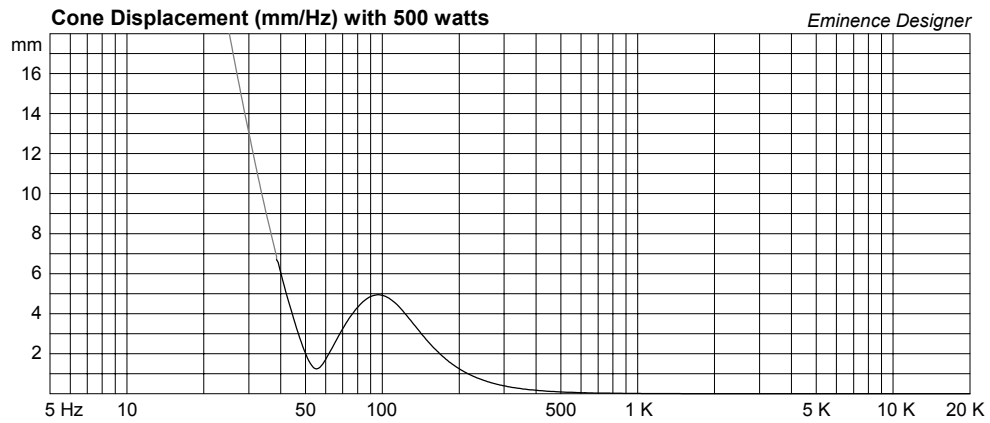
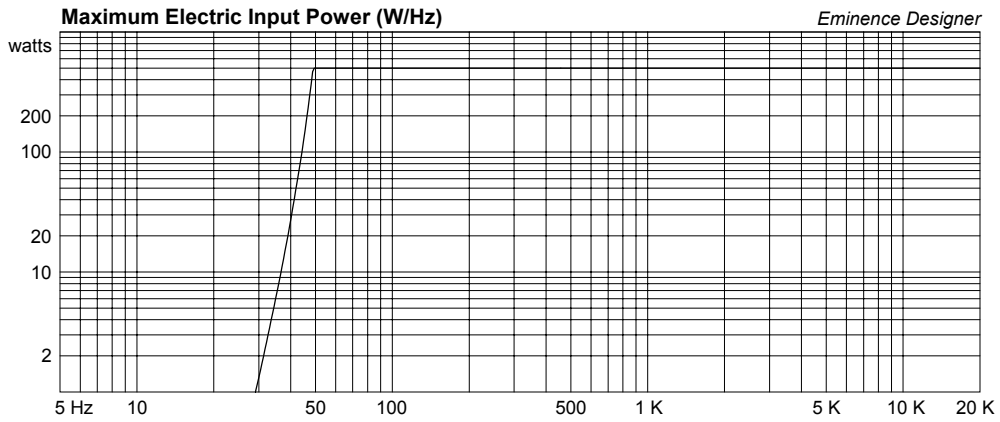
Eminence Designer

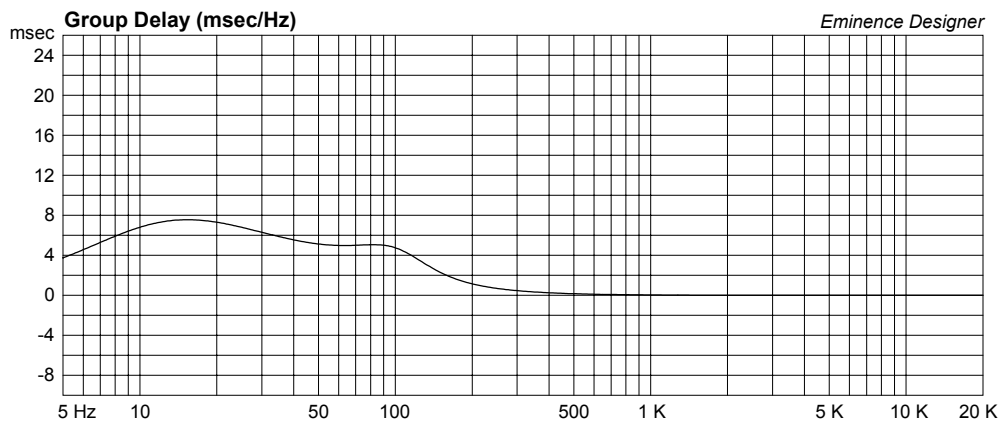
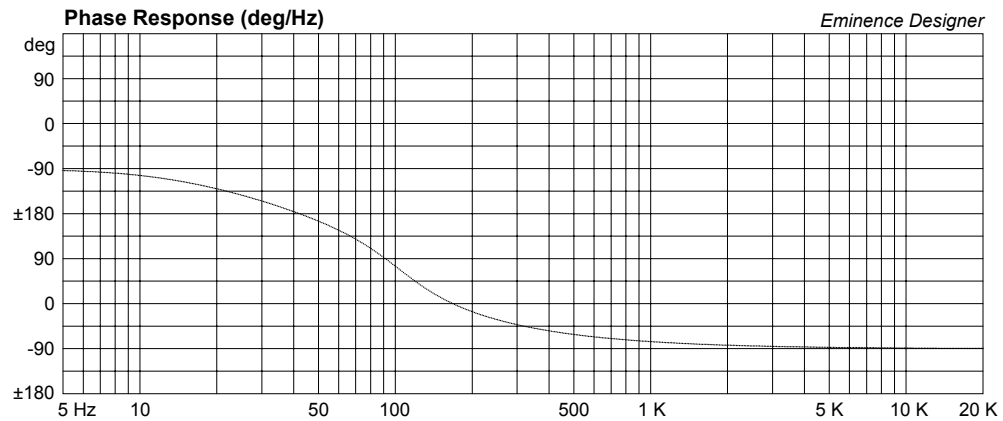
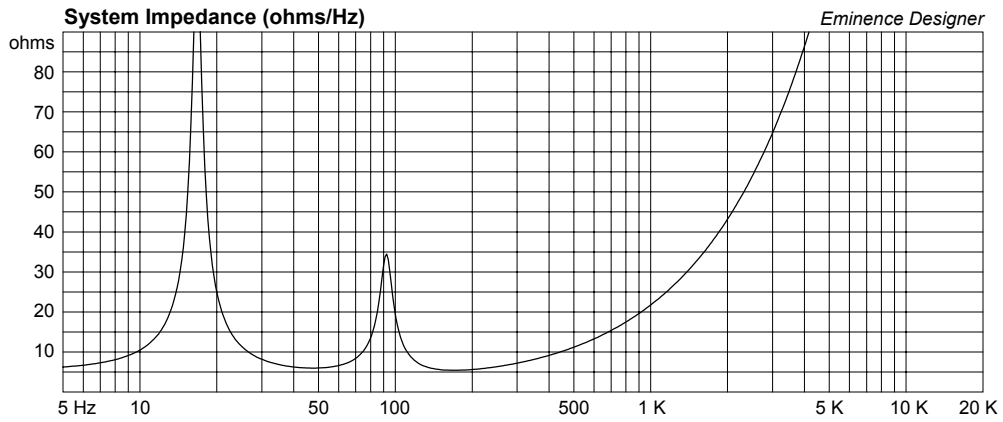


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







Delta Pro-18A Med Vented Sub Cabinet

By Jerry McNutt, Eminence Speaker LLC

Limit to 500 Watts; F3 of 48 Hz. Use a steep high pass at 35 Hz.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 5 cu.ft

V(total) = 5.339 cu.ft

Fb = 45 Hz

QL = 7

F3 = 48.28 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 3.585 in

Driver Properties

--Description--

Name: Delta Pro-18A

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 18" Sub Woofer

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 28.03 Hz

Qms = 10.38

Vas = 17.62 cu.ft

Xmax = 0.264 in

Sd = 184.1 sq.in

Qes = 0.33

Re = 5.3 ohms

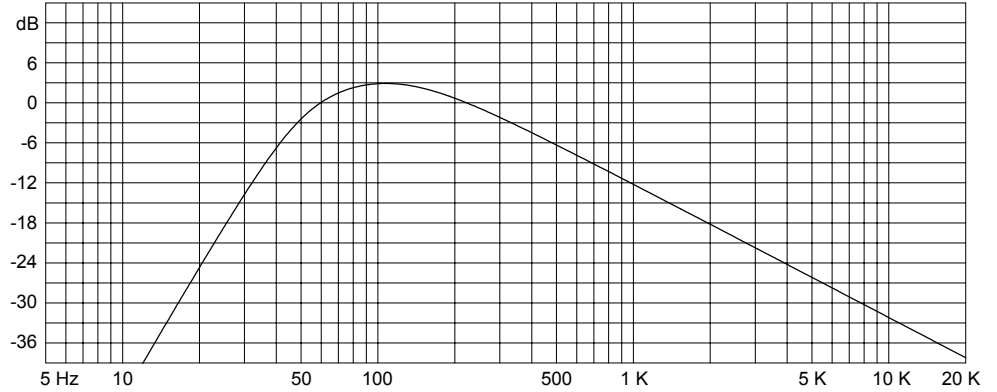
Le = 3.43 mH

Z = 8 ohms

Pe = 500 watts

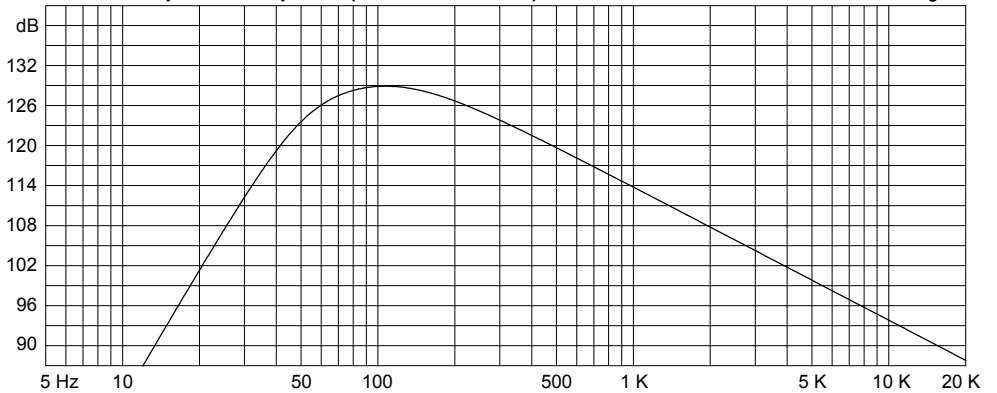
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



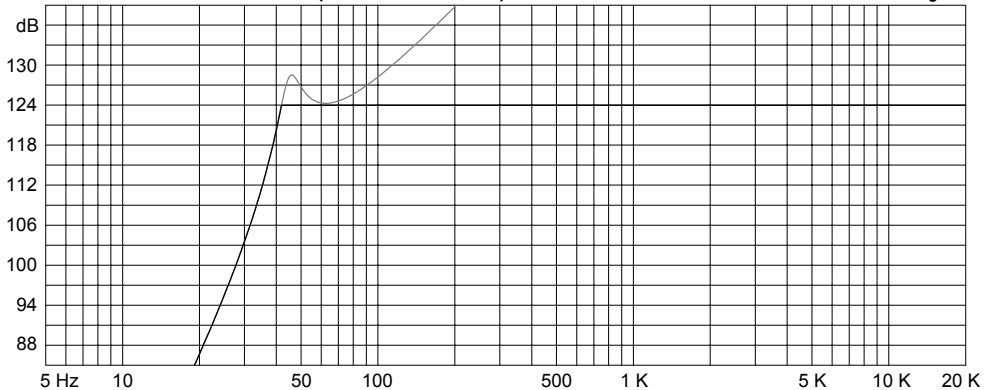
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 500 watts

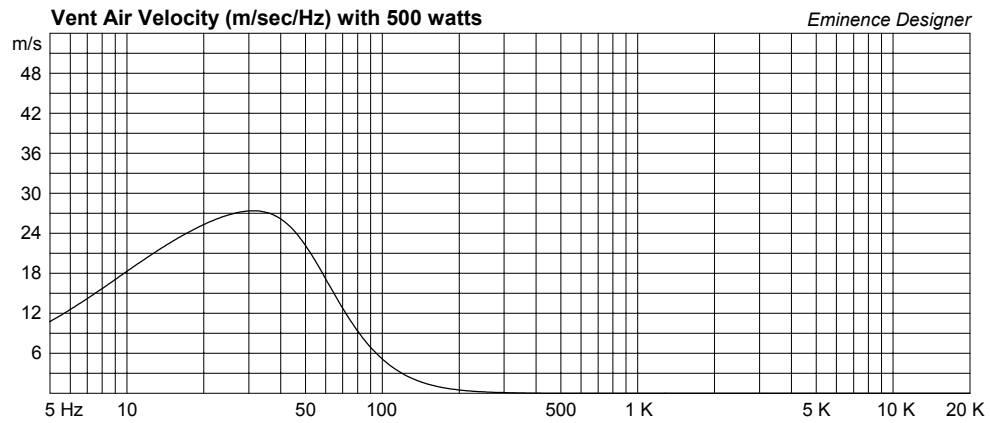
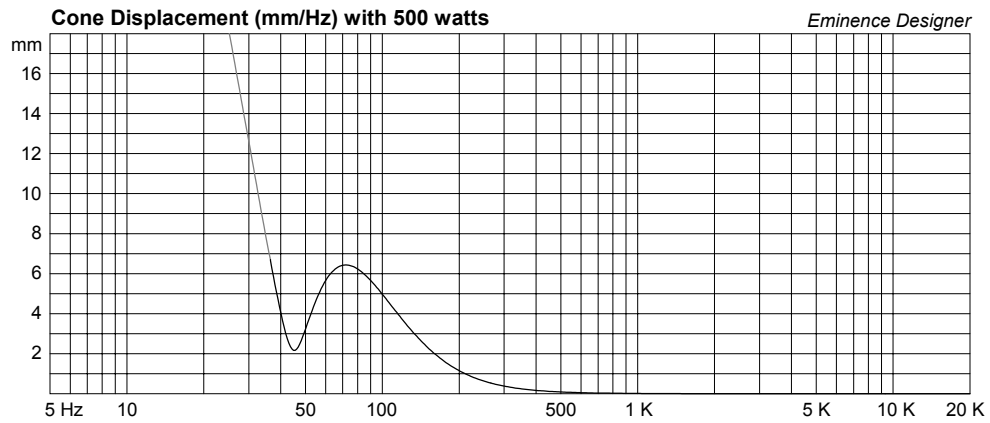
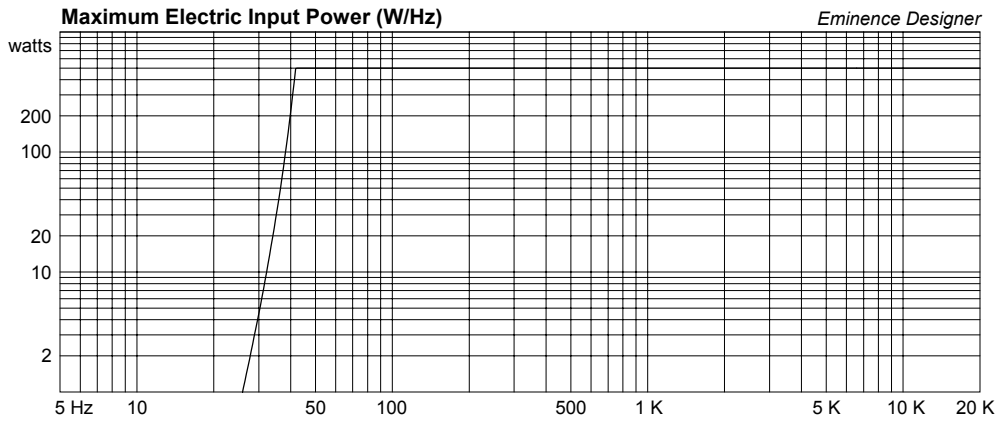
Eminence Designer

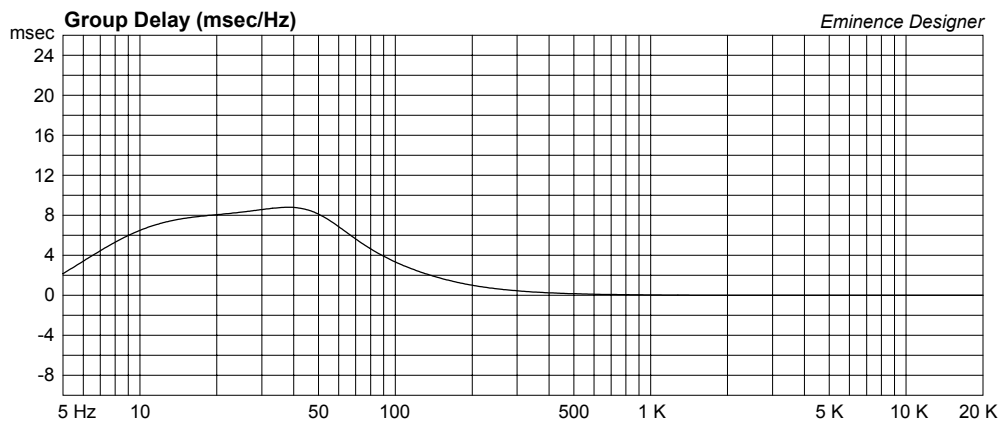
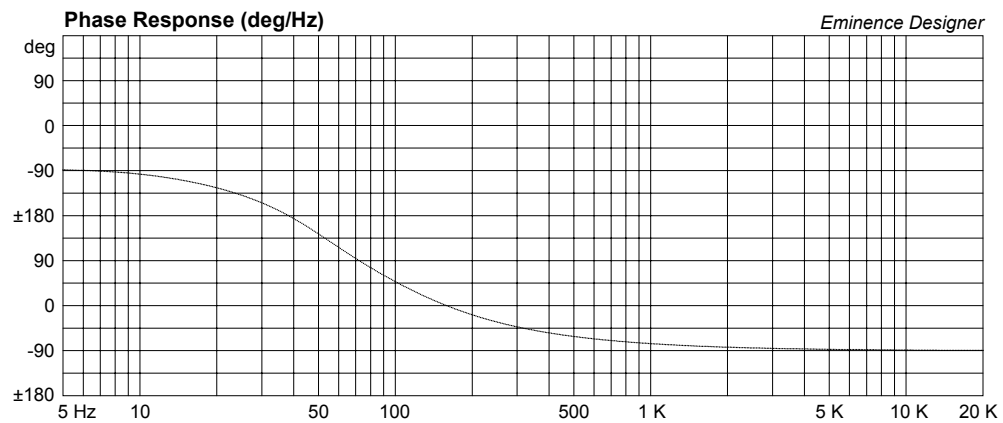
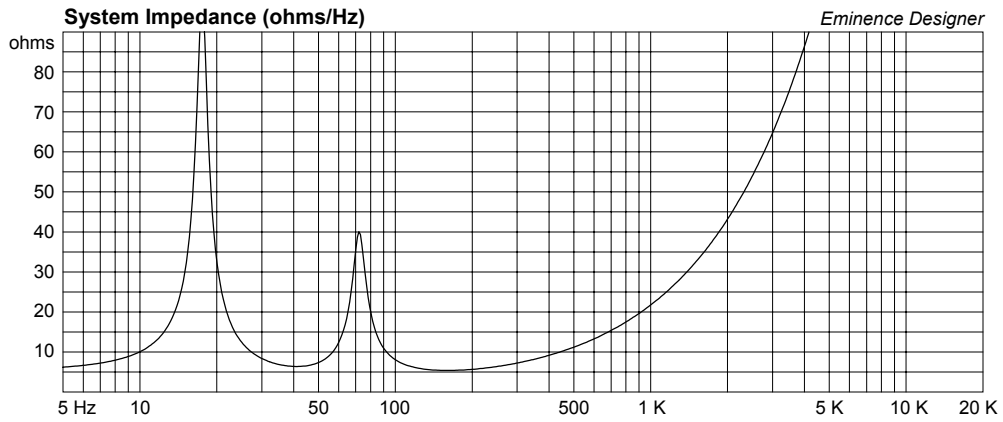


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







Delta Pro-18A Med to Large Sub Cabinet

By Jerry McNutt, Eminence Speaker LLC

Limit to 500 Watts; F3 of 45 Hz. Use steep high pass at 35 Hz.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 6 cu.ft

V(total) = 6.309 cu.ft

Fb = 46 Hz

QL = 7

F3 = 45.31 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 2 in

Driver Properties

--Description--

Name: Delta Pro-18A

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 18" Sub Woofer

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 28.03 Hz

Qms = 10.38

Vas = 17.62 cu.ft

Xmax = 0.264 in

Sd = 184.1 sq.in

Qes = 0.33

Re = 5.3 ohms

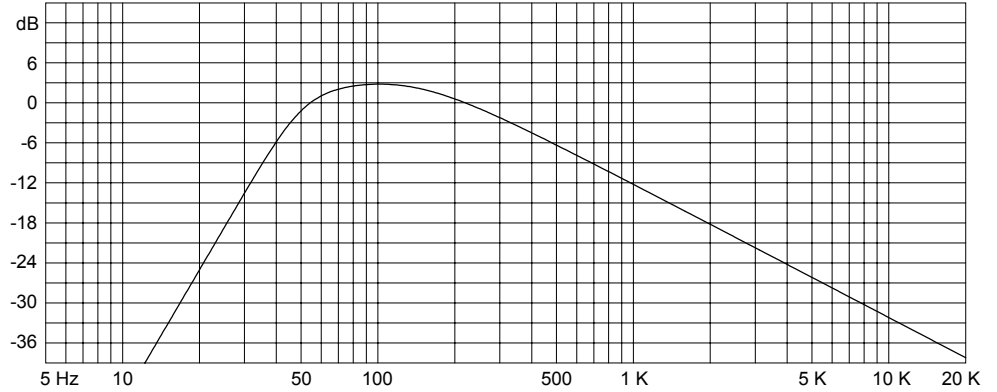
Le = 3.43 mH

Z = 8 ohms

Pe = 500 watts

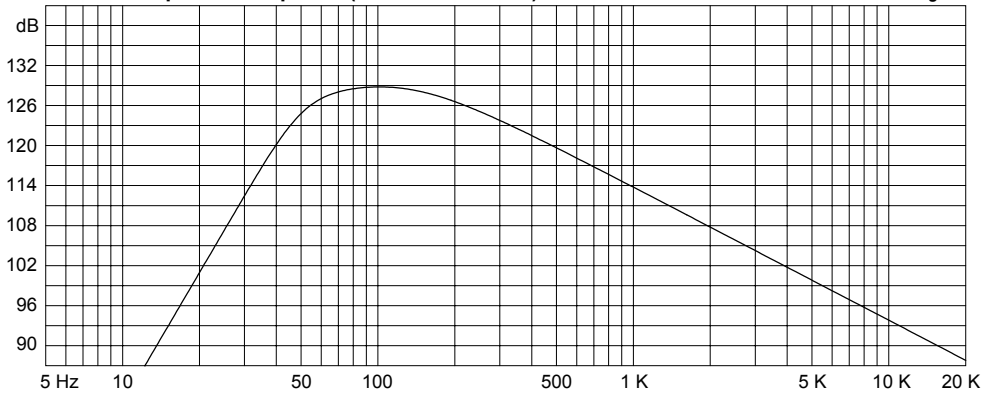
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



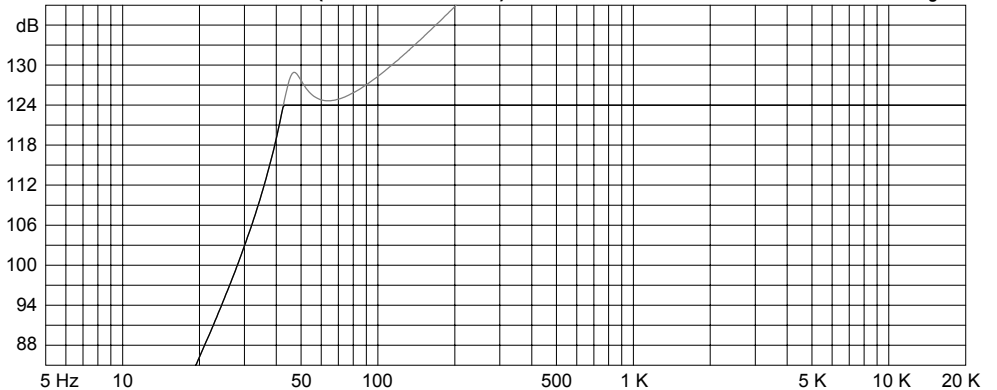
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 500 watts

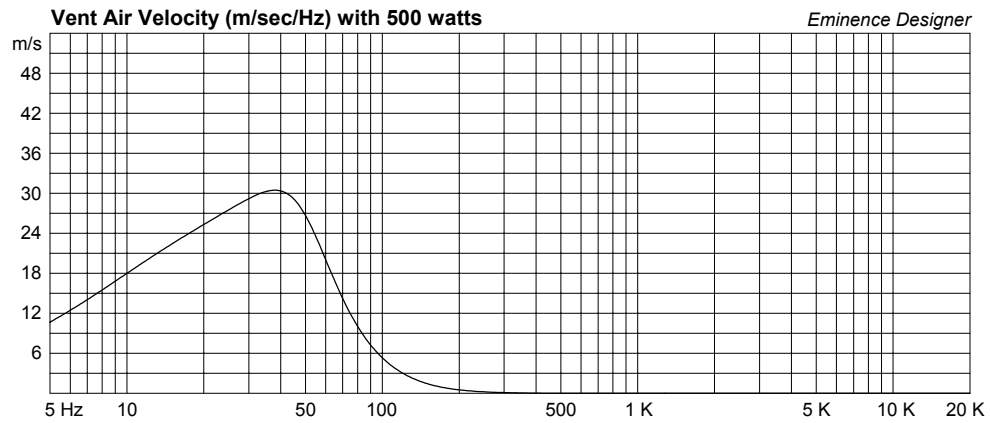
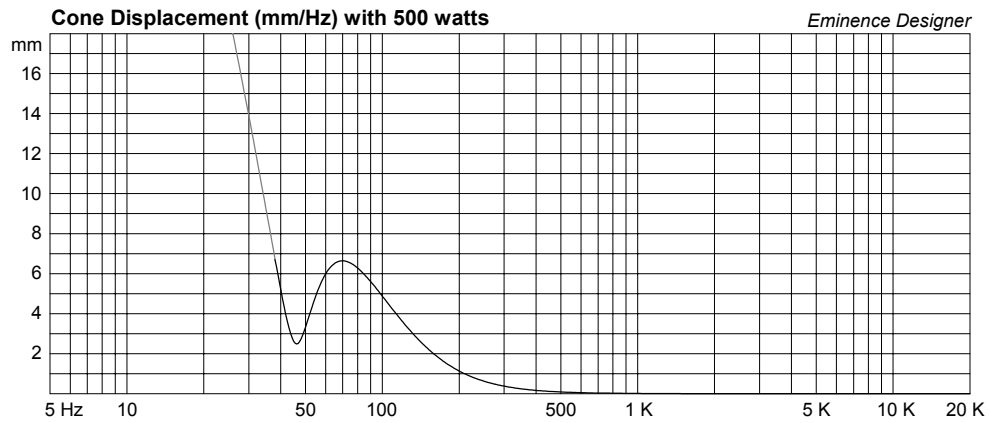
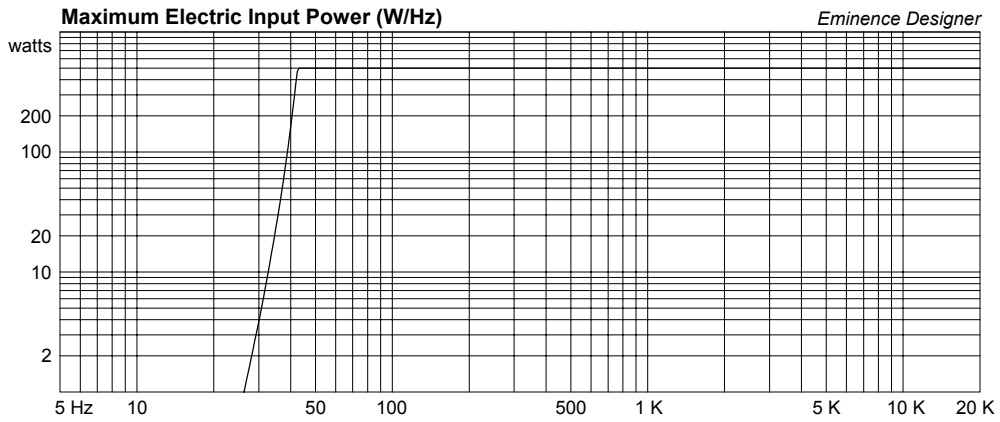
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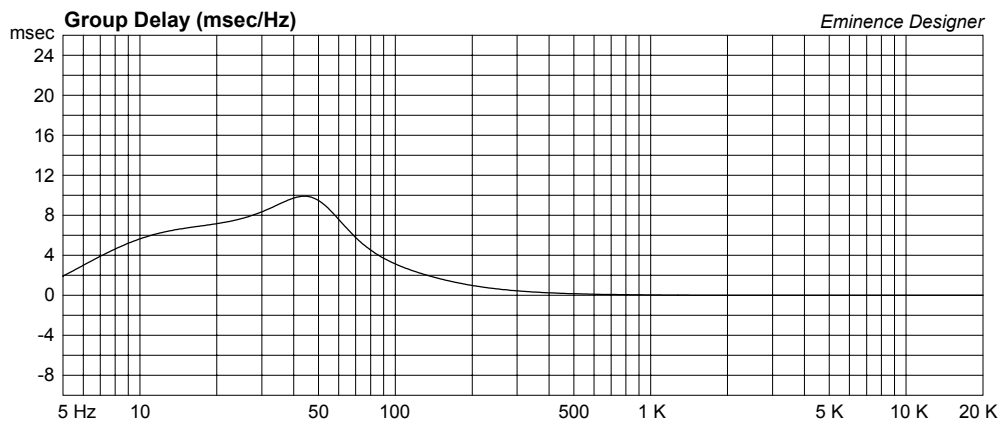
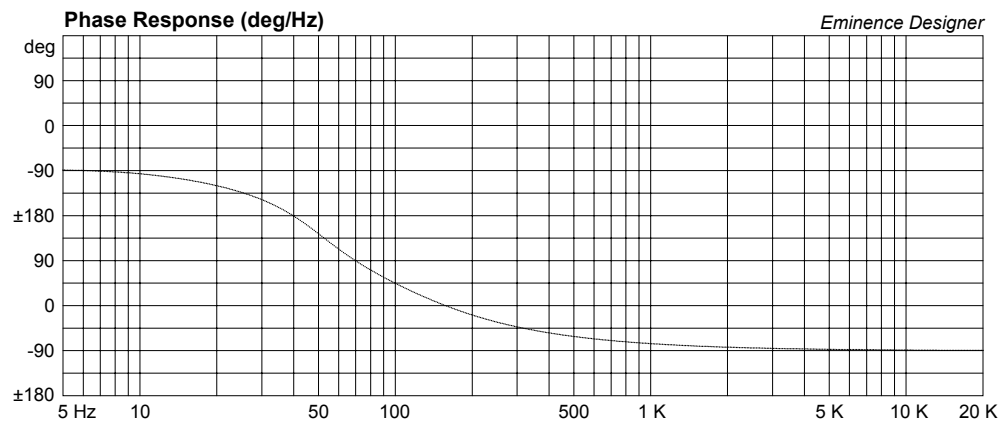
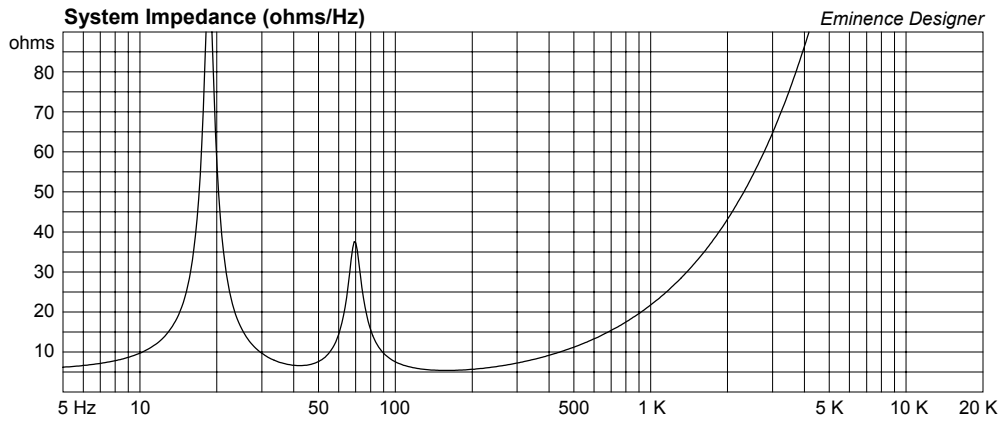


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







Delta Pro-18A Two By 18 Subwoofer

By Jerry McNutt, Eminence Speaker LLC

Limit to 1000 Watts; F3 of 49 Hz. Use a steep high pass at 35 Hz.
Slot Ports.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 9.8 cu.ft

V(total) = 10.7 cu.ft

Fb = 45 Hz

QL = 7

F3 = 48.75 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = rectangle

Vent ends = one flush

Hv = 20.5 in

Wv = 2 in

Lv = 6.773 in

Driver Properties

--Description--

Name: Delta Pro-18A

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 18" Sub Woofer

--Configuration--

No. of Drivers = 2

Mounting = Standard

Wiring = Parallel

Drivers sum coherently = Yes

--Driver Parameters--

Fs = 28.03 Hz

Qms = 10.38

Vas = 17.62 cu.ft [35.24]

Xmax = 0.264 in

Sd = 184.1 sq.in [368.3]

Qes = 0.33

Re = 5.3 ohms [2.65]

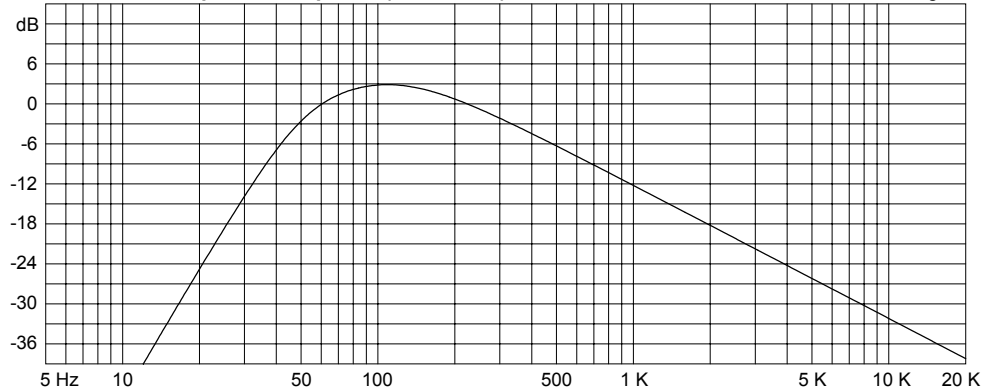
Le = 3.43 mH [1.715]

Z = 8 ohms [4]

Pe = 500 watts [1000]

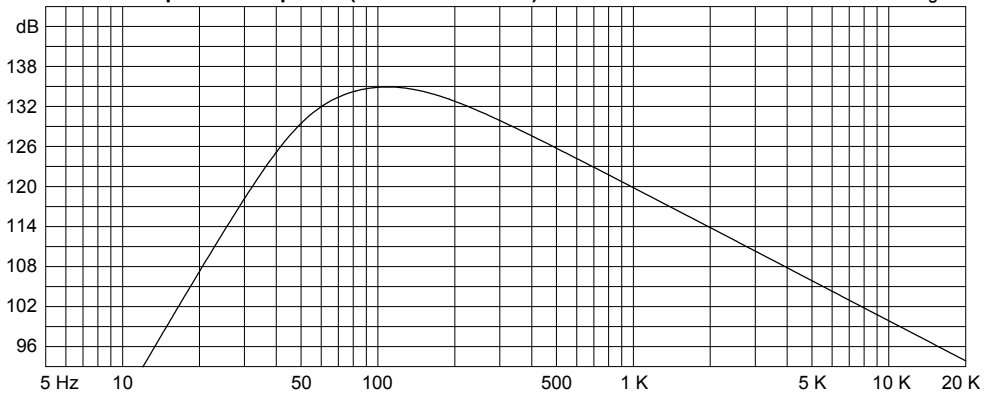
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 1000 watts

Eminence Designer



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

Eminence Designer

