

## PROFESSIONAL SERIES

# KAPPA PRO 18LF-8

The Kappa Pro 18LF provides tons of low frequency output in a lightweight, durable cast aluminum chassis. Use it as a subwoofer in small to medium sized boxes, a woofer in large three-way PA enclosures, or as a high-power bass guitar woofer. The 1,600 watt program power rating makes it an easy choice for new box designs or as a replacement for many single and double subwoofer cabinets.

- 1600 W Program Power
- 18" Nominal Diameter
- 8  $\Omega$

APPLICATION		ENCLOSURE	
Midrange	<input type="checkbox"/>	Sealed Box	<input type="checkbox"/>
Midbass	<input type="checkbox"/>	Vented Box	<input checked="" type="checkbox"/>
Woofer	<input checked="" type="checkbox"/>	Scoop Loading	<input type="checkbox"/>
Subwoofer	<input checked="" type="checkbox"/>	Horn Loading	<input checked="" type="checkbox"/>
Bass Guitar	<input checked="" type="checkbox"/>		

### SPECIFICATION

Nominal Basket Diameter	18", 457 mm
Nominal Impedance*	8 $\Omega$
Power Rating*	
Program Power	1600 W
Nominal Power	800 W
Resonance	32 Hz
Usable Frequency Range	38 Hz – 0.7 kHz
Sensitivity*	98 dB
Magnet Weight	120 oz.
Gap Height	0.37", 9.5 mm
Voice Coil Diameter	3", 76 mm

### MATERIALS OF CONSTRUCTION

- Copper voice coil
- Kapton former
- Ferrite magnet
- Vented and extended core
- Die-cast aluminum basket
- Treated paper cone
- Cloth cone edge
- Treated paper dust cap



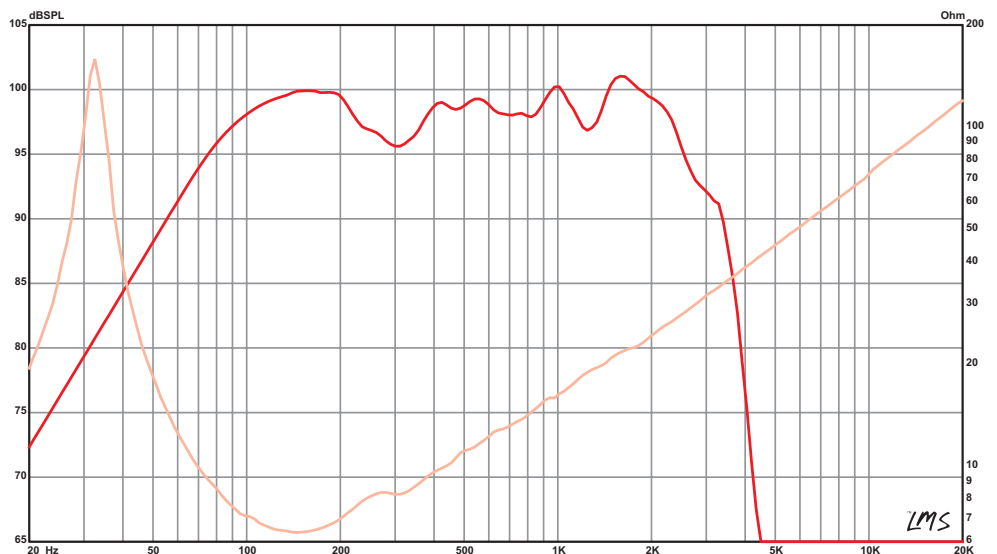
### THIELE & SMALL PARAMETERS

Fs	32 Hz
Re	5.39 $\Omega$
Le	1.21 mH
Qms	10.66
Qes	0.34
Qts	0.33
Vas	13.83 cu.ft., 391.61 liters
Vd	927.2 cc
Cms	0.21 mm/N
BL	19.39 T-M
Mms	119 grams
EBP	94
Xmax	8 mm
Sd	1159 cm <sup>2</sup>
Xlim	18 mm

### MOUNTING INFORMATION

Recommended Enclosure Volume	
Sealed	N/A
Vented	113.27–353.96 liters, 4–12.5 cu.ft.
Driver Volume Displaced	0.234 cu.ft., 6.62 liters
Overall Diameter	18", 457.2 mm
Baffle Hole Diameter	16.58", 421.1 mm
Front Sealing Gasket	Yes
Rear Sealing Gasket	Yes
Mounting Holes Diameter	0.28", 7.1 mm
Mounting Holes B.C.D.	17.25", 438.2 mm
Depth	8.15", 207 mm
Net Weight	24.5 lbs, 11.11 kg
Shipping Weight	28.1 lbs, 12.75 kg

### FREQUENCY RESPONSE & IMPEDANCE CURVE\*



VISIT [EMINENCE.COM](http://EMINENCE.COM) TO FIND A DEALER NEAR YOU.

\* See footnotes on page 2 for information regarding usable frequency range, nominal impedance, power rating and sensitivity.



## FOOTNOTES

### IMPEDANCE

Please consult [www.eminence.com](http://www.eminence.com) for specifications of models with alternative impedances.

### POWER RATING

Multiple units exceed published ratings evaluated under EIA 426A specification while tested in a free-air, non-temperature-controlled environment. Multiple compression drivers exceeded published ratings evaluated under EIA-426A or AES specification while mounted on Eminence's H290, H290S, or H2EA horn in a non-temperature-controlled environment.

### SENSITIVITY

The average output across the usable frequency range when applying 1W/1m into the nominal impedance. i.e: 2.83V/8Ω, 4V/16Ω. 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 | Yamaha P3500S amplifier | 2700 cu. ft. chamber with fiberglass on all six surfaces (three with custom-made wedges). Compression drivers were tested using a 2ft x 2ft baffle built into the wall with horn front mounted.

### COAXIALS

BETA 8CX, 10CX, and 12CX are coaxial speakers with tweeter sold separately. Published usable frequency response contingent upon use of ASD:1001 HF Driver.

Prices, product cosmetics and specifications are subject to change without notice.

**EMINENCE SPEAKER LLC**

838 Mulberry Pike, Eminence, KY 40019



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# Kappa Pro 18LF-8 Double 18 Vented Subwoofer

By Jerry McNutt, Eminence Speaker LLC  
1600 Watts, F3 at 48 Hz, Great Rock and Roll Sub  
High Pass at 40 Hz and Low Pass at 120 Hz for Subwoofer Use



## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 12 cu.ft

V(total) = 12.74 cu.ft

Fb = 47 Hz

QL = 7

F3 = 47.83 Hz

Fill = normal

--Vents--

No. of Vents = 8

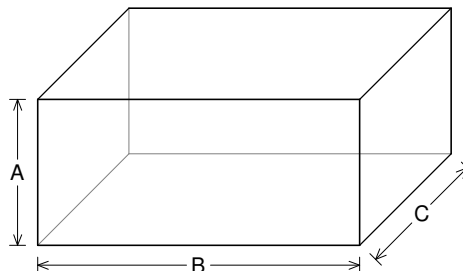
Vent shape = rectangle

Vent ends = one flush

Hv = 3.576 in

Wv = 3.576 in

Lv = 3.621 in



--External Dimensions--

A = 21.5 in

B = 47.5 in

C = 25.43 in

--Internal Dimensions--

A = 20 in

B = 46 in

C = 23.93 in

--Wall Thickness--

Front = 0.75 in

Side = 0.75 in

## Driver Properties

--Description--

Name: Kappa Pro 18LF-8

Type: Standard one-way driver

Company: Eminence Speaker LLC USA

Comment: 18" Cast Frame Pro Woofer/Sub Woofer

--Configuration--

**No. of Drivers = 2**

Mounting = Standard

Wiring = Parallel

Drivers sum coherently = Yes

--Mechanical Parameters--

Fs = 32.03 Hz

Qms = 10.66

Vas = 391.6 liters [783.2]

Cms = 0.21 mm/N [0.105]

Mms = 118.7 g [237.3]

Rms = 2.24 kg/s [4.48]

Xmax = 8 mm

Xmech = 18 mm

P-Dia = 382 mm [540.2]

Sd = 1159 sq.cm [2318]

P-Vd = 0.917 liters [1.833]

--Electrical Parameters--

Qes = 0.34

Re = 5.39 ohms [2.695]

Le = 1.21 mH [0.605]

Z = 8 ohms [4]

BL = 19.39 Tm [19.46]

Pe = 800 watts [1600]

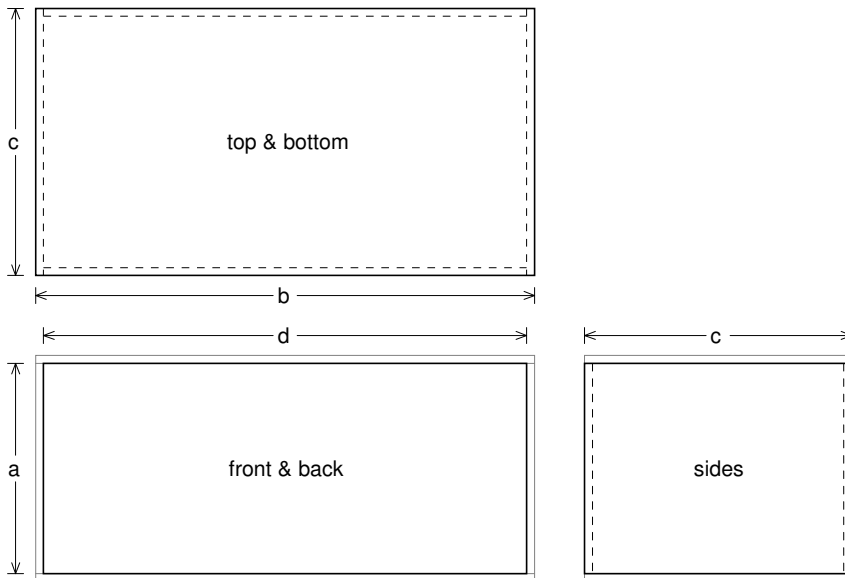
--Electromech. Parameters--

Qts = 0.33

no = 3.649 % [7.298]

1-W SPL = 97.77 dB [100.8]

2.83-V SPL = 99.48 dB [105.5]



**Box Parts**

Box Shape: Square Prism

1 Top, 1 Bottom: depth (c) = 25.43 in  
width (b) = 47.5, thickness = 0.75 in

1 Front, 1 Back: height (a) = 20 in  
width (d) = 46, thickness = 0.75 in

2 Sides: height (a) = 20 in  
depth (c) = 25.43, thickness = 0.75 in

*--Vent Parts--*

8 Tops, 8 Bottoms:

width (e) = 3.826, length (h) = 3.621 in  
thickness = 0.125 in

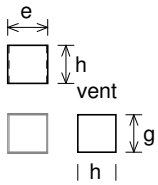
16 Sides:

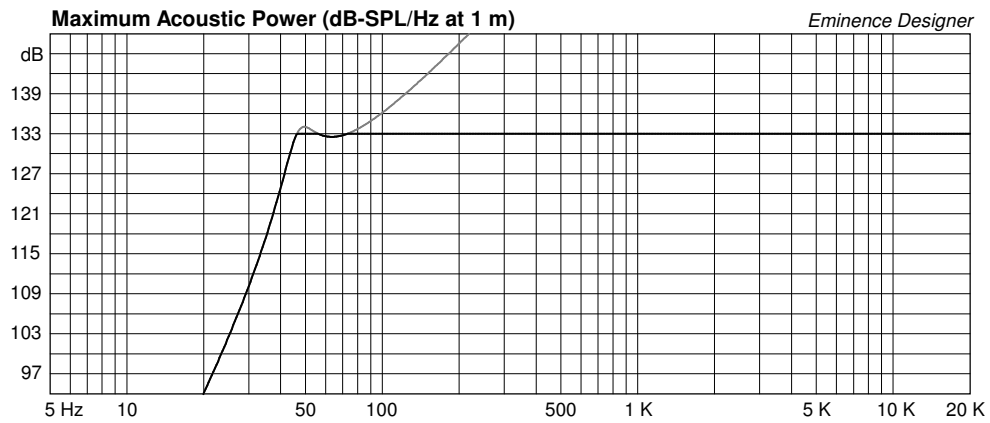
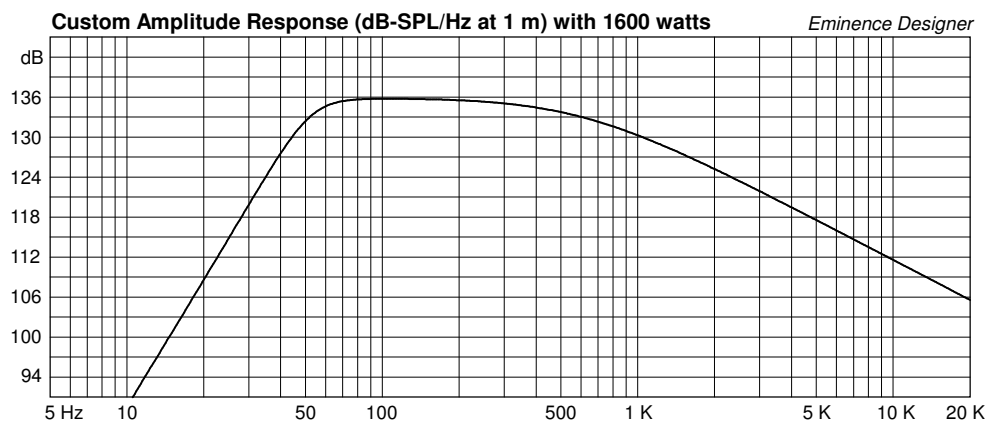
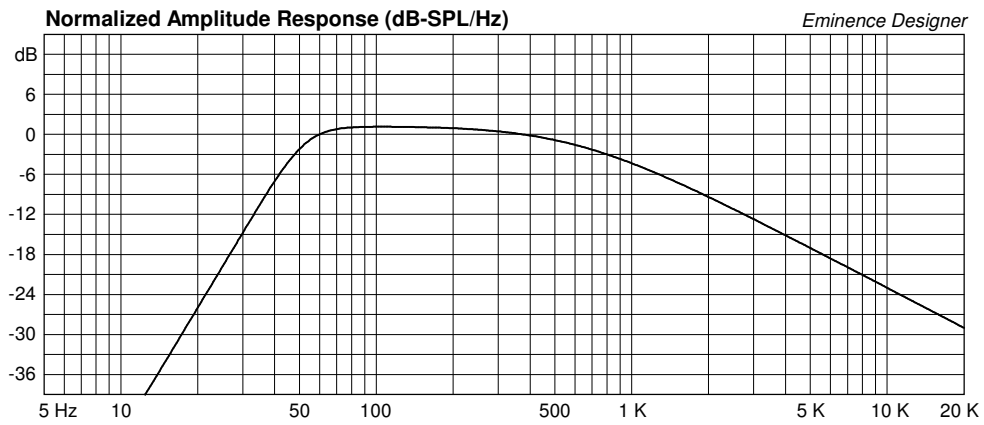
height (g) = 3.576, length (h) = 3.621 in  
thickness = 0.125 in

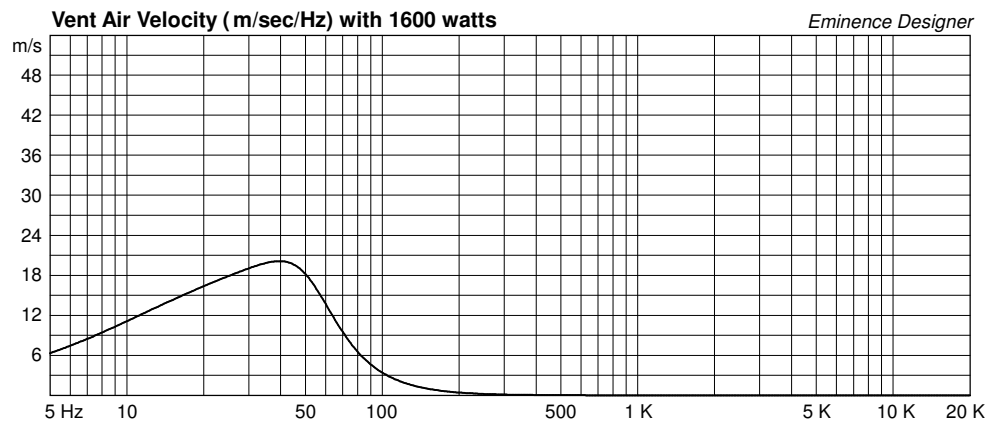
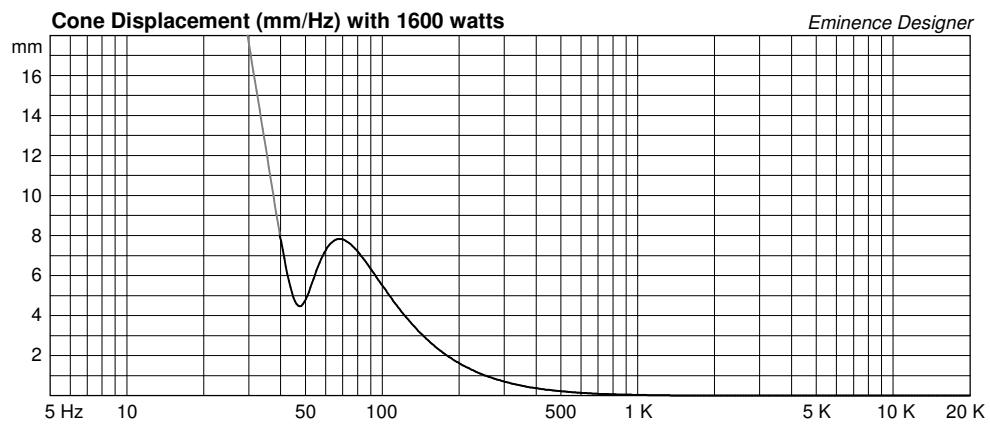
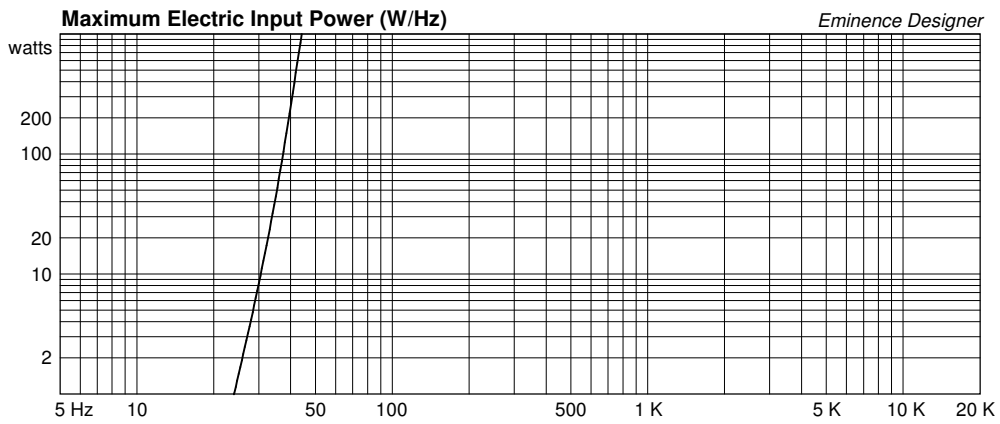
*--Driver Mounting--*

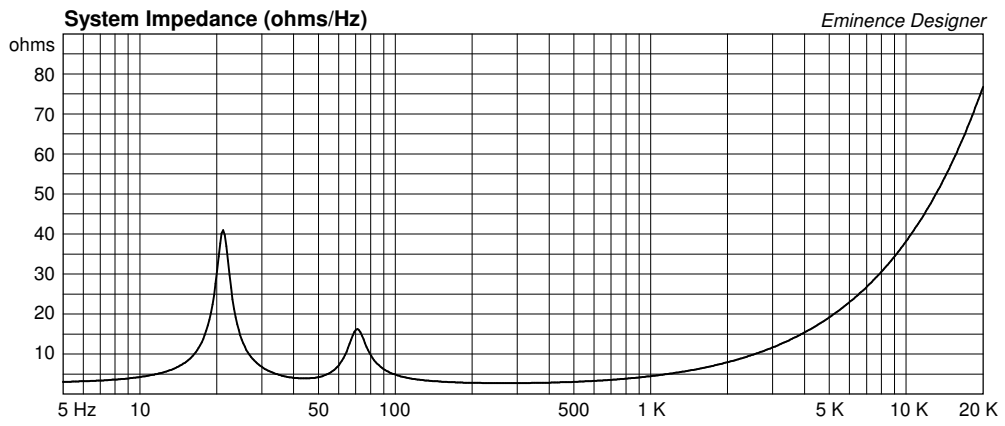
Mounting: Flush

Aim: All drivers face same direction









# Kappa Pro 18LF-8 Large Vented Subwoofer

By Jerry McNutt, Eminence Speaker LLC

500 Watts, F3 at 40 Hz

High Pass at 35 Hz and Low Pass at 100 Hz for Subwoofer Use



## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 10 cu.ft

V(total) = 10.34 cu.ft

Fb = 40 Hz

QL = 7

F3 = 39.58 Hz

Fill = normal

--Vents--

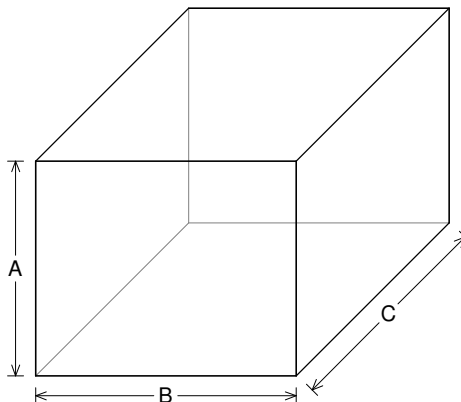
No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 2.823 in



--External Dimensions--

A = 23.5 in

B = 28.5 in

C = 31.58 in

--Internal Dimensions--

A = 22 in

B = 27 in

C = 30.08 in

--Wall Thickness--

Front = 0.75 in

Side = 0.75 in

## Driver Properties

--Description--

Name: Kappa Pro 18LF-8

Type: Standard one-way driver

Company: Eminence Speaker LLC USA

Comment: 18" Cast Frame Pro Woofer/Sub Woofer

--Configuration--

**No. of Drivers = 1**

--Mechanical Parameters--

Fs = 32.03 Hz

Qms = 10.66

Vas = 391.6 liters

Cms = 0.21 mm/N

Mms = 118.7 g

Rms = 2.24 kg/s

Xmax = 8 mm

Xmech = 18 mm

P-Dia = 382 mm

Sd = 1159 sq.cm

P-Vd = 0.917 liters

--Electrical Parameters--

Qes = 0.34

Re = 5.39 ohms

Le = 1.21 mH

Z = 8 ohms

BL = 19.39 Tm

Pe = 800 watts

--Electromech. Parameters--

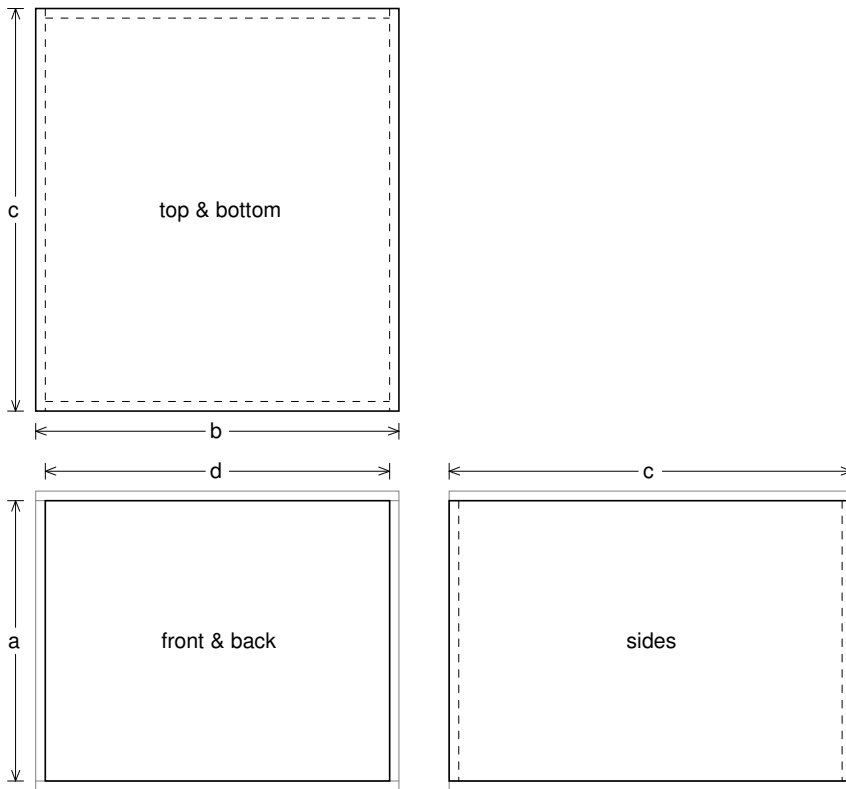
Qts = 0.33

no = 3.649 %

1-W SPL = 97.77 dB

2.83-V SPL = 99.48 dB





**Box Parts**

Box Shape: Square Prism

1 Top, 1 Bottom: depth (c) = 31.58 in  
width (b) = 28.5, thickness = 0.75 in

1 Front, 1 Back: height (a) = 22 in  
width (d) = 27, thickness = 0.75 in

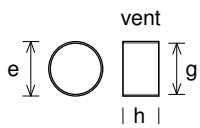
2 Sides: height (a) = 22 in  
depth (c) = 31.58, thickness = 0.75 in

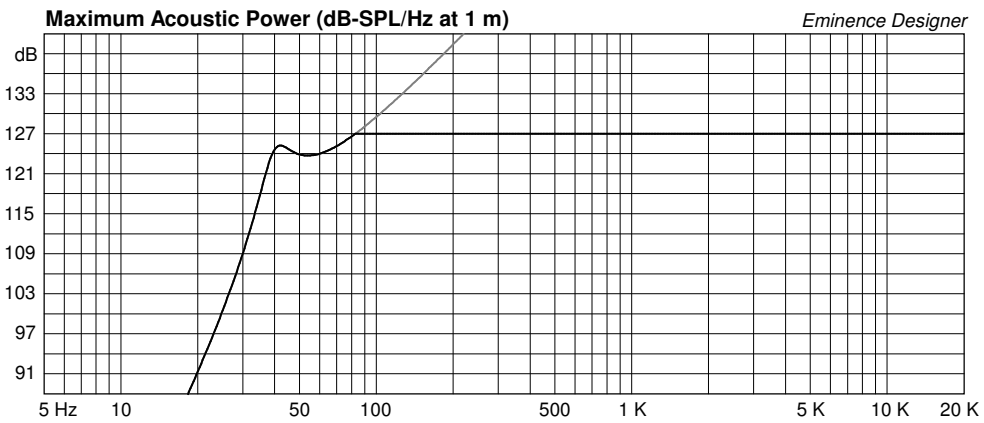
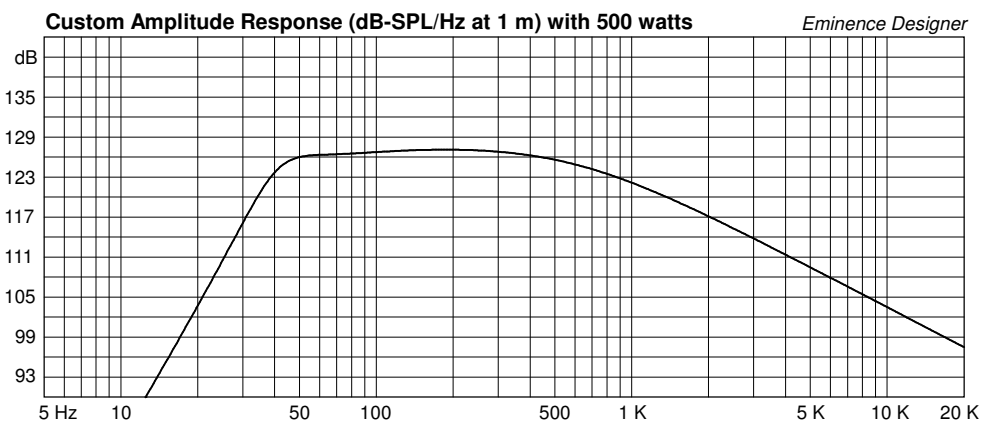
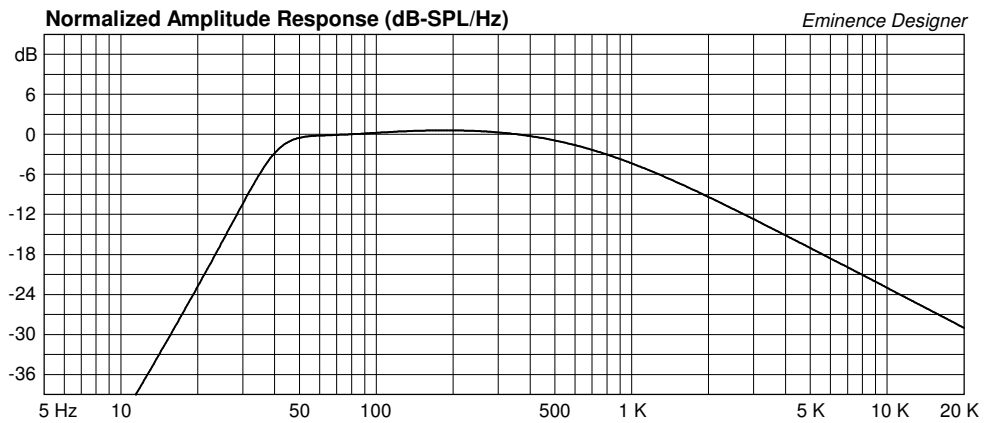
*--Vent Parts--*

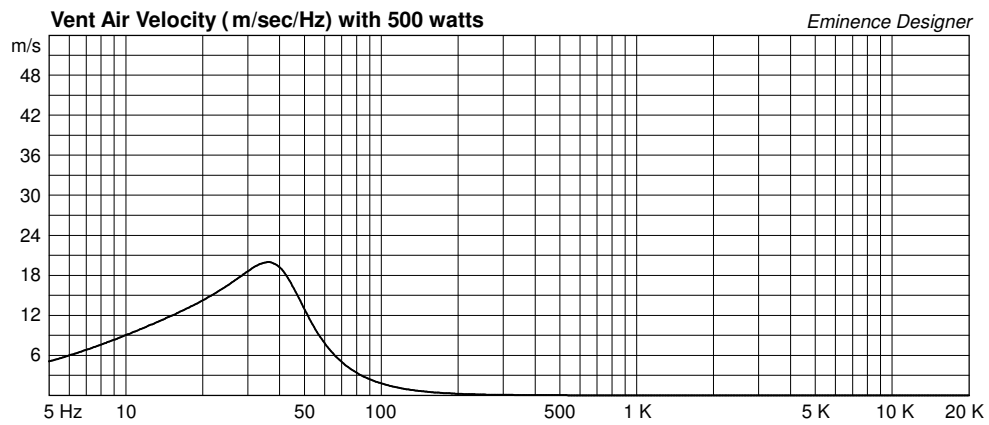
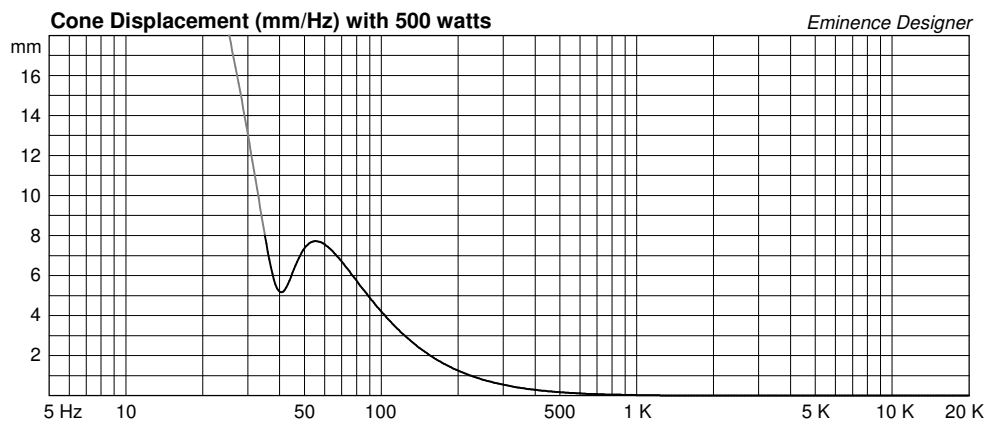
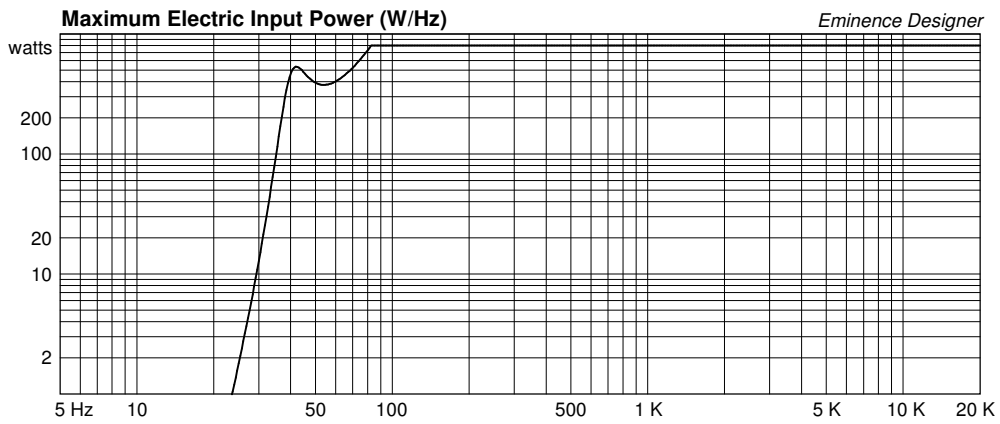
4 Ducts: outside diameter (e) = 4.25 in  
inside diameter (g) = 4 in  
length (h) = 2.823 in

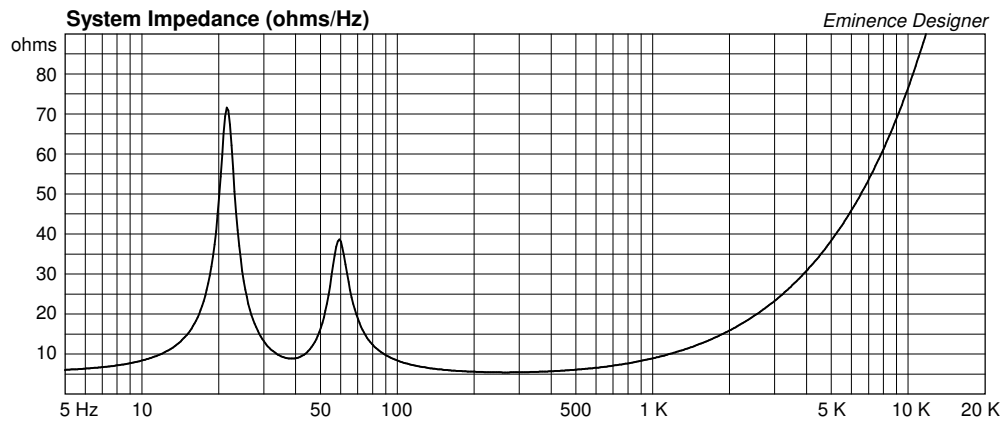
*--Driver Mounting--*

Mounting: Flush









# Kappa Pro 18LF-8 Med Vented Subwoofer

By Jerry McNutt, Eminence Speaker LLC  
700 Watts, F3 at 46 Hz, Great Rock and Roll Sub  
High Pass at 35 Hz and Low Pass at 120 Hz for Subwoofer Use



## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 6.8 cu.ft

V(total) = 7.185 cu.ft

Fb = 45 Hz

QL = 7

F3 = 45.53 Hz

Fill = normal

--Vents--

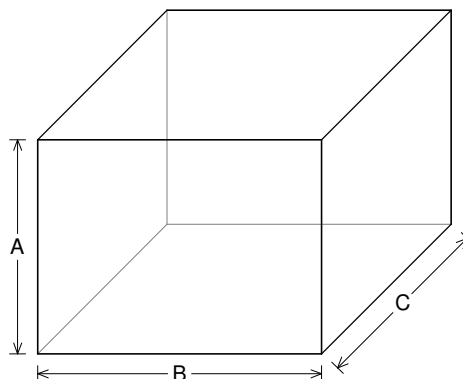
No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 4.196 in



--External Dimensions--

A = 21.5 in

B = 28.5 in

C = 24.49 in

--Internal Dimensions--

A = 20 in

B = 27 in

C = 22.99 in

--Wall Thickness--

Front = 0.75 in

Side = 0.75 in

## Driver Properties

--Description--

Name: Kappa Pro 18LF-8

Type: Standard one-way driver

Company: Eminence Speaker LLC USA

Comment: 18" Cast Frame Pro Woofer/Sub Woofer

--Configuration--

**No. of Drivers = 1**

--Mechanical Parameters--

Fs = 32.03 Hz

Qms = 10.66

Vas = 391.6 liters

Cms = 0.21 mm/N

Mms = 118.7 g

Rms = 2.24 kg/s

Xmax = 8 mm

Xmech = 18 mm

P-Dia = 382 mm

Sd = 1159 sq.cm

P-Vd = 0.917 liters

--Electrical Parameters--

Qes = 0.34

Re = 5.39 ohms

Le = 1.21 mH

Z = 8 ohms

BL = 19.39 Tm

Pe = 800 watts

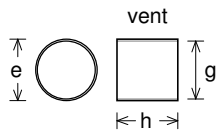
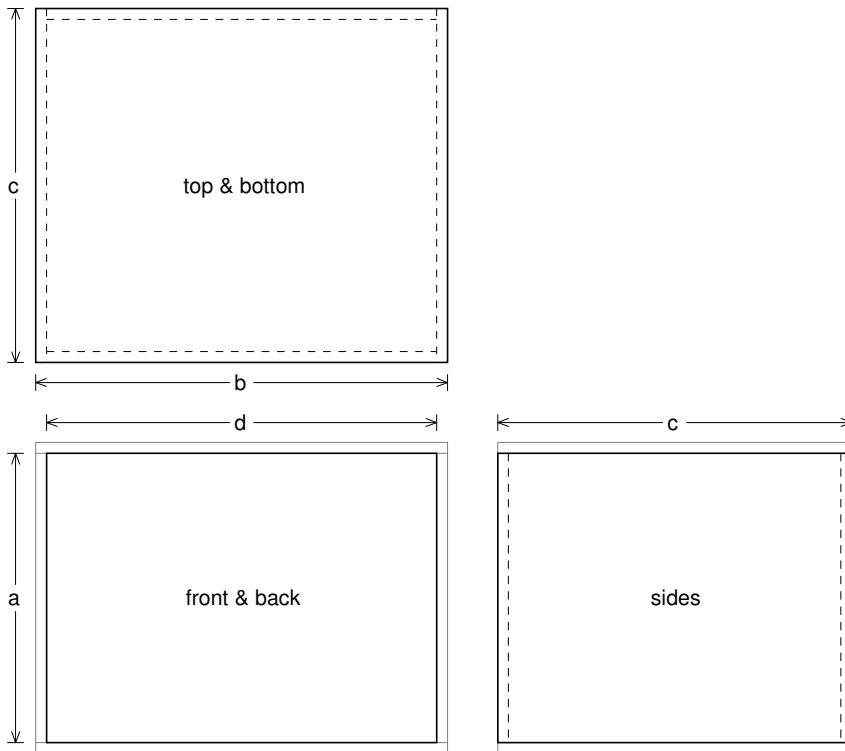
--Electromech. Parameters--

Qts = 0.33

no = 3.649 %

1-W SPL = 97.77 dB

2.83-V SPL = 99.48 dB



### Box Parts

Box Shape: Square Prism

1 Top, 1 Bottom: depth (c) = 24.49 in  
width (b) = 28.5, thickness = 0.75 in

1 Front, 1 Back: height (a) = 20 in  
width (d) = 27, thickness = 0.75 in

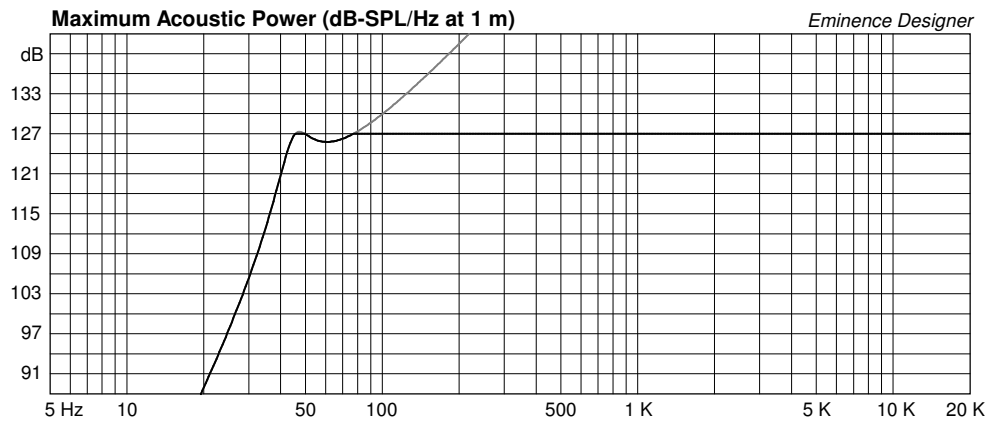
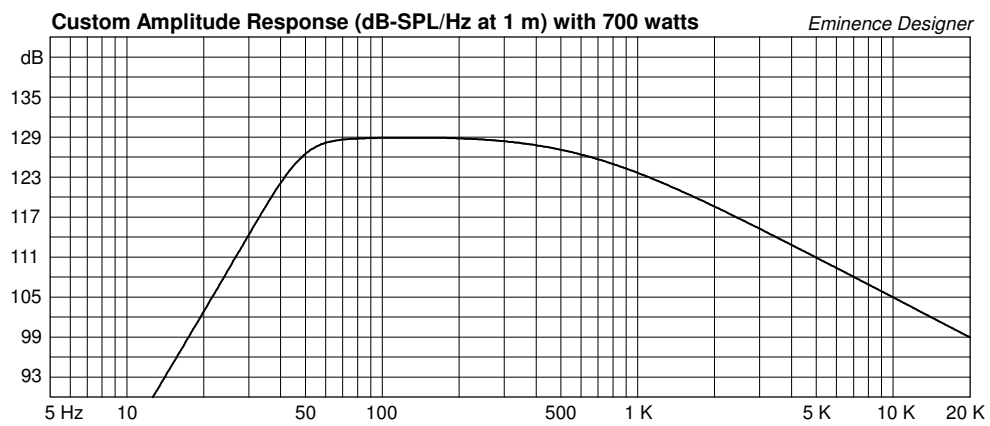
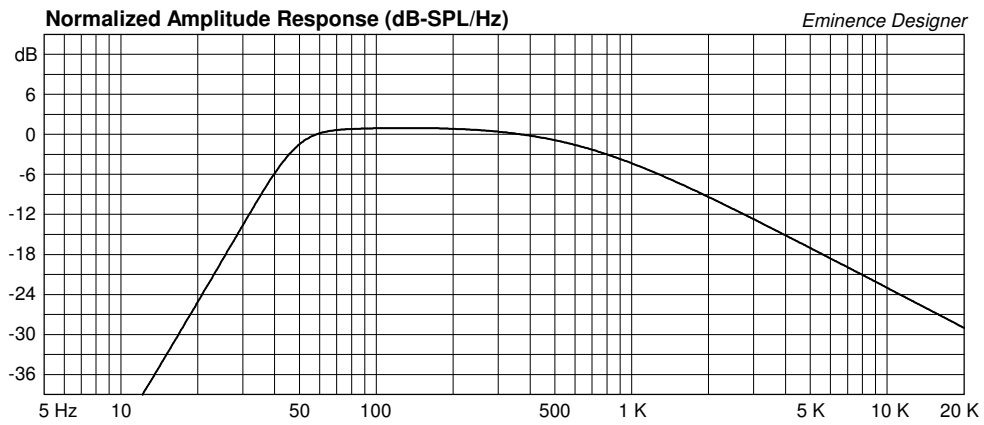
2 Sides: height (a) = 20 in  
depth (c) = 24.49, thickness = 0.75 in

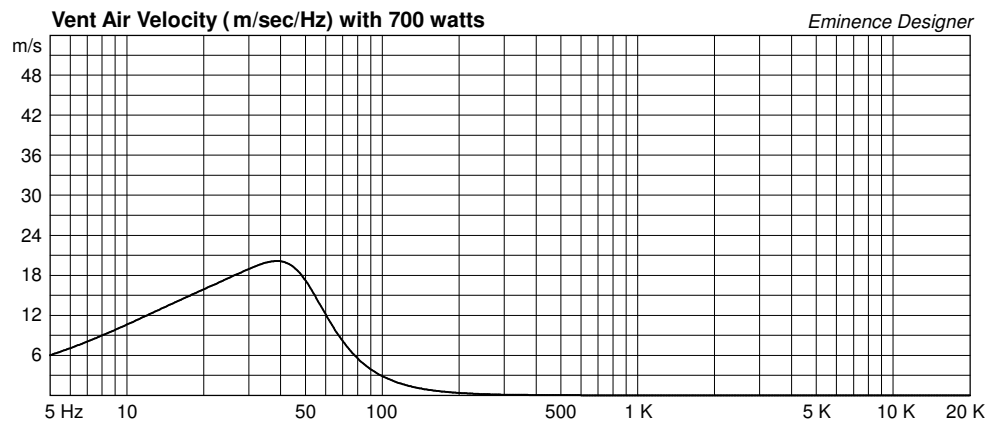
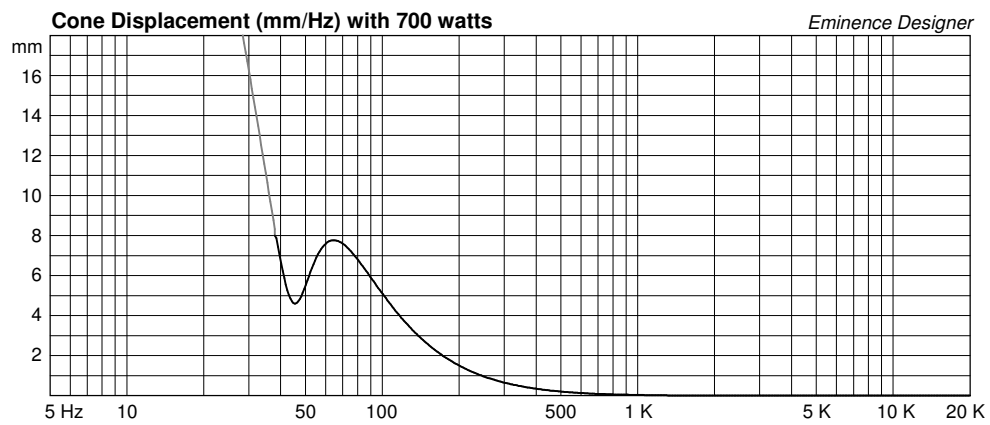
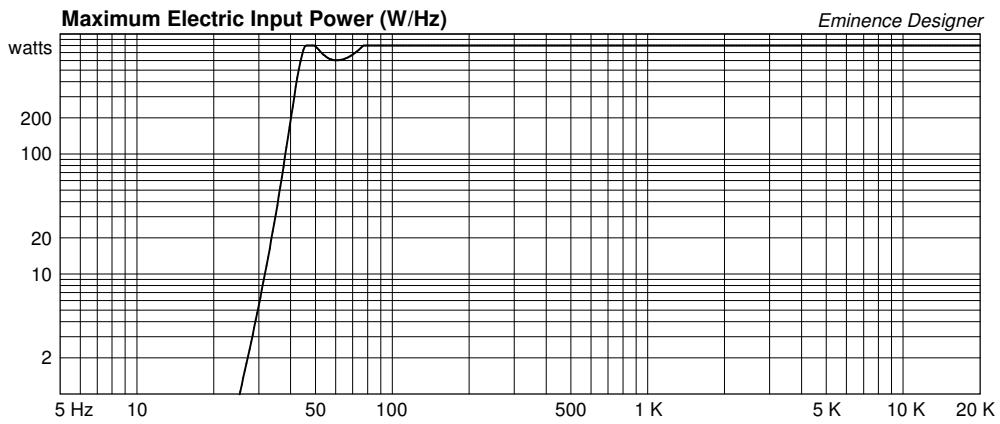
--Vent Parts--

4 Ducts: outside diameter (e) = 4.25 in  
inside diameter (g) = 4 in  
length (h) = 4.196 in

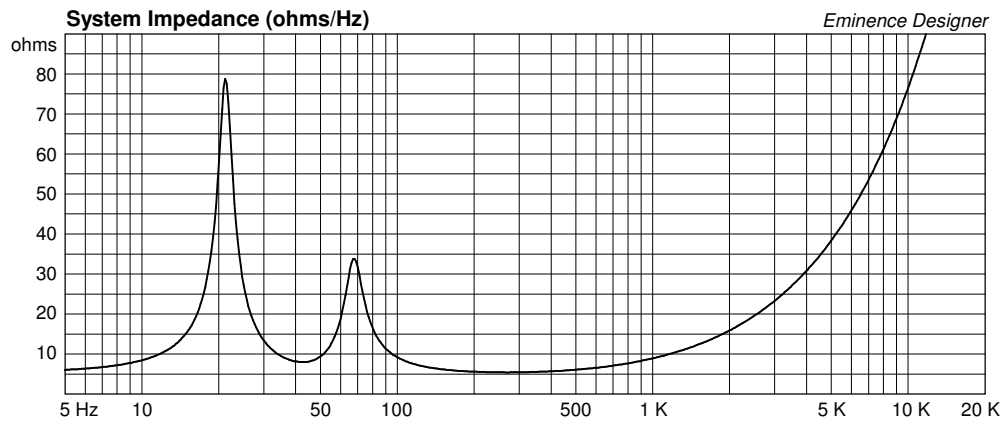
--Driver Mounting--

Mounting: Flush









# Kappa Pro 18LF-8 Small Vented Woofer Box

By Jerry McNutt, Eminence Speaker LLC

800 Watts, F3 at 52 Hz

Run full range for Bass Guitar, or HP at 40 Hz and Low Pass at 120 Hz for Sub



## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 4.6 cu.ft

V(total) = 5.082 cu.ft

Fb = 48 Hz

QL = 7

F3 = 52.35 Hz

Fill = normal

--Vents--

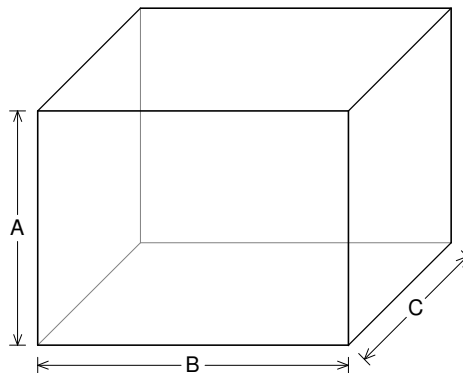
No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 7.145 in



--External Dimensions--

A = 21.5 in

B = 28.5 in

C = 17.76 in

--Internal Dimensions--

A = 20 in

B = 27 in

C = 16.26 in

--Wall Thickness--

Front = 0.75 in

Side = 0.75 in

## Driver Properties

--Description--

Name: Kappa Pro 18LF-8

Type: Standard one-way driver

Company: Eminence Speaker LLC USA

Comment: 18" Cast Frame Pro Woofer/Sub Woofer

--Configuration--

**No. of Drivers = 1**

--Mechanical Parameters--

Fs = 32.03 Hz

Qms = 10.66

Vas = 391.6 liters

Cms = 0.21 mm/N

Mms = 118.7 g

Rms = 2.24 kg/s

Xmax = 8 mm

Xmech = 18 mm

P-Dia = 382 mm

Sd = 1159 sq.cm

P-Vd = 0.917 liters

--Electrical Parameters--

Qes = 0.34

Re = 5.39 ohms

Le = 1.21 mH

Z = 8 ohms

BL = 19.39 Tm

Pe = 800 watts

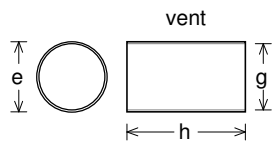
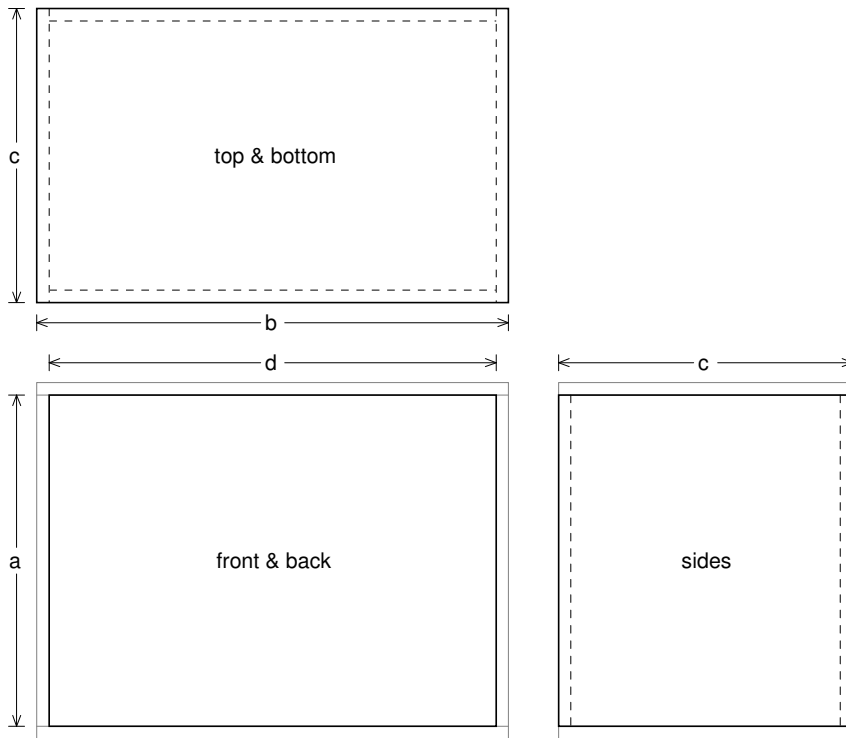
--Electromech. Parameters--

Qts = 0.33

no = 3.649 %

1-W SPL = 97.77 dB

2.83-V SPL = 99.48 dB



### Box Parts

Box Shape: Square Prism

1 Top, 1 Bottom: depth ( $c$ ) = 17.76 in  
width ( $b$ ) = 28.5, thickness = 0.75 in

1 Front, 1 Back: height ( $a$ ) = 20 in  
width ( $d$ ) = 27, thickness = 0.75 in

2 Sides: height ( $a$ ) = 20 in  
depth ( $c$ ) = 17.76, thickness = 0.75 in

--Vent Parts--

4 Ducts: outside diameter ( $e$ ) = 4.25 in  
inside diameter ( $g$ ) = 4 in  
length ( $h$ ) = 7.145 in

--Driver Mounting--

Mounting: Flush

