

Alpha 3-16 8x3 Sealed Column Array

By Jerry McNutt, Eminence Speaker LLC
280 Watts, Use above 150 Hz.



Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square

--Box Parameters--

Vb = 0.299 cu.ft

V(total) = 0.321 cu.ft

Qtc = 0.668

QL = 20

F3 = 160.3 Hz

Fill = heavy

Driver Properties

--Description--

Name: Alpha 3-16

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 3" Full Range Driver, 16 ohm

--Configuration--

No. of Drivers = 8

Mounting = Standard

Wiring = Series-Parallel

Drivers sum coherently = Yes

--Mechanical Parameters--

Fs = 111.7 Hz

Qms = 5.89

Vas = 1.05 liters [8.4]

Cms = 0.93 mm/N [0.116]

Mms = 2.18 g [17.44]

Rms = 0.26 kg/s [2.08]

Xmax = 2.7 mm

Xmech = 4 mm

P-Dia = 59.92 mm [169.5]

Sd = 28.58 sq.cm [228.6]

P-Vd = 0.00761 liters [0.0609]

--Electrical Parameters--

Qes = 0.66

Re = 10.53 ohms [5.265]

Le = 0.14 mH [0.07]

Z = 16 ohms [8]

BL = 4.95 Tm [9.883]

Pe = 35 watts [280]

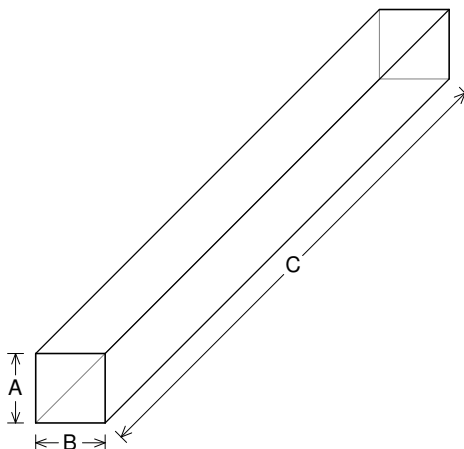
--Electromech. Parameters--

Qts = 0.593

no = 0.214 % [1.712]

1-W SPL = 85.45 dB [94.48]

2.83-V SPL = 84.26 dB [96.3]



--External Dimensions--

A = 5 in

B = 5 in

C = 46.72 in

--Internal Dimensions--

A = 3.5 in

B = 3.5 in

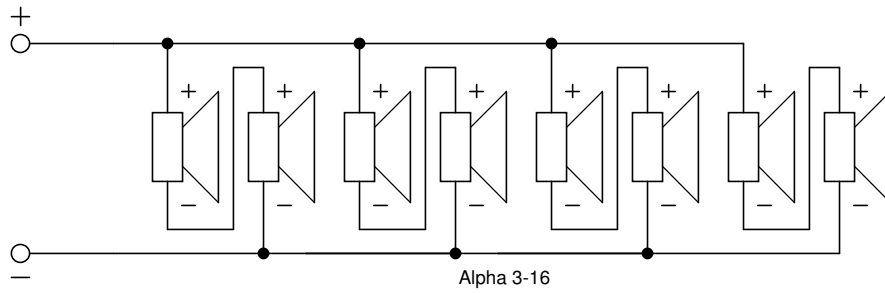
C = 45.22 in

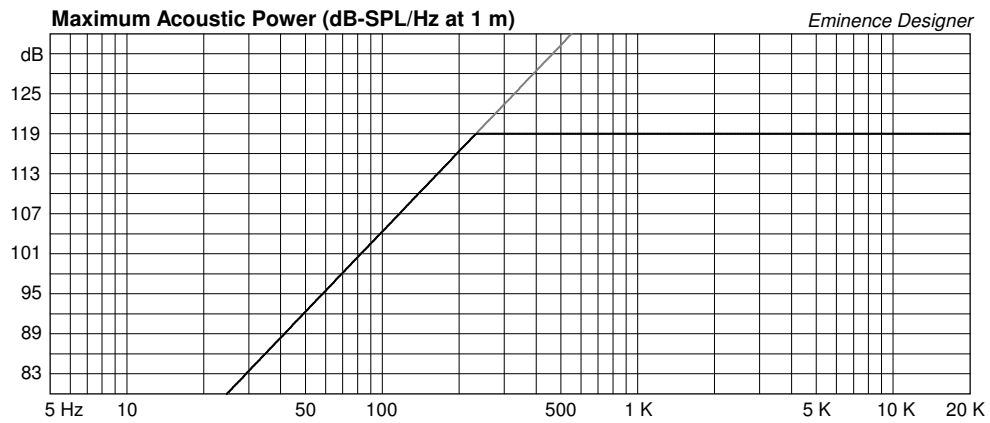
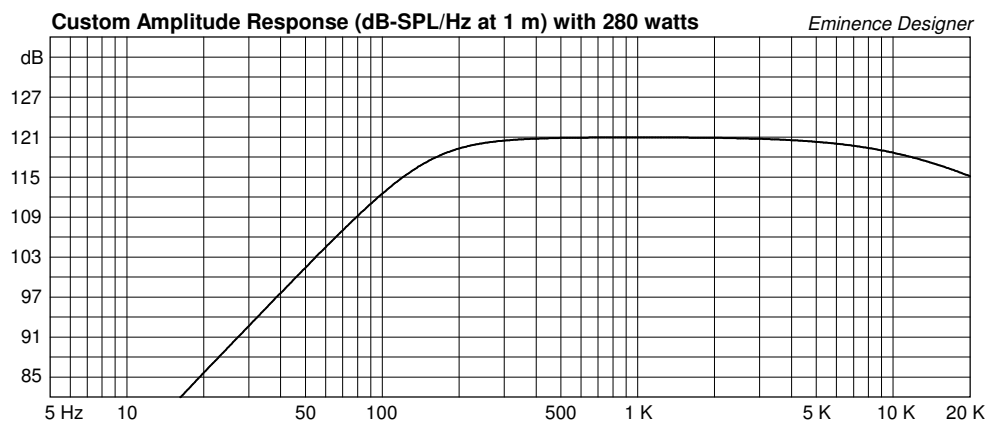
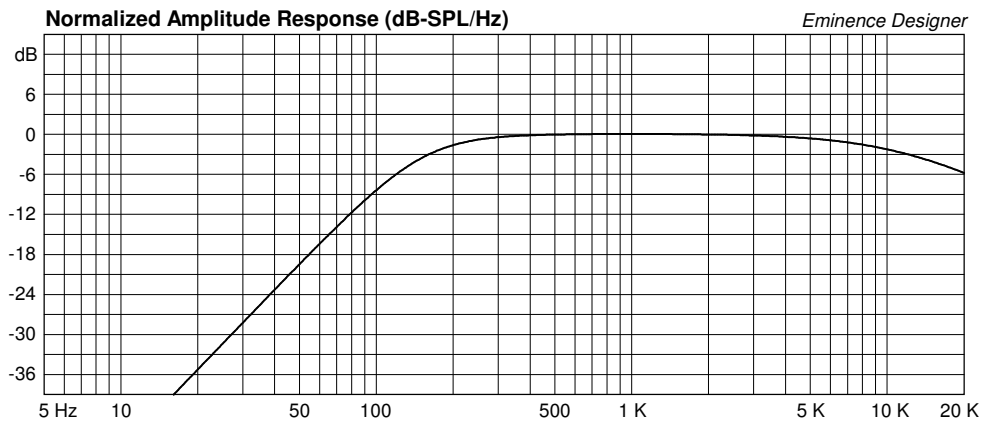
--Wall Thickness--

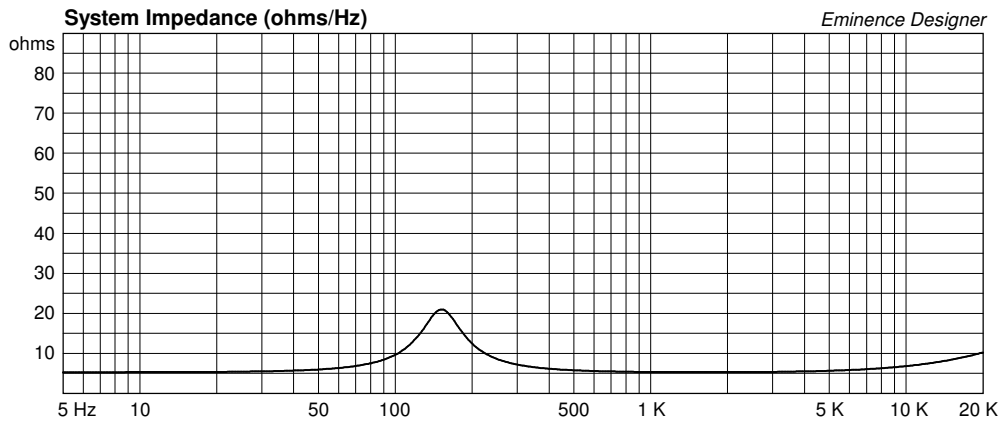
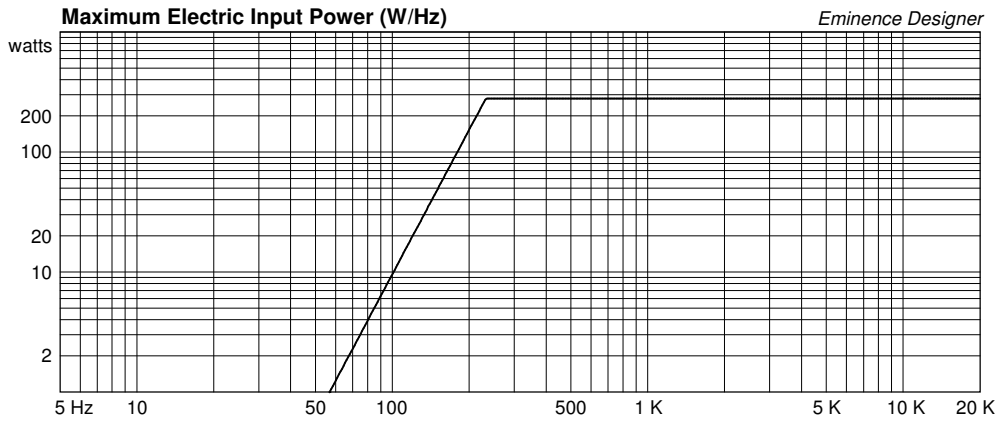
Front = 0.75 in

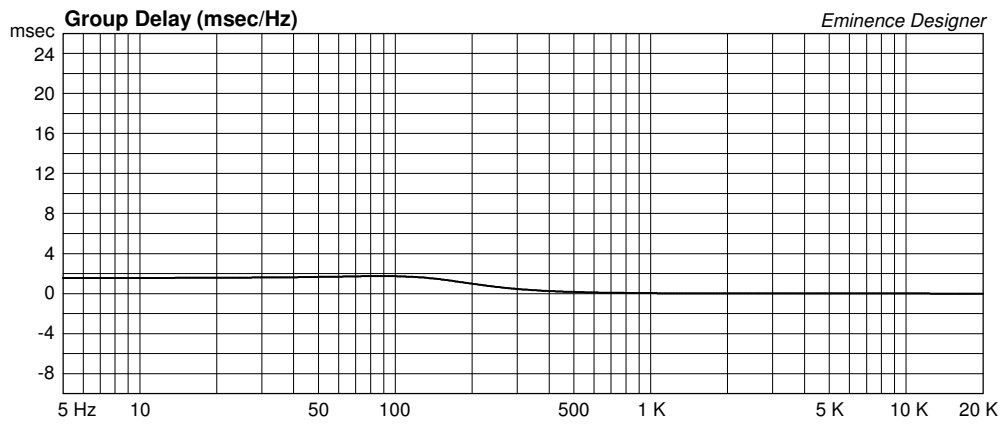
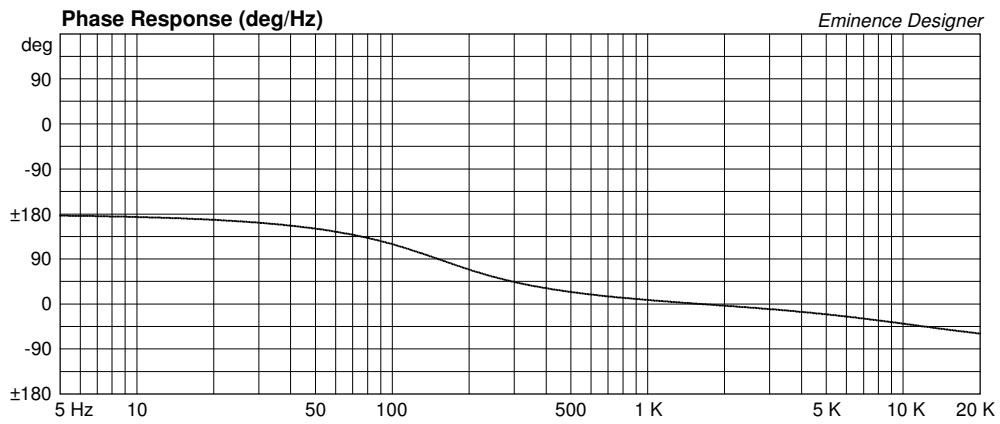
Side = 0.75 in

Wiring Diagram









Alpha 3-16 8x3 Vented Column

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Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 0.35 cu.ft

V(total) = 0.388 cu.ft

Fb = 125 Hz

QL = 7

F3 = 105.5 Hz

Fill = minimal

--Vents--

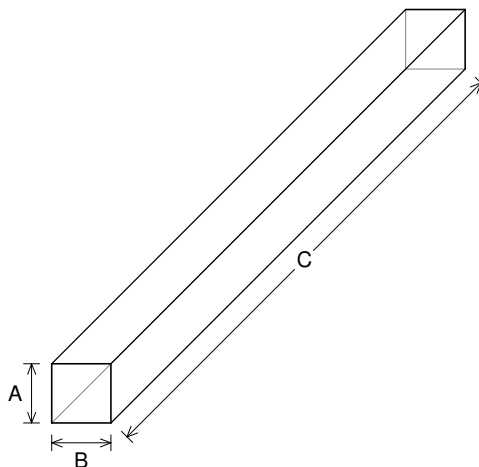
No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 2.75 in

Lv = 2.818 in



--External Dimensions--

A = 5 in

B = 5 in

C = 56.25 in

--Internal Dimensions--

A = 3.5 in

B = 3.5 in

C = 54.75 in

--Wall Thickness--

Front = 0.75 in

Side = 0.75 in

Driver Properties

--Description--

Name: Alpha 3-16

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 3" Full Range Driver, 16 ohm

--Configuration--

No. of Drivers = 8

Mounting = Standard

Wiring = Series-Parallel

Drivers sum coherently = Yes

--Mechanical Parameters--

Fs = 111.7 Hz

Qms = 5.89

Vas = 1.05 liters [8.4]

Cms = 0.93 mm/N [0.116]

Mms = 2.18 g [17.44]

Rms = 0.26 kg/s [2.08]

Xmax = 2.7 mm

Xmech = 4 mm

P-Dia = 59.92 mm [169.5]

Sd = 28.58 sq.cm [228.6]

P-Vd = 0.00761 liters [0.0609]

--Electrical Parameters--

Qes = 0.66

Re = 10.53 ohms [5.265]

Le = 0.14 mH [0.07]

Z = 16 ohms [8]

BL = 4.95 Tm [9.883]

Pe = 35 watts [280]

--Electromech. Parameters--

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no = 0.214 % [1.712]

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Wiring Diagram

