

# Custom Vented Box Design

By Departamento Técnico, Audio Sudamericana  
Madariaga 6939  
C.A.B.A.  
54 11 4605-1779



## Box Properties

--Description--

Name: Reflector de graves  
Type: Vented Box  
Shape: Prism, square (optimum)  
Company: Audio Sudamericana

--Box Parameters--

Vb = 95 liters  
V(total) = 102.8 liters  
Fb = 43 Hz  
QL = 5.284  
F3 = 52.14 Hz  
Fill = normal

--Vents--

No. of Vents = 1  
Vent shape = other  
Vent ends = one flush  
Av = 150 sq.cm  
Lv = 118.8 mm

## Driver Properties

--Description--

Name: BW 1517  
Type: Standard one-way driver  
Company: Audio Sudamericana

--Configuration--

**No. of Drivers = 1**

--Mechanical Parameters--

Fs = 35.5 Hz  
Qms = 7  
Vas = 244.5 liters  
Cms = 0.204 mm/N  
Mms = 98.53 g  
Rms = 3.14 kg/s  
Xmax = 4 mm  
Xmech = 9.4 mm  
P-Dia = 341.9 mm  
Sd = 918.1 sq.cm  
P-Vd = 0.367 liters

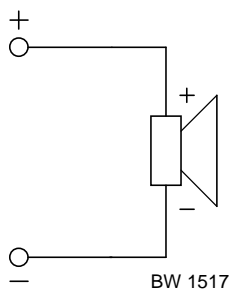
--Electrical Parameters--

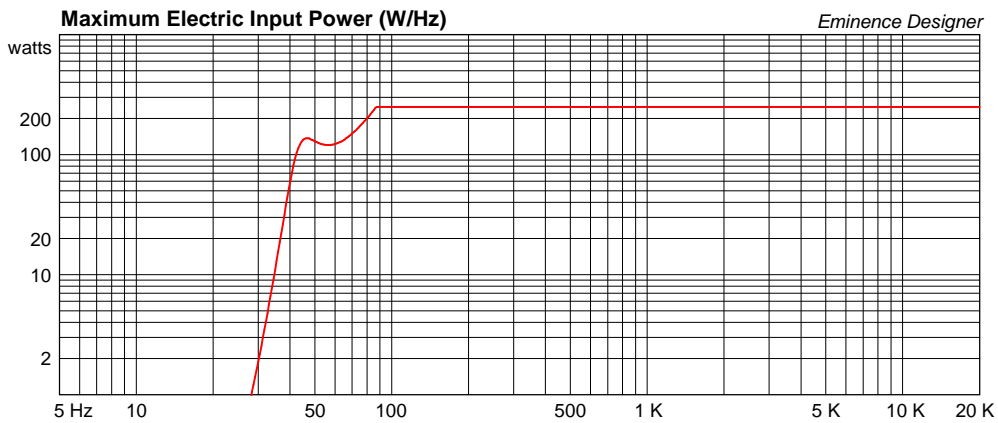
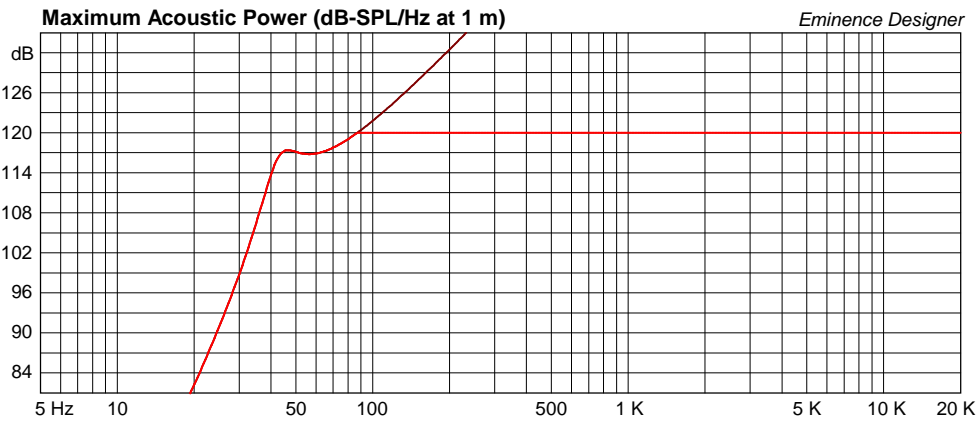
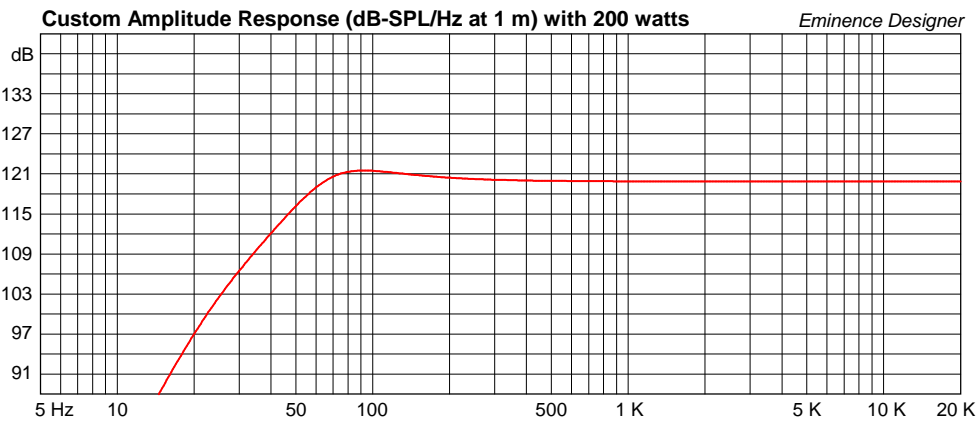
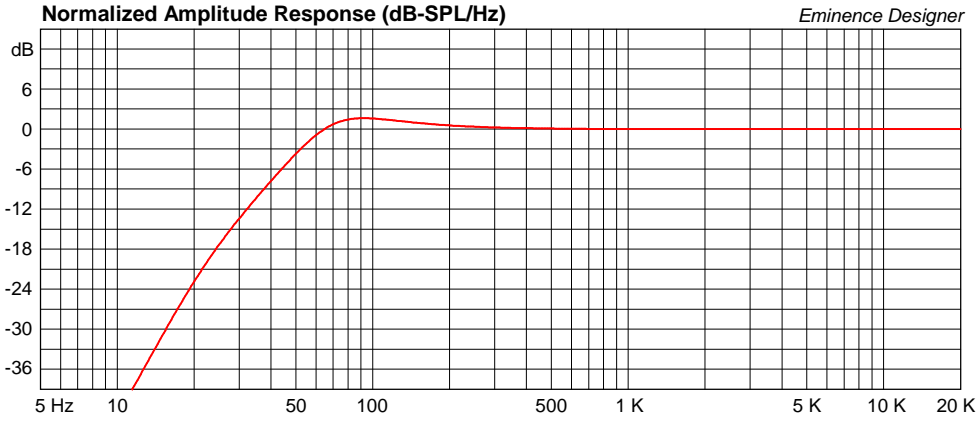
Qes = 0.46  
Re = 6.2 ohms  
Z = 8.04 ohms  
BL = 17.2 Tm  
Pe = 250 watts

--Electromech. Parameters--

Qts = 0.432  
no = 2.293 %  
1-W SPL = 95.75 dB  
2.83-V SPL = 96.53 dB

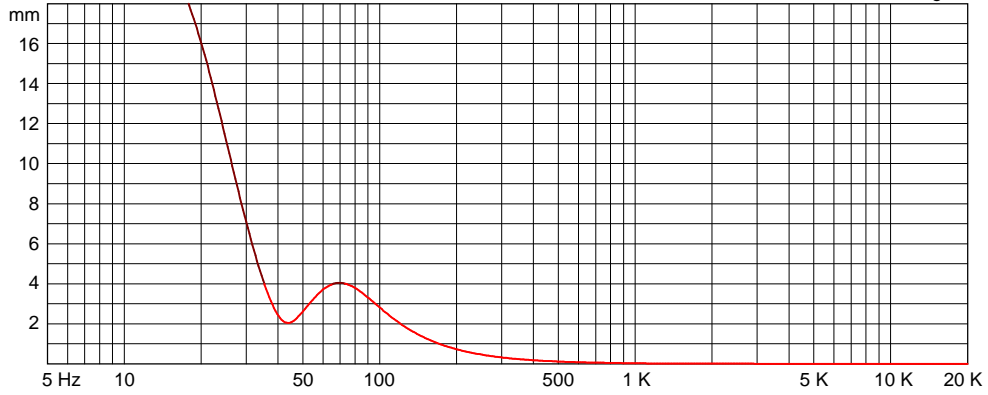
### Wiring Diagram





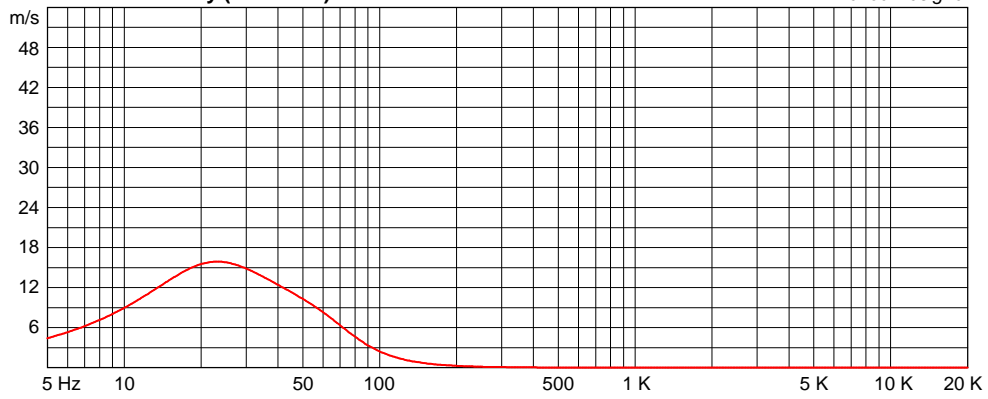
**Cone Displacement (mm/Hz) with 200 watts**

*Eminence Designer*



**Vent Air Velocity (m/sec/Hz) with 200 watts**

*Eminence Designer*



**System Impedance (ohms/Hz)**

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