CAR DIVISION

SELENIUM quatro

WPU1507 4Ω

Woofers de 15” with 4 ohms of impedance, of the professional type, developed to assist to the sound reinforcement needs in situations where smaller impredance provides larger transfer of potency of the amplifier for load (automotive sound), in the range of low and medium frequencies.

It is indicated for use in sound truck, sound outside of the car, mobile speaker system, besides conventional applications in night clubs and auditoriums. To reach a high acting degree and reliability, each component of the speaker was projected using advanced technology, and it has the characteristics above:

- Voice coil with 100 mm (4”) of diameter, mold in fiberglass and uses copper thread covered with special varnish to support at high temperatures.
- Double spider make possible the perfect concentricity of the moving system, providing, like this, great linear excursion even when great displacements are demanded.
- The advanced design cast frame is injected in aluminum with great mechanical and structural sturdiness.
- The magnet assembly has an extended center polar piece to allow long excursion and low distortion in the bass frequency range.
- Metallic connectors, of easy handling and high pressure, guarantee a mechanical and electric contact of high reliability.
- The woofer has a cooling system MCS (Multi Cooling System) that allows a great dissipation of heat from the voice coil, guaranteeing the maximum of efficiency.
- Cone and dust cap manufactured with QCF ® (Quartz Composite Fiber), exclusive Selenium technology, improve high resistence to humidity and UV radiation.

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QCF® (Quartz Composite Fiber): Selenium trademark

TECHNICAL SPECIFICATIONS	WPU1507
Nominal diameter . . . . . mm (in)	381 (15)
Nominal impedance . . . . . Ω	4
Power handling	
MAX[1] . . . . . W	1,000
RMS[2] . . . . . W	500
Sensitivity (1W@1m) . . . . . dB SPL	95
Frequency response @ -10 dB . . . . . Hz	40 a 3,000
Volume displaced by woofer . . . . . l (ft³)	6.5(0.23)
Magnet weight . . . . . g (oz)	3,400(119.92)
Voice coil diameter . . . . . mm (in)	100(3.9)
Net weight . . . . . g (lb)	10,200(22.48)

[1] Power handling specifications refer to normal speech and/or music program material, reproduced by an amplifier producing no more than 5% distortion. Power is calculated as true RMS voltage squared divided by the nominal impedance of the loudspeaker.
[2] Brazilian Standard NBR 10.303, with pink noise during 2 hours uninterrupted.

THIELE-SMALL PARAMETERS	WPU1507
Fs . . . . . Hz	35
Re . . . . . Ω	3.5
Qms	25.40
Qes	0.38
Qts	0.37
Vas . . . . . l (ft³)	150(5.28)
Ref Eff . . . . . %	1.9
Sd . . . . . m² (in²)	0.0814(126.17)
Vd . . . . . cm³ (in³)	346(21.11)
Xmax . . . . . mm (in)	4.3(0.17)
βl . . . . . T.m	16.0

A variation of ± 15% is allowed.

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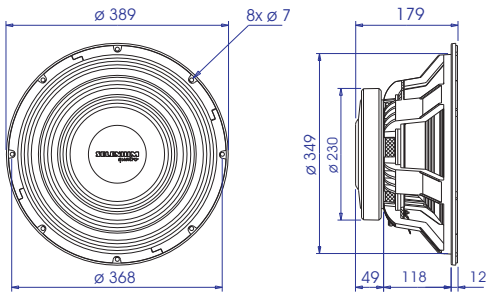

Dimensions in mm.

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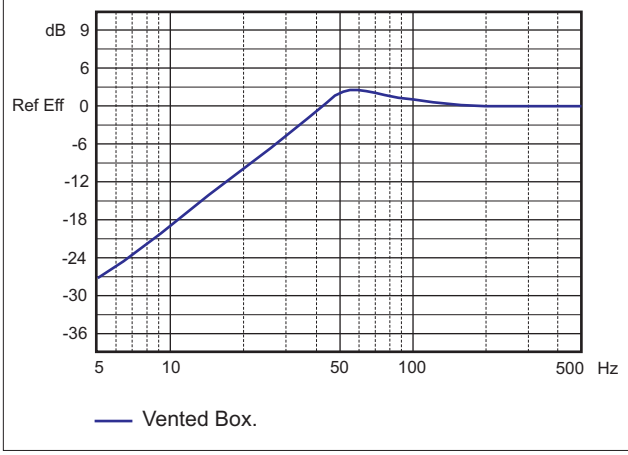
SOFTWARE SIMULATED RESPONSE CURVE



SUGGESTED ENCLOSURES

MODELS	CLOSED BOX	VENTED BOX		
	Internal Volume (liters)	Internal Volume (liters)	Duct (s)	
			Qty	Diam. x Lenght (cm)
WPU1507	XX	75	2	10 x 11

The suggested enclosure volumes are related to only one speaker, including woofer and duct(s) displaced volume.

For enclosure with more than one speaker, it is necessary to multiply the suggested volume and duct(s) by the quantity os speakers and build them with separated chambers (internal division).

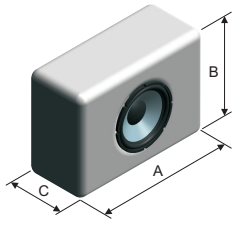
Box volumes considering the bass lift inside the car with closed apertures.

ENCLOSURES INTERNAL VOLUME CALCULATION INSTRUCTIONS

RECTANGULAR BOX

$$\text{Internal Volume} = \frac{A \times B \times C}{1000}$$

A, B and C are internal dimensions (in cm). The internal volume result is given in liters.



TRAPEZOID RECTANGULAR BOX

$$\text{Internal Volume} = \frac{A \times B \times \left(\frac{C + D}{2}\right)}{1000}$$

A, B, C and D are internal dimensions (in cm). The internal volume result is given in liters.