



12SW10A DVC / 15SW10A DVC

The Matador line offers 12" and 15" subwoofers specially developed to reproduce the lowest frequencies on the sound spectrum, i.e, the sub-bass frequencies range and to resist 1200W RMS power with large cone linear displacement. It has dual voice coil with 4 ohms that can be configured to 8 ohms impedance (serie), 2 ohms impedance (parallel) or two four Ohms independent channels allowing a better usage on the amplifier.

In order to achieve a high performance level and liability, each component of the speakers has been designed based on the latest speaker technologies, presenting the following features:

- Magnet assembly optimized by the infinite elements, using a bumped back plate to allow large cone displacement at low frequencies and a extended T-yoke to minimize the harmonic distortion and improve the heat dissipation.
- The reinforced steel frame provides the subwoofer with higher structural rigidity and has epoxy finishing.
- Long voice coil with TIL Bobine, using cooper wire covered by a special vernish to support high temperatures.
- The spyder made of impregnated Polycotton cloth, providing a better alignment to the excursion of the whole moving system and high stiffness, even when high displacements are required.
- The non-pressed paper cone is impregnated with special resines offering higher rigidity to the high mechanical efforts and allowing higher alignment to the frequency response. Additionally to it, also has a shining superficial black treatment providing an excellent finishing.
- The surround is made of nitrilic rubber and it is attached to the cone with double line stitching, guaranteeing its attachment.
- The dust cap is made of polypropylene (High Density Polymer) shows an aggressive visual label.
- The gasket is made of rubber involves the basked, providing a better sealing to the product in the accoustic box.
- The magnet assembly cover is made of polypropylene giving high strength to the product



12SW10A DVC



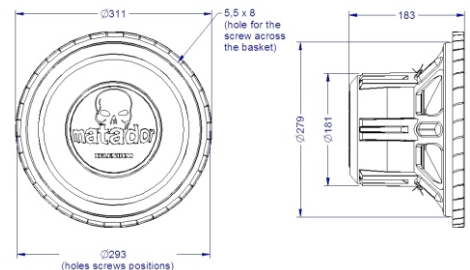
15SW10A DVC

TECHNICAL SPECIFICATIONS	12SW10A DVC	15SW10A DVC
Nominal diameter mm (in)	305 (12)	381 (15)
Nominal impedance Ω	4 + 4	4 + 4
Power handling		
MAX ¹ W	1,200	1,200
RMS ² W	600	600
Sensitivity (1W@1m) dB SPL	88	89
Frequency response @ -10 dB Hz	35 to 2,000	30 to 2,000
Volume displaced by woofer l (ft ³)	4.2 (0.15)	6.4 (0.23)
Magnet weight g (oz)	1,600 (56.4)	1,600 (56.4)
Voice coil diameter mm (in)	60 (2.36)	60 (2.36)
Net weight g (lb)	5,300 (11.7)	5,640 (12.43)

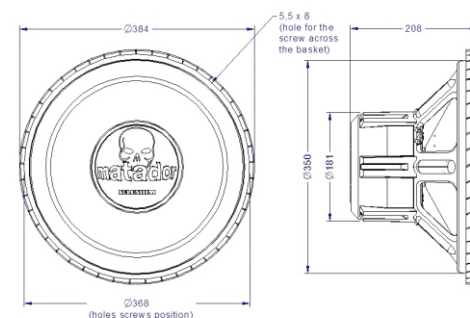
¹ Power handling specifications refer to normal speech and/or music program material, reproduced by an amplifier producing no more than 5% distortion. Power is calculated as true RMS voltage squared divided by the nominal impedance of the loudspeaker.

² Brazilian Standard NBR 10.303, with pink noise during 2 hours uninterrupted.

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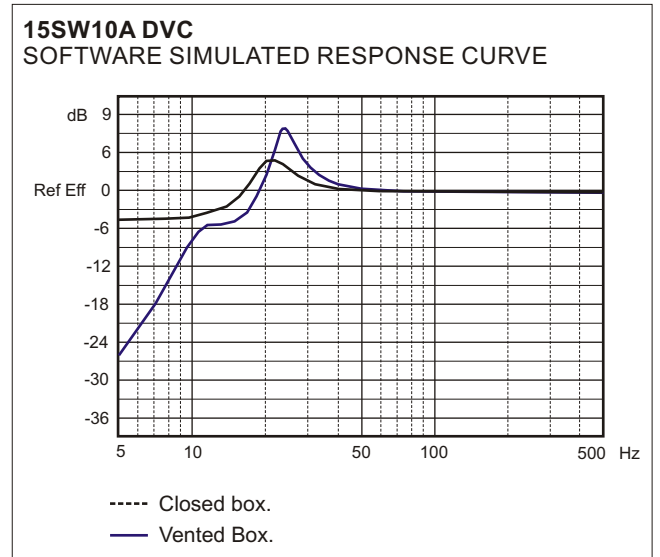
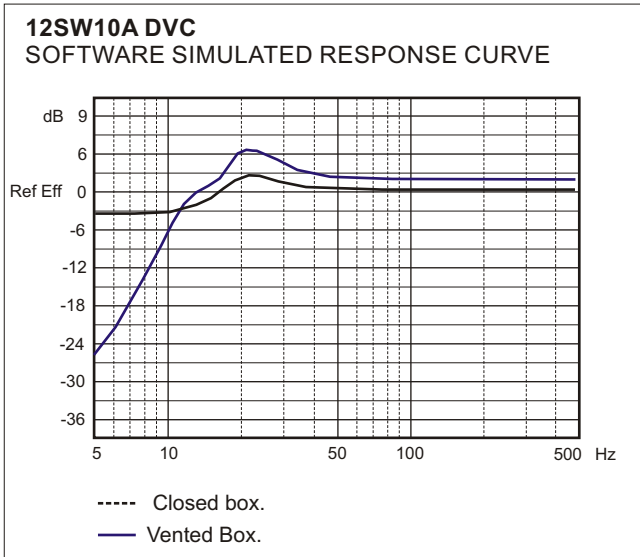
THIELE-SMALL PARAMETERS	12SW10A DVC	15SW10A DVC
Fs Hz	36	28
Re Ω	1.7	1.7
Qms	6.6	7.86
Qes	0.74	0.87
Qts	0.67	0.79
Vas l (ft ³)	63.57 (2.24)	182.79 (6.45)
Ref Eff %	0.37	0.45
Sd m ² (in ²)	0.0519 (80.4)	0.0822 (127.4)
Vd cm ³ (in ³)	363 (22.1)	575 (35.1)
Xmax mm (in)	7,0 (0.27)	7.0 (0.27)
βl T.m	15.4	15.4

A variation of ± 20% is allowed.

Dimensions in mm.



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SUGGESTED ENCLOSURES

MODELS	CLOSED BOX		VENTED BOX	
	Internal Volume (liters)	Internal Volume (liters)	Duct (s)	
			Qty	Diam. x Length (cm)
12SW10A DVC	35	40	1	10 x 23
15SW10A DVC	50	55	2	10 x 22

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 of 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.