

TECHNICAL SPECIFICATIONS CWS SUB



Subwoofer serie	CWS 12
Power rating RMS (Watt)	250
Power rating MAX. (Watt)	750
Nominal imp. Z (ohm/coil)	4
DC-resistance Re (ohm/coil)	3,2
Fs free-air resonance (Hz)	30,6
Qms	7,83
Qes	0,48
Qts (Qe // Qm)	0,452
X-max. (mm)	5,5
Cone-area (sq. cm.)	495
Vas (Liter)	79,2
Mms (Gr.)	119
Cms (uM/N)	227
Bl (T/M)	12,35
Sensitivity (dB/W/m)	90
Mounting depth (cm)	12,5
Mounting hole (cm)	28
Recommended volume sealed enclosure (L)	28,5
Recommended volume vented enclosure (L)	40
Vent length (cm)	24,6
Vent diameter (cm)	10

VOLUME CALCULATION OF VARIOUS SPEAKER MODELS

When calculating volume, the length, width and height dimensions are always used. Remember that the measurements used are always the inside measurements in cm.

Volume of cubical subwoofer cabinet:

Vol. = (L cm x H cm x B cm) : 1000 = litres

Volume of subwoofer cabinet with sloping side:

Vol. = ((Y + Z) x H x B) : 2000 = litre

The advantage of this calculation is that you can first determine what the maximum width and height measurements of the cabinet can be. Using the formula below, you can then calculate the depth. The data required: Width (cm), Height (cm) and the recommended volume of the cabinet.

Depth (Y) upper side:

$Y = (1000 \times \text{Volume litres}) : (B \text{ cm} \times H \text{ cm}) - (H \text{ cm} : 4.1) = \dots \text{ cm}$

Depth (Z) lower side:

$Z = Y \text{ cm} + (0.49 \times \text{Height in cm}) = \dots \text{ cm}$

TAKE NOTE!

You have now calculated all the internal measurements. The material thickness has to be added to find the external measurements. Draw a construction plan in diagram form before you get started.

