

TECHNICAL SPECIFICATIONS CWV-OR SUBWOOFERS



Subwoofer serie	CWV 10-OR	CWV 12-OR	CWV 15-OR
Power rating RMS (Watt)	200	250	300
Power rating MAX. (Watt)	600	750	900
Nominal imp. Z (ohm/coil)	4	4	4
DC-resistance Re (ohm/coil)	3,2	3,2	3,2
Fs free-air resonance (Hz)	30	25	21
Qms	4,400	4,580	3,718
Qes	0,499	0,475	0,619
Qts (Qe // Qm)	0,448	0,431	0,531
X-max. (mm)	9	9	9
Cone-area (sq. cm.)	339,80	514,72	814,33
Vas (Liter)	70	132,8	259,9
Mms (Gr.)	63,602	66,715	125,362
Cms (uM/N)	427,047	618,786	435,319
Bl (T/M)	8,845	8,360	9,367
Fo (Hz)	30,539	24,771	21,544
Sensitivity (dB/W/m)	88	89	90
Mounting depth (cm)	11,1	12,5	16
Mounting hole (cm)	22,6	28,5	34,6
Recommended volume sealed enclosure (L)	19	30	55
Recommended volume vented enclosure (L)	30	40	64
Vent length (cm)	24,4	33,8	15,5
Vent diameter (cm)	7,5	10	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:

$$\text{Vol.} = (\text{L cm} \times \text{H cm} \times \text{B cm}) : 1000 = \dots \text{litres}$$

Volume of subwoofer cabinet with sloping side:

$$\text{Vol.} = ((Y + Z) \times H \times B) : 2000 = \dots \text{litre}$$

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.

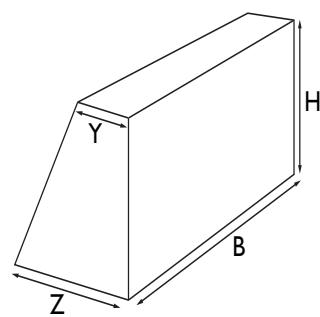
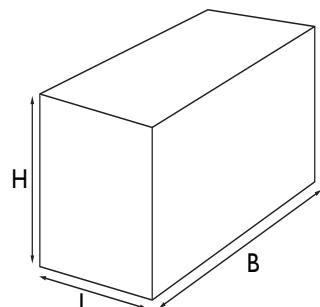
The data required: Width (cm), Height (cm) and the recommended volume of the cabinet.

Depth (Y) upper side:

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

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.