



12" Ceramic Subwoofer

Program Power 800 W 4+4 Ohm Rated impedance 12"- 320 mm Nominal diameter Sensitivity (2,83V/1m) 92,5 dB 3 in - 75 mm Voice coil diameter Frequency Range 35-2000 Hz

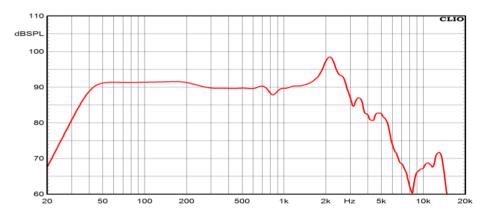
SPECIFICATIONS

Nominal Diameter		12''- 320 mm
Rated Impedance		4+4 Ohm
Nominal Power Handling ¹		350 W
Program Power ²		800 W
Sensitivity ³		92,5 dB
Frequency Range ⁴		35-2000 Hz
Minimum Impedance		-
Gasket Material		Diecast Aluminum
Magnet Material		Ferrite
Cone Material		Treated Cellulose
Cone Shape		Planar
Surround		Rubber - Half Roll
Suspension		Nomex Fabric
Voice Coil Diameter		3 in - 75 mm
Voice Coil Winding Material		Copper
Voice Coil Length		20 mm - 0,79 in
Voice Coil Former Material		Glass fiber
Connection type		Faston
Ferrofluid		No
Magnetic Gap Height		10 mm - 0,39 in
Max. Peak to Peak Excursion Xvar		-
Efficiency Bandwidth Product EBP		95
Recommended Loading		Vented Box
Volume / Tuning frequency		50 Lt (dm³) - 1,766 cuft / 40 Hz
Maximum recommended frequency		-
Version - Part Code	2+2 Ohm	HSB320-22
	4+4 Ohm	HSB320-44

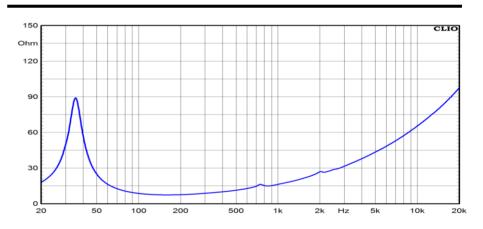
T/S PARAMETERS 4+4 Ohm

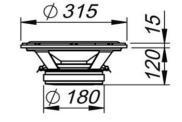
* Parameters measured with voice coils connected in series			
Resonance frequency	Fs	36 Hz	
DC Resistance	Re	6,15 Ohm	
Mechanical Q Factor	Qms	5,1	
Electrical Q Factor	Qes	0,38	
Total Q Factor	Qts	0,35	
BI Factor	BI	19 Tm	
Effective Moving Mass	Mms	99 g	
Equivalent Cas air loaded	Vas	73 lt (dm³) - 2,58 cuft	
Suspension Compliance	Cms	-	
Effective Piston Diameter	D	255 mm - 10,04 in	
Effective piston area	Sd	511 cm ² - 79,21 sq in	
Max. Linear Excursion ⁵	Xmax	7,5 mm - 0,3 in	
Voice Coil Inductance @ 1kHz	Le	1,4 mH	
Half-space Efficency	უ0	0,85 %	

FREQUENCY RESPONSE CURVE 6



FREE AIR IMPEDANCE CURVE 7





MOUNTING AND SHIPPING INFORMATION

Overall Diameter	315 mm - 12,4 in
Baffle Cutout Diameter	282 mm - 11,1 in
Flange and Gasket Thickness	14,5 mm - 0,57 in
Total Depth	134,5 mm - 5,3 in
Bolt Circle Diameter	295 mm - 11,61 in
Bolt Holes Quantity and Diameter	8 / 7 mm - 0,28 in
Net Weight	7,05 Kg - 15,53 lb
Shipping Units	1 Pc

NOTES

- ¹ Nominal power is determined according to AES2-1984 (r2003) standard.
- ² Program Power is defined as 3 dB greater than the Nominal rating.
- Sensitivity represents the averaged value of acoustic output as measured on the forward central axis of cone, at distance 1m, when connected to 2,83V sine wave test signal.
 Frequency range is given as the band of frequencies delineated by the lower and upper limits where the output level drops by 10 dB below the rated sensitivity in half space environment.
- 5 Linear Math. Xmax is calculated as (Hvc-Hg)/2 + Hg/4 where Hvc is the coil depth and Hg is the gapdepth.
- ⁶ Frequency response curve In the range above 150 Hz is measured on infinite baffle conditions and simulated as per recommended loading in the range below 150 Hz.
- ⁷ Impedance curve is measured in free air conditions at small signals.