

50 mm aluminum voice coil
 Carbon fiber composites dome
 High-grade neodymium magnet
 Ferrofluid cooling and damping
 Acoustic resistance Qts control
 Computer optimized design
 Motor metal parts CNC machined
 Under-dome dB Cloth® damping material
 Removable faceplate
 Removable grill
 Rear-mount installation adapter



The carbon fiber reinforced, polymer matrix, composite dome ensures extraordinary rigidity combined with very low weight.

The large (50 mm) aluminum voice coil allows the use of much higher power for this kind of component.

This midrange uses a very large, vented, neodymium motor magnet, optimized with computer simulations (FEA) to obtain a greater efficiency and improved linearity along all the voice coil's excursion.

The neodymium magnet is a high-grade type to reduce magnetic loss at elevated temperature and concentrate more energy in a small space.

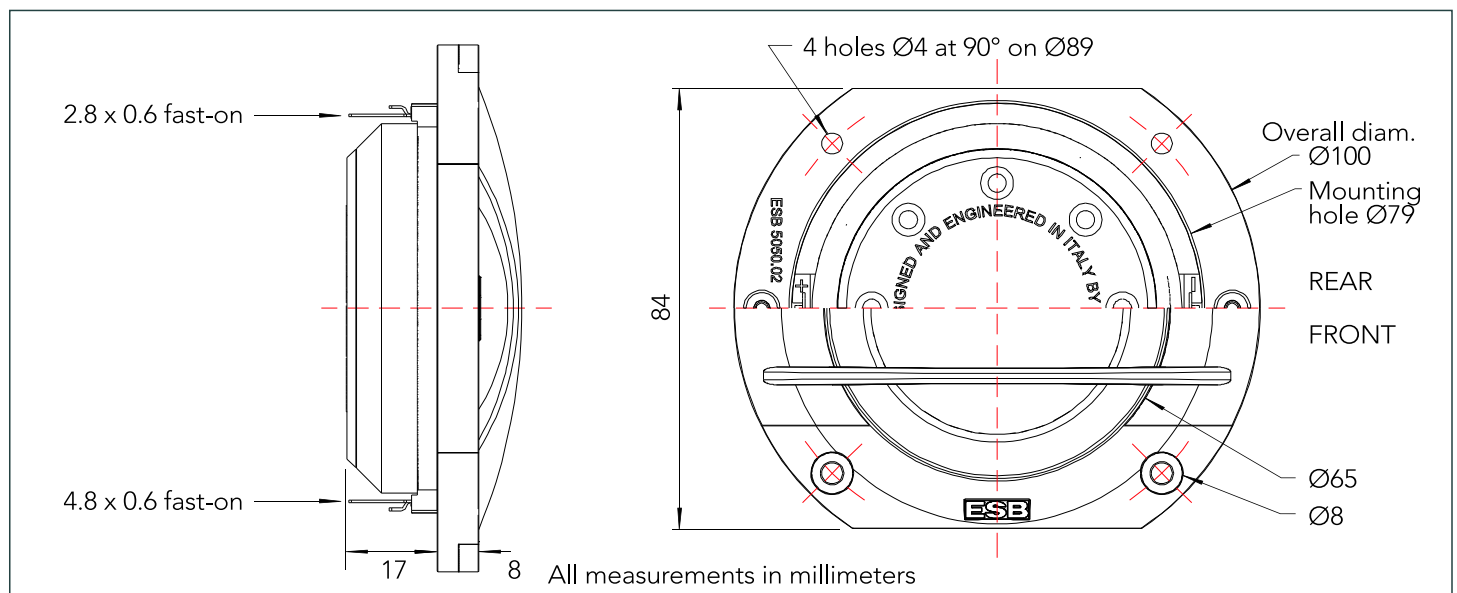
All motor parts are made by CNC process, for tighter tolerances and improved performance.

Great attention was paid to the axial and radial ventilation of the moving coil, to ensure high power handling, reduced distortion, and high durability. The axial ventilation holes reduce the compression of the air at the back of the dome for a great reduction in distortion and an extended response to lower frequency.

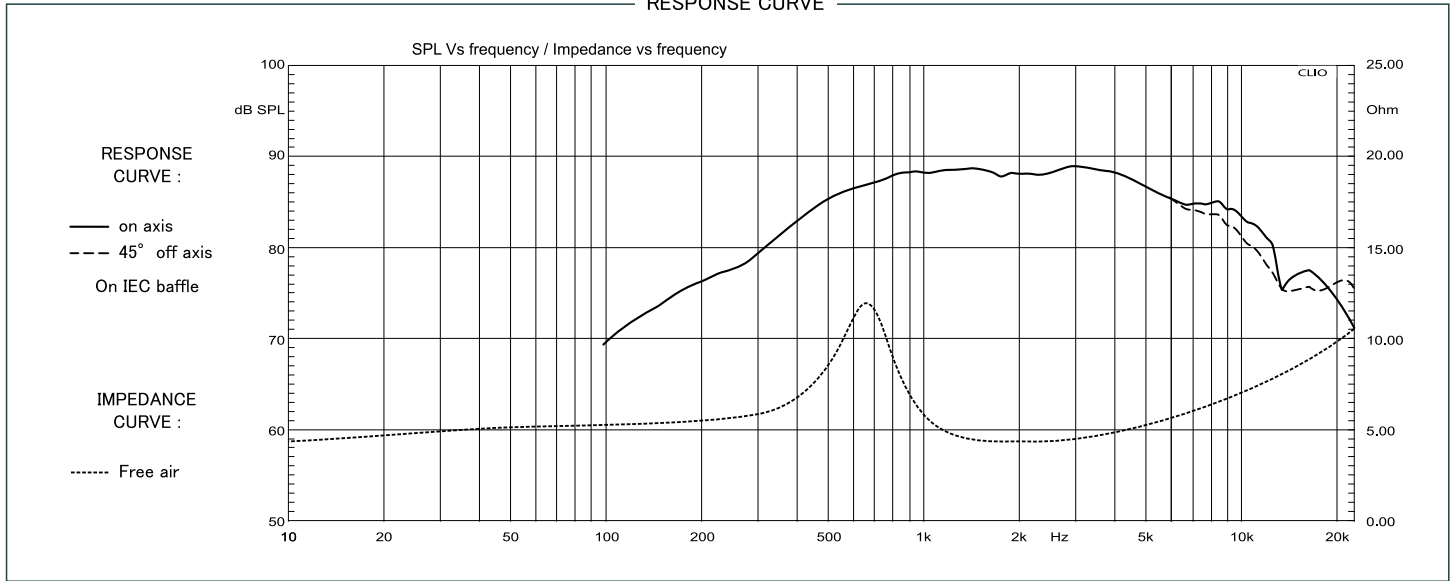
A special acoustic resistance helps to control the midrange Qts.

Residual resonances are killed by the under-dome dB Cloth® damping material, this extends the frequency response to the lower limits and reduces harmonic distortion.

The faceplate can be removed and replaced with an adapter for rear mount installation.

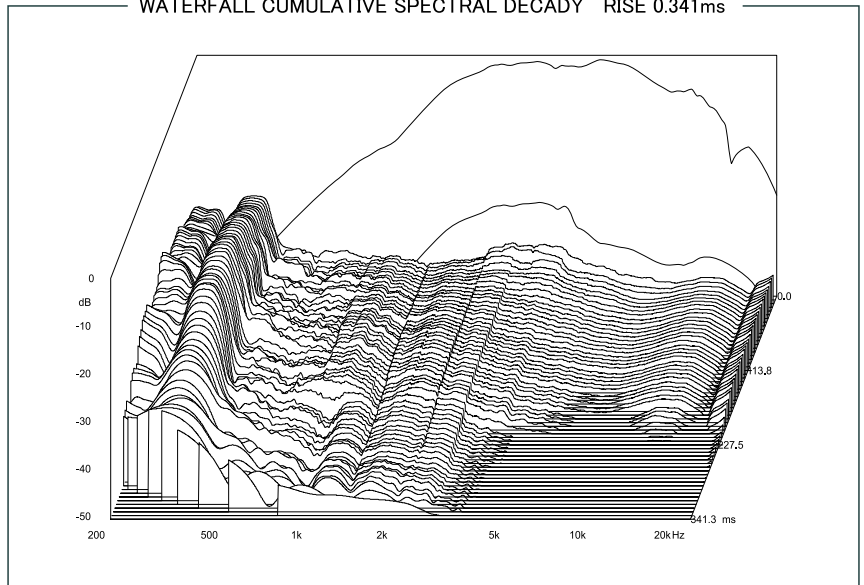


RESPONSE CURVE



SPECIFICATIONS			
Technical Characteristics	Symbol	Value	Units
GENERAL DATA			
Overall Dimension	D x h	100 x 25	mm
Nominal Power Handling (AES)*	P	120	W
Transient Power *	Pp	240	W
Sensivity 1W/1m	SPL	91	dB SPL
Frequency Response		500 – 6000	Hz
Net Weight		344	g
Dome Material		Carbon fibres and epoxy resin matrix	
*Nominal and Transient power @ High Pass 500Hz-12dB/Oct			
ELECTRICAL DATA			
Nominal Impedance	Z	4	Ω
DC Resistance	Re	3.5	Ω
Voice coil Inductance	Lbm	0.06	μH
VOICE COIL AND MAGNET PARAMETERS			
Voice Coil Diameter	Dia	25	mm
Voice coil Height	h	4.5	mm
Number of layers	n	2	
Voice Coil Former		Aluminum	
Magnet System		Neodymium Vented	
Magnetic Gap Height	HE	3	mm
Max Linear excursion	Xmax	± 4.5	mm
Flux density	B	1.4	T
BL Product	BxL	11.9	Na
Magnet dimension	Ø x h	46 x 6	mm
Magnet weight	m	75	g
T&S PARAMETERS			
Mechanical Q Factor	Qms	2.60	
Electrical Q Factor	Qes	1.009	
Total Q Factor	Qts	0.76	
Suspension Compliance	Cms	0.005	N/m
Mechanical Resistance	Rms	16.99	Ω
Moving Mass	mms	2.3	g
Eq. Comp. Air Load	VAS	0.01	l
Resonance Frequency	Fs	630	Hz
Effective Piston Area	SD	27.32	cm ²
CROSSOVER VALUE			
Fc	Crossover frequency	Hz	
L	Inductor	mH	
C	Capacitor	μF	
R	Resistance	Ω	
P	Reduction from Nominal Power	%	
S	Crossover Slope	dB/Oct	

WATERFALL CUMULATIVE SPECTRAL DECAY RISE 0.341ms



SUGGESTED APPLICATION

Fc	450	500	550	600	650	700	750	800	850	900	900
S	6 HP	6 HP	6 HP	6 HP	6 HP	6 HP	6 HP	6 HP	6 HP	6 HP	6 HP
C	49	38	33	24	23	22	21	20	19	18	17
P	-40	-30	-25	-20	-10	-5					
Fc	2000	2500	3000	3500	4000	4500	5000				
S	6 LP	6 LP	6 LP	6 LP	6 LP	6 LP	6 LP				
L	0.3	0.25	0.21	0.2	0.18	0.16	0.15				
Att.	-2	-4	-6	-9	-12						
R	2	4.7	6.8	11.5	20.4						

Fc	450	500	550	600	650	700	750	800	850	900	900
S	12 HP	12 HP	12 HP	12 HP	12 HP	12 HP	12 HP	12 HP	12 HP	12 HP	12 HP
C1	35	27	24	17	15	14	15	16	18	19	21
L1	3.5	3.7	3.5	4	3.9	3.5	2.9	2.3	1.8	1.6	1.1
P	-20										
Fc	2000	2500	3000	3500	4000	4500	5000				
S	12 LP	12 LP	12 LP	12 LP	12 LP	12 LP	12 LP				
L2	0.4	0.36	0.3	0.27	0.25	0.23	0.22				
C2	14	11.5	9	7.5	6.2	5.3	4.5				