

12 XM

CO-AXIAL LOUDSPEAKER

DESCRIPTION

This loudspeaker has been designed to incorporate a 12" bass and a 2" compression driver, with titanium diaphragm, into an integrated voice coil gap magnet system. This model achieve high efficiency and smooth response, with low harmonic distortion and excellent power handling.

SPECIFICATIONS

BASS DRIVER

Nominal diameter	300 mm. 12 in.
Rated impedance	8 ohms.
Power capacity	250 w
Sensitivity	96 dB 1w @ 1m
Frequency range	40-3500 Hz
Recommended enclosure vol.	60-120 l 2.12-4.24 ft. ³
Voice coil diameter	100 mm. 4 in.
Magnetic assembly weight	8.8 kg. 19.36 lb.
BL Factor	13.2 N/A
Moving mass	0.046 kg.

Positive voltage on red terminal moves diaphragm forward

THIELE-SMALL PARAMETERS

Fs	42 Hz
Re	5.8 ohms.
Qms	8.94
Qes	0.4
Qts	0.38
Vas	122 l 4.3 ft. ³
η_0	2.2 %
Sd	0.053 m. ² 82.15 in. ²
Xmax	4 mm. 0.16 in.
Vd	210 cm. ³ 12.8 in. ³
Le	0.95 mH

H.F. DRIVER

Rated impedance	8 ohms.
Power capacity	100 w
Frequency range	1-17 kHz
Sensitivity	105 dB 1w @ 1m
Voice coil diameter	72.2 mm. 2.85 in.
Voice coil inductance	0.13 mH
BL Factor	8.5 N/A
Dispersion	90°

Positive voltage on red terminal moves diaphragm toward the phase plug

MOUNTING INFORMATION

Overall diameter	320 mm. 12.6 in.
Bolt circle diameter	299 mm. 11.77 in.
Baffle cutout diameter :	
-Front mount	286 mm. 11.26 in.
-Rear mount	280 mm. 11.06 in.
Volume displaced by driver	6.5 l 0.23 ft. ³
Net weight	10.27 kg. 22.6 lb.
Shipping weight	11 kg. 24.2 lb.
Depth	147 mm. 5.79 in.

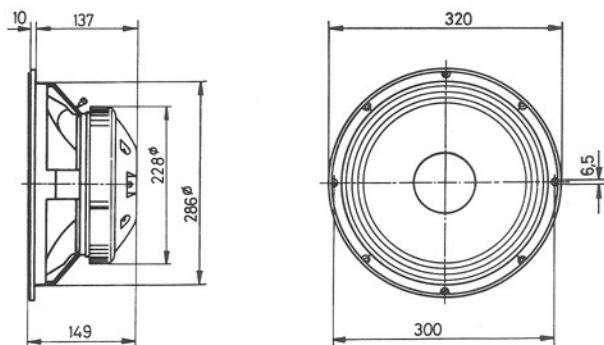
MATERIALS

L.F. UNIT

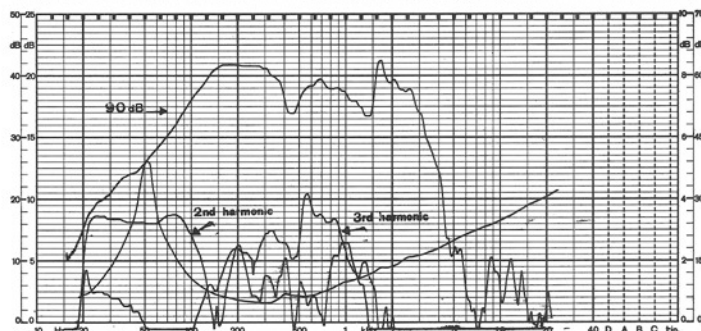
Basket	Die cast aluminium
Cone	Paper
Surround	Plasticised cloth
Voice coil material	Edgewound copper clad aluminium ribbon wire

H.F. UNIT

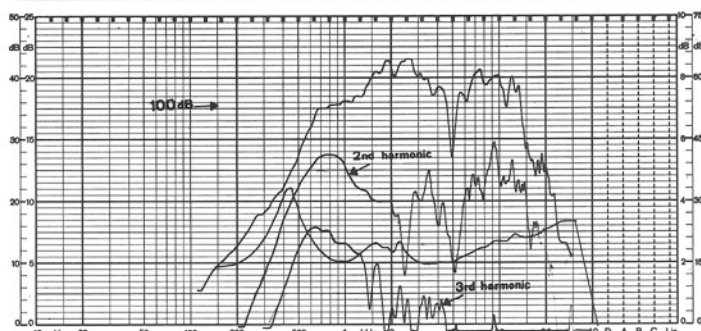
Diaphragm	Titanium
Voice coil material	Edgewound copper ribbon wire



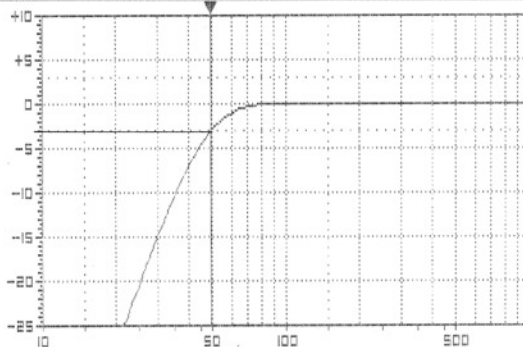
Frequency response, Distortion * & Impedance curves. On axis, 1w @ 1m, L.F. unit



Frequency response, Distortion * & Impedance curves. On axis, 1w @ 1m, H.F. unit



PREDICTED LOW FREQUENCY RESPONSE • Bass-reflex cabinet, Vb=80 l, fb=45 Hz.



(*) 2nd & 3rd harmonic level raised 20 dB