

15XA38Nd COAXIAL TRANSDUCER

KEY FEATURES

- High power handling: 350 / 90 W_{AES} (LF / HF)
- High sensitivity: 99 / 105 dB (LF / HF)
- Low resonant frequency: 38 Hz
- Low weight and compact common magnet system design
- Demodulating rings in LF and HF units
- Composite Titanium / Polyester HF diaphragm
- 80° coverage horn for HF dispersion control



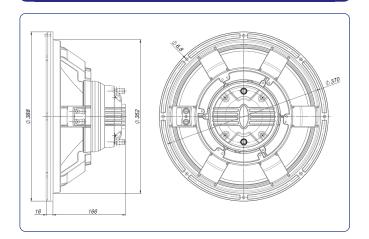
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$\begin{array}{llllllllllllllllllllllllllllllllllll$	Rated impedance (LF/HF)	38		8 / 16 Ω
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$, LEO		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Program power (LF/HF)		700	/ 180 W
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Sensitivity (LF/HF**)	99 dB	1W / 1ı	m @ Z _N
Recom. HF crossover 1,5 kHz or higher (12 dB/oct min slope) Voice coil diameter (LF/HF) 101,6 mm 4 in 72,4 mm 2,85 in 20,4 N/A BL factor 20,4 N/A 0,082 kg Voice coil length 16 mm 4 in 72,4 mm 2,85 in 20,082 kg Voice coil length 16 mm 9 mm		105 dB	1W / 1	m @ Z _N
Voice coil diameter (LF/HF) 101,6 mm	Frequency range	4	40 - 20	.000 Hz
Voice coil diameter (LF/HF) 101,6 mm 4 in 72,4 mm 2,85 in BL factor 20,4 N/A Moving mass 0,082 kg Voice coil length 16 mm Air gap height 9 mm	Recom. HF crossover			
72,4 mm 2,85 in BL factor 20,4 N/A Moving mass 0,082 kg Voice coil length 16 mm Air gap height 9 mm	Voice coil diameter (LF/HF)	•		
Moving mass0,082 kgVoice coil length16 mmAir gap height9 mm	, ,	72,4	mm	2,85 in
Voice coil length 16 mm Air gap height 9 mm	BL factor		2	0,4 N/A
Air gap height 9 mm	Moving mass		0	,082 kg
Air gap height 9 mm	Voice coil length			16 mm
	_			9 mm
A _{damage} (peak to peak) 28 mm	X _{damage} (peak to peak)			28 mm

THIELE-SMALL PARAMETERS***

Resonant frequency, f _s	38 Hz
D.C. Voice coil resistance, R _e	6,7 Ω
Mechanical Quality Factor, Q _{ms}	6,4
Electrical Quality Factor, Q _{es}	0,31
Total Quality Factor, Qts	0,30
Equivalent Air Volume to C _{ms} , V _{as}	238 I
Mechanical Compliance, C _{ms}	217 μm / N
Mechanical Resistance, R _{ms}	3 kg / s
Efficiency, η ₀	3,9 %
Effective Surface Area, S _d	0,088 m ²
Maximum Displacement, X _{max} ****	6 mm
Displacement Volume, V _d	528 cm ³
Voice Coil Inductance, Le @ 1 kHz	1 mH



DIMENSION DRAWINGS



MOUNTING INFORMATION

Overall diameter	388 mm	,
Bolt circle diameter	370 mm	14,57 in
Baffle cutout diameter:		
- Front mount	352 mm	13,85 in
Depth	182 mm	7,17 in
Net weight	6,8 kg	14,96 lb
Shipping weight	7,4 kg	16,28 lb

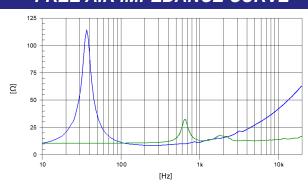
Notes:

- * The power capaticty is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.
- ** Sensitivity was measured at 1m distance, on axis, with 1W input, averaged in the range 1 7 kHz.
- *** T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).
- **** The X_{max} is calculated as $(L_{VC}$ $H_{ag})/2$ + $(H_{ag}/3,5)$, where L_{VC} is the voice coil length and H_{ag} is the air gap height.

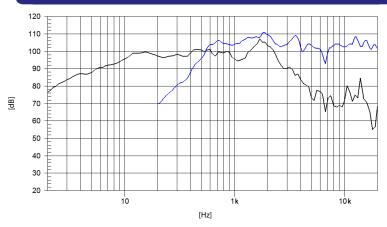


15XA38Nd COAXIAL TRANSDUCER

FREE AIR IMPEDANCE CURVE



FREQUENCY RESPONSE CURVE



Note: On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

FILTERED AND OFF-AXIS FREQUENCY RESPONSE



Note: Filtered frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m with FD-2XA $\,$

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Polígono Industrial Moncada II • C/. Pont Sec, 1c • 46113 MONCADA - Valencia (Spain)
• Tel.: (34) 96 130 13 75 • Fax: (34) 96 130 15 07 • http://www.beyma.com • E-mail: beyma@beyma.com •