

## **8NMFW**

**LOW FREQUENCY TRANSDUCER Preliminary Data Sheet** 



- High power handling and low distortion 8" woofer
- Exclusive Malt Cross® Technology Cooling System
- Low power compression losses
- High force factor design for top performance applications
- FEA optimized ceramic magnetic circuit and suspensions
- Ultra low air noise
- Carbon fiber cone and dustcap

• Double BIMAX spider and NBR surround

Enhanced linear behaviour

- 2" QUATTRO in/out aluminium voice coil
- Optimized triple aluminum and copper demodulating circuit
- Extended controlled displacement: X<sub>max</sub> ± 9 mm
- 43 mm peak-to-peak excursion before damage





### **TECHNICAL SPECIFICATIONS**

Nominal diameter	20	0 mm	8 in
Rated impedance			8 Ω
Minimum impedance			7,4 Ω
Power capacity <sup>1</sup>		200	W <sub>AES</sub>
Program power <sup>2</sup>			400 W
Long term max. power <sup>3</sup>			600 W
Sensitivity	90 dB	1W / 1r	n @ Z <sub>N</sub>
Frequency range		30 - 2.	500 Hz

Voice coil diameter	50,8 mm	2 in
BI factor		13,4 N/A
Moving mass		0,048 kg
Voice coil length		20 mm
Air gap height		6 mm
X <sub>damage</sub> (peak to peak)		43 mm

## THIELE-SMALL PARAMETERS 4

Resonant frequency, f <sub>s</sub>	37 Hz
D.C. Voice coil resistance, R <sub>e</sub>	5,7 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	7,6
Electrical Quality Factor, Qes	0,36
Total Quality Factor, Q <sub>ts</sub>	0,34
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	27 I
Mechanical Compliance, C <sub>ms</sub>	376 $\mu$ m / N
Mechanical Resistance, R <sub>ms</sub>	1,5 kg / s
Efficiency, η <sub>0</sub>	0,4 %
Effective Surface Area, S <sub>d</sub>	0,0227 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> <sup>5</sup>	9 mm
Displacement Volume, V <sub>d</sub>	204 cm <sup>3</sup>
Voice Coil Inductance, Le	1,1 mH

<sup>&</sup>lt;sup>1</sup> The power capaticty is determined according to AES2-1984 (r2003) standard.

<sup>&</sup>lt;sup>2</sup> Program power is defined as power capacity + 3 dB.

<sup>&</sup>lt;sup>3</sup> Long term maximum power according to IEC268-5 18.2.

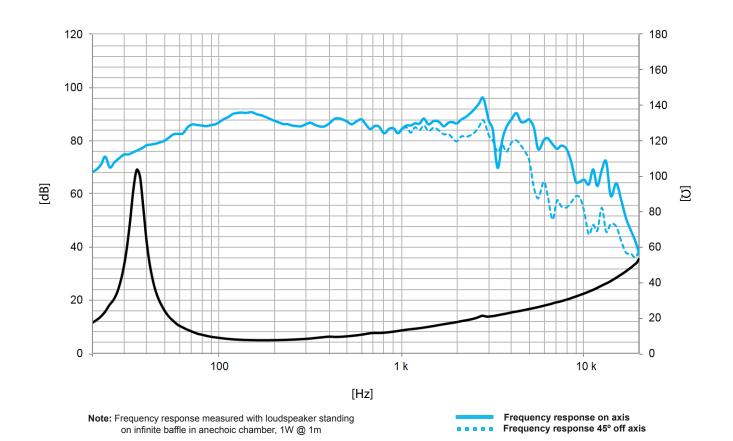
<sup>&</sup>lt;sup>4</sup> T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $<sup>^{5}</sup>$  The  $X_{max}$  is calculated as  $(L_{vc} - H_{aq})/2 + (H_{aq}/3,5)$ , where  $L_{vc}$  is the voice coil length and  $H_{aq}$  is the air gap height.



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## **MOUNTING INFORMATION**

Overall diameter	227 mm	8,94 in
Bolt circle diameter	210 mm	8,27 in
Baffle cutout diameter:		
- Front mount	181 mm	7,12 in
Depth	137 mm	5,4 in
Net weight	3,7 kg	8,15 lb
Shipping weight	4,4 kg	9,7 lb

## **DIMENSION DRAWING**

