

# 8BR40/N

#### **LOW FREQUENCY TRANSDUCER**

## **KEY FEATURES**

- Power handling: 100 W program power
- Sensitivity: 91 dB (1W / 1m)
- 1" copper voice coil
- Rubber surround
- Ferrite magnet

- Die cast aluminum basket
- Flat response and low harmonic distortion
- Extended controlled displacement: X<sub>max</sub> ± 6,7 mm
- 20 mm peak-to-peak excursion before damage





## **TECHNICAL SPECIFICATIONS**

Nominal diameter	200 mm 8	in
Rated impedance	8 :	Ω
Minimum impedance	6,4	Ω
Power capacity <sup>1</sup>	50 W <sub>RM</sub>	1S
Program power <sup>2</sup>	100 \	Ν
Sensitivity	91 dB 1W / 1m @ Z	, -N
Frequency range	30 - 6.000 H	łz
Recom. enclosure vol.	20 / 60 I 0,7 / 2,1 f	t³
Voice coil diameter	25,4 mm 1	in
BI factor	6,8 N/	Α
Moving mass	0,021 k	g
Voice coil length	16 mi	m
Air gap height	6 mi	m
X <sub>damage</sub> (peak to peak)	20 mi	m

## THIELE-SMALL PARAMETERS<sup>3</sup>

Resonant frequency, f <sub>s</sub>	30 Hz
D.C. Voice coil resistance, R <sub>e</sub>	5,5 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	2,1
Electrical Quality Factor, Q <sub>es</sub>	0,48
Total Quality Factor, Q <sub>ts</sub>	0,39
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	89,1 I
Mechanical Compliance, C <sub>ms</sub>	1300 $\mu$ m / N
Mechanical Resistance, R <sub>ms</sub>	2 kg / s
Efficiency, η <sub>0</sub>	0,5 %
Effective Surface Area, S <sub>d</sub>	0,022 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> <sup>4</sup>	6,7 mm
Displacement Volume, V <sub>d</sub>	147 cm <sup>3</sup>
Voice Coil Inductance, L <sub>e</sub>	0,5 mH

#### Notes

<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.

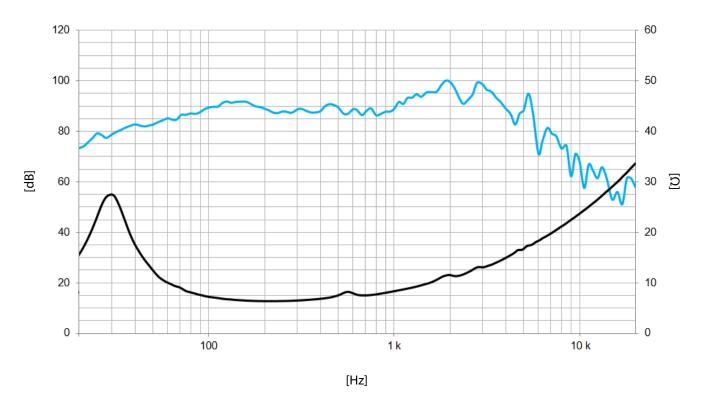
<sup>&</sup>lt;sup>3</sup> T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $<sup>^4</sup>$  The X<sub>max</sub> is calculated as (L<sub>vc</sub> - H<sub>ag</sub>)/2 + (H<sub>ag</sub>/3,5), where L<sub>vc</sub> is the voice coil length and H<sub>ag</sub> is the air gap height.



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

# **MOUNTING INFORMATION**

Overall diameter	212 mm	8,3 in
Bolt circle diameter	198 mm	7,8 in
Baffle cutout diameter:		
- Front mount	181 mm	7,1 in
Depth	89 mm	3,5 in
Volume displaced by driver	1,5	0,05 ft <sup>3</sup>
Net weight	1,3 kg	2,9 lb
Shipping weight	1,5 kg	3,3 lb

# **DIMENSION DRAWING**

