

# PROFESSIONAL LOUDSPEAKERS www.beyma.com

# 8BR40/N

#### **LOW FREQUENCY TRANSDUCER**

### **KEY FEATURES**

- It incorporates a curvilinear cone attached to a rubber surround, in order to provide suspension stability and to allow maximum excursion linearity with high sensitivity and extremely low distortion.
- It has been specifically designed to deliver exceptional low and mid frequency reproduction.



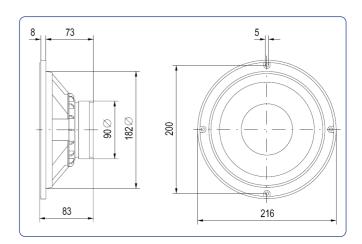
## TECHNICAL SPECIFICATIONS

Nominal diameter 200 mm. 8 in. Rated impedance 8 ohms Minimum impedance 6.8 ohms Power capacity\* 50 w RMS **Program power** 100 w Sensitivity 90 dB 2.83v @ 1m @ 2π Frequency range 35 - 6000 Hz Recom. enclosure vol. 20 / 60 I 0.7 / 2.12 ft.3 Voice coil diameter 25.8 mm. 1 in. Magnetic assembly weight 1 kg. 2.2 lb. **BL** factor 6.9 N/A **Moving mass** 0.025 kg. Voice coil length 16 mm Air gap height 6 mm X damage (peak to peak) 20 mm

# THIELE-SMALL PARAMETERS\*\*

Resonant frequency, fs	33.2 Hz
D.C. Voice coil resistance, Re	6.5 ohms
Mechanical Quality Factor, Qms	2.61
Electrical Quality Factor, Qes	0.73
Total Quality Factor, Qts	0.57
Equivalent Air Volume to Cms, Vas	61.351
Mechanical Compliance, Cms	907.7 <b>μ</b> m / N
Mechanical Resistance, Rms	2.02 kg/s
Efficiency, ηο (%)	0.3
Effective Surface Area, Sd (m²)	$0.022  \text{m}^2$
Maximum Displacement, Xmax***	6 mm
Displacement Volume, Vd	130 cm <sup>3</sup>
Voice Coil Inductance, Le @ 1 kHz	0.8 mH

## **DIMENSION DRAWINGS**



### **MOUNTING INFORMATION**

Overall diameter Bolt circle diameter	216 mm. 200 mm.	
Baffle cutout diameter: - Front mount	182 mm.	7 16 in
- Rear mount	185 mm.	_
Depth	83 mm.	3.26 in.
Volume displaced by driver	1.5 l.	0.05 ft. <sup>3</sup>
Net weight	1.36 kg.	2.99 lb.
Shipping weight	1.55 kg.	3.41 lb.

#### Notes:

\*The power capacity is determined according to AES2-1984 (r2003) standard.

Program power is defined as the transducer's ability to handle normal music program material.

\*\*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).

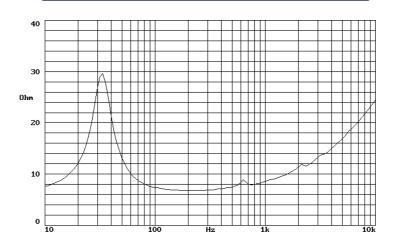
\*\*\*The Xmax is calculated as (Lvc - Hag)/2 + Hag/3.5, where Lvc is the voice coil length and Hag is the air gap height.



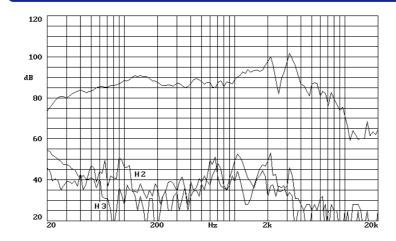
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**LOW FREQUENCY TRANSDUCER** 

#### FREE AIR IMPEDANCE CURVE



## FREQUENCY RESPONSE AND DISTORTION



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