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# 6CX200Nd

COAXIAL TRANSDUCER Preliminary Data Sheet

## **KEY FEATURES**

- 200 W AES power handling capacity for LF unit
- 40 W AES power handling capacity for HF unit
- High sensitivity: 92 dB (LF) and 102 dB (HF)
- Low Resonant frequency: 65 Hz
- Extended controlled displacement: Xmax ± 5.5 mm
- Extended mechanical displacement capability: Xpp 18 mm
- CONEX spider
- Designed with MMSS technology
- · Common Neodymium magnet system for both units
- Low weight and mounting depth
- Excellent off-axis response

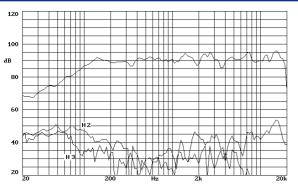
#### TECHNICAL SPECIFICATIONS

Nominal diameter	165 mm. 6.5 in.
Rated impedance	8 ohms
Minimum impedance	5.9 ohms
Power capacity*(LF/HF)	200 / 40 w AES
Program power(LF/HF)	400 / 80 w
Sensitivity (LF/HF)	92 dB / 102 dB 2.83v @ 1m @ 2π
Frequency range	60 - 20000 Hz
Recom. enclosure vol.	10 / 40 l 0.35 / 1.4 ft. <sup>3</sup>
Voice coil diameter	51.7 mm. 2 in.
Magnetic assembly weight	1.2kg. 2.64 lb.
BL factor	10.1 N/A
Moving mass	0.017 kg.
Voice coil length	14mm
Air gap height	9 mm
X damage (peak to peak)	18mm

# THIELE-SMALL PARAMETERS\*\*

Resonant frequency, fs65 HzD.C. Voice coil resistance, Re5.3 ohmsMechanical Quality Factor, Qms3.58Electrical Quality Factor, Qes0.34Total Quality Factor, Qts0.30
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Total Quality Factor, Qts 0.30
Equivalent Air Volume to Cms, Vas 8.251
Mechanical Compliance, Cms 324 µm/N
Mechanical Resistance, Rms 2.01 kg/s
<b>Efficiency, ηο (%)</b> 0.74
Effective Surface Area, Sd (m <sup>2</sup> ) 0.0135 m <sup>2</sup>
Maximum Displacement, Xmax*** 5.1 mm
Displacement Volume, Vd 68.85 cm <sup>3</sup>
Voice Coil Inductance, Le @ 1 kHz 0.6 mH

#### FREQUENCY RESPONSE AND DISTORTION



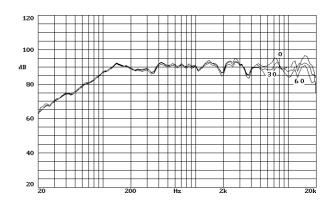
Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1w @ 1m.



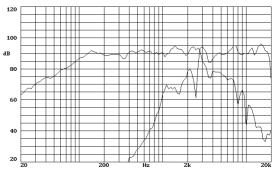
## MOUNTING INFORMATION

Overall diameter Bolt circle diameter Baffle cutout diameter:	162.5 mm. 6.40 in. 121.62 mm. 4.79 in.
- Front mount	145.3 mm. 5.72 in.
- Rear mount	145.3 mm. 5.72 in.
Overall depth	96mm. 3.8 in.
Mounting depth	85mm. 3.35 in.
Volume displaced by driver	0.551 0.02 ft.3
Net weight	1.9kg. 4.18 lb.

#### **OFF-AXIS FREQUENCY RESPONSE**



# LF/HF DRIVER RESPONSE



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

029