

# 8CFX260Nd

COAXIAL TRANSDUCER Preliminary Data Sheet

### **KEY FEATURES**

- High performance 8" coaxial speaker
- 2,5" / 2,85" voice coil diameter design (LF / HF)
- High power hadling 500 / 120 W program power
- High sensitivity 97 / 103 dB (1W / 1m) (LF / HF)
- Lightweight common neodymium magnetic circuit
- Cast frame speaker

- Features a waterproof carbon fiber cone
- Demodulation ring for linear and extended response and lower distortion
- For all high quality sound single point source applications including house of worship, studio monitors, home theater systems, movie theater, small PA systems, etc.



## **TECHNICAL SPECIFICATIONS**

| Nominal diameter                   | 200 mm                                  |      | 8 in                |
|------------------------------------|-----------------------------------------|------|---------------------|
| Rated impedance (LF/HF)            |                                         |      | 8/8Ω                |
| Minimum impedance (LF/HF)          |                                         | 6    | ,8 / 6,9 Ω          |
| Power capacity 1 (LF/HF)           | 250 / 60 W <sub>AES</sub>               |      |                     |
| Program power <sup>2</sup> (LF/HF) |                                         | 50   | 0 / 120 W           |
| Sensitivity (LF/HF <sup>3</sup> )  | 97 dB                                   | 1W / | 1m @ Z <sub>N</sub> |
|                                    | 103 dB                                  | 1W / | 1m @ Z <sub>N</sub> |
| Frequency range                    | 100 - 20.000 Hz                         |      |                     |
| Recom. HF crossover                | 1,5 kHz or higher (12 dB/oct min slope) |      |                     |
| Voice coil diameter (LF/HF)        | 63,5 mm                                 |      | 2,5 in              |
|                                    | 72,4 n                                  | nm   | 2,85 in             |
| BI factor                          |                                         |      | 13,5 N/A            |
| Moving mass                        |                                         |      | 0,021 kg            |
| Voice coil length                  |                                         |      | 15 mm               |
| Air gap height                     |                                         |      | 7 mm                |
| X <sub>damage</sub> (peak to peak) |                                         |      | 20 mm               |

### THIELE-SMALL PARAMETERS 4

| Resonant frequency, f <sub>s</sub>                         | 100 Hz               |
|------------------------------------------------------------|----------------------|
| D.C. Voice coil resistance, R <sub>e</sub>                 | 5,2 Ω                |
| Mechanical Quality Factor, Q <sub>ms</sub>                 | 4,8                  |
| Electrical Quality Factor, Q <sub>es</sub>                 | 0,37                 |
| Total Quality Factor, Qts                                  | 0,35                 |
| Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub> | 81                   |
| Mechanical Compliance, C <sub>ms</sub>                     | 119 μm / N           |
| Mechanical Resistance, R <sub>ms</sub>                     | 2,7 kg / s           |
| Efficiency, η <sub>0</sub>                                 | 2,2 %                |
| Effective Surface Area, S <sub>d</sub>                     | 0,022 m <sup>2</sup> |
| Maximum Displacement, X <sub>max</sub> <sup>5</sup>        | 6 mm                 |
| Displacement Volume, V <sub>d</sub>                        | 132 cm <sup>3</sup>  |
| Voice Coil Inductance, L <sub>e</sub>                      | 0,23 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> Sensitivity was measured at 1m distance, on axis, with 1W input, averaged in the range 1 - 7 kHz

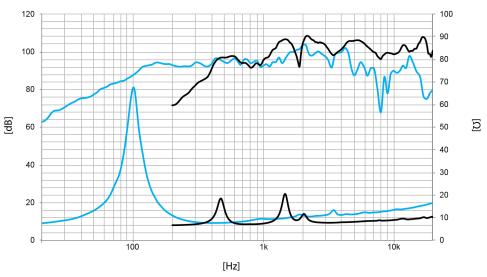
<sup>&</sup>lt;sup>4</sup> T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $<sup>^{\</sup>rm s}$  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    | 195 mm | 7,7 in  |
| Baffle cutout diameter: |        |         |
| - Front mount           | 181 mm | 7,1 in  |
| Depth                   | 134 mm | 5,3 in  |
| Net weight              | 4,9 kg | 10,8 lb |
| Shipping weight         | 5,2 kg | 11,5 lb |

# **DIMENSION DRAWING**

