

## 5CX200Nd/N

**COAXIAL TRANSDUCER** 

### **KEY FEATURES**

- High power handling: 300 / 80 W program power
- High sensitivity: 92,5 / 102 dB (1W / 1m) (LF / HF)
- 1,5" / 1,75" voice coil (LF/HF)
- Common neodymium magnet system design
- Waterproof paper cone with Santoprene<sup>™</sup> surround
- CONEX spider

- Shorting cap for extended response
- Extended controlled displacement: X<sub>max</sub> ± 5,7 mm
- 19 mm peak-to-peak excursion before damage
- Excellent off-axis response
- 70° coverage horn for HF dispersion control





### TECHNICAL SPECIFICATIONS

| Nominal diameter                   | 125 mm 5 ir                             |        | 5 in                |
|------------------------------------|---|--------|---------------------|
| Rated impedance (LF/HF)            |   |        | 8/8Ω                |
| Minimum impedance (LF/HF)          |   | 5      | 5,7 / 5,0 Ω         |
| Power capacity 1 (LF/HF)           |   | 150 /  | 40 W <sub>AES</sub> |
| Program power <sup>2</sup> (LF/HF) |   | 3      | 00 / 80 W           |
| Sensitivity (LF/HF 3)              | 92,5 dB                                 | 1W /   | 1m @ Z <sub>N</sub> |
|                                    | 102 dB                                  | 1W /   | 1m @ Z <sub>N</sub> |
| Frequency range                    |   | 75 - 2 | 20.000 Hz           |
| Recom. HF crossover                | 2,5 kHz or higher (12 dB/oct min slope) |        |                     |
| Voice coil diameter (LF/HF)        | 38,1                                    | mm     | 1,5 in              |
|                                    | 44,4                                    | mm     | 1,75 in             |
| BI factor                          |   |        | 7,3 N/A             |
| Moving mass                        |   |        | 0,006 kg            |
| Voice coil length                  |   |        | 14 mm               |
| Air gap height                     |   |        | 6 mm                |
| X <sub>damage</sub> (peak to peak) |   |        | 19 mm               |

### THIELE-SMALL PARAMETERS4

| Resonant frequency, f <sub>s</sub>                         | 75 Hz                |
|--|----------------------|
| D.C. Voice coil resistance, Re                             | 5,2 Ω                |
| Mechanical Quality Factor, Q <sub>ms</sub>                 | 10                   |
| Electrical Quality Factor, Q <sub>es</sub>                 | 0,28                 |
| Total Quality Factor, Qts                                  | 0,28                 |
| Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub> | 9,1 l                |
| Mechanical Compliance, C <sub>ms</sub>                     | 711 μm / N           |
| Mechanical Resistance, R <sub>ms</sub>                     | 0,3 kg/s             |
| Efficiency, η <sub>0</sub>                                 | 1,3 %                |
| Effective Surface Area, S <sub>d</sub>                     | $0,0095 \text{ m}^2$ |
| Maximum Displacement, X <sub>max</sub> ⁵                   | 5,7 mm               |
| Displacement Volume, V <sub>d</sub>                        | 48 cm <sup>3</sup>   |
| Voice Coil Inductance, Le                                  | 0,22 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 2 - 7 kHz

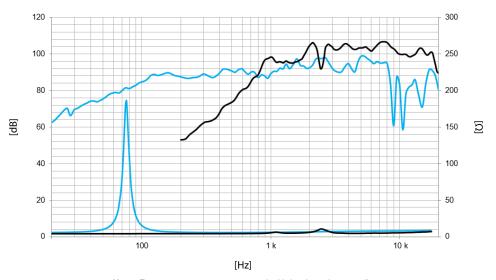
<sup>&</sup>lt;sup>4</sup>T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $<sup>^{6}</sup>$  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.



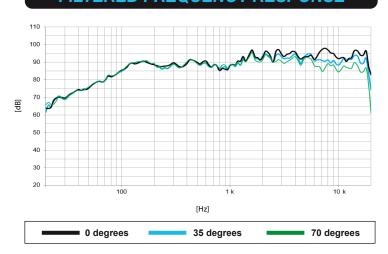
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**COAXIAL TRANSDUCER** 



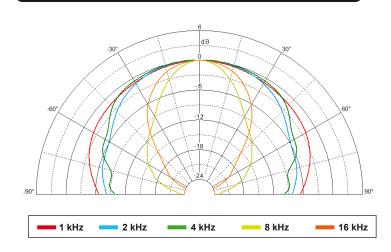
Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

### FILTERED FREQUENCY RESPONSE



Note: Filtered frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m using filter FD-2CX

### **POLAR PATTERN**



### **MOUNTING INFORMATION**

| Overall diameter           | 155 mm   | 6,1 in               |
|----------------------------|----------|----------------------|
| Bolt circle diameter       | 141,5 mm | 5,6 in               |
| Baffle cutout diameter:    |          |                      |
| - Front mount              | 120 mm   | 4,7 in               |
| Depth                      | 95 mm    | 3,7 in               |
| Volume displaced by driver | 0,5 l    | 0,02 ft <sup>3</sup> |
| Net weight                 | 1,6 kg   | 3,5 lb               |
| Shipping weight            | 1,7 kg   | 3,7 lb               |

### **DIMENSION DRAWING**

