

## KEY FEATURES

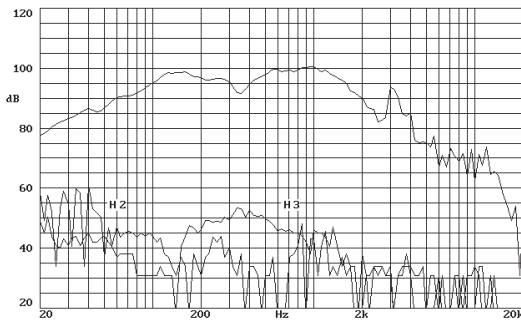
- 4" (100 mm.) copper round wire voice coil
- High sensitivity: 98 dB
- Large Xmax: 7.5 mm.
- Extremely low resonant frequency: 27 Hz
- Designed for subwoofer and woofer applications



## GENERAL DESCRIPTION

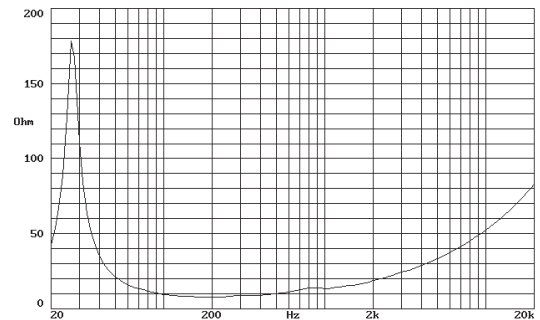
This 15" model has been designed specifically to reinforce the low frequency range at very high power levels. The voice coil diameter (4") and its high stiffness cone give this loudspeaker an uncommon resistance to the most demanding requirements, both thermal and mechanical. The voice coil has an optimised winding length to increase linear excursion, obtaining an Xmax of 7.5 mm. The magnetic structure construction generates a symmetrical magnetic field and, at the same time, provides an efficient thermal path which contributes to heat dissipation. The 15K200 has been designed for subwoofer and woofer applications, specially for using in compact bass-reflex enclosures.

## FREQUENCY RESPONSE AND DISTORTION CURVES

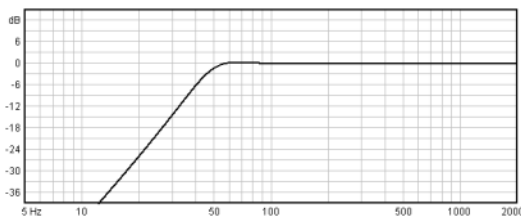


Note: on axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1w @ 1m.

## FREE AIR IMPEDANCE CURVE



## PREDICTED LOW FREQUENCY RESPONSE



Note: Bass-reflex cabinet, Vb=90 l, fb=45 Hz

## TECHNICAL SPECIFICATIONS

|                          |  |
|--------------------------|--|
| Nominal diameter         | 380 mm. 15 in.                         |
| Rated impedance          | 8 ohms.                                |
| Minimum impedance        | 7.9 ohms.                              |
| Power capacity *         | 300 w AES                              |
| Program power            | 600 w                                  |
| Sensitivity              | 98 dB 2.83v @ 1m @ 2π                  |
| Frequency range          | 25 - 2000 Hz                           |
| Recom. enclosure vol.    | 60 / 150 l 2.12 / 5.3 ft. <sup>3</sup> |
| Voice coil diameter      | 100 mm. 4 in.                          |
| Magnetic assembly weight | 9 kg. 19.84 lb.                        |
| BL factor                | 20.5 N / A                             |
| Moving mass              | 0.106 kg.                              |
| Voice coil length        | 21 mm.                                 |
| Air gap height           | 9 mm.                                  |
| X damage (peak to peak)  | 28 mm.                                 |

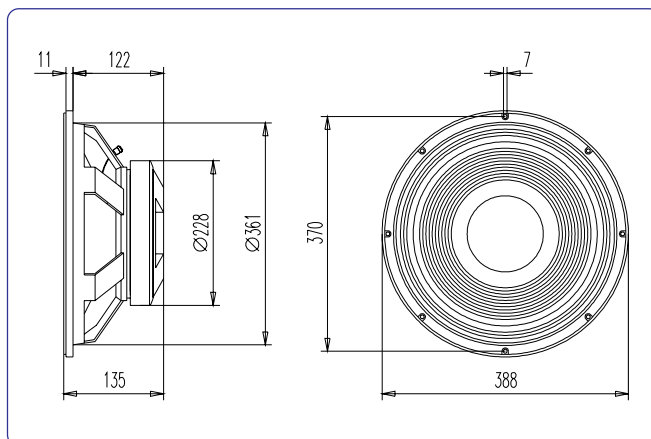
## MOUNTING INFORMATION

|                            |                           |
|----------------------------|---------------------------|
| Overall diameter           | 388 mm. 15.28 in.         |
| Bolt circle diameter       | 370 mm. 14.56 in.         |
| Baffle cutout diameter:    |                           |
| - Front mount              | 361 mm. 14.21 in.         |
| - Rear mount               | 355 mm. 13.97 in.         |
| Depth                      | 135 mm. 5.31 in.          |
| Volume displaced by driver | 7 l 0.25 ft. <sup>3</sup> |
| Net weight                 | 10.4 kg. 22.92 lb.        |
| Shipping weight            | 11.5 kg. 25.35 lb.        |

## THIELE-SMALL PARAMETERS \*\*

|  |                       |
|--|-----------------------|
| Resonant frequency, fs                       | 27 Hz                 |
| D.C. Voice coil resistance, Re               | 6.3 ohms.             |
| Mechanical Quality Factor, Qms               | 9.01                  |
| Electrical Quality Factor, Qes               | 0.27                  |
| Total Quality Factor, Qts                    | 0.26                  |
| Equivalent Air Volume to Cms, Vas            | 345 l                 |
| Mechanical Compliance, Cms                   | 320 μm / N            |
| Mechanical Resistance, Rms                   | 2.76 kg / s           |
| Efficiency, ηo (%)                           | 2.5                   |
| Effective Surface Area, Sd (m <sup>2</sup> ) | 0.0880 m <sup>2</sup> |
| Maximum Displacement, Xmax                   | 7.5 mm.               |
| Displacement Volume, Vd                      | 660 cm. <sup>3</sup>  |
| Voice Coil Inductance, Le @ 1 kHz            | 1.2 mH                |

## DIMENSION DRAWINGS



## MATERIALS

- **Voice coil:** copper round wire with high temperature bonding strength. Nomex former able to withstand high temperatures.
- **Cone:** high stiffness paper cone.
- **Surround:** treated cloth to guarantee good retaining of elasticity in despite of continuing use.
- **Spider:** cotton spider.
- **Metal parts:** anti-corrosion coated parts designed to resist aggressive environmental conditions.
- **Basket:** specially designed die cast aluminium basket to avoid disturbing resonances.
- **Magnet:** ferrite magnet.

### 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).



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