

KEY FEATURES:
$100 \mathrm{db} 1 \mathrm{~W} / 1 \mathrm{~m}$ average sensitivity
77 mm high temperature sandwich voice coil
900 W AES program power
Aluminium demodulating ring for lower distortion and improved heat
dissipation
Powerful, ferrite $\mathbf{1 8 0} \mathbf{~ m m}$ magnet structure
Silicone spider

## Application : High power woofer

15B450 loudspeaker combining good linearity and efficiency with high power handling capabilities, with use of 77 mm voice coil. It features aluminium die cast frame with integrated aluminium demodulating ring, 180 mm magnet structure and 19 mm high voice coil. $\mathbf{1 5 B 4 5 0}$ is suitable for application in a wide variety of enclosure types and particularly as LF driver in 2- or 3- way systems.

SPECIFICATIONS

| Nominal Diameter | $15 " / 388$ inch/mm |
| :--- | :--- |
| Impedance | 8 Ohm |
| Minimum Impedance | 6.32 Ohm |
| Power Capacity AES 1 | 450 W |
| Program Power 2 | 900 W |
| Sensitivity | $(200-2000 \mathrm{~Hz}) 100 \mathrm{~dB} / \mathrm{W} / \mathrm{m}$ |
| Frequency Range | $45-2500 \mathrm{~Hz}$ |
| Voice Coil Diameter | 77 mm |
| Voice Coil Material | Cooper |
| Voice Coil Former | Glassfiber |
| Voice Coil Winding Depth | 18 mm |
| Magnet Gap Depth | 9 mm |
| Cone Material | Paper with glassfiber |
| Basket | Die cast aluminium |
| Magnet | Ferrite |
| Flux Density | 1.33 T |

1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 120 L box enclosure tuned 56 Hz using a $40-400 \mathrm{~Hz}$ band limited pink noise test signal applied continuously for 2 hours.
2. Program power is defined as $3 d b$ greater than AES Power Capacity

* Linear Mathematical Xmax is calculated as: $(\mathrm{Hvc}-\mathrm{Hg}) / 2+\mathrm{Hg} / 4$ where Hvc is the voice coil depth and Hg is the gap depth.


## THIELE-SMALL PARAMETERS

| Resonance Frequency | 45.08 Hz |
| :--- | :--- |
| Mechanical Efficiency Factor (Qms) | 9.60 |
| Electrical Efficiency Factor (Qes) | 0.294 |
| Total Q (Qts) | 0.286 |
| Equivalent Air Volume (Vas ) | 146.85 Litres |
| Diaphragm mass ind. airload (Mms) | 81.56 grams |
| Voice Coil Resistance Re | 5.32 Ohms |
| Effective Diagram Area (Sd) | $829.6 \mathrm{~cm}^{2}$ |
| Peak Linear Displacement of Diaphragm (Xmax)* | $\pm 6.75 \mathrm{~mm}$ |
| Mechanical Compliance of Suspension (Cms) | $0.153 \mathrm{~mm} / \mathrm{N}$ |
| BL Product (BL) | $20.43 \mathrm{T.m}$ |
| V.C. Inductance at 1 kHz (Le) | 1.08 mH |

## MOUNTING INFORMATION

| Overall Diameter | 388 mm |
| :--- | :--- |
| Baffle Hole Diameter | 352 mm |
| Number of Mounting Holes | 8 eliptic $7 \times 8 \mathrm{~mm}$ |
| Bolt Circle Diameter | $370 / 372 \mathrm{~mm}$ |
| Overall Depth | 162.5 mm |
| Net Weight | 7.5 kg |

## OBERTON <br> Professional Loudspeakers




