

# 12HX230



**LF 12" - 250 W - 97 dB - 8 Ohm**  
**HF 30 W - 107 dB - 8 Ohm**

### NOMINAL SPECIFICATIONS

|                                     |  |
|-------------------------------------|--|
| Nom. Diameter                       | 300 mm (12 in)                               |
| Overall Diameter                    | 316 mm (12.44 in)                            |
| Bolt Circle Diameter                | 298.5 mm (11.75 in)                          |
| Baffle Cutout Diameter              | 282 mm (11.10 in)                            |
| Depth                               | 162 mm (6.38 in)                             |
| Flange and Gasket Thickness         | 12 mm (0.47 in)                              |
| <b>Net Weight</b>                   | <b>4.3 Kg (9.5 lb)</b>                       |
| Shipping Box<br>(Single Carton Box) | 350 x 346 x 190 mm<br>(13.8 x 13.6 x 8.5 in) |
| Shipping Weight                     | 5 Kg (11.0 lb)                               |

### PART NUMBER

|                                |     |
|--------------------------------|-----|
| Push Terminals - 8 Ohm Version | TBA |
|--------------------------------|-----|

### NOTES:

- (1) 2 Hours Test According to AES 2-1984 Rev. 2003
- (2) Maximum power is defined as 3dB greater than nominal power.
- (3) HF Sensitivity averaged within the frequency range
- (4) 12 dB/oct or higher slope high-pass filter
- (5) Treated Polycotton
- (6)  $X_{max} = [(winding\ depth - magnetic\ gap\ depth)/2] + (magnetic\ gap\ depth/3)$
- (7) Maximum excursion before permanent damage

### TECHNICAL PARAMETERS

|                                      | LF   | HF                      |
|--------------------------------------|--|-------------------------|
| Nom. Impedance                       | 8 Ohm  | 8 Ohm                   |
| Minimum Impedance                    | 6.4 Ohm                                      | 7 Ohm                   |
| AES Power Handling (1)               | 250 W  | 30 W                    |
| <b>Max Power Handling (2)</b>        | <b>500 W</b>                                 | <b>60 W</b>             |
| <b>Sensitivity (1W/1m) (3)</b>       | <b>97 dB</b>                                 | <b>107 dB</b>           |
| Frequency Range                      | 55-5000 Hz                                   | 1500-20000 Hz           |
| <b>Voice Coil Diameter</b>           | <b>65 mm (2.56 in)</b>                       | <b>37 mm (1.46 in)</b>  |
| <b>Winding Material</b>              | <b>Al</b>                                    | <b>Al</b>               |
| Former Material                      | Glass Fiber                                  | Kapton                  |
| Winding Depth                        | 17.4 mm (0.69 in)                            | 2.1 mm (0.08 in)        |
| <b>Magnetic Gap Depth</b>            | <b>8 mm (0.31 in)</b>                        | <b>2.6 mm (0.10 in)</b> |
| Flux Density                         | 1.15 T                                       | 1.85 T                  |
| Min. Cross. Freq. (4)                | -  | 1.7 kHz                 |
| Dispersion Angle                     | -  | 100°                    |
| <b>Diaphragm Material</b>            | -  | <b>Ketone Polymer</b>   |
| <b>Diaphragm Shape</b>               | -  | <b>Annular</b>          |
| Magnet                               | Ferrite Ring                                 | -                       |
| Basket Material                      | Aluminum                                     | -                       |
| Demodulation                         | Aluminum Ring                                | -                       |
| Cone Surround (5)                    | Triple Roll                                  | -                       |
| NET Air Volume filled by Loudspeaker | 1.9 dm <sup>3</sup> (0.067 ft <sup>3</sup> ) | -                       |
| Spider Profile                       | 1x variable height waves                     | -                       |

### THIELE & SMALL PARAMETERS

|             |                      |
|-------------|----------------------|
| Fs          | 55 Hz                |
| Re [LF]     | 5.3 Ohm              |
| Re [HF]     | 5.5 Ohm              |
| Qes         | 0.46                 |
| Qms         | 7.4                  |
| Qts         | 0.44                 |
| Vas         | 56.6 dm <sup>3</sup> |
| Sd          | 489 cm <sup>2</sup>  |
| Xmax (6)    | 7.37 mm              |
| Xdamage (7) | 15.25 mm             |
| Mms         | 50.2 g               |
| Bl          | 14.1 N/A             |
| Le          | 0.62 mH              |
| Mmd         | 38.0 g               |
| Cms         | 0.17 mm/N            |
| Rms         | 2.34 Kg/s            |
| Eta Zero    | 1.98 %               |
| EBP         | 120 Hz               |

